An Assesment of Web 2.0 Practical Content Development Self-Efficacy Beliefs of Teacher Candidates

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We certify that we have read this thesis and that in our opinion it is fully adequate in scope and quality as a thesis for the degree of Master of Science in Information and Communication Technologies in Education.

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ABSTRACT

One of the most effective ways of achieving the targeted results at the end of the training, which is a complex and practical process, is to continuously improve in science and technology. In this context, it is planned in a coherent and detailed manner in the light of science and technology, and depends on the arrangement of appropriate educational environments, the guidance of the teacher in the transfer of behavioral changes to the student and the reliable control during the process. The aim of the study is evaluating the self-efficacy beliefs (SEB) of teacher candidates in developing practical content with Web 2.0 technologies. The data sample of this research is provided from teacher candidates at Eastern Mediterranean University (EMU) Faculty of Education in 2018-2019 academic year. The data collection tool of the research, the web 2.0 practical content development self-efficacy beliefs (W2PCDSEB) to determine the scale (W2SEBS) which is developed by Birişci et al., (2017). Descriptive analysis from quantitative analysis methods was used. Analysis of the data was performed using the SPSS program, t-test, one-way variance analysis (ANOVA). As a result outcome of the research, there was significantly difference web 2.0 self-efficacy beliefs (W2SEB) of teacher candidate's between gender and departments.

Keywords: web 2.0, practical content development, self-efficacy, teacher candidate.

ÖZ

Kompleks ve uygulamalı bir süreç olan eğitimin sonunda hedeflenen sonuçların gerçekleştirilmesinde en etkili yollardan biri, bilim ve teknolojideki gelişmeler doğrultusunda sürekli olarak geliştirilmesidir. Bu bağlamda, bilim ve teknolojinin ışığında tutarlı ve detaylı bir şekilde planlanarak, uygun eğitim ortamlarının düzenlenmesine, davranış değişikliğinin öğrenciye aktarılmasında öğretmenin bu süreç içerisinde rehberliğine ve güvenilir şekilde kontrol etmesine bağlıdır. Bu kapsamdan yola çıkılarak araştırmanın amacı; Web 2.0 teknolojileri ile pratik içerik geliştirmede öğretmen adaylarının öz yeterlik inançlarının değerlendirilmesidir. Araştırmanın örneklemini 2018-2019 öğretim yılında Doğu Akdeniz Üniversitesi (DAÜ) Eğitim Fakültesi'nde okuyan öğretmen adaylarına oluşturmaktadır. Araştırmanın veri toplama aracı olarak, Birişçi ve diğerleri (2018) tarafından geliştirilen web 2.0 hızlı içerik geliştirme öz-yeterlik inancı belirlemeye yönelik ölçek (W2ÖYİÖ) kullanılmıştır. W2ÖYİÖ; hazırlık, sunum ve değerlendirme faktörleri olmak üzere üç faktörlü 21 maddeden oluşmaktadır. Araştırmada elde edilen verilerin analizi, nicel analiz yöntemlerinden tanımlayıcı analiz kullanılmıştır. Elde edilen verilerin analizi, SPSS programı kullanılarak, t-testi, tek yönlü varyans analizi (ANOVA) ile yapılmıştır. Araştırma sonucunda, araştırmanın örneklemini oluşturan öğretmen adaylarının web 2.0 hızlı içerik geliştirme öz-yeterlik inançlarının cinsiyet ve okudukları bölüme değişkenlerine göre istatistiksel olarak anlamlı farklılık olduğu saptanmıştır.

Anahtar Kelimeler: web 2.0, hızlı içerik geliştirme, öz-yeterlik, öğretmen adayı.

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PREFACE

Especially in the 2000s, developments in Web technology have created "new" opportunities "to learn from experiences and experiences in social learning environments. With the beginning of Web 2.0 era, which ushered in a new era in the Internet world, it has become possible educational activities such as the exchange of ideas, the exchange of information, different interpretations and learning experiences in discussion environments. The use of “Web 2.0” technologies in "teacher training and especially in the “application level” can contribute to this process. In this context, the' objective of the proposed study is to evaluate the self-efficiency beliefs of aspiring teachers in the development of Web 2.0 practical content. It is believed that the findings from the research can afford the teacher element, revealing SEB on the development of the practical content of Web 2.0 tools' education and awareness' of research on web 2.0 tools.

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LIST OF ABBREVIATIONS

BE	Basic Education
CITE	Computer and Instructional Technology Education
EMU	Eastern Mediterranean University
ES	Educational Sciences
FAE	Fine Arts Education
FLE	Foreign Languages Education
ICT	Information and Communication Technologies
MSE	Mathematics and Science Education
SE	Special Education
SEB	Self-Efficacy Beliefs
TPFK	Technological Pedagogical Field Knowledge
TSSE	Turkish and Social Sciences Education
W2PCDSEB	Web 2.0 Practical Content Development Self-Efficacy Beliefs

Chapter 1

INTRODUCTION

1.1 Background of the Study

Advances in Information and Communication Technologies (ICT), affect people's behavior and ways of communication. For this reason, new educational policies that regulate the lives of societies in economic, social and cultural aspects are needed. The issue of how these regulations can meet qualified human power necessitates the development of some standards. Societies can effectively use technologies that are developed in their own fields in order to sustain their existence, even for global competition of 21st Century. They are faced with the fact that; they must have individuals who exhibit century skills and demonstrate a lifetime of learning competence so that they can adapt to change. The main goal of this change is to become an information society or a society with digital culture that is often mentioned today.

In order to achieve the goal of becoming an information society, the society needs to accept information and communication technologies as a cultural value and educate its individuals for their useful and effective use.

The usage of 'information and communication technologies' in educational environments, diversification and exchange of learning resources, the equal opportunity to access information has changed the way professional development activities are carried out (Solman and Werderhorn, 2000; Odabaşı and Kabakçı, 2007). In the 20th century, workshops that respond to real needs, effective use of technology, continuous activities with colleagues, online communities, models, mentors and case

studies (Salpeter, 2003). Online communities; it is thought that teachers and teacher candidates with limited ability to meet will be able to discuss and share, and teacher candidates will be able to learn more than teachers can learn on their own thanks to their mentoring and guidance. Similarly, Hemphill and Hemphill (2007) indicated that online discussions involving experienced teachers would improve the quality of teacher training. Although there are a number of environments where online discussions and sharing can be made, Web 2.0-based environments are thought to optimize these environments for professional development activities.

The web 2.0 concept was first used by Darcy DiNucci' in 1999 in an article titled "The Torn Future" and later in 2004 in a brainstorming session at a conference organized by 'Tim O'reilly' and Media Live International (DiNucci, 1999; O'reilly, 2005). The concept of web 2.0 refers to user-centric internet applications that support participation, interoperability, collaboration, and collective intelligence. According to Ağır (2010), Web 2.0 applications represent the tools that users can produce web content, change existing content, and share. Users can share links, photos, videos, and documents in 'Web 2.0 based environments', usually with a simple interface. Features of 'Web 2.0 based environments', such as support for participatory contributions, connectivity and cooperation, and allowing participants to contribute to information rather than consume information, have increased interest in the use of these environments in professional development activities (Warren, 2009).

It is thought that it would be beneficial for teachers to meet Web 2.0 tools, to be aware of the features of these tools and to use these environments to enrich the educational process and to provide their own professional development. Similarly, Ağır (2010) stated that teachers can use Web 2.0 tools both in their professional development and in their classroom. However, it is thought that it is a necessity rather

than a preference to adopt and apply this innovative educational approach for it teachers who have an important role in integrating technology into education.

Teachers are' important actors in' the planning, conducting and evaluating of educational activities. The power of societies in our information age is directly proportional to the manpower that they produce. The need for individuals' who can produce and use information, educational paradigms and changes in learning styles have affected the education system and the roles of teachers have changed. Teachers have been the most important guide in raising individuals' who are' aware' of' their' abilities and who can' use' them, make independent decisions and are open to innovation. Considering labor market, human resources and continuous educational requirements of our age, it is aimed that individuals in the social society will have the ability' to' learn', to think', to be able to learn, to think and to learn.

Teachers, especially teachers who are aware of the educational needs, who think, criticize, self-renewable teachers have an important role on training of individuals with these characteristics. It is mentioned in the related literature: Teacher's personal characteristics (self-confidence, creativity, pro-vision, etc.), their competence as the manager of learning activities, their ability to follow the learning process and their course, their relations with students, parents and other teachers, the learning process and therefore the student achievement. In order for them to be able to carry out an effective teaching process, it is important that the teacher feels himself professionally sufficient, in other words, the high level of teacher self-efficacy (Pan, 2010; Alajami, 2011).

Especially from 2000s onwards, developments in Web technology have created new opportunities to enable individuals to learn from experiences in social learning environments. So, it has become possible to conduct educational activities such as

exchanging ideas, sharing information, making different interpretations and gaining learning experiences in discussion environments (Koehler and Mishra, 2009; Barseghyan, 2015). The introduction of computers into educational environments requires pre-service' teachers' to be trained to use' technology' effectively' in education. If they' do not' have the necessary pedagogical basis for integrating technology into their classrooms, they will never benefit from the potential of technology (Angeli, 2005). Two important factors in developing practical content with Web 2.0' tools are teacher self-efficacy' and professional development. The self-efficacy of a teacher has an impact on the implementation of Web 2.0' tools, as higher self-efficacy has shown that more attempts and continued effect are achieved, regardless of the initial failure (Abbit, 2011).

The participation of 21. Century learning models supports cooperation, flexibility in creativity, adaptability and use of learning materials (Rogers, C., Liddle, S.W., Chan, P., Doxey, A., Isom, B. 2007). It is thought that this new generation of learning habits can be acquired by providing students with technology-based learning environments. There are multiple ways of teaching with technology support (Maple, 2009). One of the technology-supported education options is web-based education. This type of web-based training, in which the teacher and the learner are not in the same environment, communicate with each other via internet or network, is called "e - learning" or "online learning" (Davidson-Shivers and Rasmussen, 2006, quoted Ateşkan, 2008). Hargadon (2010) and Enonbun (2010) stated that the use of flexible and interactive features of the internet makes it a great convenience for learners to prepare themselves to the global world and that the use of the internet as a learning tool enables learners to access information without having to go abroad.

In the recent design of e-learning environments, peer assessment, social platforms that allow discussions, or Web 2.0 based environments, is preferred (Maple, 2009). Second-generation internet technologies (web 2.0), such as blogs, podcasts, social networks, where educators, researchers, students can be easily accessed and mostly free of charge, have begun to offer new opportunities for education (Rhoades, E. B., Friedel, C. R., Morgan, A. C. 2009; Williams and Chinn, 2009). Collaborative work of Web 2.0-based environments, access to information, social interaction, and feedback make it extremely easy for them to use in the field of Education (McLoughlin and Lee, 2007; Deperlioğlu and Köse, 2010).

When the literature is examined, one can see how information literacy has changed with the development of technology, how access to information and research strategies has changed so much, and how to use these technologies to become information literacy. In order for university students and their teachers to feel adequate in this field, knowledge literacy skills and self-efficacy should be developed in order to be able to use knowledge literacy skills and self-efficacy (Demiralay, 2008).

Self-efficacy, " is one of the important concepts of the social learning theory of Bandura (Bandura, 1977; quoted by: Kurbanoğlu and Akkoyunlu, 2003). According to Bandura, self-sufficiency is the judgment of the individual about the ability to organize and perform successfully necessary activities to show a certain performance. The development of self-efficacy relates to the characteristics of the social learning theory of Bandura. According to this theory, self-efficacy belief is influenced by the symbolic language used in self-reflection and self-observation, and in understanding the results of relationships. In addition, these cognitive features directly affect the social responses an individual receives from the environment (Lee, 2007). Studies on Self-Efficacy Beliefs in the field of education are considered in three categories. These;

in this paper, the impact of SEB on academic achievement and performance, the impact of self-efficacy beliefs on the selection of the field of expertise, and the effects of SEB on professional preferences, and the applications that teachers perform in teaching, and the relationship between different student products are discussed in the field of SEB."

Many studies have been carried out on self-sufficiency in Turkey. For example, information literacy self-competence perception "(Kurbanoğlu and Akkoyunlu, 2002; Akkoyunlu and Kurbanoğlu, 2003; Akkoyunlu and Kurbanoğlu, 2004; Kurbanoğlu, Akkoyunlu and Umay, 2006; Usluel, 2006; Usluel, 2007; Kaya and Durmuş, 2008; Demiralay, 2008) are among the subjects studied in the field of technology in recent years.

1.2 Purpose of Study

The purpose of this study is to investigate of Web 2.0 Practical Content Development Self-Efficacy Beliefs of teacher candidates.

1.3 Research Question

The aim of the research is to determine the Self-Efficacy Beliefs of teacher candidates in Web 2.0 practical content development:

1. What are the teacher candidates of Web 2.0 Practical Content Development Self-Efficacy Beliefs?
2. What are the teacher candidates of W2PCDSEB according to preparation, presentation and evaluation?
3. What are the teacher candidates of W2PCDSEB according to department?
4. What are the teacher candidates of W2PCDSEB according to gender?

1.4 Significance of the Study

The rapid development of information and technology necessitates the development of information societies, enabling them to monitor and adapt the technological developments to themselves. It has become inevitable to integrate technology with the field of education in order to make learning-teaching processes effective. Thanks to the rapid developments in technology, new materials are added to the tools that can be used in educational processes every day. The structure of the education system and the effective use of informatics technologies, which have been seen especially in learning-teaching activities applied in educational environments, has become important for educators.

The potential of technology in learning-teaching processes is known to all educators and is acknowledged for its strength. However, this potential changes very little in their professional and personal lives. It is important to ensure effective use of technology in educational activities in order to ensure that the technology competencies of educators will directly affect the service they provide (Seferoglu, 2009).

In this context, it is important to cause the performance levels of the prospective teachers about use of Web 2.0 tools and to direct their training to the defined needs. In this study, it is aimed to determine pre-service teachers' self-efficacy belief in using Web 2.0 pratical content development tools.

1.5 Limitations of the Study

The limitations of the study are as follows:

- The study is limited to teacher candidates who have been studying at the University of Eastern Mediterranean in the academic year 2018-2019.
- The sample of the study is limited to 8 departments and those are Computer

and Instructional Technology Education (CITE), Educational Sciences (ES), Fine Arts Education (FAE), Mathematics and Science Education (MSE), Special Education (SE), Basic Education (BE), Turkish and Social Sciences Education (TSSE) and Foreign Languages Education (FLE) in the Faculty of Education of Eastern Mediterranean University.

1.6 Definition of Terms

Self-Efficacy: Self-efficacy is the individual's own opinion about the capacity to perform a particular task for a particular performance (Bandura, 1977). Self-efficacy is the most significant predictor of human behavior and is the force that enables the person to see the ability and control power necessary to carry out an activity. Self-efficacy is also necessary to plan and implement the necessary behavior in the process of reaching goals as it is based on the belief in one's abilities (Schmitz and Schwarzer, 2000).

Web 2.0: Web 2.0 is a virtual platform that provides, software as a service that is constantly updated by new user content. Information is provided by searching for and aggregating data from a variety of sources that provide rich user content while enabling a shareholding architecture (O'Reilly, 2007).

Chapter 2

LITERATURE REVIEW

In this section, Web 2.0 technology and self-efficacy issues are discussed for the purpose of the research. In the Web 2.0 technologies section, the use of Web 2.0 technologies in education and in the self-efficacy section, teacher self-efficacy issues were discussed and research conducted in the relevant literature was investigated.

2.1 Web 2.0 Technology in Education

Web 2.0 is, simply understood as a "bottom-up organization of tools and activities hosted on the Internet" (Orr, 2007). O'reilly (2005) further explains that Web 2.0 is more than just tools and technologies on the Internet. Web 2.0 is also a way for individuals to connect, communicate, and collaborate in a way that was limited to Web 1.0.

Web 1.0 is also a one-way communication, which limits the use of the internet, because content sharing is done only by a certain segment. With the exponential growth of web 1.0, Web 2.0 software has emerged to make it easier for most new online activities to be pre-made. Therefore, the term Web 2.0 has been introduced and this development has contributed to the placement of the internet in every area of life. These web pages differ from previously known www and offer new opportunities for users, and have begun to affect social, business, and educational activities. Thus, the period of the creation of the content by the site owners was over, the sites that allowed everyone to participate emerged and the opportunity to share information with the users as well as getting information from the web (Albion, 2008; Akçay, 2009).

A distinguishing feature in Web 2.0 is the contrast between web 2.0 and old Web (Web 1.0). In short, web 2.0 is the next level of internet usage. Web 2.0 has brought mobility to these environments with a one-way information flow in Web 1.0. Because today's read-and-write web provides user involvement in Information Presentation and creation. There have been developments in communication and information sharing with this transition. Therefore, with its dynamic structure brought to the internet environment, Web 2.0 became one of the most fashionable words (Grosseck, 2009; Harper, 2012).

After these developments, web pages have become more diverse and dynamic than they used to be. With Web 2.0, the web has started to offer free, user-friendly information in an open source format, where its users are more comfortable with internet functionality. Web 2.0 is more than technology; it is a new concept and has become an important discipline in supporting content publishing over the internet. In summary, Web 2.0 can be defined as technologies that offer users the opportunity to create, share, change, and actively participate in this process, and support communication and collaboration (Huang et al., 2009).

Web 2.0 resources are hosted on the World Wide Web and can be easily accessed from any computer with internet connection. While no interactive communication on previous static web pages has been provided, dynamic web pages introduced by Web 2.0 offer a variety of possibilities, such as interactive communication, recycling from the same page to the target resource, as well as information submission. Using Web 2.0, people no longer have access to the web for specific actions, such as access to content; access to social interactions and aggregate information and access to aggregate information (Alajmi, 2011).

Web 2.0 includes semantic web applications. Thus, some authors use semantic web and web 2.0 interchangeably in their publications (Alajmi, 2011). This term was originally introduced by Tim O'reilly in 2004 (O'reilly, 2007). These technologies explain trends in their use to increase creativity, communication, secure information sharing, collaboration and the functionality of the web. In the light of these trends, Web 2.0 can be seen as an online infrastructure that includes large ideas, creative energy, joint problem solving and solutions (Fahser-Herro, 2010).

In Web 2.0, users can use the web as an environment to create, modify content for other purposes, and consume shared content. In this respect, Web 2.0 can be likened to a platform with a performance field such as theatre scene (Franklin and Harmelen, 2007; Tu et al., 2008).

The Web 2.0 concept was first introduced in 2004 at a conference organized by two American companies named O'reilly and mediative International. In this conference, which focuses on the future and development of the internet, it is emphasized that the web has become more important than ever before with the applications developed and that it is in continuous development. As a result, the concept of Web 2.0 was used to define a phenomenon that is not limited to existing technology (Cash, 2010).

Web 2.0 has been discussed and many technology researchers have questioned the meaning of this concept. In the beginning, it was incorrectly perceived by some circles as a formalized change in the user interface of the web. In addition to thinking that Web 2.0 is a new and meaningless marketing definition, it has also been accepted as a new revolution and science in the web (Tyagi, 2012).

After the launch of O'reilly (2004), Web 2.0 has been described by different authors and different perspectives. The common point in all definitions is that web 2.0

refers to the social use of the web. This use has created an online environment in which people actively create, produce and share their own content.

Web 2.0 technologies will provide many advantages in terms of communication and information sharing opportunities for people in educational environments. Grosseck (2009), listed these advantages as follows:

- Reducing education costs,
- Flexibility of selected technologies,
- Easy and fast access to information regardless of time and location,
- Integrate a wide range of Web 2.0 applications into learning-teaching activities,
- Easy access to information and collaboration through social services,
- Check users' access to resources through authentication,
- Share accumulated experiences and resources,
- Not connected to any platform (Internet connection and Internet Browser is sufficient for a computer),
- Easy-to-use (requires minimum requirements for use with the internet),
- Long-term availability,
- Search and organize information (tagging and RSS feeds contributions),
- Increased number of methods and tutorial applications due to the variety of new technologies,
- Ability to test teaching practices using existing methods,
- Easily create instructional digital media content (videocast, podcast, etc.).

Web 2.0 technologies offer individuals opportunities in many ways. Web 2.0 tools can be used in different ways, such as questioning the current situation, question management, and telling alternative stories. These technologies are now among the elements of everyday life for most people. From there, these tools represent a constant

transition from HTML web pages to user-manipulated networks, and web-based technologies where users contribute to content (Buffington, 2008; Cash, 2010; Park, 2013).

Rives (2009) refers to Web 2.0 as the contribution of all users to content-rich online. Although the definition of Web 2.0 continues to evolve, most experts are collaborating in key categories such as online collaboration, information distribution, online service automation, social networking services, tagging, and rich internet applications (Alaji, 2011).

There are two aspects highlighted by these definitions made to Web 2.0 (Magnuson, 2012):

- The user is centrally positioned to create content and easily communicate across the web with a wider audience than ever before.
- The dynamic structure of Web 2.0 allows content creation, testing, and continuous updates.

According to Web 2.0 definitions, given the characteristics of these technologies, it is first noticed that they originate from users. This concept is called 'social web' because unlike Web 1.0, it encourages users to use collective intelligence more democratically. Therefore, the power of active participation in Web 2.0 leads individuals to collective intelligence (Magnuson, 2012).

Thus, Web 2.0 can take full advantage of the power of collective intelligence. Collective intelligence is a feature that addresses collaborative services in Web 2.0 applications and is based on the fact that most people are more knowledgeable than a few selected people. Thus, by changing, sharing and updating the information, it is possible to use the power of collective intelligence to increase the knowledge and reach the information easily (O'reilly and Battelle, 2009; Magnuson, 2012).

When we look at the other features of Web 2.0 in the literature, we often draw attention to features such as collaboration, communication, interaction, sharing, user-generated information. Especially collaborative activities are an important component for success in web-based environments. The success of Web 2.0 is based on the new generation of social software such as Wiki, blogs, RSS, peer-to-peer, instant messaging, Podcasts, Ajax-based browsers and other social networks to establish interactive communications and collaboration between people over the internet. In collaborative web pages, content created by different teams can be combined on a gradual timeline (Alexander, 2006; Buffington, 2008; Huang et al., 2009; Park, 2013).

Thus, it becomes easier to produce information by cooperating. Thus, a collaborative and interactive internet environment where individuals can easily share, create and contribute to global conversations is provided. Web 2.0 technologies tools have three features to facilitate social sharing (Drexler et al., 2008):

- User-based information,
- Options to choose where shares are made,
- Social networking alternatives (general sharing, group Building, Development, discussion and collaboration opportunities).

These technologies have also changed the way people interact with each other and obtain information (Estrada, 2012). With the Web 2.0 transformation, the internet has become a place where sharing among users is increasing, enabling them to live life that is similar to their real lives on the internet (Çakıroğlu, 2013). In addition, it has become a platform for social software to create user groups to create content on the internet, to socialise on the web and to work with others (Franklin and Harmelen, 2007; Avci, 2009; Chu et al., 2009; Anderson, 2012).

With these technologies, users can easily share a news, a video or a song they see anywhere on Facebook and Twitter. Thus, Web 2.0 technologies make it easier for users to contribute to environments that aim to share their content and ideas (Albion, 2008). On these sites, especially tech-savvy users create and personalize their own applications to share and modify them. While these users have the advantage of creating content on content consumption, information is recovered from corporate control. In addition, there is no need for special skills to create and edit these applications. The first factor of Web 2.0 is to develop the ability to create and publish content without the need to have knowledge of a computer programming language or special equipment other than a personal computer (Oiran, 2009).

In Web 2.0 applications with all these features, it takes more people to use the software, delivers it as a constantly updated service, receives and mixes data from multiple sources, includes individual users, and allows them to mix their data and services with others while offering (Alajmi, 2011).

www.edu20.org, founded in 2006 by a British entrepreneur named Graham Glass, is a good example of the educational use of Web 2.0 technologies. The site is designed as an environment where students, parents and teachers can register and learn by everyone. The students attend the courses that their teachers have opened through the site and the parents can follow the participation and success status of the students through the site. The main aim of the system is to increase the cooperation between the teachers and parents and to determine the difficulties experienced by the students and to provide support for the students. In this way, it is aimed to determine the situations that negatively affect learning by providing teacher-student-parent interaction and to take measures against them. Applications are integrated into the system, where users can share, chat and comment on multimedia to enable interaction.

The content sharing site called Akademist, which was created by Dumlupınar (2007), was designed in accordance with Web 2.0 standards. The prototype site established for the thesis study allows users to share and interpret content such as projects, Items, dissertations and research reports. Unlike a homework site, content sharing and development on the site is based on volunteerism, just like wikis. Users can gain learning experiences from each other's shared contents and can conduct free discussions about these shares. It is possible to develop the existing contents according to the wishes of the users. The site also allows users to share video and audio files from different platforms and comment on them. Therefore, in a collaborative and interactive environment, users gain access to both shared content and exchange of ideas.

In 2009, Churchill conducted a study to determine how blogs from Web 2.0 tools can support learning activities. In the study, 24 graduate students in Hong Kong University have been selected as samples. With the integration of blogs into the teaching activities, students are given access to the course content and the course discussions are carried out through blogs. At the end of the application carried out during a half term, it was concluded that the blogs were an effective learning tool with the qualitative data obtained from the students. In particular, it has been found that students have gained learning experiences by reading their friends' blogs, commenting on shared contents and reviewing the written comments.

The research conducted by Moran et al. (2011) with the participation of 3431 lecturers in the United States shows that the views on the educational use of social media tools are very positive. 70% of the lecturers who participated in the study stated that video and audio file sharing sites, blogs and wikis were efficient teaching tools. However, 58% of the participants stated that social media tools are important teaching tools that support collaborative learning.

The study conducted by Vaughan in 2010 aimed to determine the effect of Web 2.0 technologies integration to courses on active and cooperative learning, student interaction and academic achievement. Research at the end of the Web has been found that the use of the 2.0 tools in the educational environment significantly increases the active and cooperative learning activities. Rosen and Nelson (2008) argue that Web 2.0 has created a completely new generation of students. They defined this concept as ler the use of digital tools and Web 2.0 technologies in teaching-learning activities for the formation and construction of knowledge and stated that they made significant contributions to social constructivist learning.

2.2 Importance of Web 2.0 Technology in Education

Web 2.0 will have significant suggestions for understudies and teachers in formal, casual, business-based and deep-rooted instruction. Since most understudies utilize these advances regularly in their day by day lives. The rise of Web 2.0 advances has changed the way understudies connected, work, and learn modern data. In this manner, understudies require not as it were to get it the substance given but too to be dynamic, they got to be an person with inventive considering, issue understanding and innovation education. Subsequently, coordination these advances into instruction will emphatically influence the learning prepare. Coordinated web 2.0 applications into the preparing zone; in expansion to expanding the quality of learning and educating both interior and exterior the classroom and giving bolster to teachers and understudies, it too makes a difference clients to connected with data in a more dynamic and collaborative way in a assortment of instructive groups (Franklin and Harmelen, 2007; Harper, 2012; Kale, 2013).

Social learning is a central principle that is created by learners through the social interaction of knowledge and within the framework of this knowledge. Social

learning approaches using Web 2.0 as a tool in the mechanisms between collaborative student teachers and especially students working in different places at different times. For example, a group of students can create a wiki and this can be directed by a teacher. Based on this theory, Web 2.0 is a more participatory and potentially changing paradigm environment for configuring and sharing information. In this way, web-based education with easy access to the internet and computer has enabled every house to become a school, a faculty, a course (Franklin and Harmelen, 2007; Albion, 2008; Balliel, 2014).

Although Web 2.0 is presented as a relatively new idea with the emphasis of participants, it has been used since it was possible to access the internet in schools because educators have accepted the internet as a place for participation (Albion, 2008).

Web 2.0's network participation enables practitioners to work with tools that help them share their ideas and experiences. With a network of Education set up with Web 2.0 technologies, there will likely be the following (Albion, 2008; Hargadon, 2009).

- It may be possible for educators to participate in activities that will make a difference for themselves, their students and their institutions.
- It can be encouraged to learn continuously.
- Professional development opportunities can be provided to personnel or managers prohibited by law or policy.
- Changing regulations, requirements and standards can be kept with best practices.
- Educators may be able to meet specific needs and demands for customized approaches that meet the learning styles of all students.

Because of the rapid increase in the number of Web 2.0 tools, the training area is still looking for a framework for how to design learning experiences using Web 2.0 technologies (Bower et al., 2009).

Online structures and paradigms of these tools help to improve distance learning opportunities. Frequent use of these tools has revealed the term education 2.0. The awesome power of Web 2.0 tools, which are more social revolution than technical revolution, can change the nature of students' learning and direct students to education 2.0. Education 2.0 is the use of digital tools to configure information and transform learning and teaching by students, as well as teachers participating in interactive communities or networks. Grosseck (2009) recommends the following model for the use of Web 2.0 technologies in education in which education 2.0 is applied:

Table 1: Web 2.0 Technology Education Applications (Grosseck, 2009)

Web 2.0 Technologies	**Educational Applications**
Blogs	• Using blogs for real life writing experiences, • Gathering class blogs for easy browsing, • Teachers give quick feedback to students, students' friends, • Updating information such as homework, • Encourage students to comment and help each other on blogs,
Microblogs	• Class communities, cooperative writing discoveries, reader responses, collaboration throughout the school, cities, project management, opinion evaluation, a platform for metacognition, part of a conference or presentation, for reference or research, facilitating virtual class discussions, creating a learning experience, personal learning network applications,

	• Using teachers to disseminate material and work, finding the source of ideas, giving students concrete feedback, promoting professional connections, informal research etc. applications such as use,
Wikis	• Student projects, collaboration on ideas, organizing documents and resources from individuals and student groups. • The presentation tool is used as a group research project on a specific idea, in the management of school and classroom documents, as a collaborative brochure for students, for students to create books and diaries. • Creating and maintaining a class environment in class, class discussion, web resources gathering, working parties and university projects.
Photo / Slide Sharing	• Interpreting, sharing and annotating images or photos used in the classroom, • Inspiring writing and creativity, creating presentations using photographs, • Find photos of places and events using headings, • Sending students' presentations to authentic audiences and receiving feedback from all over the world, sharing professional development materials, and making it accessible to anyone, anytime, anywhere.
Video Sharing	• The professional development of the individual for his own videos, videos on his own subject to prepare special videos, video sharing sites related to current issues.
Tracking Content Via RSS	• Professional development, time saving, updated information in the field of teaching, • Information from restrictive sources, sharing with other educators, • RSS feeds can be used for course tracking by keeping web pages current and relevant.

When Grosseck's model is examined, it can be seen that there are individuals in the middle. In these environments all learners and the learner an actor because the roles and actions are part of the daily drama of life. Therefore, it is important that students take an active role in the process to increase the effectiveness of learning. The electronic collaboration of Web 2.0 applications such as wikis, blogs and social media sites can play an important role in this area (Tu et al., 2008).

The transfer of knowledge and skills can be extended to other core electronic Web 2.0 applications such as Facebook, Google Docs and YouTube, which can easily support learning and teaching. For this reason, online cooperative writing tools such as wikis and blogs that we use frequently are integrated into educational practices (Brodahl et al., 2011).

Since these technologies can be integrated into classes, to take place in educational environments, many people believe that teaching practices will change. Teachers should now have the opportunity to find and select technologies that correspond to the students' characteristic and learning styles and are familiar with new technologies so that they do not fall behind their students. As the use of these tools has increased in society, some educators have begun to convert these tools into classes, but there are Spider expectations of practice in schools. These tools can contribute to learning in many ways and provide teachers with a communication environment in which they can exchange and exchange information (Albion, 2008; Allen, 2008; Conole, 2010).

Teachers should be familiar with Web 2.0 tools to be aware of these opportunities and use them in their courses. Keeping teachers in the appropriate activities where you can use Web 2.0 for your own learning will make a significant contribution to this. In this respect, it is assumed that it is important to use these tools

in the pre-service period. In this regard, it is necessary to integrate Web 2.0 technologies in teacher education (Albion, 2008).

With advances in technologies, Web 2.0 has introduced new ways of working out new opportunities for learning and teaching that are not possible before. In addition, many teachers have started to consider these new technologies because most of these tools are cheap and easily accessible methods to use technology, to increase critical thinking and to support basic discussions in the classroom (Franklin and Harmelen, 2007; Gooding, 2007).

Grosseck (2009) outlined the advantages of using Web 2.0 technologies in education as follows:

- Wide range of information and collaboration opportunities through social bookmarking services,
- Cost reduction,
- Flexibility (in the case of the possibility of selecting technologies),
- Fast and easy access to information at any time and place,
- Integration of various Web 2.0 technologies into learning-teaching environments,
- Ability to control access to resources by verifying users' identities,
- Accumulate information (blogs, microblogs, wiki, flickr, YouTube) and share resources,
- Platform independency (adequate computer with Internet Browser and connection),
- Compatibility with the elements of the training field and the existing contextual dynamics,
- Simple to use,

- Reliability in continuous use,
- Spend less time and energy during search and information Management,
- Digital content creation.

In view of these characteristics of Web 2.0 technologies, their contribution to educational environments is seen. These tools facilitate cooperation and communication among students. One-way and limited communication can lead to the inability of Web 1.0 to be used as an effective communication method in education and education (Çakıroğlu, 2013).

Students can easily communicate with teachers and colleagues in a web 2.0 environment. This feature allows users to interact more effectively with information and collaborative environments in a variety of educational formats. Therefore, through these tools, students gain skills such as communication, online collaboration, negotiation, digital identity management for teamwork. In addition, Web 2.0 tools provide quick feedback on studies that support students' skills (Avcı, 2009; Park, 2013; Rhoads et al., 2013).

Web 2.0 has the potential to promote not only individual and group learning, but also high-performance learning. This may increase student participation. For example, Web 2.0 offers reading, writing and evaluation skills in schools and thus modifies reading, writing and evaluation (Fahser-Herro and Steinkuehler, 2009; London and Hall, 2011).

Web 2.0 software supports individual learning with a variety of presentation modes that appeal to multiple senses. By leveraging web technologies, tutors and colleagues you can easily access student research on 2.0 sites (London and Hall, 2011; park, 2013).

Students will have the opportunity to work at their own pace in these networks. In this way, individual differences can be eliminated. Because these networks learn different learning styles, text, audio, video etc. by providing services can contribute to their learning. In web-based education, very high-quality lessons can be prepared from pedagogically by using internet and computer technology (Ballıel, 2014).

The experimental applications and simulations in the courses prepared in this way enable open-ended problems in uncertain situations and make decisions (London and Hall, 2011). These tools go beyond group work support to provide students with the ability to share content to create lessons and learning materials, and students can create good lesson material using Web 2.0 systems (Franklin and Harmelen, 2007).

It can be said that the Web 2.0 tools contribute to the individual training of candidates for teachers in teacher education. As you know, the most important goal of universities is to educate independent individuals. These independent people; develop their own learning goals; develop plans and strategies to achieve these goals; work alone or with others to achieve their goals; they reflect learning processes and have the ability to control their products (Franklin and Harmelen, 2007).

The formation of independent individuals depends on the academic education, in order to be effective. The use of Web 2.0 technologies can be changed to provide collaborative learning and knowledge through a different educational approach through social configuration (Newland and Byles, 2014).

These technologies, with their positive impact on cognitive, motivation and student participation, help to be successful in academic environments that show opportunities for joint learning and development. Because Web 2.0 applications support learning and teaching in teacher education through video sharing, cooperation networks, mobile broadband and mobile computers. Therefore, the best way to help

teachers learn web 2.0 is to work with Web 2.0 in authentic activities (Albion, 2008 Estrada, 2012; Huang et al., 2013).

2.3 Self-Efficacy

In addition to the terms "self-regulation "and" language learning strategies", an equally important term "self-competence" should be considered for this study. Bandura (1986) defines self-efficacy as "assessing the ability of people to organize and implement measures necessary to achieve specific activities." This means that students with higher self-efficacy can easily decide what to do and how to feel when learning language and strategy. Therefore, since Bandura (1997) stated that students with self-efficacy set higher goals, made more efforts and fulfilled their learning tasks in difficult situations, the aim of our training should be to increase the self-efficacy of our students.

The quote says that the more self-regulating a student is, the more efficient it will be. In addition, students use a higher degree of self-efficacy than students with fewer self-efficacy strategies. Pintrich and De Groot (1990) also confirms that self-regulation is closely linked to the success of Primary School students. Research with university students shows the same trend. Self-efficacy students usually have a higher self-efficacy than their peers. The use of self-organizing learning strategies can be predicted by the students' belief in the event. It can be concluded whether the student's self-efficacy actively uses learning strategies in the interest of his / her own learning process. Another study by Stoeger and Ziegler (2007) found that self-regulation techniques have a high degree of self-efficacy.

Self-efficacy is based on the claim that people are struggling to control happenings in your life. To ensure control, to meet people's judgments about the ability to perform certain duties, and to meet those judgements about self-sufficiency, to force

people to decide on solving each task (Bandura, 1997). For example, do not take all actions around you, but you will avoid some of them by taking into account their SEB about this task. If you believe that the task requires a lot of effort and the task is not successful, you cannot resolve it. They also identify opportunities to overcome potential challenges in the light of efforts, energy and time to invest in an event. Self-efficacy is not about the quality of people, but about the beliefs on what they can do in alternative situations. It also shows that people are actually different from their beliefs about self-efficacy in different roles. You can have a high level of confidence in their performance for a series of tasks, but you can have a low level of self-esteem for other tasks. Therefore, resources that affect people beliefs on their abilities in different contexts are of great significance.

- **Sources of self-efficacy**

Bandura (1997) notes that these are the sources of SEB: "experience of mastery (enactive gain), vicarious experience, social conviction and physiological situations. These resources influence the process of building a strong sense of self-efficacy."

Mastery experiences: The most effective source, experience of mastery, cracks in the front of the task, services play an important role in creating a sense of self-competence (Bandura, 1997; Tschannen-Moran and Woolfolk Hay, 2001). Personal experiences tend to improve or weaken the expectations of success or failure, successes and failures that people experience in their lives in relation to their previous successes. If you have successfully completed challenging tasks, increase your self-esteem. Differently, if you have had slight success in dealing with tasks that challenge your skills, this can cause people to expect simple and quick success in all activities, regardless of whether these activities are hard or simple. Such experiences can lead to failure and discouragement and low SEB in all. This can also lead to paralysis of desperation (Dweck, 2000), and people cause failure due to lack of competence and

do not exist at all. The final result is probably amotivation and depression. People can create a sense of self-efficacy with the constant effort they make when dealing with difficulties. This shows that, despite failures, when people try to overcome difficulties and setbacks, they can increase their faith in their ability through their ongoing efforts. If you know what is behind success, you will not be discouraged by obstacles and you will have a sense of self-efficacy."

Vicarious experiences: Observing other people is another source that influences the process of building SEB. Bandura (1997) refers to research studies that show how people create a sense of self-efficacy by observing others in similar situations and evaluating their abilities. Observing others can increase the sense of self-efficacy if they witness others' success with a lasting effort, which leads to the belief that they have the same skills to perform similar tasks. On the contrary, it can also lead to a decrease in SEB when they observe others' failures despite the high effort. Schunk and Pajares (2002) states that SEB are affected by the affinity of the selected models. For example, modeling others is effective when their spouses share their similarities with the duties they are dealing with. A novice teacher may be uncertain on his ability to deal with troubled students in his classroom and may think he will fail if he tries. Observing that other novice teachers feel the same but are successful in managing students with destructive behaviors will increase their SEB and allow them to feel that they can manage this task."

Social persuasion: Social worldview in terms of how other people approach the person's abilities in a social environment (Bandura, 1997). People feel encouraged when others believe in their ability to perform a task and to convince them directly or indirectly. This in turn leads to increased confidence in their own effectiveness. For example, teachers usually try to encourage their students by expressing confidence in

their skills. Feel encouraged, students do their best to overcome their difficulties (if any) and succeed. Similarly, a lack of conviction can undermine people's self-esteem. If teachers show distrust, what is discouraging, their students will accept errors before they try the task. This will eventually lead to a low self-efficacy.

This does not mean that an unrealistic belief also strengthens the belief in one's own effectiveness, especially if it is followed by disappointing results (Channen - Moran et al. 1998). For example, if teachers improve students' self-efficacy, even though the requirements for completing tasks exceed their students' abilities, this will ultimately lead to setbacks and disappointments. It can also undermine students' confidence in their skills and they will try to avoid relatively difficult activities and quickly abandon them in the face of obstacles.

Physiological states: According to Bandura (1997), physiological and emotional states of people play a role in the evaluation of their own abilities. How people interpret physiological and emotional responses to their body, strengthen or weaken their belief in effectiveness in terms of their relationship to performance or physical well-being. In the same way, positive and negative mental states have the same effect on people when they evaluate their beliefs about their activities. This shows that the intensity or frequency of the body's reactions and mood changes are not important here, but how they are perceived and interpreted by people. High self-efficacy is often associated with the interpretation of responses, such as stimulants; people with low self-efficacy perceive them as indicators of stress, anxiety, or vulnerability to fear. For example, before starting the first class, a new teacher may experience fear. If this teacher interprets this fear as a sign of poor performance, he will probably not feel proficient in teaching this class. On the other hand, if he sees

this fear as an energy factor rather than a sense of incompetence, he is likely to increase his motivation.

2.4 Importance of Self-Efficacy in Education

Self-efficacy is often referred to as belief in what can be done. If a person analyzed the situation and only looked at the facts, he would not have come to a conclusion about his own effectiveness. Self-efficacy is based on a person's belief in his or her own abilities and is not related to previous experience. For example, a person may have high self-efficacy when walking on a tight rope, but has never performed a specific task, but has experience with walking tools at the construction site of a skyscraper. In addition to believing in one's own abilities, self-efficacy depends on the observed results of others. If one sees that the other is successful in a particular task and the Observer feels like an observer, it may also be effective in that task (Stoffle and Leeder, 2005).

In order to further clarify the self-efficacy, the reality of how self-efficacy responds to other self-assessments should be looked at. For example, the estimates of self-efficacy and results sometimes do not follow the same trend (Bandura, 1977). Because of the negative result estimate, intent cannot be triggered because the result estimate is negative, not because the self-sufficiency is not high. Finally, self-efficacy is also considered to be associated with socialization. Self-efficacy changes not only by following other people, but also by working together and changing self-efficacy. By exploring the main areas affecting self-efficacy (observable results, past experience, prediction and socialization), this technology has a conceptual way for self-efficacy study. Speaking of self-efficacy in terms of technology, talk about the student's belief in technology learning and understanding technology and their skills.

Students' self-efficacy affects them in different ways. Accordingly, students are affected by various factors such as self-efficacy, academic performance, emotions and academic performance. Some researchers are working on these topics. According to Wang et al. (2013), students' self-efficacy is extremely dependent on their learning activity. When a student realizes that he or she can do what he or she wants, and eventually succeeds, self-sufficiency increases accordingly. In addition, students' performance is influenced by their beliefs in their activities.

Pajares and Miller (1994) demonstrated that students' mathematical skills to solve problems can predict the success of problem solving compared to other variables. Another study by Zimmerman and Bandura (1994) found that students' self-efficacy in terms of writing performance is positively associated with their musical scores as well as their actual scores. Therefore, it can be said that students' success reflects their self-efficacy positively (Angeli, 2005).

Bandura (2006) describes the importance of self-efficacy and the reflection of students' academic achievement:

> Effective beliefs affect whether people are unpredictable or strategic, optimistic or pessimistic. They also affect the choices people make, the challenges and goals they set for themselves, how they work, how much effort they put into their efforts, what results they expect, and how long they face obstacles, their resilience to distress, their emotional quality of life, their environmental needs and their choices of life, and their success in managing stress and depression.

It is understood that a person's beliefs in his or her own activity affect not only the educational life but also the decision made about life decisions in general. Therefore, if the teacher wants his students to cope with all the difficulties they face in the language learning process, it is emphasized that for quite a long time, he has to do everything possible to teach the learning process, which provides a high level of self-efficacy for the students to solve all the above tasks. It also helps them prepare better for professional and social life.

There are several factors that affect people's self-efficacy. In the past, people's experiences can affect their own self-efficacy, because if a person has a winning experience, they have a high self-efficacy because they are confident of their abilities. Wang and Pape (2005) agree: "the belief of students in their activity can be strengthened through past and positive feedback from teachers and parents in the forest through successful experiences.

> Therefore, positive experiences of the past and the support of teachers will provide students with a high degree of self-efficacy. In other words, teachers should always encourage their students to take full advantage of their potential and make them believe they can do it if they believe they want it. In this way, students gain self-efficacy, they must be successful.

The role of teachers is very important here, because they need to offer their students opportunities to increase their self-efficacy. Each student can successfully assign tasks to students according to the level of success so that the language learning process feels complete. This increases the self-confidence of students so that self-sufficiency is higher. However, in order to learn a high level of self-efficacy, teachers must also have a high level of self-efficacy. There are also studies that prove the importance of self-efficacy of teachers. According to the results of Ashton's study on self-efficacy (1994), teachers with high self-efficacy evaluate themselves and their education positively. They also believe that they play an important role in educating their students so that they can devote their energies, their commitment and their time to teaching their students. So they do everything they can to develop effective learning strategies. In another study conducted by Gibson and Dembo (1984), researchers observed eight teachers with high or low self-efficacy. They found that those with high self-efficacy were more efficient in classroom management and learning time. These highly effective teachers seem more confident and less frustrated when confronted

with classroom problems. Therefore, it is important for teachers to have a high degree of self-efficacy, so that students can think on it.

Show conviction for students' self-efficacy in research conducted on their own that self-efficacy can be improved and improved through education. Bandura (1997) means "cognitive modernization", which is defined as "visualizing self-management in different situations and difficult situations" as part of various experiences. This can be accomplished by offering students challenging tasks, and they can overcome complexity. You should be left alone to realize that you may be able to cope with the situation that increases your self-efficacy.

Bandura (1997) suggests that people can find satisfaction and confidence to review how to deal with increasingly complex or threatening situations and how to deal with them. “Therefore, this assignment process has to be repeated several times by the teachers so that they receive the self-esteem they receive with the first toughest tasks. Self-expression and self-improvement can be part of a wider repertoire of student self-regulating skills. This means that students can increase self-efficacy through self-organizing measures through modeling. Zimmerman and Kitsantas (2005) with such self-regulation strategies called "self-affirmation cycle", students develop confidence and competence to strengthen their own “influence” beliefs.

Students are expected to be self-regulating students who use learning strategies to develop self-efficacy. Zimmerman and Schunk (2008) indicate that self-efficacy students are more likely to use cognitive and metacognitive strategies in teaching than those who question their competence. Therefore, students should be encouraged to use self-regulation strategies to improve their activities. In other words, it is possible to increase the perception of self-efficacy by helping students learn to become better self-organizers.

There are several steps that students need to take to increase their self-efficacy. Bandura (1997) argues that students are self-sufficient by selecting and interpreting information from four main sources. They usually develop experience based on the results of their previous performance. They also develop self-efficacy through the experience of others to observe others. Therefore, Bandura (1997) emphasizes the importance of modeling so that students can shape their own self-efficacy. Another source is social beliefs learned by students such as parents, teachers, peers, through feedback, judgement and evaluation of their performance. Finally, these are the emotional and physiological states of arousal, anxiety, mood, and exhaustion that affect the person's faith in his or her own activity. Therefore, there are several factors that affect the development of students' beliefs about self-efficacy. Self-efficacy is a broad term that can be associated with self-regulatory strategies, but also directly associated. When students implement the right strategies to achieve what they are looking for, they increase their level of self-proficiency that is completely related to "experience of mastery". "This category is directly related to the purpose of this study, to determine the relationship between self-regulation skills and student self-efficacy (Yusuf, 2011).

2.5 Related Research

There are many studies on the use of Web 2.0 technologies in teaching environments. In some studies, researchers have tried to determine their effectiveness by integrating these technologies in the teaching process. In addition, the attitudes and perceptions of students or teachers with respect to the usage of these instruments in education were investigated in some studies. However, there are very limited studies on pre-service teachers' SEB regarding web 2.0 practical content development. The relevant studies are as follows:

In the research conducted by Brown (2008), teacher candidates used Facebook as a lesson for the purpose of adding homework as a friend, adding books as a friend, sharing information, following the exam dates, following up the exam subjects and creating working groups. However, the researcher applied the practice for literature and history courses. As a result of the findings, it was concluded that social networking sites were available and meaningful for these courses.

Malhiwsky (2010), in his research, aims to determine the impact of Web 2.0 technologies on student achievement. In this study, mixed method including quantitative and qualitative methods is used. In the quantitative dimension of the study, especially the pre-test and post-test scores were analyzed and the community level, connection and learning in the classroom were examined. In qualitative dimension, the students investigated the ways of using Web 2.0 technologies in language learning and perceptions. Research results showed that time has a significant effect. According to the results of the research, it was found that the class cooperation stated by the students in the Web 2.0 course was higher. In addition, the students in the Web 2.0 course have a higher level of commitment. However, learning is at the same level in both groups. Asynchronous online interviews have 22 codes that are organized in 5 general themes: network, convenience, development, enjoyment and ease of use.

Ata (2011) investigated the relationship between university students' use of web 2.0 technologies and information literacy self-efficacy perceptions. The sample of the study, in which the relational screening model is used, consists of university students studying at various faculties of Dokuz Eylül University. Information literacy self-efficacy perceptions, foreign language level, computer ownership, frequency of internet usage, Web 2.0 technologies (blog, Wiki, podcast, video sharing sites, MSN and Facebook) was found to be a significant difference between the frequency of use.

Pal and Franklin (2011), in their research, schools in the United States with the integration of in-service teachers' self-efficacy and Web 2.0 tools (eg blogs, wiki, podcasts, social networking sites, image / photo sharing sites, and course management systems) investigated the relationship between. Results obtained from the research; reported that in-service teacher candidates have low self-efficacy in using Web 2.0 tools and that Web 2.0 tools integration is low in their classrooms.

Tınmaz (2011) examined the use of social networks and tried to identify the advantages and problems of using these networks in teaching. In this study, a mixed method with both quantitative and qualitative data is used. Questionnaires, interviews and open-ended questions were used to collect data. The study consists of four stages. In this process, Facebook's use and satisfaction was determined by Facebook's availability in education, interviews and analysis of a course process on Facebook. In this study, both qualitative and quantitative data were collected by questionnaire, interview table and open-ended questions. According to the results of the study, Facebook has the potential to use in teaching processes. Most of the respondents think that Facebook is more appropriate to support educational environments.

Teo et al. (2018) demonstrate procedures for teaching how to use Web 2.0. Based on previous research on the pedagogical rights of ICT, a factor model has been hypothesized. Data were collected from two universities in China (N = 464). The results of structural regression analysis, perceived arbitrary, perceived enjoyment, innovation norms, creativity and creativity conditions did not use Web 2.0 technologies. So can help stakeholders (teacher trainers, school leaders, and educational policymakers) in China to better understand the realities of Web 2.0 technologies.

Based on this scope, it is proven that the Web 2.0 instruments which are the new web-based instructional technology and the SEB of the teacher or teacher candidates separately are inspected when the related literature is examined. However, it is seen that there are limited number of researches about the pre-service teachers' W2PCDSEB. In this context, it is important in the research to be conducted and it is thought that it will be guided the future researches.

Chapter 3

METHODOLOGY

In this section, model of research, population and sample of research, data collection tools, collection of data and how-to analysis of obtained data are examined.

3.1 Research Method

Quantitative research design will be used for proposed study. Quantitative research is to determine the relationship between one thing (an independent variable) and another (a dependent or outcome variable) in a population. Quantitative research designs are either descriptive (subjects usually measured once) or experimental (subjects measured before and after treatment) (Hopkins, 2000).

One method used in quantitative research is the Survey method. This method is tried to describe, explain, what events, objects, assets, institutions, groups and various fields. Such investigations are tried to present the current situations, conditions and characteristics. It includes processes such as interpretation, evaluation and generalization to be applied to new situations by analyzing and explaining the data (Gunter, 2002).

3.2 Research Group

The research group of this study is included all teacher candidates whose registered at the Faculty of Education at the Eastern Mediterranean University during the 2018-2019 academic year. Even though all teacher candidates are tried to be reached, only 251 candidates are responded. In this context, the research consists of

all 251 teaching candidates who read in 8 different departments on the basis of volunteerism.

Demographic data (gender, department, class) of the participants of the research are given in Table 2.

Table 2: Demographic Information of Participants

		Frequency (F)	**Percent (%)**	**Valid Percent (%)**	**Cumulative Percent (%)**
Gender	**Female**	150	59.8	59.8	59.8
	Male	101	40.2	40.2	100.0
Departments	**CITE**	6	2.4	2.4	2.4
	ES	55	21.9	21.9	24.3
	FAE	18	7.2	7.2	31.5
	MSE	3	1.2	1.2	32.7
	SE	63	25.1	25.1	57.8
	BE	53	21.1	21.1	78.9
	TSSE	20	8.0	8.0	86.9
	FLE	33	13.1	13.1	100.0
Classes	**1st Class**	5	2.0	2.0	2.0
	2nd Class	149	59.4	59.4	61.4
	3rd Class	79	31.5	31.5	92.8
	4th Class	16	6.4	6.4	99.2
Total		**251**	**251**	**100**	**100**

According to Table 2, the sample of the study was 59.8% (150 people) female, 40.2% (101 people) male. The sample of the study reads: 2.4% (6 People) Computer and Instructional Technology Education (CITE), 21.9% (55 people) Educational Sciences (ES), 7.2% (18 people) Fine Arts Education (FAE), 1.2% (3 people)

Mathematics and Science Education (MSE), 25.1% (63 people) Special Education (SE), 21.1% (53 people) Basic Education (BE), 8% (20 people) Turkish and Social Sciences Education (TSSE), and 13.1% (33 people) Foreign Languages Education (FLE). The sample consisted of 2% (5 people) 1st class, 59.4% (149 people) 2nd class, 31.5% (79 people) 3rd class and 6.4% (16 people) 4th class.

3.3 Data Collection Tools

The data collection tool of the research, the web 2.0 practical content development self-efficacy beliefs (W2PCDSEB) to determine the scale (W2SEBS) which is developed by Birişçi et al., (2018). W2SEBS was developed to identify the proficiency level of a course to be conducted by Birişçi et al (2018). The scale consisting of 21 items and three sub-dimensions (preparation, presentation and evaluation) is prepared in variable degrees between "Very Inadequate" to "Very Sufficient".

3.4 Data Analysis

Data analysis of the research is descriptive analysis, frequency, percent, t- test, ANOVA. Descriptive analysis is also referred to as observational studies, because researcher observe the subjects without their intervention. The simplest descriptive analysis is a case that contains data on just one topic. Examples are a study of an outstanding athlete or a dysfunctional institution. Descriptive analysis of some cases is called case series. In cross-sectional analysis, variables of interest in a sample of subjects are tested once and the relationships between them are determined (Hopkins, 2000).

3.5 Validity and Reliability

In order to determine the reliability of the developed scale, Cronbach Alpha reliability coefficient of the scale and its sub-factors were calculated. The internal consistency coefficient of the scale was 0.95 (Table 3). The internal consistency coefficients of the three dimensions of the scale were for “Preparation” 0.83; for “Presentation” 0.85 and for “Evaluation” 0.84. According to the calculated internal consistency coefficients, the reliability of the scale is high.

Table 3: The Internal Consistency Coefficient of the Scale

Cronbach's Alpha	**N of Items**
.95	21

The purpose of using Web 2.0 applications is to categorize Cronbach's Alpha (α) as reliable since it is in the range of 0.71. Perception of Web 2.0 applications usage Cronbach's Alpha (α) value 0.93 is highly reliable because popular and widely used web 2.0 applications are 0.93 (Kalayci, 2009).

Chapter 4

FINDINGS AND DISCUSSION

In this chapter, the results of the study obtained by the data collection tool were analyzed and discussed extensively, the results aided in providing answers to the research questions specified.

4.1 Teacher Candidates of Web 2.0 Practical Content Development Self-Efficacy Beliefs

The sample of the study is shown in Table 4, scoring averages, standard deviations, lowest and highest scores of the scale, which determine levels of W2PCDSEB.

Table 4: Levels of W2PCDSEB

	N	**Minimum**	**Maximum**	**Mean**	**Std. Deviation**
Total of W2SEBS	251	24.00	105.00	73.49	15.15

W2SEBS has 3 sub-dimensions and 21 items respectively which are being evaluated on a likert type scale consisting 5 items with the minimum value being 1 and a maximum value of 5.

The mean of total items was 73.49 (minimum value 24.00; max value 105.00) and standard deviation was 15.15. Additionally, a mean value which is significantly greater than the average mean midpoint value indicates that the mean value is moderately high.

4.2 Teacher Candidates of W2PCDSEB According to Preparation, Presentation and Evaluation

The mean of the three sub-dimensions of the W2SBS scale of the sample is given in Table 5.

Table 5: The Mean of the Three Sub-Dimensions of the W2SBS Scale

Three Sub-Dimensions of the W2SBS Scale	**N**	**Minimum**	**Maximum**	**Mean**	**Std. Deviation**
Preparation	251	16.00	65.00	44.53	9.86
Presentation	251	4.00	20.00	14.59	3.26
Evaluation	251	4.00	20.00	14.35	3.31

According to Table 5, the mean of the "Preparation" sub-dimension was 44.53 (min value 16.00; max value 65.00) and the standard deviation was 9.86; "Presentation" sub-dimension was 14.59 (min value 4.00; max value 20.00) and standard deviation 3.26; "Evaluation" sub-dimension was 14.35 (min value 4.00; max value 20.00) and standard deviation 3.31.

According to these values, the abilities referenced in preparation sub-dimension is relatively high comparing the other sub-dimensions presentation and evaluation. As a result, 53.99% of the participants are claimed that their ability in preperation assessments are sufficient and very sufficient level. In opposition to this, 18.98% of partipicants have claimed that their ability in preperation assesments are inadequate and very inadequate, while 27.03% of partipicants remained undecided.

The frequency and percentage values of each item of the three sub-dimensions of the W2SEBS, which consists of 21 items of the sample, are given in Table 6.

Table 6: The Frequency and Percentage Values of Each Item of The Three Sub-Dimensions of The W2SEBS

Three Sub-Dimensions of W2SEBS		**Frequency (F)**	**Percentage (%)**
Preparation			
Item 1	Very Inadequate	19	7.6
	Inadequate	29	11.6
	Undecided	54	21.5
	Sufficient	112	44.6
	Very Sufficient	37	14.7
Item 2	Very Inadequate	23	9.2
	Inadequate	61	24.3
	Undecided	74	29.5
	Sufficient	74	29.5
	Very Sufficient	19	7.6
Item 3	Very Inadequate	10	4.0
	Inadequate	38	15.1
	Undecided	60	23.9
	Sufficient	111	44.2
	Very Sufficient	32	12.7
Item 4	Very Inadequate	11	4.4
	Inadequate	33	13.1
	Undecided	50	19.9
	Sufficient	123	49.0
	Very Sufficient	34	13.5
Item 5	Very Inadequate	9	3.6
	Inadequate	56	22.3
	Undecided	94	37.5

	Sufficient	72	28.7
	Very Sufficient	20	8.0
Item 6	Very Inadequate	15	6.0
	Inadequate	45	17.9
	Undecided	73	29.1
	Sufficient	95	37.8
	Very Sufficient	23	9.2
Item 7	Very Inadequate	8	3.2
	Inadequate	45	17.9
	Undecided	74	29.5
	Sufficient	98	39
	Very Sufficient	26	10.4
Item 8	Very Inadequate	7	2.8
	Inadequate	27	10.8
	Undecided	64	25.5
	Sufficient	128	51.0
	Very Sufficient	25	10.0
Item 9	Very Inadequate	4	1.6
	Inadequate	32	12.7
	Undecided	74	29.5
	Sufficient	117	46.6
	Very Sufficient	24	9.6
Item 10	Very Inadequate	4	1.6
	Inadequate	24	9.6
	Undecided	62	24.7
	Sufficient	130	51.8

	Very Sufficient	31	12.4
Item 11	Very Inadequate	7	2.8
	Inadequate	28	11.2
	Undecided	58	23.1
	Sufficient	117	46.6
	Very Sufficient	41	16.3
Item 12	Very Inadequate	9	3.6
	Inadequate	43	17.1
	Undecided	74	29.5
	Sufficient	95	37.8
	Very Sufficient	30	12
Item 13	Very Inadequate	7	2.8
	Inadequate	25	10
	Undecided	71	28.3
	Sufficient	110	43.8
	Very Sufficient	38	15.1
Presentation			
Item 14	Very Inadequate	8	3.2
	Inadequate	27	10.8
	Undecided	42	16.7
	Sufficient	133	53.0
	Very Sufficient	41	16.3
Item 15	Very Inadequate	6	4.2
	Inadequate	29	11.6
	Undecided	58	23.1
	Sufficient	117	46.6

	Very Sufficient	41	13.3
Item 16	Very Inadequate	5	2.0
	Inadequate	34	13.5
	Undecided	68	27.1
	Sufficient	105	41.8
	Very Sufficient	39	15.5
Item 17	Very Inadequate	6	2.4
	Inadequate	25	10.0
	Undecided	49	19.5
	Sufficient	122	48.6
	Very Sufficient	49	19.5
Evaluation			
Item 18	Very Inadequate	9	3.6
	Inadequate	33	13.1
	Undecided	65	25.9
	Sufficient	107	42.6
	Very Sufficient	37	14.7
Item 19	Very Inadequate	8	3.2
	Inadequate	30	12.0
	Undecided	62	24.7
	Sufficient	116	46.2
	Very Sufficient	35	13.9
Item 20	Very Inadequate	5	2.0
	Inadequate	35	13.9
	Undecided	66	26.3
	Sufficient	114	45.4

	Very Sufficient	31	12.4
Item 21	Very Inadequate	7	2.8
	Inadequate	23	9.2
	Undecided	47	18.7
	Sufficient	121	48.2
	Very Sufficient	53	21.1
Total		251	100

According to Table 6, the frequency and percentages of the responses given to each item of the three sub-dimensions of the W2SEBS of the sample of the study are given below:

Frequency and percentages of each item of the "Preparation" dimension (Item 1 - Item 13);

Of Item 1; 7.6% (19 person) Very Inadequate, 11.6% (29 person) Inadequate, 21.5% (54 person) Undecided, 44.6% (112 person) Sufficient, 14.7% (37 person) Very Sufficient, of Item 2; 9,2% (28 person) Very Inadequate, 24.3% (61 person) Inadequate, 29.5% (74 person) Undecided, 29,5% (74 person) Sufficient, 7.6% (19 person) Very Sufficient; of Item 3; 4% (10 person) Very Inadequate, 15.1% (38 person) Inadequate, 23.9% (60 person) Undecided, 44.2% (111 person) Sufficient, 12.7% (32 person) Very Sufficient, of Item 4; 4.4% (11 person) Very Inadequate, 13.1% (33 person) Inadequate, 19.9% (50 person) Undecided, 49% (123 person) Sufficient, 13.5% (34 person) Very Sufficient, of Item 5; 3.6% (9 person) Very Inadequate, 22.3% (56 person) Inadequate, 37.5% (94 person) Undecided, 28.7% (72 person) Sufficient, 8% (20 person) Very Sufficient, of Item 6; 6% (15 person) Very Inadequate, 17.9% (45 person) Inadequate, 29.1% (73 person) Undecided, 37.8% (35

person) Sufficient, 9.2% (23 person) Very Sufficient, of Item 7; 3.2% (8 person) Very Inadequate, 17.9% (45 person) Inadequate, 29.5% (74 person) Undecided, 39% (98 person) Sufficient, 10.4% (26 person) Very Sufficient; of Item 8; 2.8% (7 person) Very Inadequate, 27% (10.8 person) Inadequate, 25.5% (64 person) Undecided, 51% (128 person) Sufficient, 10% (25 person) Very Sufficient; of Item 9; 1.6% (4 person) Very Inadequate, 12.7% (32 person) Inadequate, 29.5% (74 person) Undecided, 46.6% (117 person) Sufficient, 9.6% (24 person) Very Sufficient, of Item 10; 1.6% (4 person) Very Inadequate, 9.6% (24 person) Inadequate, 24.7% (62 person) Undecided, 51.8% (130 person) Sufficient, 12.4% (31 person) Very Sufficient; of Item 11; 2.8% (7 person) Very Inadequate, 11.2% (28 person) Inadequate, 23,1% (58 person) Undecided, 46.6% (117 person) Sufficient, 16.3% (41 person) Very Sufficient; of Item 12; 3.6% (9 person) Very Inadequate, 17.1% (43 person) Inadequate, 29.5% (74 person) Undecided, 37.8% (95 person) Sufficient, 12% (30 person) Very Sufficient; of Item 13; 2.8% (7 person) Very Inadequate, 10% (25 person) Inadequate, 28.3% (71 person) Undecided, 43.8% (110 person) Sufficient, 15.1% (38 person) Very Sufficient.

Frequency and percentages of each item of the “Presentation” dimension (Item 14 - Item 17);

Of Item 14; 3.2% (8 person) Very Inadequate, 10.8% (27 person) Inadequate, 16.7% (42 person) Undecided, 53% (133 person) Sufficient, 16.3% (41 person) Very Sufficient, of Item 15; 2.4% (6 person) Very Inadequate, 11.6% (29 person) Inadequate, 23.1% (58 person) Undecided, 46.6% (117 person) Sufficient, 16.3% (41 person) Very Sufficient, of Item 16; 2% (5 person) Very Inadequate, 13.5% (34 person) Inadequate, 27.1% (68 person) Undecided, 41.8% (105 person) Sufficient, 15.5% (39 person) Very Sufficient, of Item 17; 2.4% (6 person) Very Inadequate, 10% (25 person) Inadequate, 19.5% (49 person) Undecided, 48.6% (122 person) Sufficient,

19.5% (49 person) Very Sufficient,

Frequency and percentages of each item of the "Evaluation" dimension (Item 18 - Item 21);

Of Item 18; 3.6% (9 person) Very Inadequate, 13.1% (33 person) Inadequate, 25.9% (65 person) Undecided, 42.6% (107 person) Sufficient, 14.7% (37 person) Very Sufficient, of Item 19; 3.2% (8 person) Very Inadequate, 12% (30 person) Inadequate, 24.7% (62 person) Undecided, 46.2% (116 person) Sufficient, 13.9% (35 person) Very Sufficient, of Item 20; 2% (5 person) Very Inadequate, 13.9% (35 person) Inadequate, 26.3% (66 person) Undecided, 45.4% (114 person) Sufficient, 12.4% (31 person) Very Sufficient, of Item 21; 2.8% (7 person) Very Inadequate, 9.2% (23 person) Inadequate, 18.7% (47 person) Undecided, 48.2% (121 person) Sufficient, 21.1% (53 person) Very Sufficient.

4.3 Teacher Candidates of W2PCDSEB According to Department

The results of the one-way ANOVA Test according to the "department" variable of the general and sub-dimensions of the W2SBS scale are given in Table 7 and Table 8.

Table 7: The Results of the Test According to the "Department" Variable of the General and Sub-Dimensions of the W2SBS Scale

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
Preparation									
Item 1	CITE	6	46.67	0.52	0.21	41.25	52.09	4	5
	ES	55	32	128.24	0.17	28.53	35.47	1	5
	FAE	18	38.89	0.83	0.2	34.75	43.03	2	5
	MSE	3	26.67	115.47	0.67	-0.2	55.35	2	4
	SE	63	34.13	104.16	0.13	31.5	36.75	1	5

	BE	53	36.6	103.67	0.14	33.75	39.46	1	5
	TSSE	20	42	0.41	0.09	40.08	43.92	4	5
	FLE	33	29.39	108.8	0.19	25.54	33.25	1	5
	Total	251	34.74	111.1	0.07	33.36	36.12	1	5
Item 2	CITE	6	45	0.55	0.22	39.25	50.75	4	5
	ES	55	28	119.26	0.16	24.78	31.22	1	5
	FAE	18	33.89	103.69	0.24	28.73	39.05	2	5
	MSE	3	26.67	115.47	0.67	-0.2	55.35	2	4
	SE	63	29.05	0.95	0.12	26.67	31.43	1	5
	BE	53	31.89	105.72	0.15	28.97	34.8	1	5
	TSSE	20	37	0.92	0.21	32.68	41.32	2	5
	FLE	33	24.85	103.44	0.18	21.18	28.52	1	5
	Total	251	30.2	110.07	0.07	28.83	31.57	1	5
Item 3	CITE	6	46.67	0.52	0.21	41.25	52.09	4	5
	ES	55	32.36	108.8	0.15	29.42	35.31	1	5
	FAE	18	37.22	107.41	0.25	31.88	42.56	2	5
	MSE	3	30	100	0.58	0.52	54.84	2	4
	SE	63	33.49	104.97	0.13	30.85	36.14	1	5
	BE	53	36.04	100.65	0.14	33.26	38.81	1	5
	TSSE	20	38.5	0.67	0.15	35.36	41.64	2	5
	FLE	33	33.03	0.92	0.16	29.78	36.29	2	5
	Total	251	34.66	102.46	0.06	33.39	35.94	1	5
Item 4	CITE	6	46.67	0.52	0.21	41.25	52.09	4	5
	ES	55	33.27	112.31	0.15	30.24	36.31	1	5
	FAE	18	38.89	0.83	0.2	34.75	43.03	2	5
	MSE	3	26.67	115.47	0.67	-0.2	55.35	2	4
	SE	63	33.49	109.48	0.14	30.74	36.25	1	5
	BE	53	37.55	0.94	0.13	34.96	40.13	1	5
	TSSE	20	39	0.64	0.14	36	42	3	5
	FLE	33	33.94	0.93	0.16	30.63	37.25	2	5
	Total	251	35.42	102.43	0.06	34.15	36.69	1	5
Item 5	CITE	6	46.67	0.52	0.21	41.25	52.09	4	5
	ES	55	29.09	0.91	0.12	26.64	31.55	1	5
	FAE	18	32.78	0.75	0.18	29.04	36.52	2	5
	MSE	3	26.67	115.47	0.67	-0.2	55.35	2	4
	SE	63	30.64	102.98	0.13	28.04	33.23	1	5

	BE	53	34.15	0.99	0.14	31.43	36.88	1	5
	TSSE	20	31	0.79	0.18	27.31	34.69	2	4
	FLE	33	30.3	0.95	0.17	26.93	33.68	1	5
	Total	251	31.51	0.98	0.06	30.3	32.73	1	5
Item 6	CITE	6	46.67	0.52	0.21	41.25	52.09	4	5
	ES	55	30.91	111.01	0.15	27.91	33.91	1	5
	FAE	18	32.78	0.75	0.18	29.04	36.52	2	4
	MSE	3	23.33	0.58	0.33	0.9	37.68	2	3
	SE	63	30.95	113.19	0.14	28.1	33.8	1	5
	BE	53	34.72	0.95	0.13	32.09	37.34	1	5
	TSSE	20	36	0.82	0.18	32.16	39.84	2	5
	FLE	33	31.52	103.44	0.18	27.85	35.18	1	5
	Total	251	32.63	104.81	0.07	31.33	33.93	1	5
Item 7	CITE	6	45	0.84	0.34	36.22	53.78	3	5
	ES	55	32	102.56	0.14	29.23	34.77	1	5
	FAE	18	35	0.92	0.22	30.41	39.59	2	5
	MSE	3	26.67	115.47	0.67	-0.2	55.35	2	4
	SE	63	31.91	102.95	0.13	29.31	34.5	1	5
	BE	53	34.72	0.97	0.13	32.04	37.4	1	5
	TSSE	20	38	0.7	0.16	34.74	41.26	2	5
	FLE	33	32.42	0.94	0.16	29.1	35.75	1	5
	Total	251	33.55	0.99	0.06	32.31	34.78	1	5
Item 8	CITE	6	46.67	0.52	0.21	41.25	52.09	4	5
	ES	55	34.55	101.5	0.14	31.8	37.29	1	5
	FAE	18	37.22	0.96	0.23	32.46	41.99	1	5
	MSE	3	33.33	0.58	0.33	18.99	47.68	3	4
	SE	63	34.6	0.91	0.11	32.3	36.9	1	5
	BE	53	36.79	0.78	0.11	34.65	38.94	2	5
	TSSE	20	37.5	0.72	0.16	34.15	40.85	2	5
	FLE	33	32.42	0.94	0.16	29.1	35.75	1	5
	Total	251	35.46	0.91	0.06	34.32	36.59	1	5
Item 9	CITE	6	46.67	0.52	0.21	41.25	52.09	4	5
	ES	55	33.27	0.88	0.12	30.89	35.66	1	5
	FAE	18	35.56	0.86	0.2	31.3	39.81	2	5
	MSE	3	26.67	115.47	0.67	-0.2	55.35	2	4
	SE	63	34.76	0.84	0.11	32.65	36.88	1	5

	BE	53	37.17	0.82	0.11	34.92	39.42	2	5
	TSSE	20	35.5	0.94	0.21	31.08	39.92	2	5
	FLE	33	32.73	0.94	0.16	29.38	36.08	1	5
	Total	251	34.98	0.89	0.06	33.87	36.09	1	5
Item 10	CITE	6	45	0.55	0.22	39.25	50.75	4	5
	ES	55	35.46	0.88	0.12	33.08	37.83	1	5
	FAE	18	38.89	0.58	0.14	35.99	41.79	2	5
	MSE	3	30	100	0.58	0.52	54.84	2	4
	SE	63	36.03	0.83	0.11	33.93	38.13	2	5
	BE	53	37.74	0.97	0.13	35.05	40.42	1	5
	TSSE	20	38.5	0.59	0.13	35.75	41.25	2	5
	FLE	33	32.73	0.94	0.16	29.38	36.08	1	5
	Total	251	36.38	0.88	0.06	35.29	37.46	1	5
Item 11	CITE	6	45	0.55	0.22	39.25	50.75	4	5
	ES	55	36.18	0.97	0.13	33.56	38.81	1	5
	FAE	18	38.33	0.71	0.17	34.82	41.85	2	5
	MSE	3	30	100	0.58	0.52	54.84	2	4
	SE	63	35.56	0.89	0.11	33.3	37.81	1	5
	BE	53	37.36	112.92	0.16	34.25	40.47	1	5
	TSSE	20	39	0.85	0.19	35.01	42.99	2	5
	FLE	33	32.12	0.99	0.17	28.6	35.64	1	5
	Total	251	36.26	0.98	0.06	35.04	37.47	1	5
Item 12	CITE	6	46.67	0.52	0.21	41.25	52.09	4	5
	ES	55	33.82	0.93	0.13	31.3	36.34	1	5
	FAE	18	32.78	101.78	0.24	27.72	37.84	2	5
	MSE	3	26.67	115.47	0.67	-0.2	55.35	2	4
	SE	63	33.02	0.96	0.12	30.6	35.44	1	5
	BE	53	34.72	106.71	0.15	31.78	37.66	1	5
	TSSE	20	41	0.55	0.12	38.41	43.59	3	5
	FLE	33	27.88	102.34	0.18	24.25	31.51	1	4
	Total	251	33.75	101.74	0.06	32.48	35.01	1	5
Item 13	CITE	6	46.67	0.52	0.21	41.25	52.09	4	5
	ES	55	35.46	0.9	0.12	33.02	37.89	1	5
	FAE	18	37.78	0.73	0.17	34.14	41.42	2	5
	MSE	3	36.67	0.58	0.33	22.32	51.01	3	4
	SE	63	35.08	0.98	0.12	32.61	37.55	1	5

	BE	53	36.42	102.08	0.14	33.6	39.23	1	5
	TSSE	20	39	0.64	0.14	36	42	3	5
	FLE	33	32.12	108.28	0.19	28.28	35.96	1	5
	Total	251	35.86	0.96	0.06	34.67	37.05	1	5
Presentation									
Item 14	CITE	6	45	0.55	0.22	39.25	50.75	4	5
	ES	55	35.64	103.21	0.14	32.85	38.43	1	5
	FAE	18	41.11	0.68	0.16	37.75	44.48	2	5
	MSE	3	30	100	0.58	0.52	54.84	2	4
	SE	63	36.03	0.94	0.12	33.66	38.41	1	5
	BE	53	36.98	101.12	0.14	34.19	39.77	1	5
	TSSE	20	41.5	0.49	0.11	39.21	43.79	3	5
	FLE	33	34.24	111.89	0.19	30.28	38.21	1	5
	Total	251	36.85	0.98	0.06	35.64	38.07	1	5
Item 15	CITE	6	43.33	0.82	0.33	34.77	51.9	3	5
	ES	55	37.64	0.92	0.12	35.14	40.13	1	5
	FAE	18	38.89	0.58	0.14	35.99	41.79	3	5
	MSE	3	30	0	0	30	30	3	3
	SE	63	36.03	0.94	0.12	33.66	38.41	2	5
	BE	53	35.66	111.82	0.15	32.58	38.74	1	5
	TSSE	20	39	0.79	0.18	35.31	42.69	2	5
	FLE	33	31.82	101.41	0.18	28.22	35.41	1	5
	Total	251	36.3	0.97	0.06	35.09	37.5	1	5
Item 16	CITE	6	41.67	0.75	0.31	33.77	49.57	3	5
	ES	55	35.82	0.98	0.13	33.18	38.46	1	5
	FAE	18	35	0.86	0.2	30.74	39.26	2	5
	MSE	3	26.67	0.58	0.33	12.32	41.01	2	3
	SE	63	36.35	0.92	0.12	34.03	38.67	2	5
	BE	53	36.6	103.67	0.14	33.75	39.46	1	5
	TSSE	20	35.5	0.89	0.2	31.35	39.65	2	5
	FLE	33	31.82	107.4	0.19	28.01	35.63	1	5
	Total	251	35.54	0.98	0.06	34.33	36.75	1	5
Item 17	CITE	6	45	0.55	0.22	39.25	50.75	4	5
	ES	55	36.36	100.67	0.14	33.64	39.09	1	5
	FAE	18	37.78	0.81	0.19	33.76	41.8	2	5
	MSE	3	30	0	0	30	30	3	3

	SE	63	37.3	0.95	0.12	34.9	39.7	1	5
	BE	53	38.11	107.52	0.15	35.15	41.08	1	5
	TSSE	20	41.5	0.59	0.13	38.75	44.25	3	5
	FLE	33	33.94	0.97	0.17	30.51	37.37	2	5
	Total	251	37.29	0.97	0.06	36.09	38.49	1	5
Evaluation									
Item 18	CITE	6	45	0.55	0.22	39.25	50.75	4	5
	ES	55	33.27	100.1	0.13	30.57	35.98	1	5
	FAE	18	42.22	0.55	0.13	39.5	44.95	3	5
	MSE	3	33.33	0.58	0.33	18.99	47.68	3	4
	SE	63	35.71	1	0.13	33.21	38.22	1	5
	BE	53	37.36	0.98	0.14	34.65	40.07	1	5
	TSSE	20	38	0.83	0.19	34.1	41.9	2	5
	FLE	33	26.67	0.89	0.15	23.51	29.82	1	4
	Total	251	35.18	101.33	0.06	33.92	36.44	1	5
Item 19	CITE	6	45	0.55	0.22	39.25	50.75	4	5
	ES	55	34.18	113.35	0.15	31.12	37.25	1	5
	FAE	18	38.89	0.76	0.18	35.12	42.66	2	5
	MSE	3	33.33	0.58	0.33	18.99	47.68	3	4
	SE	63	34.6	0.96	0.12	32.18	37.03	1	5
	BE	53	37.93	0.91	0.12	35.43	40.42	1	5
	TSSE	20	38.5	0.59	0.13	35.75	41.25	2	5
	FLE	33	30.91	0.98	0.17	27.43	34.38	2	5
	Total	251	35.58	0.98	0.06	34.36	36.8	1	5
Item 20	CITE	6	45	0.55	0.22	39.25	50.75	4	5
	ES	55	33.64	0.97	0.13	31.02	36.26	1	5
	FAE	18	35	0.92	0.22	30.41	39.59	2	5
	MSE	3	33.33	0.58	0.33	18.99	47.68	3	4
	SE	63	35.4	0.88	0.11	33.19	37.61	2	5
	BE	53	37.55	103.6	0.14	34.69	40.4	1	5
	TSSE	20	37.5	0.55	0.12	34.93	40.08	2	4
	FLE	33	30.91	0.98	0.17	27.43	34.38	1	5
	Total	251	35.22	0.95	0.06	34.04	36.4	1	5
Item 21	CITE	6	45	0.55	0.22	39.25	50.75	4	5
	ES	55	37.09	104.83	0.14	34.26	39.93	1	5

	FAE	18	41.11	0.83	0.2	36.97	45.25	2	5
	MSE	3	33.33	0.58	0.33	18.99	47.68	3	4
	SE	63	35.56	104.38	0.13	32.93	38.18	1	5
	BE	53	40	0.9	0.12	37.52	42.48	1	5
	TSSE	20	41	0.45	0.1	38.91	43.09	3	5
	FLE	33	33.33	102.06	0.18	29.71	36.95	2	5
	Total	251	37.57	0.98	0.06	36.35	38.79	1	5

Table 8: The Results of the One-Way ANOVA Test According to the "Department" Variable of the General and Sub-Dimensions of the W2SBS Scale

Variable	Source	Sum of Squares	Sd	Mean Square	F	P	Significant Difference
Preparation							
Item 1	Between Groups	39.77	7	5.68	5.14	0.00	CITE-ES, CITE-BE, CITE-FLE, ES-FAE, ES-SE, ES-BE, ES-TSSE, FAE-FLE, FAE-BE, FAE-TSSE, MSE-TSSE, SE-TSSE, BE-FLE, TSSE-FLE
	Within Groups	268.81	243	1.11			
	Total	308.58	250				
Item 2	Between Groups	39.67	7	5.67	5.23	0.00	CITE-ES, CITE-FAE, CITE-MSE, CITE-SE, CITE-BE, CITE-FLE, ES-FAE, ES-SE, ES-BE, ES-TSSE, FAE-FLE, SE-TSSE, BE-FLE, TSSE-FLE
	Within Groups	263.23	243	1.08			
	Total	302.90	250				
Item 3	Between Groups	19.07	7	2.73	2.72	0.01	CITE-ES, CITE-FAE, CITE-MSE, CITE-SE, CITE-BE, CITE-FLE, ES-TSSE
	Within Groups	243.39	243	1.00			
	Total	262.46	250				

Item 4	Between Groups	22.62		3.23	3.28	0.00	CITE-ES, CITE-MSE, CITE-SE, CITE-BE, CITE-FLE, ES-FAE, ES-BE, ES-TSSE, FAE-MSE, FAE-SE, MSE-TSSE, SE-BE, SE-TSSE
	Within Groups	239.69	243	0.99			
	Total	262.31	250				
Item 5	Between Groups	22.71	7	3.24	3.66	0.00	CITE-ES, CITE-FAE, CITE-MSE, CITE-SE, CITE-BE, CITE-TSSE, CITE-FLE, ES-BE, SE-BE
	Within Groups	215.54	243	0.89			
	Total	238.25	250				
Item 6	Between Groups	22.81	7	3.26	3.14	0.00	CITE-ES, CITE-FAE, CITE-MSE CITE-SE, CITE-BE, CITE-TSSE, CITE-FLE, FAE-ES, MSE-TSSE, SE-BE
	Within Groups	251.84	243	1.04			
	Total	274.65	250				
Item 7	Between Groups	17.79	7	2.54	2.69	0.01	CITE-ES, CITE-FAE, CITE-MSE, CITE-SE, CITE-FLE, ES-TSSE, FAE-ES, MSE-TSSE, SE-BE, BE-TSSE, TSSE-FLE
	Within Groups	229.65	243	0.95			
	Total	247.44	250				
Item 8	Between Groups	13.97	7	2.00	2.50	0.02	CITE-ES, CITE-FAE, CITE-MSE, CITE-SE, CITE-BE, CITE-TSSE, BE-FLE, TSSE-FLE
	Within Groups	194.26	243	0.80			
	Total	208.22	250				
Item 9	Between Groups	16.23	7	2.32	3.09	0.00	CITE-ES, CITE-FAE, CITE-MSE, CITE-SE, CITE-BE, CITE-TSSE, CITE-FLE, ES-
	Within Groups	182.52	243	0.75			

	Total	198.75	250				BE, SE-BE, SE-TSSE, BE-MSE, BE-FLE
Item 10	Between Groups	13.64	7	1.95	2.65	0.01	CITE-ES, CITE-MSE, CITE-SE, CITE-BE, CITE-TSSE, CITE-FLE, FAE-FLE, BE-FLE, TSSE-FLE
	Within Groups	178.37	243	0.73			
	Total	192.01	250				
Item 11	Between Groups	14.64	7	2.09	2.27	0.03	CITE-ES, CITE-MSE, CITE-SE, CITE-FLE, FAE-FLE, TSSE-FLE
	Within Groups	224.15	243	0.92			
	Total	238.80	250				
Item 12	Between Groups	34.41	7	4.92	5.32	0.00	CITE-ES, CITE-FAE, CITE-MSE, CITE-SE, CITE-BE, CITE-FLE, ES-TSSE, ES-FLE, FAE-FLE, FAE-TSSE, MSE-TSSE, SE-TSSE, SE-FLE, BE-TSSE, BE-FLE, TSSE-FLE
	Within Groups	224.39	243	0.92			
	Total	258.80	250				
Item 13	Between Groups	14.91	7	2.13	2.42	0.02	CITE-ES, CITE-FAE, CITE-SE, CITE-BE, CITE-FLE, FAE-FLE, BE-FLE, TSSE-FLE
	Within Groups	214.00	243	0.88			
	Total	228.91	250				
Presentation							
Item 14	Between Groups	16.47	7	2.35	2.58	0.01	CITE-ES, CITE-MSE, CITE-SE, CITE-BE, CITE-FLE, ES-FAE, ES-TSSE, FAE-
	Within Groups	221.67	243	0.91			

	Total	238.14	250				SE, FAE-FLE, SE-TSSE, TSSE-FLE
Item 15	Between Groups	14.70	7	2.10	2.32	0.03	CITE-MSE, CITE-FLE, ES-FLE, FAE-FLE, SE-FLE, TSSE-FLE
	Within Groups	219.85	243	0.91			
	Total	234.54	250				
Item 16	Between Groups	10.29	7	1.47	1.57	0.15	
	Within Groups	227.73	243	0.94			
	Total	238.02	250				
Item 17	Between Groups	13.29	7	1.90	2.09	0.05	CITE-ES, CITE-MSE, CITE-FLE, ES-TSSE, BE-FLE, TSSE-FLE
	Within Groups	220.29	243	0.91			
	Total	233.58	250				
Evaluation							
Item 18	Between Groups	45.02	7	6.43	7.38	0.00	CITE-ES, CITE-SE, CITE-FLE, ES-FAE, ES-BE, ES-FLE, FAE-SE, FAE-FLE, SE-FLE, BE-FLE, TSSE-FLE
	Within Groups	211.65	243	0.87			
	Total	256.67	250				
Item 19	Between Groups	20.94	7	2.99	3.32	0.00	CITE-ES, CITE-FLE, ES-BE, FAE-FLE, BE-FLE, TSSE-FLE
	Within Groups	218.97	243	0.90			
	Total	239.91	250				
Item	Between	17.30	7	2.47	2.90	0.01	

20	Groups					CITE-ES, CITE-FLE, ES-BE, FAE-FLE, BE-FLE, TSSE-FLE
	Within Groups	207.33	243	0.85		
	Total	224.63	250			
Item 21	Between Groups	20.20	7	2.89	3.19	0.00 CITE-SE, CITE-FLE, FAE-SE, FAE-FLE, SE-BE, SE-TSSE, BE-FLE, TSSE-FLE
	Within Groups	219.98	243	0.91		
	Total	240.17	250			

Sig. < 0.05

According to Table 8, the SEB of teacher candidates who make up the sample of the research in practice with web 2.0 technologies were evaluated below according to the department variable according to the one-way ANOVA test result ($p < 0.05$):

- All items in the "Preparation" sub-dimension of the W2SBS scale (Item 1-Item 13) are statistically significant.
- In the lower dimension of the W2SBS scale "Presentation", Item 14, 15 and 17 are statistically significant, but Item 16 is not statistically significant.
- All items in the "Evaluation" sub-dimension of the W2SBS scale (Item 18-Item 21) are statistically significant.

Accordingly, the results of the one-way ANOVA test show that the teacher candidates' SEB in developing practical content with Web 2.0 technologies differ statistically significantly (Sig. < 0.05). In this context, post-hoc test was applied to determine which departments were statistically significant. Post-hoc tests, where difference comparisons were made multiple comparisons, are performed only if an integral ANOVA test was found to be significant. The correct selection of one of the

multiple-comparison or multiple-Range tests (post-hoc) after the analysis of variance is important in determining the source of the difference more accurately.

The three sub-dimensions of the W2SBS scale, which consists of 21 items, were discussed in detail below, in order to determine which departments of SEB were statistically significant in developing practical content with Web 2.0 technologies:

According to LSD test results from post-hoc tests, the result of Item 1 of the "Preparation" sub-dimension of the W2SBS scale is given in Appendix B. In this context, the "preparation" sub-dimension of the W2SBS scale was determined to determine whether the scores of "Item 1" were different depending on the partition variable and the statistically significant difference between the subgroups of (Sig. < 0.05) was determined as result of the one-way variance analysis (ANOVA);

- The Department of CITE has proved that there is a relation between the students in the Department of ES, BE and FLE in terms of statistical significance as shown in Table 8. According to Table 7, Department of CITE (mean is 46.67) has the higher mean comparing to department of ES (mean is 32), BE (mean is 36.6) and FLE (29.39) and the result indicates that the participants from CITE has higher self-efficacy belief on the basis of Item 1.
- The Department of ES has proved that there is a relation between the students in the Department of CITE, FAE, SE, BE, TSSE in terms of statistical significance as shown in Table 8. According to Table 7, Department of ES (32) has lower mean comparing to department of CITE (46.67), FAE (38.89), SE (34.13), BE (36.6) and TSSE (42) and the result indicates that the participants from ES has lower self-efficacy belief on the basis of Item 1.
- The Department of FAE has proved that there is a relation between the students in the Department of ES, FLE, BE, TSSE in terms of statistical significance as

shown in Table 8. According to Table 7, Department of FAE (38.89) has lower mean comparing to department of TSSE (42) and the result indicates that the participants from FAE has lower self-efficacy belief on the basis of Item 1. Again, according to Table 7, Department of FAE (38.89) has higher mean comparing to department of ES (32), FLE (29.39) and BE (36.6) and the result indicates that the participants from FAE has higher self-efficacy belief on the basis of Item 1.

- The Department of MSE has proved that there is a relation between the students in the Department of CITE, TSSE in terms of statistical significance as shown in Table 8. According to Table 7, Department of MSE (26.67) has lower mean comparing to department of CITE (46.67) and TSSE (42) and the result indicates that the participants from MSE has lower self-efficacy belief on the basis of Item 1.
- The Department of SE has proved that there is a relation between the students in the Department of TSSE in terms of statistical significance as shown in Table 8. According to Table 7, Department of SE (34.13) has lower mean comparing to department of TSSE (42) and the result indicates that the participants from SE has lower self-efficacy belief on the basis of Item 1.
- The Department of BE has proved that there is a relation between the students in the Department of ES and FLE in terms of statistical significance as shown in Table 8. According to Table 7, Department of BE (36.6) has the higher mean comparing to department of ES (32) and FLE (29.39) and the result indicates that the participants from BE has higher self-efficacy belief on the basis of Item 1.
- The Department of TSSE has proved that there is a relation between the

students in the Department of ES, MSE, SE and FLE in terms of statistical significance as shown in Table 8. According to Table 7, Department of TSSE (42) has the higher mean comparing to department of ES (32), MSE (26.67), SE (34.13) and FLE (29.39) and the result indicates that the participants from TSSE has higher self-efficacy belief on the basis of Item 1.

- The Department of FLE has proved that there is a relation between the students in the Department of CITE, FAE, SE, BE, TSSE in terms of statistical significance as shown in Table 8. According to Table 7, Department of FLE (29.39) has lower mean comparing to department of CITE (46.67), FAE (38.89), SE (34.13), BE (36.6) and TSSE (42) and the result indicates that the participants from FLE has lower self-efficacy belief on the basis of Item 1.

Item 1 queries creating a new spreadsheet ability of the participant. Since it requires an elementary level knowledge comparing the other tasks, there was no mean difference between departments higher than 2.0 and it was expected.

According to LSD test results from post-hoc tests, the result of “Item 2” of the “Preparation” sub-dimension of the W2SBS scale is given in Appendix B. In this context, the “preparation” sub-dimension of the W2SBS scale was determined to determine whether the scores of "Item 2" were different depending on the partition variable and the statistically significant difference between the subgroups of (Sig. < 0.05) was determined as result of the one-way variance analysis (ANOVA) ;

- The Department of CITE has determined that there is a relation between the students in the Department of ES, FAE, MSE, SE, BE and FLE in terms of statistical significance as shown in Table 8. According to Table 7, Department of CITE (45), has higher mean comparing to department of ES (28), FAE (33.89), MSE (26.67), SE (29.05), BE (31.89) and FLE (24.85) and the result

indicates that the participants from CITE has higher self-efficacy belief on the basis of Item 2.

- The Department of ES has determined that there is a relation between the students in the Department of CITE, FAE, SE, BE, TSSE in terms of statistical significance as shown in Table 8. According to Table 7, Department of ES (28) has lower mean comparing to department of CITE (45), FAE (33.89), SE (29.05), BE (31.89) and TSSE (37) and the result indicates that the participants from ES has lower self-efficacy belief on the basis of Item 2.
- The Department of FAE has determined that there is a relation between the students in the Department of CITE, ES and FLE in terms of statistical significance as shown in Table 8. According to Table 7, Department of FAE (29.39) has lower mean comparing to department of CITE (45) and the result indicates that the participants from FLE has lower self-efficacy belief on the basis of Item 2. According to Table 7, Department of FAE (29.39) has higher mean comparing to department of ES (28) and FLE (24.85) and the result indicates that the participants from FAE has higher self-efficacy belief on the basis of Item 2.
- The Department of MSE has determined that there is a relation between the students in the Department of CITE in terms of statistical significance as shown in Table 8. According to Table 7, Department of MSE (26.67) has lower mean comparing to department of CITE (45) and the result indicates that the participants from MSE has lower self-efficacy belief on the basis of Item 2.
- The Department of SE has determined that there is a relation between the students in the Department of CITE and TSSE in terms of statistical significance as shown in Table 8. According to Table 7, Department of SE

(29.05) has lower mean comparing to department of CITE (45) and TSSE (37) and the result indicates that the participants from SE has lower self-efficacy belief on the basis of Item 2.

- The Department of BE has determined that there is a relation between the students in the Department of CITE and FLE in terms of statistical significance as shown in Table 8. According to Table 7, Department of BE (31.89) has lower mean comparing to department of CITE (45) and the result indicates that the participants from BE has lower self-efficacy belief on the basis of Item 2. According to Table 7, Department of BE (31.89) has higher mean comparing to department of FLE (24.85) and the result indicates that the participants from BE has higher self-efficacy belief on the basis of Item 2.
- The Department of TSSE has determined that there is a relation between the students in the Department of ES, SE and FLE in terms of statistical significance as shown in Table 8. According to Table 7, Department of TSSE (37) has higher mean comparing to department of ES (28), SE (29.05) and FLE (24.85) and the result indicates that the participants from TSSE has higher self-efficacy belief on the basis of Item 2.
- The Department of FLE has determined that there is a relation between the students in the Department of CITE, FAE, BE and TSSE in terms of statistical significance as shown in Table 8. According to Table 7, Department of FLE (24.85) has lower mean comparing to department of CITE (45), FAE (33.89), BE (31.89) and TSSE (37) and the result indicates that the participants from FLE has lower self-efficacy belief on the basis of Item 2.

Item 2 essentially queries creating an animation ability, the participants from CITE department has the highest self-efficacy belief among the other groups.

According to LSD test results from post-hoc tests, the result of “Item 3” of the “Preparation” sub-dimension of the W2SBS scale is given in Appendix B. In this context, the “preparation” sub-dimension of the W2SBS scale was determined to determine whether the scores of "Item 3" were different depending on the partition variable and the statistically significant difference between the subgroups of (Sig. < 0.05) was determined as result of the one-way variance analysis (ANOVA);

- The Department of CITE has determined that there is a relation between the students in the Department of ES, FAE, MSE, SE, BE and FLE in terms of statistical significance as shown in Table 8. According to Table 7, Department of CITE (46.67) has higher mean comparing to department of ES (32.36), FAE (37.22), MSE (30), SE (33.89), BE (36.04) and FLE (33.03) and the result indicates that the participants from CITE has higher self-efficacy belief on the basis of Item 3.
- The Department of ES has determined that there is a relation between the students in the Department of CITE and TSSE in terms of statistical significance as shown in Table 8. According to Table 7, Department of ES (32.36) has lower mean comparing to department of CITE (46.67) and TSSE (38.5) and the result indicates that the participants from ES has lower self-efficacy belief on the basis of Item 3.
- The Department of FAE has determined that there is a relation between the students in the Department of CITE in terms of statistical significance as shown in Table 8. According to Table 7, Department of FAE (37.22) has lower mean comparing to department of CITE (46.67) and the result indicates that the participants from FAE has lower self-efficacy belief on the basis of Item 3.
- The Department of MSE has determined that there is a relation between the

students in the Department of CITE in terms of statistical significance as shown in Table 8. According to Table 7, Department of MSE (30) has lower mean comparing to department of CITE (46.67) and the result indicates that the participants from MSE has lower self-efficacy belief on the basis of Item 3.

- The Department of SE has determined that there is a relation between the students in the Department of CITE in terms of statistical significance as shown in Table 8. According to Table 7, Department of SE (33.49) has lower mean comparing to department of CITE (46.67) and the result indicates that the participants from SE has lower self-efficacy belief on the basis of Item 3.
- The Department of BE has determined that there is a relation between the students in the Department of CITE in terms of statistical significance as shown in Table 8. According to Table 7, Department of BE (36.04) has lower mean comparing to department of CITE (46.67) and the result indicates that the participants from BE has lower self-efficacy belief on the basis of Item 3.
- The Department of TSSE has determined that there is a relation between the students in the Department of ES in terms of statistical significance as shown in Table 8. According to Table 7, Department of TSSE (38.5) has higher mean comparing to department of ES (32.36) and the result indicates that the participants from TSSE has higher self-efficacy belief on the basis of Item 3.
- The Department of FLE has determined that there is a relation between the students in the Department of CITE in terms of statistical significance as shown in Table 8. According to Table 7, Department of FLE (33.03) has lower mean comparing to department of CITE (46.67) and the result indicates that the participants from FLE has lower self-efficacy belief on the basis of Item 3.

According to LSD test results from post-hoc tests, the result of “Item 4” of the “Preparation” sub-dimension of the W2SBS scale is given in Appendix B. In this context, the “preparation” sub-dimension of the W2SBS scale was determined to determine whether the scores of "Item 4" were different depending on the partition variable and the statistically significant difference between the subgroups of (Sig. < 0.05) was determined as result of the one-way variance analysis (ANOVA);

- The Department of CITE has determined that there is a relation between the students in the Department of ES, MSE, SE, BE and FLE in terms of statistical significance as shown in Table 8. According to Table 7, Department of CITE (46.47) has higher mean comparing to department of ES (33.27), MSE (26.67), SE (33.49), BE (37.55) and FLE (33.94) and the result indicates that the participants from CITE has higher self-efficacy belief on the basis of Item 4.
- The Department of ES has determined that there is a relation between the students in the Department of CITE, FAE, BE and TSSE in terms of statistical significance as shown in Table 8. According to Table 7, Department of ES (33.27) has lower mean comparing to department of CITE (46.67), FAE (38.89), BE (37.55) and TSSE (39) and the result indicates that the participants from ES has lower self-efficacy belief on the basis of Item 4.
- The Department of FAE has determined that there is a relation between the students in the Department of ES, MSE and SE in terms of statistical significance as shown in Table 8. According to Table 7, Department of FAE (38.89) has higher mean comparing to department of ES (33.27), MSE (26.67), and SE (33.49) and the result indicates that the participants from FAE has higher self-efficacy belief on the basis of Item 4.
- The Department of MSE has determined that there is a relation between the

students in the Department of CITE, FAE, TSSE in terms of statistical significance as shown in Table 8. According to Table 7, Department of MSE (26.67) has lower mean comparing to department of CITE (46.67), FAE (38.89) and TSSE (39) and the result indicates that the participants from MSE has lower self-efficacy belief on the basis of Item 4.

- The Department of SE has determined that there is a relation between the students in the Department of CITE, FAE, BE, TSSE in terms of statistical significance as shown in Table 8. According to Table 7, Department of SE (33.49) has lower mean comparing to department of CITE (46.67), FAE (38.89), BE (37.55) and TSSE (39) and the result indicates that the participants from SE has lower self-efficacy belief on the basis of Item 4.
- The Department of BE has determined that there is a relation between the students in the Department of CITE, ES, SE in terms of statistical significance as shown in Table 8. According to Table 7, Department of BE (37.55) has lower mean comparing to department of CITE (46.67) and the result indicates that the participants from BE has lower self-efficacy belief on the basis of Item 4. According to Table 7, Department of BE (37.55) has higher mean comparing to department of ES (33.27) and SE (33.49) and the result indicates that the participants from BE has higher self-efficacy belief on the basis of Item 4.
- The Department of TSSE has determined that there is a relation between the students in the Department of ES and MSE in terms of statistical significance as shown in Table 8. According to Table 7, Department of TSSE (39) has higher mean comparing to department of ES (33.27) and MSE (26.67) the result indicates that the participants from TSSE has higher self-efficacy belief on the basis of Item 4.

- The Department of FLE has determined that there is a relation between the students in the Department of CITE in terms of statistical significance as shown in Table 8. According to Table 7, Department of FLE (33.94) has lower mean comparing to department of CITE (46.67) and the result indicates that the participants from FLE has lower self-efficacy belief on the basis of Item 4.

Item 4 queries basic photograph/image creation abilities. The result was a bit unexpected since most of social media users might complete such tasks in daily routine but non-CITE participants has lower self-efficacy beliefs comparing to CITE participants.

According to LSD test results from post-hoc tests, the result of “Item 5” of the “Preparation” sub-dimension of the W2SBS scale is given in Appendix B. In this context, the “preparation” sub-dimension of the W2SBS scale was determined to determine whether the scores of "Item 5" were different depending on the partition variable and the statistically significant difference between the subgroups of (Sig. < 0.05) was determined as result of the one-way variance analysis (ANOVA);

- The Department of CITE has determined that there is a relation between the students in the Department of ES, FAE, MSE, SE, BE, TSSE and FLE in terms of statistical significance as shown in Table 8. According to Table 7, Department of CITE (46.47) has higher mean comparing to department of ES (29.09), FAE (32.78), MSE (26.67), SE (30.64), BE (34.15), TSSE (31) and FLE(30.3) and the result indicates that the participants from CITE has higher self-efficacy belief on the basis of Item 5.
- The Department of ES has determined that there is a relation between the students in the Department of CITE and BE in terms of statistical significance as shown in Table 8. According to Table 7, Department of ES (29.09) has lower

mean comparing to department of CITE (46.67) and BE (34.15) and the result indicates that the participants from ES has lower self-efficacy belief on the basis of Item 5.

- The Department of FAE has determined that there is a relation between the students in the Department of CITE in terms of statistical significance as shown in Table 8. According to Table 7, Department of ES (29.09) has lower mean comparing to department of CITE (46.67) and BE (34.15) and the result indicates that the participants from ES has lower self-efficacy belief on the basis of Item 5.
- The Department of MSE has determined that there is a relation between the students in the Department of CITE in terms of statistical significance as shown in Table 8. According to Table 7, Department of MSE (26.67) has lower mean comparing to department of CITE (46.67) and the result indicates that the participants from MSE has lower self-efficacy belief on the basis of Item 5.
- The Department of SE has determined that there is a relation between the students in the Department of CITE and BE in terms of statistical significance as shown in Table 8. According to Table 7, Department of SE (30.64) has lower mean comparing to department of CITE (46.67) and BE (34.15) and the result indicates that the participants from SE has lower self-efficacy belief on the basis of Item 5.
- The Department of BE has determined that there is a relation between the students in the Department of CITE, ES and SE in terms of statistical significance as shown in Table 8. According to Table 7, Department of BE (34.15) has lower mean comparing to department of CITE (46.67) and the result indicates that the participants from BE has lower self-efficacy belief on

the basis of Item 5. According to Table 7, Department of BE (34.15) has higher mean comparing to department of ES (29.09) and SE (30.64) and the result indicates that the participants from BE has higher self-efficacy belief on the basis of Item 5.

- The Department of TSSE has determined that there is a relation between the students in the Department of CITE in terms of statistical significance as shown in Table 8. According to Table 7, Department of TSSE (31) has lower mean comparing to department of CITE (46.67) and the result indicates that the participants from TSSE has lower self-efficacy belief on the basis of Item 5.
- The Department of FLE has determined that there is a relation between the students in the Department of CITE in terms of statistical significance as shown in Table 8. According to Table 7, Department of FLE (30.3) has lower mean comparing to department of CITE (46.67) and the result indicates that the participants from FLE has lower self-efficacy belief on the basis of Item 5.

In Item 5, there was a noticeable difference between CITE and other departments comparing the other items. It was expected since the item queries creating an educational content and the task required instructional information as well as requires technical background.

According to LSD test results from post-hoc tests, the result of “Item 6” of the “Preparation” sub-dimension of the W2SBS scale is given in Appendix B. In this context, the “preparation” sub-dimension of the W2SBS scale was determined to determine whether the scores of "Item 6" were different depending on the partition variable and the statistically significant difference between the subgroups of (Sig. < 0.05) was determined as result of the one-way variance analysis (ANOVA);

- The Department of CITE has determined that there is a relation between the

students in the Department of ES, FAE, MSE, SE, BE, TSSE and FLE in terms of statistical significance as shown in Table 8. According to Table 7, Department of CITE (46.47) has higher mean comparing to department of ES (30.91), FAE (32.78), MSE (23.33), SE (30.95), BE (34.72), TSSE (31.52) and FLE(31.63) and the result indicates that the participants from CITE has higher self-efficacy belief on the basis of Item 6.

- The Department of ES has determined that there is a relation between the students in the Department of CITE in terms of statistical significance as shown in Table 8. According to Table 7, Department of ES (30.91) has lower mean comparing to department of CITE (46.67) and the result indicates that the participants from ES has lower self-efficacy belief on the basis of Item 6.
- The Department of FAE has determined that there is a relation between the students in the Department of CITE and ES in terms of statistical significance as shown in Table 8. According to Table 7, Department of FAE (32.78) has lower mean comparing to department of CITE (46.67) and the result indicates that the participants from FAE has lower self-efficacy belief on the basis of Item 6. According to Table 7, Department of FAE (32.78) has higher mean comparing to department of ES (30.91) and the result indicates that the participants from FAE has higher self-efficacy belief on the basis of Item 6.
- The Department of MSE has determined that there is a relation between the students in the Department of CITE and TSSE in terms of statistical significance as shown in Table 8. According to Table 7, Department of MSE (23.33) has lower mean comparing to department of CITE (46.67) and TSSE (36) and the result indicates that the participants from MSE has lower self-efficacy belief on the basis of Item 6.

- The Department of SE has determined that there is a relation between the students in the Department of CITE and BE in terms of statistical significance as shown in Table 8. According to Table 7, Department of SE (30.95) has lower mean comparing to department of CITE (46.67) and BE (34.72) and the result indicates that the participants from SE has lower self-efficacy belief on the basis of Item 6.
- The Department of BE has determined that there is a relation between the students in the Department of CITE and SE in terms of statistical significance as shown in Table 8. According to Table 7, Department of BE (34.72) has lower mean comparing to department of CITE (46.67) and the result indicates that the participants from BE has lower self-efficacy belief on the basis of Item 6. According to Table 7, Department of BE (34.72) has higher mean comparing to department of SE (30.95) and the result indicates that the participants from BE has higher self-efficacy belief on the basis of Item 6.
- The Department of TSSE has determined that there is a relation between the students in the Department of CITE and MSE in terms of statistical significance as shown in Table 8. According to Table 7, Department of TSSE (36) has lower mean comparing to department of CITE (46.67) the result indicates that the participants from TSSE has lower self-efficacy belief on the basis of Item 6. According to Table 7, Department of TSSE (36) has higher mean comparing to department of MSE (23.33) and the result indicates that the participants from TSSE has higher self-efficacy belief on the basis of Item 6.
- The Department of FLE has determined that there is a relation between the students in the Department of CITE in terms of statistical significance as shown in Table 8. According to Table 7, Department of FLE (31.52) has lower mean

comparing to department of CITE (46.67) the result indicates that the participants from FLE has lower self-efficacy belief on the basis of Item 6.

According to LSD test results from post-hoc tests, the result of “Item 7” of the “Preparation” sub-dimension of the W2SBS scale is given in Appendix B. In this context, the “preparation” sub-dimension of the W2SBS scale was determined to determine whether the scores of "Item 7" were different depending on the partition variable and the statistically significant difference between the subgroups of (Sig. < 0.05) was determined as result of the one-way variance analysis (ANOVA);

- The Department of CITE has determined that there is a relation between the students in the Department of ES, FAE, MSE, SE and FLE in terms of statistical significance as shown in Table 8. According to Table 7, Department of CITE (45) has higher mean comparing to department of ES (32), FAE (35), MSE (26.67), SE (31.91) and FLE(32.42) and the result indicates that the participants from CITE has higher self-efficacy belief on the basis of Item 7.
- The Department of ES has determined that there is a relation between the students in the Department of CITE and TSSE in terms of statistical significance as shown in Table 8. According to Table 7, Department of ES (32) has lower mean comparing to department of CITE (45) and TSSE (38) and the result indicates that the participants from ES has lower self-efficacy belief on the basis of Item 7.
- The Department of FAE has determined that there is a relation between the students in the Department of CITE and ES in terms of statistical significance as shown in Table 8. According to Table 7, Department of FAE (35) has lower mean comparing to department of CITE (45) and the result indicates that the participants from FAE has lower self-efficacy belief on the basis of Item 7.

According to Table 7, Department of FAE (35) has higher mean comparing to department of ES (32) and the result indicates that the participants from FAE has higher self-efficacy belief on the basis of Item 7.

- The Department of MSE has determined that there is a relation between the students in the Department of CITE and TSSE in terms of statistical significance as shown in Table 8. According to Table 7, Department of MSE (35) has lower mean comparing to department of CITE (45) and TSSE (38) and the result indicates that the participants from MSE has lower self-efficacy belief on the basis of Item 7.
- The Department of SE has determined that there is a relation between the students in the Department of CITE and BE in terms of statistical significance as shown in Table 8. According to Table 7, Department of SE (31.91) has lower mean comparing to department of CITE (45) and BE (34.72) and the result indicates that the participants from SE has lower self-efficacy belief on the basis of Item 7.
- The Department of BE has determined that there is a relation between the students in the Department of CITE and TSSE in terms of statistical significance as shown in Table 8. According to Table 7, Department of BE (35) has lower mean comparing to department of CITE (45) and TSSE (38) and the result indicates that the participants from BE has lower self-efficacy belief on the basis of Item 7.
- The Department of TSSE has determined that there is a relation between the students in the Department of ES, SE and FLE in terms of statistical significance as shown in Table 8. According to Table 7, Department of TSSE (38) has higher mean comparing to department of ES (32), SE (31.91) and FLE

(32.42) and the result indicates that the participants from TSSE has higher self-efficacy belief on the basis of Item 7.

- The Department of FLE has determined that there is a relation between the students in the Department of CITE and TSSE in terms of statistical significance as shown in Table 8. According to Table 7, Department of FLE (32.42) has lower mean comparing to department of CITE (45) and TSSE (38) and the result indicates that the participants from FLE has lower self-efficacy belief on the basis of Item 7.

According to LSD test results from post-hoc tests, the result of "Item 8" of the "Preparation" sub-dimension of the W2SBS scale is given in Appendix B. In this context, the "preparation" sub-dimension of the W2SBS scale was determined to determine whether the scores of "Item 8" were different depending on the partition variable and the statistically significant difference between the subgroups of (Sig. < 0.05) was determined as result of the one-way variance analysis (ANOVA);

- The Department of CITE has determined that there is a relation between the students in the Department of ES, FAE, MSE, SE, BE, TSSE and FLE in terms of statistical significance as shown in Table 8. According to Table 7, Department of CITE (46.67) has higher mean comparing to department of ES (34.55), FAE (37.22), MSE (33.33), SE (34.6) and FLE(32.42) and the result indicates that the participants from CITE has higher self-efficacy belief on the basis of Item 8.
- The Department of ES has determined that there is a relation between the students in the Department of CITE in terms of statistical significance as shown in Table 8. According to Table 7, Department of ES (34.55) has lower mean comparing to department of CITE (46.67) and the result indicates that the

participants from ES has lower self-efficacy belief on the basis of Item 8.

- The Department of FAE has determined that there is a relation between the students in the Department of CITE in terms of statistical significance as shown in Table 8. According to Table 7, Department of FAE (37.22) has lower mean comparing to department of CITE (46.67) and the result indicates that the participants from FAE has lower self-efficacy belief on the basis of Item 8.
- The Department of MSE has determined that there is a relation between the students in the Department of CITE in terms of statistical significance as shown in Table 8. According to Table 7, Department of MSE (33.33) has lower mean comparing to department of CITE (46.67) and the result indicates that the participants from MSE has lower self-efficacy belief on the basis of Item 8.
- The Department of SE has determined that there is a relation between the students in the Department of CITE in terms of statistical significance as shown in Table 8. According to Table 7, Department of SE (34.6) has lower mean comparing to department of CITE (46.67) and the result indicates that the participants from SE has lower self-efficacy belief on the basis of Item 8.
- The Department of BE has determined that there is a relation between the students in the Department of CITE and FLE in terms of statistical significance as shown in Table 8. According to Table 7, Department of BE (36.79) has lower mean comparing to department of CITE (46.67) and the result indicates that the participants from BE has lower self-efficacy belief on the basis of Item 8. According to Table 7, Department of BE (36.79) has higher mean comparing to department of FLE (32.42) and the result indicates that the participants from BE has higher self-efficacy belief on the basis of Item 8.
- The Department of TSSE has determined that there is a relation between the

students in the Department of CITE in terms of statistical significance as shown in Table 8. According to Table 7, Department of TSSE (37.5) has lower mean comparing to department of CITE (46.67) and the result indicates that the participants from TSSE has lower self-efficacy belief on the basis of Item 8.

- The Department of FLE has determined that there is a relation between the students in the Department of CITE, BE and TSSE in terms of statistical significance as shown in Table 8. According to Table 7, Department of FLE (32.42) has lower mean comparing to department of CITE (46.67), BE (36.79) and TSSE (37.5) and the result indicates that the participants from FLE has lower self-efficacy belief on the basis of Item 8.

According to LSD test results from post-hoc tests, the result of "Item 9" of the "Preparation" sub-dimension of the W2SBS scale is given in Appendix B. In this context, the "preparation" sub-dimension of the W2SBS scale was determined to determine whether the scores of "Item 9" were different depending on the partition variable and the statistically significant difference between the subgroups of (Sig. < 0.05) was determined as result of the one-way variance analysis (ANOVA);

- The Department of CITE has determined that there is a relation between the students in the Department of ES, FAE, MSE, SE, BE, TSSE and FLE in terms of statistical significance as shown in Table 8. According to Table 7, Department of CITE (46.67) has higher mean comparing to department of ES (33.27), FAE (35.56), MSE (26.67), SE (34.76), BE (37.17), TSSE (35.5) and FLE (32.73) and the result indicates that the participants from CITE has higher self-efficacy belief on the basis of Item 9.
- The Department of ES has determined that there is a relation between the students in the Department of CITE and BE in terms of statistical significance

as shown in Table 8. According to Table 7, Department of ES (33.27) has lower mean comparing to department of CITE (46.67) and BE (37.17) and the result indicates that the participants from ES has lower self-efficacy belief on the basis of Item 9.

- The Department of FAE has determined that there is a relation between the students in the Department of CITE in terms of statistical significance as shown in Table 8. According to Table 7, Department of FAE (35.56) has lower mean comparing to department of CITE (46.67) and the result indicates that the participants from FAE has lower self-efficacy belief on the basis of Item 9.
- The Department of MSE has determined that there is a relation between the students in the Department of CITE in terms of statistical significance as shown in Table 8. According to Table 7, Department of MSE (26.67) has lower mean comparing to department of CITE (46.67) and the result indicates that the participants from FAE has lower self-efficacy belief on the basis of Item 9.
- The Department of SE has determined that there is a relation between the students in the Department of CITE, BE and TSSE in terms of statistical significance as shown in Table 8. According to Table 7, Department of SE (34.76) has lower mean comparing to department of CITE (46.67), BE (37.17) and TSSE (35.5) and the result indicates that the participants from SE has lower self-efficacy belief on the basis of Item 9.
- The Department of BE has determined that there is a relation between the students in the Department of CITE, ES, MSE, SE and FLE in terms of statistical significance as shown in Table 8. According to Table 7, Department of BE (37.17) has lower mean comparing to department of CITE (46.67) and the result indicates that the participants from BE has lower self-efficacy belief

on the basis of Item 9. According to Table 7, Department of BE (37.17) has higher mean comparing to department of ES (33.27), MSE (26.67), SE (34.76) and FLE (32.73) and the result indicates that the participants from BE has higher self-efficacy belief on the basis of Item 9.

- The Department of TSSE has determined that there is a relation between the students in the Department of CITE in terms of statistical significance as shown in Table 8. According to Table 7, Department of TSSE (35.5) has lower mean comparing to department of CITE (46.67) and the result indicates that the participants from TSSE has lower self-efficacy belief on the basis of Item 9.
- The Department of FLE has determined that there is a relation between the students in the Department of CITE and BE in terms of statistical significance as shown in Table 8. According to Table 7, Department of FLE (32.73) has lower mean comparing to department of CITE (46.67) and BE (37.17) and the result indicates that the participants from FLE has lower self-efficacy belief on the basis of Item 9.

According to LSD test results from post-hoc tests, the result of “Item 10” of the “Preparation” sub-dimension of the W2SBS scale is given in Appendix B. In this context, the “preparation” sub-dimension of the W2SBS scale was determined to determine whether the scores of "Item 10" were different depending on the partition variable and the statistically significant difference between the subgroups of (Sig. < 0.05) was determined as result of the one-way variance analysis (ANOVA);

- The Department of CITE has determined that there is a relation between the students in the Department of ES, MSE, SE, BE, TSSE and FLE in terms of statistical significance as shown in Table 8. According to Table 7, Department of CITE (45) has higher mean comparing to department of ES (35.46), MSE

(30), SE (36.03), BE (37.74), TSSE (38.5) and FLE (32.73) and the result indicates that the participants from CITE has higher self-efficacy belief on the basis of Item 10.

- The Department of ES has determined that there is a relation between the students in the Department of CITE in terms of statistical significance as shown in Table 8. According to Table 7, Department of ES (35.46) has lower mean comparing to department of CITE (45) and the result indicates that the participants from ES has lower self-efficacy belief on the basis of Item 10.
- The Department of FAE has determined that there is a relation between the students in the Department of FLE in terms of statistical significance as shown in Table 8. According to Table 7, Department of FAE (38.89) has higher mean comparing to department of FLE (32.73) and the result indicates that the participants from FAE has higher self-efficacy belief on the basis of Item 10.
- The Department of MSE has determined that there is a relation between the students in the Department of CITE in terms of statistical significance as shown in Table 8. According to Table 7, Department of MSE (30) has lower mean comparing to department of CITE (45) and the result indicates that the participants from MSE has lower self-efficacy belief on the basis of Item 10.
- The Department of SE has determined that there is a relation between the students in the Department of CITE in terms of statistical significance as shown in Table 8. According to Table 7, Department of SE (36.03) has lower mean comparing to department of CITE (45) and the result indicates that the participants from SE has lower self-efficacy belief on the basis of Item 10.
- The Department of BE has determined that there is a relation between the students in the Department of CITE and FLE in terms of statistical significance

as shown in Table 8. According to Table 7, Department of BE (37.74) has lower mean comparing to department of CITE (45) and the result indicates that the participants from BE has lower self-efficacy belief on the basis of Item 10. According to Table 7, Department of BE (37.74) has higher mean comparing to department of FLE (32.73) and the result indicates that the participants from BE has higher self-efficacy belief on the basis of Item 10.

- The Department of TSSE has determined that there is a relation between the students in the Department of FLE in terms of statistical significance as shown in Table 8. According to Table 7, Department of TSSE (38.5) has higher mean comparing to department of FLE (32.73) and the result indicates that the participants from TSSE has higher self-efficacy belief on the basis of Item 10.
- The Department of FLE has determined that there is a relation between the students in the Department of CITE, BE and TSSE in terms of statistical significance as shown in Table 8. According to Table 7, Department of FLE (32.73) has lower mean comparing to department of CITE (45), BE (37.74) and TSSE (38.5) and the result indicates that the participants from FLE has lower self-efficacy belief on the basis of Item 10.

According to LSD test results from post-hoc tests, the result of “Item 11” of the “Preparation” sub-dimension of the W2SBS scale is given in Appendix B. In this context, the “preparation” sub-dimension of the W2SBS scale was determined to determine whether the scores of "Item 11" were different depending on the partition variable and the statistically significant difference between the subgroups of (Sig. < 0.05) was determined as result of the one-way variance analysis (ANOVA);

- The Department of CITE has determined that there is a relation between the students in the Department of ES, MSE, SE and FLE in terms of statistical

significance as shown in Table 8. According to Table 7, Department of CITE (45) has higher mean comparing to department of ES (36.18), MSE (30), SE (35.56) and FLE (32.12) and the result indicates that the participants from CITE has higher self-efficacy belief on the basis of Item 11.

- The Department of ES has determined that there is a relation between the students in the Department of CITE in terms of statistical significance as shown in Table 8. According to Table 7, Department of ES (36.18) has lower mean comparing to department of CITE (45) and the result indicates that the participants from ES has lower self-efficacy belief on the basis of Item 11.
- The Department of FAE has determined that there is a relation between the students in the Department of FLE in terms of statistical significance as shown in Table 8. According to Table 7, Department of FAE (38.33) has higher mean comparing to department of FLE (32.12) and the result indicates that the participants from ES has higher self-efficacy belief on the basis of Item 11.
- The Department of MSE has determined that there is a relation between the students in the Department of CITE in terms of statistical significance as shown in Table 8. According to Table 7, Department of MSE (30) has lower mean comparing to department of CITE (45) and the result indicates that the participants from MSE has lower self-efficacy belief on the basis of Item 11.
- The Department of SE has determined that there is a relation between the students in the Department of CITE in terms of statistical significance as shown in Table 8. According to Table 7, Department of SE (35.56) has lower mean comparing to department of CITE (45) and the result indicates that the participants from SE has lower self-efficacy belief on the basis of Item 11.
- The Department of BE has determined that there is a relation between the

students in the Department of FLE in terms of statistical significance as shown in Table 8. According to Table 7, Department of BE (37.36) has higher mean comparing to department of FLE (32.12) and the result indicates that the participants from BE has higher self-efficacy belief on the basis of Item 11.

- The Department of TSSE has determined that there is a relation between the students in the Department of FLE in terms of statistical significance as shown in Table 8. According to Table 7, Department of TSSE (39) has higher mean comparing to department of FLE (32.12) and the result indicates that the participants from TSSE has higher self-efficacy belief on the basis of Item 11.
- The Department of FLE has determined that there is a relation between the students in the Department of CITE, BE and TSSE in terms of statistical significance as shown in Table 8. According to Table 7, Department of FLE (32.12) has lower mean comparing to department of CITE (45), BE (37.36) and TSSE (39) and the result indicates that the participants from FLE has lower self-efficacy belief on the basis of Item 11.

According to LSD test results from post-hoc tests, the result of “Item 12” of the “Preparation” sub-dimension of the W2SBS scale is given in Appendix B. In this context, the “preparation” sub-dimension of the W2SBS scale was determined to determine whether the scores of "Item 12" were different depending on the partition variable and the statistically significant difference between the subgroups of (Sig. < 0.05) was determined as result of the one-way variance analysis (ANOVA);

- The Department of CITE has determined that there is a relation between the students in the Department of ES, FAE, MSE, SE, BE and FLE in terms of statistical significance as shown in Table 8. According to Table 7, Department of CITE (46.67) has higher mean comparing to department of ES (33.82), FAE

(32.78), MSE (26.67), SE (33.02), BE (34.72) and FLE (27.88) and the result indicates that the participants from CITE has higher self-efficacy belief on the basis of Item 12.

- The Department of ES has determined that there is a relation between the students in the Department of CITE, TSSE and FLE in terms of statistical significance as shown in Table 8. According to Table 7, Department of ES (33.82) has lower mean comparing to department of CITE (46.67) and TSSE (41) and the result indicates that the participants from ES has lower self-efficacy belief on the basis of Item 12. According to Table 7, Department of ES (33.82) has higher mean comparing to department of FLE (27.88) and the result indicates that the participants from ES has higher self-efficacy belief on the basis of Item 12.
- The Department of FAE has determined that there is a relation between the students in the Department of FLE in terms of statistical significance as shown in Table 8. According to Table 7, Department of FAE (32.78) has higher mean comparing to department of FLE (27.88) and the result indicates that the participants from FAE has higher self-efficacy belief on the basis of Item 12.
- The Department of MSE has determined that there is a relation between the students in the Department of CITE and TSSE in terms of statistical significance as shown in Table 8. According to Table 7, Department of MSE (26.67) has lower mean comparing to department of CITE (46.67) and TSSE (41) and the result indicates that the participants from MSE has lower self-efficacy belief on the basis of Item 12.
- The Department of SE has determined that there is a relation between the students in the Department of CITE, TSSE and FLE in terms of statistical

significance as shown in Table 8. According to Table 7, Department of SE (33.02) has lower mean comparing to department of CITE (46.67) and TSSE (41) and the result indicates that the participants from SE has lower self-efficacy belief on the basis of Item 12. According to Table 7, Department of SE (33.02) has higher mean comparing to department of FLE (27.88) and the result indicates that the participants from SE has higher self-efficacy belief on the basis of Item 12.

- The Department of BE has determined that there is a relation between the students in the Department of CITE, TSSE and FLE in terms of statistical significance as shown in Table 8. According to Table 7, Department of BE (34.72) has lower mean comparing to department of CITE (46.67) and TSSE (41) and the result indicates that the participants from SE has lower self-efficacy belief on the basis of Item 12. According to Table 7, Department of BE (34.72) has higher mean comparing to department of FLE (27.88) and the result indicates that the participants from SE has higher self-efficacy belief on the basis of Item 12.
- The Department of TSSE has determined that there is a relation between the students in the Department of ES, FAE, SE, BE and FLE in terms of statistical significance as shown in Table 8. According to Table 7, Department of TSSE (41) has higher mean comparing to department of ES (33.82), FAE (32.78), SE (33.02), BE (34.72) and FLE (27.88) and the result indicates that the participants from TSSE has higher self-efficacy belief on the basis of Item 12.
- The Department of FLE has determined that there is a relation between the students in the Department of CITE, ES, SE, BE and TSSE in terms of statistical significance as shown in Table 8. According to Table 7, Department

of FLE (27.88) has lower mean comparing to department of CITE (46.67), ES (33.82), SE (33.02), BE (34.72) and TSSE (41) and the result indicates that the participants from FLE has lower self-efficacy belief on the basis of Item 12.

According to LSD test results from post-hoc tests, the result of “Item 13” of the “Preparation” sub-dimension of the W2SBS scale is given in Appendix B. In this context, the “preparation” sub-dimension of the W2SBS scale was determined to determine whether the scores of "Item 13" were different depending on the partition variable and the statistically significant difference between the subgroups of (Sig. < 0.05) was determined as result of the one-way variance analysis (ANOVA);

- The Department of CITE has determined that there is a relation between the students in the Department of ES, FAE, SE, BE and FLE in terms of statistical significance as shown in Table 8. According to Table 7, Department of CITE (46.67) has higher mean comparing to department of ES (35.46), FAE (37.78), SE (35.08), BE (36.42) and FLE (32.12) and the result indicates that the participants from CITE has higher self-efficacy belief on the basis of Item 13.
- The Department of ES has determined that there is a relation between the students in the Department of CITE in terms of statistical significance as shown in Table 8. According to Table 7, Department of ES (35.46) has lower mean comparing to department of CITE (46.67) and the result indicates that the participants from ES has lower self-efficacy belief on the basis of Item 13.
- The Department of FAE has determined that there is a relation between the students in the Department of CITE and FLE in terms of statistical significance as shown in Table 8. According to Table 7, Department of FAE (37.78) has lower mean comparing to department of CITE (46.67) and the result indicates that the participants from FAE has lower self-efficacy belief on the basis of

Item 13. According to Table 7, Department of FAE (37.78) has higher mean comparing to department of FLE (32.12) and the result indicates that the participants from FAE has higher self-efficacy belief on the basis of Item 13.

- The Department of MSE has determined that there is no relation with any department in terms of statistical significance.
- The Department of SE has determined that there is a relation between the students in the Department of CITE in terms of statistical significance as shown in Table 8. According to Table 7, Department of SE (35.08) has lower mean comparing to department of CITE (46.67) and the result indicates that the participants from SE has lower self-efficacy belief on the basis of Item 13.
- The Department of BE has determined that there is a relation between the students in the Department of CITE and FLE in terms of statistical significance as shown in Table 8. According to Table 7, Department of BE (36.42) has lower mean comparing to department of CITE (46.67) and the result indicates that the participants from FAE has lower self-efficacy belief on the basis of Item 13. According to Table 7, Department of BE (36.42) has higher mean comparing to department of FLE (32.12) and the result indicates that the participants from FAE has higher self-efficacy belief on the basis of Item 13.
- The Department of TSSE has determined that there is a relation between the students in the Department of FLE in terms of statistical significance as shown in Table 8. According to Table 7, Department of TSSE (39) has higher mean comparing to department of FLE (32.12) and the result indicates that the participants from TSSE has higher self-efficacy belief on the basis of Item 13.
- The Department of FLE has determined that there is a relation between the students in the Department of CITE, FAE, BE and TSSE in terms of statistical

significance as shown in Table 8. According to Table 7, Department of FLE (32.12) has lower mean comparing to department of CITE (46.67), FAE (37.78), BE (36.42) and TSSE (39) and the result indicates that the participants from FLE has lower self-efficacy belief on the basis of Item 13.

According to LSD test results from post-hoc tests, the result of “Item 14” of the “Presentation” sub-dimension of the W2SBS scale is given in Appendix B. In this context, the “presentation” sub-dimension of the W2SBS scale was determined to determine whether the scores of "Item 14" were different depending on the partition variable and the statistically significant difference between the subgroups of (Sig. < 0.05) was determined as result of the one-way variance analysis (ANOVA);

- The Department of CITE has determined that there is a relation between the students in the Department of ES, MSE, SE, BE and FLE in terms of statistical significance as shown in Table 8. According to Table 7, Department of CITE (45) has higher mean comparing to department of ES (35.64), MSE (30), SE (36.03), BE (36.98) and FLE (34.24) and the result indicates that the participants from CITE has higher self-efficacy belief on the basis of Item 14.
- The Department of ES has determined that there is a relation between the students in the Department of CITE, FAE and TSSE in terms of statistical significance as shown in Table 8. According to Table 7, Department of ES (35.64) has lower mean comparing to department of CITE (45), FAE (41.11) and TSSE (41.5) and the result indicates that the participants from ES has lower self-efficacy belief on the basis of Item 14.
- The Department of FAE has determined that there is a relation between the students in the Department of ES, SE and FLE in terms of statistical significance as shown in Table 8. According to Table 7, Department of FAE

(41.11) has higher mean comparing to department of ES (35.64), SE (36.03) and FLE (34.24) and the result indicates that the participants from FAE has higher self-efficacy belief on the basis of Item 14.

- The Department of MSE has determined that there is a relation between the students in the Department of CITE in terms of statistical significance as shown in Table 8. According to Table 7, Department of MSE (30) has lower mean comparing to department of CITE (45) and the result indicates that the participants from MSE has lower self-efficacy belief on the basis of Item 14.
- The Department of SE has determined that there is a relation between the students in the Department of CITE, FAE and TSSE in terms of statistical significance as shown in Table 8. According to Table 7, Department of SE (36.03) has lower mean comparing to department of CITE (45), FAE (41.11) and TSSE (41.5) and the result indicates that the participants from SE has lower self-efficacy belief on the basis of Item 14.
- The Department of BE has determined that has determined that there is no relation with any department in terms of statistical significance.
- The Department of TSSE has determined that there is a relation between the students in the Department of ES, SE and FLE in terms of statistical significance as shown in Table 8. According to Table 7, Department of TSSE (41.5) has higher mean comparing to department of ES (35.64), SE (36.03) and FLE (34.24) and the result indicates that the participants from TSSE has higher self-efficacy belief on the basis of Item 14.
- The Department of FLE has determined that there is a relation between the students in the Department of CITE, FAE and TSSE in terms of statistical significance as shown in Table 8. According to Table 7, Department of FLE

(34.24) has lower mean comparing to department of CITE (45), FAE (41.11) and TSSE (41.5) and the result indicates that the participants from FLE has lower self-efficacy belief on the basis of Item 14.

As expected, most of the participants have self-efficacy beliefs for having the ability of sharing photographs on web 2.0. Item 14 queries this basic ability on the "presentation" sub-dimension.

According to LSD test results from post-hoc tests, the result of "Item 15" of the "Presentation" sub-dimension of the W2SBS scale is given in Appendix B. In this context, the "presentation" sub-dimension of the W2SBS scale was determined to determine whether the scores of "Item 15" were different depending on the partition variable and the statistically significant difference between the subgroups of (Sig. < 0.05) was determined as result of the one-way variance analysis (ANOVA);

- The Department of CITE has determined that there is a relation between the students in the Department of MSE and FLE in terms of statistical significance as shown in Table 8. According to Table 7, Department of CITE (43.33) has higher mean comparing to department of MSE (30) and FLE (31.82) and the result indicates that the participants from CITE has higher self-efficacy belief on the basis of Item 15.
- The Department of ES has determined that there is a relation between the students in the Department of FLE in terms of statistical significance as shown in Table 8. According to Table 7, Department of ES (37.64) has higher mean comparing to department of FLE (31.82) and the result indicates that the participants from ES has higher self-efficacy belief on the basis of Item 15.
- The Department of FAE has determined that there is a relation between the students in the Department of FLE in terms of statistical significance as shown

in Table 8. According to Table 7, Department of FAE (38.89) has higher mean comparing to department of FLE (31.82) and the result indicates that the participants from FAE has higher self-efficacy belief on the basis of Item 15.

- The Department of MSE has determined that there is a relation between the students in the Department of CITE in terms of statistical significance as shown in Table 8. According to Table 7, Department of MSE (30) has lower mean comparing to department of CITE (43.33) and the result indicates that the participants from MSE has lower self-efficacy belief on the basis of Item 15.
- The Department of SE has determined that there is a relation between the students in the Department of FLE in terms of statistical significance as shown in Table 8. According to Table 7, Department of SE (36.03) has higher mean comparing to department of FLE (31.82) and the result indicates that the participants from SE has higher self-efficacy belief on the basis of Item 15.
- The Department of BE has determined that has determined that there is no relation with any department in terms of statistical significance.
- The Department of TSSE has determined that there is a relation between the students in the Department of FLE in terms of statistical significance as shown in Table 8. According to Table 7, Department of TSSE (39) has higher mean comparing to department of FLE (31.82) and the result indicates that the participants from TSSE has higher self-efficacy belief on the basis of Item 15.
- The Department of FLE has determined that there is a relation between the students in the Department of CITE, ES, FAE, SE and TSSE in terms of statistical significance as shown in Table 8. According to Table 7, Department of FLE (31.82) has lower mean comparing to department of CITE (43.33), ES (37.64), FAE (38.89), SE (36.03) and TSSE (39) and the result indicates that

the participants from FLE has lower self-efficacy belief on the basis of Item 15.

Item 15 queries the sharing video content on web 2.0, and the participants have similar self-efficacy belief level with Item 14 since there is a minor difference between sharing a video and sharing a photograph.

According to LSD test results from post-hoc tests, the result of “Item 16” of the “Presentation” sub-dimension of the W2SBS scale is given in Appendix B. In this context, the “presentation” sub-dimension of the W2SBS scale was determined to determine whether the scores of "Item 16" were different depending on the partition variable and the statistically significant difference between the subgroups of (Sig. < 0.05) was determined as result. There was no significant result found on basis on Item 16.

Since blogging is one of the most common tools of web 2.0, technical difficulty of this task might be minimally perceived by participants. However, there was no assumption or expectation for the result.

According to LSD test results from post-hoc tests, the result of “Item 17” of the “Presentation” sub-dimension of the W2SBS scale is given in Appendix B. In this context, the “presentation” sub-dimension of the W2SBS scale was determined to determine whether the scores of "Item 17" were different depending on the partition variable and the statistically significant difference between the subgroups of (Sig. < 0.05) was determined as result of the one-way variance analysis (ANOVA);

- The Department of CITE has determined that there is a relation between the students in the Department of ES, MSE and FLE in terms of statistical significance as shown in Table 8. According to Table 7, Department of CITE (45) has higher mean comparing to department of ES (36.36), MSE (30) and

FLE (33.94) and the result indicates that the participants from CITE has higher self-efficacy belief on the basis of Item 17.

- The Department of ES has determined that there is a relation between the students in the Department of CITE and TSSE in terms of statistical significance as shown in Table 8. According to Table 7, Department of ES (36.36) has lower mean comparing to department of CITE (45) and TSSE (41.5) and the result indicates that the participants from ES has lower self-efficacy belief on the basis of Item 17.
- The Department of FAE has determined that there is no relation with any department in terms of statistical significance.
- The Department of MSE has determined that there is a relation between the students in the Department of CITE in terms of statistical significance as shown in Table 8. According to Table 7, Department of MSE (30) has lower mean comparing to department of CITE (45) and the result indicates that the participants from MSE has lower self-efficacy belief on the basis of Item 17.
- The Department of SE has determined that there is no relation with any department in terms of statistical significance.
- The Department of BE has determined that has determined that there is a significant relationship between the students in the Department of FLE as shown in Table 8. According to Table 7, Department of BE (38.11) has higher mean comparing to department of FLE (33.94) and the result indicates that the participants from BE has higher self-efficacy belief on the basis of Item 17.
- The Department of TSSE has determined that there is a relation between the students in the Department of ES and FLE in terms of statistical significance as shown in Table 8. According to Table 7, Department of TSSE (41.5) has

higher mean comparing to department of ES (36.36) and FLE (33.94) and the result indicates that the participants from TSSE has higher self-efficacy belief on the basis of Item 17.

- The Department of FLE has determined that there is a relation between the students in the Department of CITE, BE and TSSE in terms of statistical significance as shown in Table 8. According to Table 7, Department of FLE (33.94) has lower mean comparing to department of CITE (45), BE (38.11) and TSSE (41.5) and the result indicates that the participants from FLE has lower self-efficacy belief on the basis of Item 17.

According to LSD test results from post-hoc tests, the result of “Item 18” of the “Presentation” sub-dimension of the W2SBS scale is given in Appendix B. In this context, the “evaluation” sub-dimension of the W2SBS scale was determined to determine whether the scores of "Item 18" were different depending on the partition variable and the statistically significant difference between the subgroups of (Sig. < 0.05) was determined as result of the one-way variance analysis (ANOVA);

- The Department of CITE has determined that there is a relation between the students in the Department of ES, SE and FLE in terms of statistical significance as shown in Table 8. According to Table 7, Department of CITE (45) has higher mean comparing to department of ES (33.27), SE (35.71) and FLE (26.67) and the result indicates that the participants from CITE has higher self-efficacy belief on the basis of Item 18.
- The Department of ES has determined that there is a relation between the students in the Department of CITE, FAE, BE and FLE in terms of statistical significance as shown in Table 8. According to Table 7, Department of ES (33.27) has lower mean comparing to department of CITE (45), FAE (42.22)

and BE (37.36) and the result indicates that the participants from ES has lower self-efficacy belief on the basis of Item 18. According to Table 7, Department of ES (33.27) has higher mean comparing to department of FLE (26.67) and the result indicates that the participants from ES has higher self-efficacy belief on the basis of Item 18.

- The Department of FAE has determined that there is a relation between the students in the Department of ES, SE and FLE in terms of statistical significance as shown in Table 8. According to Table 7, Department of FAE (42.22) has higher mean comparing to department of ES (33.27), SE (35.71) and FLE (26.67) and the result indicates that the participants from FAE has higher self-efficacy belief on the basis of Item 18.
- The Department of MSE has determined that there is no relation with any department in terms of statistical significance.
- The Department of SE has determined that there is a relation between the students in the Department of CITE, FAE and FLE in terms of statistical significance as shown in Table 8. According to Table 7, Department of SE (35.71) has lower mean comparing to department of CITE (45) and FAE (42.22) and the result indicates that the participants from SE has lower self-efficacy belief on the basis of Item 18. According to Table 7, Department of SE (35.71) has higher mean comparing to department of FLE (26.67) and the result indicates that the participants from SE has higher self-efficacy belief on the basis of Item 18.
- The Department of BE has determined that there is a relation between the students in the Department of ES and FLE in terms of statistical significance as shown in Table 8. According to Table 7, Department of BE (37.36) has

higher mean comparing to department of ES (33.27) and FLE (26.67) and the result indicates that the participants from BE has higher self-efficacy belief on the basis of Item 18.

- The Department of TSSE has determined that there is a relation between the students in the Department of FLE in terms of statistical significance as shown in Table 8. According to Table 7, Department of TSSE (38) has higher mean comparing to department of FLE (26.67) and the result indicates that the participants from TSSE has higher self-efficacy belief on the basis of Item 18.
- The Department of FLE has determined that there is a relation between the students in the Department of CITE, ES, FAE, SE, BE and TSSE in terms of statistical significance as shown in Table 8. According to Table 7, Department of FLE (26.67) has lower mean comparing to department of CITE (45), ES (33.27), FAE (42.22), SE (35.71), BE (37.36) and TSSE (38) and the result indicates that the participants from CITE has lower self-efficacy belief on the basis of Item 18.

Item 18 queries the ability of creating a puzzle with tools of web 2.0, surprisingly self-efficacy believes between the departments are lower comparing to other items.

According to LSD test results from post-hoc tests, the result of “Item 19” of the “Presentation” sub-dimension of the W2SBS scale is given in Appendix B. In this context, the “evaluation” sub-dimension of the W2SBS scale was determined to determine whether the scores of "Item 19" were different depending on the partition variable and the statistically significant difference between the subgroups of (Sig. < 0.05) was determined as result of the one-way variance analysis (ANOVA);

- The Department of CITE has determined that there is a relation between the

students in the Department of ES and FLE in terms of statistical significance as shown in Table 8. According to Table 7, Department of CITE (45) has higher mean comparing to department of ES (34.18) and FLE (30.91) and the result indicates that the participants from CITE has higher self-efficacy belief on the basis of Item 19.

- The Department of ES has determined that there is a relation between the students in the Department of CITE and BE in terms of statistical significance as shown in Table 8. According to Table 7, Department of ES (34.18) has lower mean comparing to department of CITE (45) and BE (37.93) and the result indicates that the participants from ES has lower self-efficacy belief on the basis of Item 19.
- The Department of FAE has determined that there is a relation between the students in the Department of FLE in terms of statistical significance as shown in Table 8. According to Table 7, Department of FAE (38.89) has higher mean comparing to department of FLE (30.91) and the result indicates that the participants from FAE has higher self-efficacy belief on the basis of Item 19.
- The Department of MSE has determined that there is no relation with any department in terms of statistical significance.
- The Department of SE has determined that there is no relation with any department in terms of statistical significance.
- The Department of BE has determined that there is a relation between the students in the Department of ES and FLE in terms of statistical significance as shown in Table 8. According to Table 7, Department of BE (37.93) has higher mean comparing to department of ES (34.18) and FLE (30.91) and the result indicates that the participants from BE has higher self-efficacy belief on

the basis of Item 19.

- The Department of TSSE has determined that there is a relation between the students in the Department of FLE in terms of statistical significance as shown in Table 8. According to Table 7, Department of TSSE (38.5) has higher mean comparing to department of FLE (30.91) and the result indicates that the participants from TSSE has higher self-efficacy belief on the basis of Item 19.
- The Department of FLE has determined that there is a relation between the students in the Department of CITE, FAE, SE, BE and TSSE and FLE in terms of statistical significance as shown in Table 8. According to Table 7, Department of FLE (30.91) has lower mean comparing to department of CITE (45), FAE (38.89), SE (34.6), BE (37.93), TSSE (38.5) and FLE (30.91) and the result indicates that the participants from FLE has lower self-efficacy belief on the basis of Item 19.

Item 19 essentially queries the participants ability to create interactive tests. Comparing to other items, CITE and ES has the major mean difference on this item.

According to LSD test results from post-hoc tests, the result of “Item 20” of the “Presentation” sub-dimension of the W2SBS scale is given in Appendix B. In this context, the “evaluation” sub-dimension of the W2SBS scale was determined to determine whether the scores of "Item 20" were different depending on the partition variable and the statistically significant difference between the subgroups of (Sig. < 0.05) was determined as result of the one-way variance analysis (ANOVA);

- The Department of CITE has determined that there is a relation between the students in the Department of ES and FLE in terms of statistical significance as shown in Table 8. According to Table 7, Department of CITE (45) has higher mean comparing to department of ES (33.64) and FLE (30.91) and the result

indicates that the participants from CITE has higher self-efficacy belief on the basis of Item 20.

- The Department of ES has determined that there is a relation between the students in the Department of CITE and BE in terms of statistical significance as shown in Table 8. According to Table 7, Department of ES (33.64) has lower mean comparing to department of CITE (45) and BE (37.55) and the result indicates that the participants from ES has lower self-efficacy belief on the basis of Item 20.
- The Department of FAE has determined that there is a relation between the students in the Department of FLE in terms of statistical significance as shown in Table 8. According to Table 7, Department of FAE (35) has higher mean comparing to department of FLE (30.91) and the result indicates that the participants from FAE has higher self-efficacy belief on the basis of Item 20.
- The Department of MSE has determined that there is no relation with any department in terms of statistical significance.
- The Department of SE has determined that there is no relation with any department in terms of statistical significance.
- The Department of BE has determined that there is a relation between the students in the Department of ES and FLE in terms of statistical significance as shown in Table 8. According to Table 7, Department of BE (37.55) has higher mean comparing to department of ES (33.64) and FLE (30.91) and the result indicates that the participants from BE has higher self-efficacy belief on the basis of Item 20.
- The Department of TSSE has determined that there is a relation between the students in the Department of FLE in terms of statistical significance as shown

in Table 8. According to Table 7, Department of TSSE (37.5) has higher mean comparing to department of FLE (30.91) and the result indicates that the participants from TSSE has higher self-efficacy belief on the basis of Item 20.

- The Department of FLE has determined that there is a relation between the students in the Department of CITE, FAE, SE, BE and TSSE and FLE in terms of statistical significance as shown in Table 8. According to Table 7, Department of FLE (30.91) has lower mean comparing to department of CITE (45), FAE (35), SE (35.4), BE (37.55) and TSSE (37.5) and the result indicates that the participants from FLE has lower self-efficacy belief on the basis of Item 20.

According to LSD test results from post-hoc tests, the result of “Item 21” of the “Evaluation” sub-dimension of the W2SBS scale is given in Appendix B. In this context. the “evaluation” sub-dimension of the W2SBS scale was determined to determine whether the scores of "Item 21" were different depending on the partition variable and the statistically significant difference between the subgroups of (Sig. < 0.05) was determined as result of the one-way variance analysis (ANOVA);

- The Department of CITE has determined that there is a relation between the students in the Department of SE and FLE in terms of statistical significance as shown in Table 8. According to Table 7, Department of CITE (45) has higher mean comparing to department of SE (35.56) and FLE (33.33) and the result indicates that the participants from CITE has higher self-efficacy belief on the basis of Item 21.
- The Department of ES has determined that there is no relation with any department in terms of statistical significance.
- The Department of FAE has determined that there is a relation between the

students in the Department of SE and FLE in terms of statistical significance as shown in Table 8. According to Table 7, Department of FAE (41.11) has higher mean comparing to department of SE (35.56) and FLE (33.33) and the result indicates that the participants from FAE has higher self-efficacy belief on the basis of Item 21.

- The Department of MSE has determined that that there is no relation with any department in terms of statistical significance.
- The Department of SE has determined that there is a relation between the students in the Department of CITE, FAE, BE and TSSE in terms of statistical significance as shown in Table 8. According to Table 7, Department of SE (35.56) has lower mean comparing to department of CITE (45), FAE (41.11), BE (40) and TSSE (41) and the result indicates that the participants from SE has lower self-efficacy belief on the basis of Item 21.
- The Department of BE has determined that there is a relation between the students in the Department of SE and FLE in terms of statistical significance as shown in Table 8. According to Table 7, Department of BE (40) has higher mean comparing to department of SE (35.56) and FLE (33.33) and the result indicates that the participants from BE has higher self-efficacy belief on the basis of Item 21.
- The Department of TSSE has determined that there is a relation between the students in the Department of SE and FLE in terms of statistical significance as shown in Table 8. According to Table 7, Department of TSSE (41) has higher mean comparing to department of SE (35.56) and FLE (33.33) and the result indicates that the participants from TSSE has higher self-efficacy belief on the basis of Item 21.

- The Department of FLE has determined that there is a relation between the students in the Department of CITE, FAE, SE, BE and TSSE and FLE in terms of statistical significance as shown in Table 8. According to Table 7, Department of FLE (33.33) has lower mean comparing to department of CITE (45), FAE (41.11), SE (35.56), BE (40) and TSSE (41) and the result indicates that the participants from FLE has lower self-efficacy belief on the basis of Item 21.

As a result of this context, the three sub-dimensions of the W2SBS scale, which is made up of 21 items, differ significantly from the departments variable. Karataş (2014), in the context of the faculty they graduated from, compared the technopedagogical education scores of the teachers who graduated from the Faculty of education and other faculties, supports the result of this research. Gönen and Kocakaya (2015) coincide with the results of this research, as the teacher candidates have high technopedagogical education competencies. In addition, Delen et al. (2015) concluded that the mathematics teacher candidates registered in have confidence in themselves in terms of technology and pedagogy.

The results of other studies conducted in the field literature show that the attitudes of teacher candidates to teaching profession are largely positive (Özkan, 2012; Ilğan et al., 2013), that teacher competencies are high (Çocuk et al 2015) and that they perceive themselves as sufficient in teaching profession (Kartal and Afacan, 2012). Students who have graduated from the Faculty of education from the "Public Personnel Selection Examination" score of success (general talent, general culture, educational sciences and teaching field knowledge) compared with the scores of the teacher candidates who graduated from other faculties Safran et al. (2014).

However, concluded that the scores of teacher candidates in the FAE were

statistically significantly higher. In this regard, the results of self-efficacy survey, Safran et al. (2014) the results differ.

4.4 Teacher Candidates of W2PCDSEB According to Gender

The results of the mean and standard deviation according to the "gender" variable of the general and sub-dimensions of the W2SBS scale are given in Table 9.

Table 9: The T-Test Results of the Mean and Standard Deviation According to the "Gender" Variable of the General and Sub-Dimensions of the W2SBS Scale

	Gender	**N**	**X**	**S**	**t**	**sd**	**p**
Preparation							
Item 1	Female	150	3.35	1.14	-2.15	225.29	**0.04**
	Male	101	3.65	1.05			
Item 2	Female	150	2.92	1.08	-1.76	249	0.08
	Male	101	3.17	1.11			
Item 3	Female	150	3.4	1.02	-1.25	249	0.21
	Male	101	3.56	1.03			
Item 4	Female	150	3.56	1.02	0.34	249	0.73
	Male	101	3.51	1.04			
Item 5	Female	150	3.11	0.94	-0.88	249	0.38
	Male	101	3.22	1.04			
Item 6	Female	150	3.2	1.02	-1.16	249	0.25
	Male	101	3.36	1.09			
Item 7	Female	150	3.33	0.93	-0.54	249	0.59
	Male	101	3.4	1.09			
Item 8	Female	150	3.49	0.91	-1.25	249	0.21
	Male	101	3.63	0.91			
Item 9	Female	150	3.41	0.85	-1.84	249	0.07
	Male	101	3.62	0.94			
Item 10	Female	150	3.55	0.82	-1.86	249	0.06
	Male	101	3.76	0.94			
Item 11	Female	150	3.56	0.99	-1.3	249	0.2
	Male	101	3.72	0.96			
Item 12	Female	150	3.26	0.98	-2.16	203.83	**0.03**
	Male	101	3.54	1.05			
Item 13	Female	150	3.47	0.94	-2.41	211.31	**0.02**

	Male	101	3.76	0.96			
Presentation							
Item 14	Female	150	3.61	0.96	-1.56	249	0.12
	Male	101	3.8	0.99			
Item 15	Female	150	3.56	0.94	-1.39	249	0.17
	Male	101	3.73	1			
Item 16	Female	150	3.43	0.91	-2.48	196.28	**0.01**
	Male	101	3.74	1.04			
Item 17	Female	150	3.59	0.97	-2.77	220.67	**0.01**
	Male	101	3.93	0.93			
Evaluation							
Item 18	Female	150	3.45	1.05	-1.36	249	0.18
	Male	101	3.62	0.96			
Item 19	Female	150	3.54	0.97	-0.35	249	0.73
	Male	101	3.58	0.99			
Item 20	Female	150	3.47	0.95	-1.13	249	0.26
	Male	101	3.6	0.95			
Item 21	Female	150	3.67	1	-1.79	249	0.08
	Male	101	3.89	0.94			

Table 9 shows the results of the Independent Group t-test ($p < 0.05$) in order to determine whether the three sub-dimensions of the W2SBS scale, which is made up of 21 items, differ significantly from the gender variable, are discussed in detail below:

- Statistical differences in the “preparation” sub-dimensions of the W2SBS scale were found statistically significant, depending on the gender variables of the scores of Item 1, Item 12 and Item 13 as shown in Table 9. Female participants (Item 1 mean is 3.35, Item 12 mean is 3.26, Item 13 mean is 3.47) has lower mean comparing to male participants (3.65, 3.54, 3.76) and the result indicates that the female participants has lower self-efficacy belief on the basis of related items.
- Statistical differences in the “presentation” sub-dimensions of the W2SBS

scale were found statistically significant, depending on the gender variables of the scores of Item 16 and Item 17 as shown in Table 9. Female participants (Item 16 mean is 3.43, Item 17 mean is 3.93) has lower mean comparing to male participants (3.47, 3.93) and the result indicates that the female participants has lower self-efficacy belief on the basis of related items.

- Statistical differences in the "evaluation" sub-dimensions of the W2SBS scale were not found statistically significant, depending on the gender variables of the scores of all Items.

As a result of research, the three sub-dimensions of the W2SBS scale, which is made up of 21 items, differ significantly from the gender variable. The results Demiralay (2008)'s study showed that girls 'students' scores were higher. In the study, it was found that there was no important difference on teachers and teachers' knowledge literacy in terms of gender variables.

In the study conducted by Korkut and Akkoyunlu (2008) on 47 people, it was concluded that knowledge literacy perceptions of Foreign Language teachers did not differ significantly from gender. In another study conducted by Usluel (2007) on 1702 teacher candidates, it was found that gender was an effective variable in the use of Information Technology in accessing information and that there was a significant difference in favor of male students. In the study conducted by Demiralay (2008) on 1801 people, it was found that the perception of knowledge literacy of teachers changed significantly according to gender.

Significant differences in gender variables and the results of the research of differences lead to studies. For example, the gender differences seen in the use of technology in accessing information. Such as Usluel (2007), are a preliminary study of the suggestions to be made in order to overcome this difference in the innovations

that will be made in education. For this reason, significant differences in gender variables or differences in non-achievable differences give literacy an important point of view in projects that will increase the development of self-competence perception.

Odabaşı (2004) stated that content should be rich in web based interactive learning, and that such practical courses should be prepared taking into account the individual characteristics of the student as well as the proper and attractive design. Because web-based learning models require a variety of investments, regardless of the area, and are costly models.

As a result of this research, the emergence of a significant difference in gender is one of the distinguishing individual characteristics of teacher candidates.

Chapter 5

CONCLUSION

In this study Web 2.0 Practical Content Development Self-Efficacy Beliefs of teacher candidates are investigated with designated research questions. The results obtained from the research and the results obtained depending on the recommendations are included below.

Self-efficacy beliefs of teacher candidates who make up the sample of the research in practice with web 2.0 technologies were evaluated to find a proper answer to “What are the teacher candidates of Web 2.0 Practical Content Development Self-Efficacy Beliefs?”.

According to the overall scores of the scale, the mean of the W2SEBS was 73.49 (minimum value 24.00; max value 105.00) and standard deviation was 15.15. It can be said that the teacher candidates have higher self-efficacy beliefs than average.

As another research question “What are the teacher candidates of W2PCDSEB according to preparation, presentation and evaluation?” was investigated on same results. According to the department variable according to the one-way ANOVA test result ($p < 0.05$): All items in the “Preparation” sub-dimension of the W2SBS scale (Item 1-Item 13) are statistically significant. In the lower dimension of the W2SBS scale “Presentation”, Item 14, 15 and 17 are statistically significant, but Item 16 is not statistically significant. All items in the “Evaluation” sub-dimension of the W2SBS scale (Item 18-Item 21) are statistically significant.

To find the proper answer of the research question “What are the teacher candidates of W2PCDSEB according to department?”, post-hoc test was applied to determine which departments were statistically significant. According to significant values found on the ANOVA results, CITE is the highest significant department. It was an expected result since CITE has web 2.0 course content in curriculum. ES was the second significant department rather than the other departments and ES is sharing some elective and core courses with the CITE.

The last research question “What are the teacher candidates of W2PCDSEB according to gender?” is answered with the results of the Independent Group t-test ($p < 0.05$) in order to determine whether the three sub-dimensions of the W2SBS scale, which is made up of 21 items, differ significantly from the gender variable, are discussed in detail below:

Statistical differences in the “preparation” sub-dimensions of the W2SBS scale were found statistically significant, depending on the gender variables of the scores of Item 1, Item 12 and Item 13, Statistical differences in the “presentation” sub-dimensions of the W2SBS scale were found statistically significant, depending on the gender variables of the scores of Item 16 and Item 17. Statistical differences in the “evaluation” sub-dimensions of the W2SBS scale were not found statistically significant, depending on the gender variables of the scores of all Items.

According to the results of the research, suggestions for future research are stated below:

Courses that enable the development of Web 2.0 and W2SBS levels of teacher candidates should be added to the program and given to teacher candidates at undergraduate level either elective or compulsory. Teachers should be provided with in-service trainings and the development of Web 2.0 and W2SBS PAB and TPAB self-

confidence levels should be ensured. In this way, it is thought that teachers will support the use of technology more efficiently in their lessons. By supporting teachers to use different web 2.0 tools in their courses, teachers' awareness of different programs can be increased during the training process.

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APPENDICES

Appendix A: Web 2.0 Practical Content Development Self-Efficacy Belief Scale (W2SEBS)

Faktörler	Maddeler	Çok Yetersiyim (1)	Yetersizim (2)	Kararsızım (3)	Yeterliyim (4)	Çok Yeterliyim (5)
HAZIRLIK	1. Web 2.0 araçlarını kullanarak çalışma yaprağı hazırlayabilirim.					
	2. Web 2.0 araçlarını kullanarak animasyon oluşturabilirim.					
	3. Dersin kazanımlarını destekleyici nitelikte Web 2.0 araçlarından faydalanabilirim.					
	4. Web 2.0 araçlarını kullanarak görüntü/fotoğraf oluşturabilirim.					
	5. Web 2.0 araçlarını kullanarak eğitsel içerikli karikatür oluşturabilirim.					
	6. Web 2.0 araçlarını kullanmada öğrencilere rehberlik yapabilirim.					
	7. Web 2.0 araçlarını kullanarak video oluşturabilirim.					
	8. Ders içeriği ile ilişkili Web 2.0 araçları ile hazırlanmış materyalleri kullanabilirim.					
	9. Pedagojik ilke ve kurallara uygun Web 2.0 araçlarından faydalanabilirim.					
	10. Güncel Web 2.0 araçlarından faydalanabilirim.					
	11. Web 2.0 araçlarını kullanarak etkileşimli sunum hazırlayabilirim.					

	12. Web 2.0 araçlarını kullanarak kavram haritası oluşturabilirim.					
	13. Web 2.0 araçlarını kullanarak grafik, şekil ve nesneler oluşturabilirim.					
SUNUM	14. Web 2.0 araçlarını kullanarak fotoğraf paylaşabilirim.					
	15. Web 2.0 araçlarını kullanarak video paylaşabilirim.					
	16. Web 2.0 araçlarını kullanarak blog yazıları paylaşabilirim.					
	17. Web 2.0 araçlarını kullanarak sunum paylaşabilirim.					
DEĞERLENDİRME	18. Web 2.0 araçlarını kullanarak kelime avı/bulmaca oluşturabilirim.					
	19. Web 2.0 araçlarını kullanarak etkileşimli değerlendirme soruları hazırlayabilirim.					
	20. Web 2.0 araçlarını kullanarak farklı ölçme ve değerlendirme araçlarından faydalanabilirim.					
	21. Web 2.0 araçlarını kullanarak test (çoktan seçmeli,boşluk doldurma, doğru-yanlış,vb.) hazırlayabilirim.					

Appendix B: SPSS Results

Spss Results for Item 1

Dependent Variable		(I) Department	(J) Department	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	95% Confidence Interval
							Lower Bound	Upper Bound
PREPARATION	Item 1	CITE	ES	1.46*	0.45	0.00	0.58	2.36
			FAE	0.78	0.50	0.12	-0.20	1.75
			MSE	2.00*	0.74	0.01	0.54	3.47
			SE	1.25*	0.45	0.01	0.37	2.14
			BE	1.00*	0.45	0.03	0.11	1.90
			TSSE	0.47	0.49	0.34	-0.50	1.43
			FLE	1.72*	0.47	0.00	0.81	2.65
		ES	CITE	-1.46*	0.45	0.00	-2.36	-0.58
			FAE	-.68*	0.29	0.02	-1.25	-0.13
			MSE	0.53	0.62	0.39	-0.70	1.76
			SE	-0.21	0.19	0.27	-0.60	0.17
			BE	-.46*	0.20	0.02	-0.86	-0.06
			TSSE	-1.00*	0.27	0.00	-1.54	-0.46
			FLE	0.26	0.23	0.26	-0.20	0.72
		FAE	CITE	-0.78	0.50	0.12	-1.75	0.20
			ES	0.68*	0.29	0.02	0.13	1.25
			MSE	1.22	0.66	0.06	-0.07	2.51
			SE	0.48	0.28	0.09	-0.08	1.03
			BE	0.23	0.29	0.43	-0.34	0.79

			TSSE	-0.31	0.34	0.36	-0.98	0.36
			FLE	0.94*	0.31	0.00	0.34	1.56
		MSE	CITE	-2.00*	0.74	8.00	-3.47	-0.54
			ES	-0.53	0.62	0.39	-1.76	0.70
			FAE	-1.22	0.66	0.06	-2.51	0.07
			SE	-0.75	0.62	0.23	-1.97	0.48
			BE	-0.99	0.62	0.11	-2.22	0.24
			TSSE	-1.53*	0.65	0.02	-2.82	-0.25
			FLE	-0.27	0.63	0.67	-1.52	0.98
		SE	CITE	-1.25*	0.45	0.01	-2.14	-0.37
			ES	0.21	0.19	0.27	-0.17	0.60
			FAE	-0.48	0.28	0.09	-1.03	0.08
			MSE	0.75	0.62	0.23	-0.48	1.97
			BE	-0.25	0.20	0.21	-0.63	0.14
			TSSE	-0.78*	0.27	0.00	-1.32	-0.26
			FLE	0.47*	0.23	0.04	0.03	0.92
		BE	CITE	-1.00*	0.45	0.03	-1.90	-0.11
			ES	0.46*	0.20	0.02	0.06	0.86
			FAE	-0.23	0.29	0.43	-0.79	0.34
			MSE	0.99	0.62	0.11	-0.24	2.22
			SE	0.25	0.20	0.21	-0.14	0.63
			TSSE	-0.54	0.28	0.05	-1.08	0.00
			FLE	0.72*	0.23	0.00	0.26	1.18
		TSSE	CITE	-0.47	0.49	0.34	-1.43	0.50
			ES	1.00*	0.27	0.00	0.46	1.54
			FAE	0.31	0.34	0.36	-0.36	0.98
			MSE	1.53*	0.65	0.02	0.25	2.82
			SE	0.78*	0.27	0.00	0.26	1.32
			BE	0.54	0.28	0.05	0.00	1.08

			FLE	1.26*	0.30	0.00	0.67	1.85
		FLE	CITE	-1.72*	0.47	0.00	-2.65	-0.81
			ES	-0.26	0.23	0.26	-0.72	0.20
			FAE	-0.94*	0.31	0.00	-1.56	-0.34
			MSE	0.27	0.63	0.67	-0.98	1.52
			SE	-0.47*	0.23	0.04	-0.92	-0.03
			BE	-0.72*	0.23	0.00	-1.18	-0.26
			TSSE	-1.26*	0.30	0.00	-1.85	-0.67

Spss Results for Item 2

Dependent Variable		**(I) Department**	**(J) Department**	**Mean Difference (I-J)**	**Std. Error**	**Sig.**	**95% Confidence Interval**	**95% Confidence Interval**
							Lower Bound	**Upper Bound**
PREPARATION	Item 2	CITE	ES	1.70*	0.45	0.00	0.82	2.58
			FAE	1.11*	0.49	0.02	0.14	2.08
			MSE	1.83*	0.74	0.01	0.38	3.28
			SE	1.59*	0.44	0.00	0.72	2.47
			BE	1.31*	0.45	0.00	0.43	2.19
			TSSE	0.80	0.48	0.10	-0.15	1.75
			FLE	2.01*	0.46	0.00	1.11	2.93
		ES	CITE	-1.70*	0.45	0.00	-2.58	-0.82
			FAE	-0.58*	0.28	0.04	-1.15	-0.03
			MSE	0.13	0.62	0.83	-1.08	1.35
			SE	-0.10	0.19	0.59	-0.48	0.27

			BE	-0.39	0.20	0.05	-0.78	0.01
			TSSE	-0.90*	0.27	0.00	-1.44	-0.36
			FLE	0.32	0.23	0.17	-0.14	0.77
		FAE	CITE	-1.11*	0.49	0.02	-2.08	-0.14
			ES	0.58*	0.28	0.04	0.03	1.15
			MSE	0.72	0.65	0.27	-0.56	2.00
			SE	0.48	0.28	0.08	-0.06	1.03
			BE	0.20	0.28	0.48	-0.36	0.76
			TSSE	-0.31	33815.00	0.36	-0.98	0.36
			FLE	0.90*	0.30	0.00	0.30	1.50
		MSE	CITE	-1.83*	0.74	0.01	-3.28	-0.38
			ES	-0.13	0.62	0.83	-1.35	1.08
			FAE	-0.72	0.65	0.27	-2.00	0.56
			SE	-0.24	0.62	0.70	-1.45	0.97
			BE	-0.52	0.62	0.40	-1.74	0.69
			TSSE	-1.03	0.64	0.11	-2.30	0.24
			FLE	0.18	0.63	0.77	-1.05	1.42
		SE	CITE	-1.59*	0.44	0.00	-2.47	-0.72
			ES	0.10	0.19	0.59	-0.27	0.48
			FAE	-0.48	0.28	0.08	-1.03	0.06
			MSE	0.24	0.62	0.70	-0.97	1.45
			BE	-0.28	0.19	0.15	-0.67	0.10
			TSSE	-0.79*	0.27	0.00	-1.32	-0.27
			FLE	0.42	0.22	0.06	-0.02	0.86
		BE	CITE	-1.31*	0.45	0.00	-2.19	-0.43
			ES	0.39	0.20	0.05	-0.01	0.78
			FAE	-0.20	0.28	0.48	-0.76	0.36
			MSE	0.52	0.62	0.40	-0.69	1.74
			SE	0.28	0.19	0.15	-0.10	0.67

			TSSE	-0.51	0.27	0.06	-1.05	0.03
			FLE	0.70*	0.23	0.00	0.25	1.16
		TSSE	CITE	-0.80	0.48	0.10	-1.75	0.15
			ES	0.90*	0.27	0.00	0.36	1.44
			FAE	0.31	0.34	0.36	-0.36	0.98
			MSE	1.03	0.64	0.11	-0.24	2.30
			SE	0.79*	0.27	0.00	0.27	1.32
			BE	0.51	0.27	0.06	-0.03	1.05
			FLE	1.21*	0.29	0.00	0.63	1.80
		FLE	CITE	-2.01*	0.46	0.00	-2.93	-1.11
			ES	-0.32	0.23	0.17	-0.77	0.14
			FAE	-0.90*	0.30	0.00	-1.50	-0.30
			MSE	-0.18	0.63	0.77	-1.42	1.05
			SE	-0.42	0.22	0.06	-0.86	0.02
			BE	-0.70*	0.23	0.00	-1.16	-0.25
			TSSE	-1.21*	0.29	0.00	-1.80	-0.63

Spss Results for Item 3

Dependent Variable		**(I) Department**	**(J) Department**	**Mean Difference (I-J)**	**Std. Error**	**Sig.**	**95% Confidence Interval**	**95% Confidence Interval**
							Lower Bound	**Upper Bound**
		CITE	ES	1.43*	0.43	0.00	0.58	2.28
			FAE	0.94*	0.47	0.05	0.02	1.87
			MSE	1.66*	0.71	0.02	0.27	3.06
			SE	1.31*	0.43	0.00	0.48	2.16

PREPARATION	Item 3		BE	1.06*	0.43	0.01	0.21	1.91
			TSSE	0.82	0.47	0.08	-0.10	1.73
			FLE	1.36*	0.44	0.00	0.49	2.24
		ES	CITE	-1.43*	0.43	0.00	-2.28	-0.58
			FAE	-0.49	0.27	0.08	-1.02	0.05
			MSE	0.24	0.59	0.69	-0.93	1.41
			SE	-0.11	0.18	0.54	-0.48	0.25
			BE	-0.37	0.19	0.06	-0.75	0.01
			TSSE	-0.61*	0.26	0.02	-1.13	-0.10
			FLE	-0.07	0.22	0.76	-0.50	0.37
		FAE	CITE	-0.94*	0.47	0.05	-1.87	-0.02
			ES	0.49	0.27	0.08	-0.05	1.02
			MSE	0.72	0.62	0.25	-0.51	1.95
			SE	0.37	0.27	0.16	-0.15	0.90
			BE	0.12	0.27	0.67	-0.42	0.66
			TSSE	-0.13	0.33	0.70	-0.77	0.51
			FLE	0.42	0.29	0.15	-0.16	1.00
		MSE	CITE	-1.66*	0.71	0.02	-3.06	-0.27
			ES	-0.24	0.59	0.69	-1.41	0.93
			FAE	-0.72	0.62	0.25	-1.95	0.51
			SE	-0.35	0.59	0.56	-1.51	0.82
			BE	-0.60	0.59	0.31	-1.77	0.57
			TSSE	-0.85	0.62	0.17	-2.07	0.37
			FLE	-0.30	0.60	0.62	-1.49	0.89
		SE	CITE	-1.31*	0.43	0.00	-2.16	-0.48
			ES	0.11	0.18	0.54	-0.25	0.48
			FAE	-0.37	0.27	0.16	-0.90	0.15
			MSE	0.35	0.59	0.56	-0.82	1.51
			BE	-0.25	0.19	0.17	-0.62	0.11

			TSSE	-0.50	0.26	0.05	-1.01	0.01
			FLE	0.05	0.22	0.83	-0.38	0.47
		BE	CITE	-1.06*	0.43	0.01	-1.91	-0.21
			ES	0.37	0.19	0.06	-0.01	0.75
			FAE	-0.12	0.27	0.67	-0.66	0.42
			MSE	0.60	0.59	0.31	-0.57	1.77
			SE	0.25	0.19	0.17	-0.11	0.62
			TSSE	-0.25	0.26	0.35	-0.76	0.27
			FLE	0.30	0.22	0.18	-0.14	0.74
		TSSE	CITE	-0.82	0.47	0.08	-1.73	0.10
			ES	0.61*	0.26	0.02	0.10	1.13
			FAE	0.13	0.33	0.70	-0.51	0.77
			MSE	0.85	0.62	0.17	-0.37	2.07
			SE	0.50	0.26	0.05	-0.01	1.01
			BE	0.25	0.26	0.35	-0.27	0.76
			FLE	0.55	0.28	0.06	-0.01	1.11
		FLE	CITE	-1.36*	0.44	0.00	-2.24	-0.49
			ES	0.07	0.22	0.76	-0.37	0.50
			FAE	-0.42	0.29	0.15	-1.00	0.16
			MSE	0.30	0.60	0.62	-0.89	1.49
			SE	-0.05	0.22	0.83	-0.47	0.38
			BE	-0.30	0.22	0.18	-0.74	0.14
			TSSE	-0.55	0.28	0.06	-1.11	0.01

Spss Results for Item 4

Dependent Variable	**(I) Department**	**(J) Department**	**Mean Difference (I-J)**	**Std. Error**	**Sig.**	**95% Confidence**	**95% Confidence**

							Interval	Interval
							Lower Bound	**Upper Bound**
PREPARATION	Item 4	CITE	ES	1.33*	0.43	0.00	0.50	2.18
			FAE	0.78	0.47	0.10	-0.14	1.70
			MSE	2.00*	0.70	0.01	0.62	3.38
			SE	1.31*	0.42	0.00	0.48	2.15
			BE	0.91*	0.43	0.03	0.07	1.75
			TSSE	0.77	0.46	0.10	-0.14	1.68
			FLE	1.27*	0.44	0.00	0.40	2.14
		ES	CITE	-1.33*	0.43	0.00	-2.18	-0.50
			FAE	-0.56*	0.27	0.04	-1.09	-0.03
			MSE	0.66	0.59	0.26	-0.50	1.82
			SE	-0.02	0.18	0.91	-0.38	0.34
			BE	-0.42*	0.19	0.03	-0.80	-0.05
			TSSE	-0.57*	0.26	0.03	-1.08	-0.06
			FLE	-0.07	0.22	0.76	-0.50	0.36
		FAE	CITE	-0.78	0.47	0.10	-1.70	0.14
			ES	0.56*	0.27	0.04	0.03	1.09
			MSE	1.22*	0.62	0.05	0.00	2.44
			SE	0.53*	0.27	0.04	0.02	1.06
			BE	0.13	0.27	0.62	-0.40	0.67
			TSSE	-0.01	0.32	0.97	-0.65	0.62
			FLE	0.49	0.29	0.09	-0.08	1.07
		MSE	CITE	-2.00*	0.70	0.01	-3.38	-0.62
			ES	-0.66	0.59	0.26	-1.82	0.50
			FAE	-1.22*	0.62	0.05	-2.44	0.00
			SE	-0.68	0.59	0.25	-1.84	0.47
			BE	-1.09	0.59	0.07	-2.25	0.07
			TSSE	-1.23*	0.61	0.05	-2.44	-0.02

			FLE	-0.73	0.60	0.23	-1.91	0.45
		SE	CITE	-1.31*	0.42	0.00	-2.15	-0.48
			ES	0.02	0.18	0.91	-0.34	0.38
			FAE	-0.53*	0.27	0.04	-1.06	-0.02
			MSE	0.68	0.59	0.25	-0.47	1.84
			BE	-0.40*	0.19	0.03	-0.77	-0.04
			TSSE	-0.55*	0.25	0.03	-1.05	-0.05
			FLE	-0.04	0.21	0.83	-0.47	0.38
		BE	CITE	-0.91*	0.43	0.03	-1.75	-0.07
			ES	0.42*	0.19	0.03	0.05	0.80
			FAE	-0.13	0.27	0.62	-0.67	0.40
			MSE	1.09	0.59	0.07	-0.07	2.25
			SE	0.40*	0.19	0.03	0.04	0.77
			TSSE	-0.15	0.26	0.58	-0.66	0.37
			FLE	0.36	0.22	0.10	-0.07	0.79
		TSSE	CITE	-0.77	0.46	0.10	-1.68	0.14
			ES	0.57*	0.26	0.03	0.06	1.08
			FAE	0.01	0.32	0.97	-0.62	0.65
			MSE	1.23*	0.61	0.05	0.02	2.44
			SE	0.55*	0.25	0.03	0.05	1.05
			BE	0.15	0.26	0.58	-0.37	0.66
			FLE	0.51	0.28	0.07	-0.05	1.06
		FLE	CITE	-1.27*	0.44	0.00	-2.14	-0.40
			ES	0.07	0.22	0.76	-0.36	0.50
			FAE	-0.49	0.29	0.09	-1.07	0.08
			MSE	0.73	0.60	0.23	-0.45	1.91
			SE	0.04	0.21	0.83	-0.38	0.47
			BE	-0.36	0.22	0.10	-0.79	0.07
			TSSE	-0.51	0.28	0.07	-1.06	0.05

Spss Results for Item 5

Dependent Variable		(I) Department	(J) Department	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	95% Confidence Interval
							Lower Bound	Upper Bound
PREPARATION	Item 5	CITE	ES	1.75*	0.40	0.00	0.96	2.56
			FAE	1.38*	0.44	0.00	0.51	2.26
			MSE	2.00*	0.67	0.00	0.69	3.31
			SE	1.60*	0.40	0.00	0.81	2.40
			BE	1.25*	0.41	0.00	0.45	2.05
			TSSE	1.56*	0.44	0.00	0.70	2.43
			FLE	1.63*	0.42	0.00	0.81	2.46
		ES	CITE	-1.75*	0.40	0.00	-2.56	-0.96
			FAE	-0.37	0.26	0.15	-0.87	0.14
			MSE	0.24	0.56	0.67	-0.86	1.34
			SE	-0.15	0.17	0.38	-0.50	0.19
			BE	-0.50*	0.18	0.01	-0.86	-0.15
			TSSE	-0.19	0.25	0.44	-0.68	0.29
			FLE	-0.12	0.21	0.56	-0.53	0.29
		AE	CITE	-1.38*	0.44	0.00	-2.26	-0.51
			ES	0.37	0.26	0.15	-0.14	0.87
			MSE	0.61	0.59	0.30	-0.55	1.77
			SE	0.21	0.25	0.40	-0.28	0.71
			BE	-0.14	0.26	0.59	-0.64	0.37
			TSSE	0.18	0.31	0.56	-0.42	0.78
			FLE	0.25	0.28	0.37	-0.30	0.79
		MSE	CITE	-2.00*	0.67	0.00	-3.31	-0.69

			ES	-0.24	0.56	0.67	-1.34	0.86
			FAE	-0.61	0.59	0.30	-1.77	0.55
			SE	-0.40	0.56	0.48	-1.49	0.70
			BE	-0.75	0.56	0.18	-1.85	0.35
			TSSE	-0.43	0.58	0.46	-1.58	0.72
			FLE	-0.36	0.57	0.52	-1.48	0.76
		SE	CITE	-1.60*	0.40	0.00	-2.40	-0.81
			ES	0.15	0.17	0.38	-0.19	0.50
			FAE	-0.21	0.25	0.40	-0.71	0.28
			MSE	0.40	0.56	0.48	-0.70	1.49
			BE	-0.35*	0.18	0.05	-0.70	-0.01
			TSSE	-0.04	0.24	0.88	-0.51	0.44
			FLE	0.03	0.20	0.87	-0.37	0.43
		BE	CITE	-1.25*	0.41	0.00	-2.05	-0.45
			ES	0.50*	0.18	0.01	0.15	0.86
			FAE	0.14	0.26	0.59	-0.37	0.64
			MSE	0.75	0.56	0.18	-0.35	1.85
			SE	0.35*	0.18	0.05	0.01	0.70
			TSSE	0.32	0.25	0.20	-0.17	0.80
			FLE	0.38	0.21	0.07	-0.03	0.80
		SSE	CITE	-1.56*	0.44	0.00	-2.43	-0.70
			ES	0.19	0.25	0.44	-0.29	0.68
			FAE	-0.18	0.31	0.56	-0.78	0.42
			MSE	0.43	0.58	0.46	-0.72	1.58
			SE	0.04	0.24	0.88	-0.44	0.51
			BE	-0.32	0.25	0.20	-0.80	0.17
			FLE	0.07	0.27	0.79	-0.46	0.60
		FLE	CITE	-1.63*	0.42	0.00	-2.46	-0.81
			ES	0.12	0.21	0.56	-0.29	0.53

			FAE	-0.25	0.28	0.37	-0.79	0.30
			MSE	0.36	0.57	0.52	-0.76	1.48
			SE	-0.03	0.20	0.87	-0.43	0.37
			BE	-0.38	0.21	0.07	-0.80	0.03
			TSSE	-0.07	0.27	0.79	-0.60	0.46

Spss Results for Item 6

Dependent Variable		**(I) Department**	**(J) Department**	**Mean Difference (I-J)**	**Std. Error**	**Sig.**	**95% Confidence Interval**	**95% Confidence Interval**
							Lower Bound	**Upper Bound**
PREPARATION	Item 6	CITE	ES	1.57*	0.44	0.00	0.71	2.44
			FAE	1.38*	0.48	0.00	0.44	2.33
			MSE	2.33*	0.72	0.00	0.92	3.75
			SE	1.57*	0.43	0.00	0.71	2.43
			BE	1.19*	0.44	0.01	0.33	2.06
			TSSE	1.06*	0.47	0.03	0.13	2.00
			FLE	1.51*	0.45	0.00	0.63	2.41
		ES	CITE	-1.57*	0.44	0.00	-2.44	-0.71
			FAE	-0.19	0.28	0.50	-0.73	0.36
			MSE	0.76	0.60	0.21	-0.43	1.95
			SE	0.00	0.19	0.98	-0.37	0.37
			BE	-0.38	0.20	0.05	-0.77	0.01
			TSSE	-0.51	0.27	0.06	-1.03	0.01
			FLE	-0.06	0.22	0.79	-0.50	0.38
		FAE	CITE	-1.38*	0.48	0.00	-2.33	-0.44

			ES	0.19	0.28	0.50	-0.36	0.73
			MSE	0.94	0.63	0.14	-0.31	2.19
			SE	0.18	0.27	0.50	-0.35	0.72
			BE	-0.19	0.28	0.49	-0.74	0.35
			TSSE	-0.32	0.33	0.33	-0.97	0.33
			FLE	0.13	0.30	0.67	-0.46	0.71
		MSE	CITE	-2.33*	0.72	0.00	-3.75	-0.92
			ES	-0.76	0.60	0.21	-1.95	0.43
			FAE	-0.94	0.63	0.14	-2.19	0.31
			SE	-0.76	0.60	0.21	-1.95	0.42
			BE	-1.14	0.60	0.06	-2.33	0.05
			TSSE	-1.26*	0.63	0.05	-2.51	-0.03
			FLE	-0.82	0.61	0.18	-2.03	0.39
		SE	CITE	-1.57*	0.43	0.00	-2.43	-0.71
			ES	0.00	0.19	0.98	-0.37	0.37
			FAE	-0.18	0.27	0.50	-0.72	0.35
			MSE	0.76	0.60	0.21	-0.42	1.95
			BE	-0.37*	0.19	0.05	-0.75	0.00
			TSSE	-0.50	0.26	0.06	-1.02	0.01
			FLE	-0.06	0.22	0.80	-0.49	0.37
		BE	CITE	-1.19*	0.44	0.01	-2.06	-0.33
			ES	0.38	0.20	0.05	-0.01	0.77
			FAE	0.19	0.28	0.49	-0.35	0.74
			MSE	1.14	0.60	0.06	-0.05	2.33
			SE	0.37*	0.19	0.05	0.00	0.75
			TSSE	-0.13	0.27	0.63	-0.65	0.40
			FLE	0.32	0.23	0.16	-0.12	0.76
		TSSE	CITE	-1.06*	0.47	0.03	-2.00	-0.13
			ES	0.51	0.27	0.06	-0.01	1.03

			FAE	0.32	0.33	0.33	-0.33	0.97
			MSE	1.26*	0.63	0.05	0.03	2.51
			SE	0.50	0.26	0.06	-0.01	1.02
			BE	0.13	0.27	0.63	-0.40	0.65
			FLE	0.45	0.29	0.12	-0.12	1.02
		FLE	CITE	-1.51*	0.45	0.00	-2.41	-0.63
			ES	0.06	0.22	0.79	-0.38	0.50
			FAE	-0.13	0.30	0.67	-0.71	0.46
			MSE	0.82	0.61	0.18	-0.39	2.03
			SE	0.06	0.22	0.80	-0.37	0.49
			BE	-0.32	0.23	0.16	-0.76	0.12
			TSSE	-0.45	0.29	0.12	-1.02	0.12

Spss Results for Item 7

Dependent Variable		**(I) Department**	**(J) Department**	**Mean Difference (I-J)**	**Std. Error**	**Sig.**	**95% Confidence Interval**	**95% Confidence Interval**
							Lower Bound	**Upper Bound**
		CITE	ES	1.30*	0.42	0.00	0.48	2.12
			FAE	1.00*	0.46	0.03	0.10	1.90
			MSE	1.83*	0.69	0.01	0.48	3.19
			SE	1.30*	0.42	0.00	0.49	2.13
			BE	1.02*	0.42	0.02	0.20	1.85

PREPARATION	Item 7		TSSE	0.70	0.45	0.12	-0.19	1.59
			FLE	1.25*	0.43	0.00	0.41	2.11
		ES	CITE	-1.30*	0.42	0.00	-2.12	-0.48
			FAE	-0.30	0.26	0.26	-0.82	0.22
			MSE	0.53	0.58	0.36	-0.60	1.67
			SE	0.01	0.18	0.96	-0.34	0.36
			BE	-0.27	0.19	0.15	-0.64	0.10
			TSSE	-0.60*	0.25	0.02	-1.10	-0.10
			FLE	-0.04	0.21	0.84	-0.46	0.38
		FAE	CITE	-1.00*	0.46	0.03	-1.90	-0.10
			ES	0.30	0.26	0.26	-0.22	0.82
			MSE	0.83	0.61	0.17	-0.36	2.03
			SE	0.31	0.26	0.24	-0.20	0.82
			BE	0.03	0.27	0.92	-0.49	0.55
			TSSE	-0.30	0.32	0.34	-0.92	0.32
			FLE	0.26	0.28	0.37	-0.30	0.82
		MSE	CITE	-1.83*	0.69	0.01	-3.19	-0.48
			ES	-0.53	0.58	0.36	-1.67	0.60
			FAE	-0.83	0.61	0.17	-2.03	0.36
			SE	-0.52	0.57	0.36	-1.66	0.61
			BE	-0.81	0.58	0.16	-1.94	0.33
			TSSE	-1.13	0.60	0.06	-2.32	0.05
			FLE	-0.58	0.59	0.33	-1.73	0.58
		SE	CITE	-1.30*	0.42	0.00	-2.13	-0.49

			ES	-0.01	0.18	0.96	-0.36	0.34
			FAE	-0.31	0.26	0.24	-0.82	0.20
			MSE	0.52	0.57	0.36	-0.61	1.66
			BE	-0.28	0.18	0.12	-0.64	0.08
			TSSE	-0.60*	0.25	0.02	-1.10	-0.12
			FLE	-0.05	0.21	0.80	-0.46	0.36
		BE	CITE	-1.02*	0.42	0.02	-1.85	-0.20
			ES	0.27	0.19	0.15	-0.10	0.64
			FAE	-0.03	0.27	0.92	-0.55	0.49
			MSE	0.81	0.58	0.16	-0.33	1.94
			SE	0.28	0.18	0.12	-0.08	0.64
			TSSE	-0.33	0.26	0.20	-0.83	0.17
			FLE	0.23	0.22	0.29	-0.20	0.65
		TSSE	CITE	-0.70	0.45	0.12	-1.59	0.19
			ES	0.60*	0.25	0.02	0.10	1.10
			FAE	0.30	0.32	0.34	-0.32	0.92
			MSE	1.13	0.60	0.06	-0.05	2.32
			SE	0.60*	0.25	0.02	0.12	1.10
			BE	0.33	0.26	0.20	-0.17	0.83
			FLE	0.55*	0.28	0.04	0.01	1.10
		FLE	CITE	-1.25*	0.43	0.00	-2.11	-0.41
			ES	0.04	0.21	0.84	-0.38	0.46
			FAE	-0.26	0.28	0.37	-0.82	0.30
			MSE	0.58	0.59	0.33	-0.58	1.73

			SE	0.05	0.21	0.80	-0.36	0.46
			BE	-0.23	0.22	0.29	-0.65	0.20
			TSSE	-0.55*	0.28	0.04	-1.10	-0.01

Spss Results for Item 8

Dependent Variable		**(I) Department**	**(J) Department**	**Mean Difference (I-J)**	**Std. Error**	**Sig.**	**95% Confidence Interval**	**95% Confidence Interval**
							Lower Bound	**Upper Bound**
PREPARATION	Item 8	CITE	ES	1.21*	0.38	0.00	0.45	1.97
			FAE	0.94*	0.42	0.03	0.11	1.77
			MSE	1.33*	0.63	0.04	0.09	2.58
			SE	1.20*	0.38	0.00	0.45	1.96
			BE	0.98*	0.39	0.01	0.23	1.75
			TSSE	0.91*	0.42	0.03	0.10	1.74
			FLE	1.42*	0.40	0.00	0.64	2.21
		ES	CITE	-1.21*	0.38	0.00	-1.97	-0.45
			FAE	-0.27	0.24	0.27	-0.75	0.21
			MSE	0.12	0.53	0.82	-0.92	1.17
			SE	-0.01	0.17	0.97	-0.33	0.32
			BE	-0.22	0.17	0.19	-0.56	0.11
			TSSE	-0.30	0.23	0.21	-0.76	0.16
			FLE	0.21	0.20	0.28	-0.18	0.60
		FAE	CITE	-0.94*	0.42	0.03	-1.77	-0.11
			ES	0.27	0.24	0.27	-0.21	0.75

			MSE	0.39	0.56	0.49	-0.71	1.49
			SE	0.26	0.24	0.27	-0.21	0.73
			BE	0.04	0.24	0.86	-0.44	0.52
			TSSE	-0.03	0.29	0.92	-0.60	0.54
			FLE	0.48	0.26	0.07	-0.04	1.00
		MSE	CITE	-1.33*	0.63	0.04	-2.58	-0.09
			ES	-0.12	0.53	0.82	-1.17	0.92
			FAE	-0.39	0.56	0.49	-1.49	0.71
			SE	-0.13	0.53	0.81	-1.17	0.91
			BE	-0.35	0.53	0.52	-1.39	0.70
			TSSE	-0.42	0.55	0.45	-1.51	0.67
			FLE	0.09	0.54	0.87	-0.97	1.15
		SE	CITE	-1.20*	0.38	0.00	-1.96	-0.45
			ES	0.01	0.17	0.97	-0.32	0.33
			FAE	-0.26	0.24	0.27	-0.73	0.21
			MSE	0.13	0.53	0.81	-0.91	1.17
			BE	-0.22	0.17	0.19	-0.55	0.11
			TSSE	-0.29	0.23	0.21	-0.74	0.16
			FLE	0.22	0.19	0.26	-0.16	0.60
		BE	CITE	-0.98*	0.39	0.01	-1.75	-0.23
			ES	0.22	0.17	0.19	-0.11	0.56
			FAE	-0.04	0.24	0.86	-0.52	0.44
			MSE	0.35	0.53	0.52	-0.70	1.39
			SE	0.22	0.17	0.19	-0.11	0.55
			TSSE	-0.07	0.23	0.76	-0.53	0.39
			FLE	0.43*	0.20	0.03	0.05	0.83
		TSSE	CITE	-0.91*	0.42	0.03	-1.74	-0.10
			ES	0.30	0.23	0.21	-0.16	0.76
			FAE	0.03	0.29	0.92	-0.54	0.60

			MSE	0.42	0.55	0.45	-0.67	1.51
			SE	0.29	0.23	0.21	-0.16	0.74
			BE	0.07	0.23	0.76	-0.39	0.53
			FLE	0.50*	0.25	0.05	0.01	1.01
		FLE	CITE	-1.42*	0.40	0.00	-2.21	-0.64
			ES	-0.21	0.20	0.28	-0.60	0.18
			FAE	-0.48	0.26	0.07	-1.00	0.04
			MSE	-0.09	0.54	0.87	-1.15	0.97
			SE	-0.22	0.19	0.26	-0.60	0.16
			BE	-0.43*	0.20	0.03	-0.83	-0.05
			TSSE	-0.50*	0.25	0.05	-1.01	-0.01

Spss Results for Item 9

Dependent Variable		**(I) Department**	**(J) Department**	**Mean Difference (I-J)**	**Std. Error**	**Sig.**	**95% Confidence Interval**	**95% Confidence Interval**
							Lower Bound	**Upper Bound**
		CITE	ES	1.33*	0.37	0.00	0.61	2.07
			FAE	1.11*	0.41	0.01	0.31	1.92
			MSE	2.00*	0.61	0.00	0.79	3.21
			SE	1.19*	0.37	0.00	0.46	1.92
			BE	0.94*	0.37	0.01	0.21	1.69
			TSSE	1.11*	0.40	0.01	0.32	1.91
			FLE	1.39*	0.38	0.00	0.64	2.15
		ES	CITE	-1.33*	0.37	0.00	-2.07	-0.61

PREPARATION	Item 9		FAE	-0.23	0.24	0.33	-0.69	0.24
			MSE	0.66	0.51	0.20	-0.35	1.67
			SE	-0.15	0.16	0.35	-0.46	0.17
			BE	-0.38*	0.17	0.02	-0.72	-0.06
			TSSE	-0.22	0.23	0.33	-0.67	0.22
			FLE	0.05	0.19	0.78	-0.32	0.43
		FAE	CITE	-1.11*	0.41	0.01	-1.92	-0.31
			ES	0.23	0.24	0.33	-0.24	0.69
			MSE	0.89	0.54	0.10	-0.18	1.95
			SE	0.08	0.23	0.73	-0.38	0.54
			BE	-0.16	0.24	0.50	-0.63	0.30
			TSSE	0.01	0.28	0.98	-0.55	0.56
			FLE	0.28	0.25	0.27	-0.22	0.78
		MSE	CITE	-2.00*	0.61	0.00	-3.21	-0.79
			ES	-0.66	0.51	0.20	-1.67	0.35
			FAE	-0.89	0.54	0.10	-1.95	0.18
			SE	-0.81	0.51	0.12	-1.82	0.20
			BE	-1.05*	0.51	0.04	-2.06	-0.04
			TSSE	-0.88	0.54	0.10	-1.94	0.17
			FLE	-0.61	0.52	0.25	-1.64	0.42
		SE	CITE	-1.19*	0.37	0.00	-1.92	-0.46
			ES	0.15	0.16	0.35	-0.17	0.46
			FAE	-0.08	0.23	0.73	-0.54	0.38
			MSE	0.81	0.51	0.12	-0.20	1.82
			BE	-0.24	0.16	0.14	-0.56	0.08
			TSSE	-0.07	0.22	0.74	-0.51	0.36
			FLE	0.20	0.19	0.28	-0.16	0.57
		BE	CITE	-0.94*	0.37	0.01	-1.69	-0.21
			ES	0.38*	0.17	0.02	0.06	0.72

			FAE	0.16	0.24	0.50	-0.30	0.63
			MSE	1.05*	0.51	0.04	0.04	2.06
			SE	0.24	0.16	0.14	-0.08	0.56
			TSSE	0.17	0.23	0.46	-0.28	0.62
			FLE	0.44*	0.19	0.02	0.07	0.82
		TSSE	CITE	-1.11*	0.40	0.01	-1.91	-0.32
			ES	0.22	0.23	0.33	-0.22	0.67
			FAE	-0.01	0.28	0.98	-0.56	0.55
			MSE	0.88	0.54	0.10	-0.17	1.94
			SE	0.07	0.22	0.74	-0.36	0.51
			BE	-0.17	0.23	0.46	-0.62	0.28
			FLE	0.28	0.25	0.26	-0.21	0.76
		FLE	CITE	-1.39*	0.38	0.00	-2.15	-0.64
			ES	-0.05	0.19	0.78	-0.43	0.32
			FAE	-0.28	0.25	0.27	-0.78	0.22
			MSE	0.61	0.52	0.25	-0.42	1.64
			SE	-0.20	0.19	0.28	-0.57	0.16
			BE	-0.44*	0.19	0.02	-0.82	-0.07
			TSSE	-0.28	0.25	0.26	-0.76	0.21

Spss Results for Item 10

Dependent Variable		**(I) Department**	**(J) Department**	**Mean Difference (I-J)**	**Std. Error**	**Sig.**	**95% Confidence Interval**	**95% Confidence Interval**
							Lower Bound	**Upper Bound**
		CITE	ES	0.95*	0.37	0.01	0.23	1.68

PREPARATION	Item 10		FAE	0.61	0.40	0.13	-0.18	1.41
			MSE	1.50*	0.61	0.01	0.31	2.69
			SE	0.89*	0.37	0.02	0.18	1.62
			BE	0.73	0.37	0.05	0.00	1.45
			SSE	0.65	0.40	0.10	-0.14	1.44
			FLE	1.22*	0.38	0.00	0.48	1.98
		ES	CITE	-0.95*	0.37	0.01	-1.68	-0.23
			FAE	-0.34	0.23	0.14	-0.80	0.11
			MSE	0.55	0.51	0.28	-0.46	1.55
			SE	-0.06	0.16	0.72	-0.37	0.25
			BE	-0.23	0.16	0.17	-0.55	0.10
			TSSE	-0.30	0.22	0.18	-0.75	0.14
			FLE	0.27	0.19	0.15	-0.10	0.64
		FAE	CITE	-0.61	0.40	0.13	-1.41	0.18
			ES	0.34	0.23	0.14	-0.11	0.80
			MSE	0.89	0.53	0.10	-0.16	1.94
			SE	0.29	0.23	0.21	-0.17	0.74
			BE	0.12	0.23	0.62	-0.35	0.58
			TSSE	0.04	0.28	0.89	-0.51	0.59
			FLE	0.61*	0.25	0.02	0.12	1.11
		MSE	CITE	-1.50*	0.61	0.01	-2.69	-0.31
			ES	-0.55	0.51	0.28	-1.55	0.46
			FAE	-0.89	0.53	0.10	-1.94	0.16
			SE	-0.60	0.51	0.24	-1.60	0.39
			BE	-0.77	0.51	0.13	-1.78	0.23
			TSSE	-0.85	0.5	0.11	-1.89	0.19
			FLE	-0.27	0.52	0.60	-1.29	0.75
		SE	CITE	-0.89*	0.37	0.02	-1.62	-0.18
			ES	0.06	0.16	0.72	-0.25	0.37

			FAE	-0.29	0.23	0.21	-0.74	0.17
			MSE	0.60	0.51	0.24	-0.39	1.60
			BE	-0.17	0.16	0.29	-0.49	0.14
			TSSE	-0.25	0.22	0.26	-0.68	0.19
			FLE	0.33	0.18	0.07	-0.03	0.69
		BE	CITE	-0.73	0.37	0.05	-1.45	0.00
			ES	0.23	0.16	0.17	-0.10	0.55
			FAE	-0.12	0.23	0.62	-0.58	0.35
			MSE	0.77	0.51	0.13	-0.23	1.78
			SE	0.17	0.16	0.29	-0.14	0.49
			TSSE	-0.08	0.22	0.73	-0.52	0.37
			FLE	0.50*	0.19	0.01	0.13	0.88
		SSE	CITE	-0.65	0.40	0.10	-1.44	0.14
			ES	0.30	0.22	0.18	-0.14	0.75
			FAE	-0.04	0.28	0.89	-0.59	0.51
			MSE	0.85	0.53	0.11	-0.19	1.89
			SE	0.25	0.22	0.26	-0.19	0.68
			BE	0.08	0.22	0.73	-0.37	0.52
			FLE	0.57*	0.24	0.02	0.10	1.06
		LE	CITE	-1.22*	0.38	0.00	-1.98	-0.48
			ES	-0.27	0.19	0.15	-0.64	0.10
			FAE	-0.61*	0.25	0.02	-1.11	-0.12
			MSE	0.27	0.52	0.60	-0.75	1.29
			SE	-0.33	0.18	0.07	-0.69	0.03
			BE	-0.50*	0.19	0.01	-0.88	-0.13
			TSSE	-0.57*	0.24	0.02	-1.06	-0.10

Spss Results for Item 11

Dependent Variable		(I) Department	(J) Department	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	95% Confidence Interval
							Lower Bound	Upper Bound
PREPARATION	Item 11	CITE	ES	0.88*	0.41	0.03	0.07	1.70
			FAE	0.67	0.45	0.14	-0.23	1.56
			MSE	1.50*	0.68	0.03	0.16	2.84
			SE	0.94*	0.41	0.02	0.14	1.75
			BE	0.76	0.41	0.07	-0.05	1.58
			TSSE	0.60	0.45	0.18	-0.28	1.48
			FLE	1.28*	0.43	0.00	0.45	2.13
		ES	CITE	-0.88*	0.41	0.03	-1.70	-0.07
			FAE	-0.22	0.26	0.41	-0.73	0.30
			MSE	0.62	0.57	0.28	-0.50	1.74
			SE	0.06	0.18	0.72	-0.29	0.41
			BE	-0.12	0.18	0.53	-0.48	0.25
			TSSE	-0.28	0.25	0.26	-0.78	0.21
			FLE	0.41	0.21	0.06	-0.01	0.82
		FAE	CITE	-0.67	0.45	0.14	-1.56	0.23
			ES	0.22	0.26	0.41	-0.30	0.73
			MSE	0.83	0.60	0.17	-0.35	2.01
			SE	0.28	0.26	0.28	-0.23	0.78
			BE	0.10	0.26	0.71	-0.42	0.61
			TSSE	-0.07	0.31	0.83	-0.68	0.55
			FLE	0.62*	0.28	0.03	0.07	1.18
		MSE	CITE	-1.50*	0.68	0.03	-2.84	-0.16
			ES	-0.62	0.57	0.28	-1.74	0.50

			FAE	-0.83	0.60	0.17	-2.01	0.35
			SE	-0.56	0.57	0.33	-1.67	0.56
			BE	-0.74	0.57	0.20	-1.86	0.39
			TSSE	-0.90	0.59	0.13	-2.07	0.27
			FLE	-0.21	0.58	0.71	-1.35	0.93
		SE	CITE	-0.94*	0.41	0.02	-1.75	-0.14
			ES	-0.06	0.18	0.72	-0.41	0.29
			FAE	-0.28	0.26	0.28	-0.78	0.23
			MSE	0.56	0.57	0.33	-0.56	1.67
			BE	-0.18	0.18	0.32	-0.53	0.17
			TSSE	-0.34	0.25	0.16	-0.83	0.14
			FLE	0.34	0.21	0.10	-0.06	0.75
		BE	CITE	-0.76	0.41	0.07	-1.58	0.05
			ES	0.12	0.18	0.53	-0.25	0.48
			FAE	-0.10	0.26	0.71	-0.61	0.42
			MSE	0.74	0.57	0.20	-0.39	1.86
			SE	0.18	0.18	0.32	-0.17	0.53
			TSSE	-0.16	0.25	0.52	-0.66	0.33
			FLE	0.52*	0.21	0.02	0.10	0.94
		TSSE	CITE	-0.60	0.45	0.18	-1.48	0.28
			ES	0.28	0.25	0.26	-0.21	0.78
			FAE	0.07	0.31	0.83	-0.55	0.68
			MSE	0.90	0.59	0.13	-0.27	2.07
			SE	0.34	0.25	0.16	-0.14	0.83
			BE	0.16	0.25	0.52	-0.33	0.66
			FLE	0.68*	0.27	0.01	0.15	1.22
		FLE	CITE	-1.28*	0.43	0.00	-2.13	-0.45
			ES	-0.41	0.21	0.06	-0.82	0.01
			FAE	-0.62*	0.28	0.03	-1.18	-0.07

			MSE	0.21	0.58	0.71	-0.93	1.35
			SE	-0.34	0.21	0.10	-0.75	0.06
			BE	-0.52*	0.21	0.02	-0.94	-0.10
			TSSE	-0.68*	0.27	0.01	-1.22	-0.15

Spss Results for Item 12

Dependent Variable		**(I) Department**	**(J) Department**	**Mean Difference (I-J)**	**Std. Error**	**Sig.**	**95% Confidence Interval**	**95% Confidence Interval**
							Lower Bound	**Upper Bound**
PREPARATION	Item 12	CITE	ES	1.28*	0.41	0.00	0.47	2.10
			FAE	1.38*	0.45	0.00	0.50	2.28
			MSE	2.00*	0.68	0.00	0.66	3.34
			SE	1.36*	0.41	0.00	0.56	2.17
			BE	1.19*	0.41	0.00	0.38	2.01
			TSSE	0.57	0.45	0.21	-0.31	1.45
			FLE	1.87*	0.43	0.00	1.04	2.72
		ES	CITE	-1.28*	0.41	0.00	-2.10	-0.47
			FAE	0.10	0.26	0.69	-0.41	0.62
			MSE	0.72	0.57	0.21	-0.41	1.84
			SE	0.08	0.18	0.65	-0.27	0.43
			BE	-0.09	0.18	0.63	-0.45	0.27
			TSSE	-0.71*	0.25	0.01	-1.21	-0.22
			FLE	0.59*	0.21	0.01	0.18	1.01
		FAE	CITE	-1.38*	0.45	0.00	-2.28	-0.50
			ES	-0.10	0.26	0.69	-0.62	0.41

			MSE	0.61	0.60	0.31	-0.57	1.79
			SE	-0.02	0.26	0.93	-0.53	0.48
			BE	-0.19	0.26	0.46	-0.71	0.32
			TSSE	-0.82*	0.31	0.01	-1.44	-0.21
			FLE	0.49	0.28	0.08	-0.06	1.04
		SE	CITE	-2.00*	0.68	0.00	-3.34	-0.66
			ES	-0.72	0.57	0.21	-1.84	0.41
			FAE	-0.61	0.60	0.31	-1.79	0.57
			SE	-0.63	0.57	0.27	-1.75	0.48
			BE	-0.81	0.57	0.16	-1.93	0.32
			TSSE	-1.43*	0.59	0.02	-2.61	-0.26
			FLE	-0.12	0.58	0.83	-1.26	1.02
		SE	CITE	-1.36*	0.41	0.00	-2.17	-0.56
			ES	-0.08	0.18	0.65	-0.43	0.27
			FAE	0.02	0.26	0.93	-0.48	0.53
			MSE	0.63	0.57	0.27	-0.48	1.75
			BE	-0.17	0.18	0.34	-0.52	0.18
			TSSE	-0.79*	0.25	0.00	-1.28	-0.31
			FLE	0.51*	0.21	0.01	0.11	0.92
		BE	CITE	-1.19*	0.41	0.00	-2.01	-0.38
			ES	0.09	0.18	0.63	-0.27	0.45
			FAE	0.19	0.26	0.46	-0.32	0.71
			MSE	0.81	0.57	0.16	-0.32	1.93
			SE	0.17	0.18	0.34	-0.18	0.52
			TSSE	-0.62*	0.25	0.01	-1.13	-0.13
			FLE	0.68*	0.21	0.00	0.26	1.10
		SSE	CITE	-0.57	0.45	0.21	-1.45	0.31
			ES	0.71*	0.25	0.01	0.22	1.21
			FAE	0.82*	0.31	0.01	0.21	1.44

			MSE	1.43*	0.59	0.02	0.26	2.61
			SE	0.79*	0.25	0.00	0.31	1.28
			BE	0.62*	0.25	0.01	0.13	1.13
			FLE	1.31*	0.27	0.00	0.78	1.85
		FLE	CITE	-1.87*	0.43	0.00	-2.72	-1.04
			ES	-0.59*	0.21	0.01	-1.01	-0.18
			FAE	-0.49	0.28	0.08	-1.04	0.06
			MSE	0.12	0.58	0.83	-1.02	1.26
			SE	-0.51*	0.21	0.01	-0.92	-0.11
			BE	-0.68*	0.21	0.00	-1.10	-0.26
			TSSE	-1.31*	0.27	0.00	-1.85	-0.78

Spss Results for Item 13

Dependent Variable		**(I) Department**	**(J) Department**	**Mean Difference (I-J)**	**Std. Error**	**Sig.**	**95% Confidence Interval**	**95% Confidence Interval**
							Lower Bound	**Upper Bound**
		CITE	ES	1.12*	0.40	0.01	0.33	1.92
			FAE	0.88*	0.44	0.05	0.02	1.76
			MSE	1.00	0.66	0.13	-0.31	2.31
			SE	1.15*	0.40	0.00	0.37	1.95
			BE	1.02*	0.40	0.01	0.23	1.82
			TSSE	0.77	0.44	0.08	-0.09	1.63
			FLE	1.45*	0.42	0.00	0.63	2.27
		ES	CITE	-1.12*	0.40	0.01	-1.92	-0.33

P R E P A R A T I O N	Item 13		FAE	-0.23	0.25	0.36	-0.73	0.27
			MSE	-0.12	0.56	0.83	-1.22	0.97
			SE	0.04	0.17	0.83	-0.30	0.38
			BE	-0.10	0.18	0.60	-0.45	0.26
			TSSE	-0.35	0.25	0.15	-0.84	0.13
			FLE	0.33	0.21	0.11	-0.07	0.74
		FAE	CITE	-0.88*	0.44	0.05	-1.76	-0.02
			ES	0.23	0.25	0.36	-0.27	0.73
			MSE	0.11	0.59	0.85	-1.04	1.26
			SE	0.27	0.25	0.28	-0.22	0.76
			BE	0.14	0.26	0.60	-0.37	0.64
			TSSE	-0.12	0.30	0.69	-0.72	0.48
			FLE	0.56*	0.27	0.04	0.02	1.11
		MSE	CITE	-1.00	0.66	0.13	-2.31	0.31
			ES	0.12	0.56	0.83	-0.97	1.22
			FAE	-0.11	0.59	0.85	-1.26	1.04
			SE	0.16	0.55	0.78	-0.93	1.25
			BE	0.03	0.56	0.96	-1.07	1.12
			TSSE	-0.23	0.58	0.69	-1.38	0.91
			FLE	0.45	0.57	0.42	-0.66	1.57
		SE	CITE	-1.15*	0.40	0.00	-1.95	-0.37
			ES	-0.04	0.17	0.83	-0.38	0.30
			FAE	-0.27	0.25	0.28	-0.76	0.22
			MSE	-0.16	0.55	0.78	-1.25	0.93
			BE	-0.13	0.17	0.45	-0.48	0.21
			TSSE	-0.39	0.24	0.11	-0.87	0.08
			FLE	0.30	0.20	0.14	-0.10	0.69
		BE	CITE	-1.02*	0.40	0.01	-1.82	-0.23
			ES	0.10	0.18	0.60	-0.26	0.45

			FAE	-0.14	0.26	0.60	-0.64	0.37
			MSE	-0.03	0.56	0.96	-1.12	1.07
			SE	0.13	0.17	0.45	-0.21	0.48
			TSSE	-0.26	0.25	0.30	-0.74	0.23
			FLE	0.42*	0.21	0.04	0.02	0.84
		TSSE	CITE	-0.77	0.44	0.08	-1.63	0.09
			ES	0.35	0.25	0.15	-0.13	0.84
			FAE	0.12	0.30	0.69	-0.48	0.72
			MSE	0.23	0.58	0.69	-0.91	1.38
			SE	0.39	0.24	0.11	-0.08	0.87
			BE	0.26	0.25	0.30	-0.23	0.74
			FLE	0.68*	0.27	0.01	0.16	1.21
		FLE	CITE	-1.45*	0.42	0.00	-2.27	-0.63
			ES	-0.33	0.21	0.11	-0.74	0.07
			FAE	-0.56*	0.27	0.04	-1.11	-0.02
			MSE	-0.45	0.57	0.42	-1.57	0.66
			SE	-0.30	0.20	0.14	-0.69	0.10
			BE	-0.42*	0.21	0.04	-0.84	-0.02
			TSSE	-0.68*	0.27	0.01	-1.21	-0.16

Spss Results for Item 14

Dependent Variable	**(I) Department**	**(J) Department**	**Mean Difference (I-J)**	**Std. Error**	**Sig.**	**95% Confidence Interval**	**95% Confidence Interval**
						Lower Bound	**Upper Bound**

PRESANTATION	Item 14	CITE	ES	0.93*	0.41	0.02	0.13	1.75
			FAE	0.39	0.45	0.39	-0.50	1.28
			MSE	1.50*	0.68	0.03	0.17	2.83
			SE	0.89*	0.41	0.03	0.09	1.70
			BE	0.80	0.41	0.05	-0.01	1.61
			TSSE	0.35	0.44	0.43	-0.53	1.23
			FLE	1.07*	0.42	0.01	0.24	1.91
		ES	CITE	-0.93*	0.41	0.02	-1.75	-0.13
			FAE	-0.54*	0.26	0.04	-1.06	-0.04
			MSE	0.56	0.57	0.32	-0.55	1.68
			SE	-0.04	0.18	0.82	-0.39	0.31
			BE	-0.13	0.18	0.47	-0.50	0.23
			TSSE	-0.58*	0.25	0.02	-1.08	-0.10
			FLE	0.14	0.21	0.51	-0.27	0.55
		FAE	CITE	-0.39	0.45	0.39	-1.28	0.50
			ES	0.54*	0.26	0.04	0.04	1.06
			MSE	1.11	0.60	0.06	-0.06	2.28
			SE	0.50*	0.26	0.05	0.01	1.01
			BE	0.41	0.26	0.11	-0.10	0.93
			TSSE	-0.04	0.31	0.90	-0.65	0.57
			FLE	0.68*	0.28	0.02	0.14	1.24
		SE	CITE	-1.50*	0.68	0.03	-2.83	-0.17
			ES	-0.56	0.57	0.32	-1.68	0.55
			FAE	-1.11	0.60	0.06	-2.28	0.06
			SE	-0.60	0.56	0.29	-1.71	0.51
			BE	-0.70	0.57	0.22	-1.81	0.42
			TSSE	-1.15	0.59	0.05	-2.31	0.01
			FLE	-0.42	0.58	0.46	-1.56	0.71
		SE	CITE	-0.89*	0.41	0.03	-1.70	-0.09

			ES	0.04	0.18	0.82	-0.31	0.39
			FAE	-0.50*	0.26	0.05	-1.01	-0.01
			MSE	0.60	0.56	0.29	-0.51	1.71
			BE	-0.09	0.18	0.59	-0.45	0.26
			TSSE	-0.54*	0.25	0.03	-1.03	-0.06
			FLE	0.18	0.21	0.38	-0.23	0.58
		BE	CITE	-0.80	0.41	0.05	-1.61	0.01
			ES	0.13	0.18	0.47	-0.23	0.50
			FAE	-0.41	0.26	0.11	-0.93	0.10
			MSE	0.70	0.57	0.22	-0.42	1.81
			SE	0.09	0.18	0.59	-0.26	0.45
			TSSE	-0.45	0.25	0.07	-0.95	0.04
			FLE	0.27	0.21	0.20	-0.14	0.69
		SSE	CITE	-0.35	0.44	0.43	-1.23	0.53
			ES	0.58*	0.25	0.02	0.10	1.08
			FAE	0.04	0.31	0.90	-0.57	0.65
			MSE	1.15	0.59	0.05	-0.01	2.31
			SE	0.54*	0.25	0.03	0.06	1.03
			BE	0.45	0.25	0.07	-0.04	0.95
			FLE	0.72*	0.27	0.01	0.19	1.26
		LE	CITE	-1.07*	0.42	0.01	-1.91	-0.24
			ES	-0.14	0.21	0.51	-0.55	0.27
			FAE	-0.68*	0.28	0.02	-1.24	-0.14
			MSE	0.42	0.58	0.46	-0.71	1.56
			SE	-0.18	0.21	0.38	-0.58	0.23
			BE	-0.27	0.21	0.20	-0.69	0.14
			TSSE	-0.72*	0.27	0.01	-1.26	-0.19

Spss Results for Item 15

Dependent Variable		(I) Department	(J) Department	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	95% Confidence Interval
							Lower Bound	Upper Bound
PRESANTATION	Item 15	CITE	ES	0.57	0.41	0.17	-0.24	1.38
			FAE	0.44	0.45	0.32	-0.44	1.33
			MSE	1.33*	0.67	0.05	0.01	2.66
			SE	0.73	0.41	0.07	-0.07	1.53
			BE	0.77	0.41	0.06	-0.04	1.57
			TSSE	0.43	0.44	0.33	-0.44	1.31
			FLE	1.15*	0.42	0.01	0.32	1.98
		ES	CITE	-0.57	0.41	0.17	-1.38	0.24
			FAE	-0.13	0.26	0.63	-0.63	0.38
			MSE	0.76	0.56	0.18	-0.35	1.87
			SE	0.16	0.18	0.36	-0.19	0.51
			BE	0.20	0.18	0.28	-0.16	0.56
			TSSE	-0.14	0.25	0.58	-0.63	0.35
			FLE	0.58*	0.21	0.01	0.17	0.99
		FAE	CITE	-0.44	0.45	0.32	-1.33	0.44
			ES	0.13	0.26	0.63	-0.38	0.63
			MSE	0.89	0.59	0.14	-0.28	2.06
			SE	0.29	0.25	0.26	-0.22	0.79
			BE	0.32	0.26	0.22	-0.19	0.83
			TSSE	-0.01	0.31	0.97	-0.62	0.60
			FLE	0.70*	0.28	0.01	0.16	1.26
		MSE	CITE	-1.33*	0.67	0.05	-2.66	-0.01
			ES	-0.76	0.56	0.18	-1.87	0.35

			FAE	-0.89	0.59	0.14	-2.06	0.28
			SE	-0.60	0.56	0.28	-1.71	0.50
			BE	-0.57	0.56	0.32	-1.68	0.55
			TSSE	-0.90	0.59	0.13	-2.06	0.26
			FLE	-0.18	0.57	0.75	-1.31	0.95
		SE	CITE	-0.73	0.41	0.07	-1.53	0.07
			ES	-0.16	0.18	0.36	-0.51	0.19
			FAE	-0.29	0.25	0.26	-0.79	0.22
			MSE	0.60	0.56	0.28	-0.50	1.71
			BE	0.04	0.18	0.83	-0.31	0.39
			TSSE	-0.30	0.24	0.23	-0.78	0.18
			FLE	0.42*	0.20	0.04	0.02	0.82
		BE	CITE	-0.77	0.41	0.06	-1.57	0.04
			ES	-0.20	0.18	0.28	-0.56	0.16
			FAE	-0.32	0.26	0.22	-0.83	0.19
			MSE	0.57	0.56	0.32	-0.55	1.68
			SE	-0.04	0.18	0.83	-0.39	0.31
			TSSE	-0.33	0.25	0.18	-0.83	0.16
			FLE	0.38	0.21	0.07	-0.03	0.80
		TSSE	CITE	-0.43	0.44	0.33	-1.31	0.44
			ES	0.14	0.25	0.58	-0.35	0.63
			FAE	0.01	0.31	0.97	-0.60	0.62
			MSE	0.90	0.59	0.13	-0.26	2.06
			SE	0.30	0.24	0.23	-0.18	0.78
			BE	0.33	0.25	0.18	-0.16	0.83
			FLE	0.71*	0.27	0.01	0.19	1.25
		FLE	CITE	-1.15*	0.42	0.01	-1.98	-0.32
			ES	-0.58*	0.21	0.01	-0.99	-0.17
			FAE	-0.70*	0.28	0.01	-1.26	-0.16

			MSE	0.18	0.57	0.75	-0.95	1.31
			SE	-0.42*	0.20	0.04	-0.82	-0.02
			BE	-0.38	0.21	0.07	-0.80	0.03
			TSSE	-0.71*	0.27	0.01	-1.25	-0.19

Spss Results for Item 16

Dependent Variable		**(I) Department**	**(J) Department**	**Mean Difference (I-J)**	**Std. Error**	**Sig.**	**95% Confidence Interval**	**95% Confidence Interval**
							Lower Bound	**Upper Bound**
PRESANTATION	Item 16	CITE	ES	0.58	0.42	0.16	-0.24	1.40
			FAE	0.67	0.46	0.15	-0.23	1.57
			MSE	1.50*	0.68	0.03	0.15	2.85
			SE	0.53	0.41	0.20	-0.28	1.35
			BE	0.51	0.42	0.23	-0.32	1.33
			TSSE	0.62	0.45	0.17	-0.27	1.50
			FLE	0.98*	0.43	0.02	0.14	1.83
		ES	CITE	-0.58	0.42	0.16	-1.40	0.24
			FAE	0.08	0.26	0.76	-0.44	0.60
			MSE	0.92	0.57	0.11	-0.22	2.05
			SE	-0.05	0.18	0.77	-0.41	0.30
			BE	-0.08	0.19	0.67	-0.45	0.29
			TSSE	0.03	0.25	0.90	-0.47	0.53
			FLE	0.40	0.21	0.06	-0.02	0.82
		FAE	CITE	-0.67	0.46	0.15	-1.57	0.23
			ES	-0.08	0.26	0.76	-0.60	0.44

			MSE	0.83	0.60	0.17	-0.36	2.02
			SE	-0.13	0.26	0.60	-0.64	0.37
			BE	-0.16	0.26	0.54	-0.68	0.36
			TSSE	-0.05	0.31	0.87	-0.67	0.57
			FLE	0.32	0.28	0.26	-0.24	0.88
		MSE	CITE	-1.50*	0.68	0.03	-2.85	-0.15
			ES	-0.92	0.57	0.11	-2.05	0.22
			FAE	-0.83	0.60	0.17	-2.02	0.36
			SE	-0.97	0.57	0.09	-2.10	0.16
			BE	-0.99	0.57	0.09	-2.13	0.14
			TSSE	-0.88	0.60	0.14	-2.06	0.30
			FLE	-0.52	0.58	0.38	-1.67	0.63
		SE	CITE	-0.53	0.41	0.20	-1.35	0.28
			ES	0.05	0.18	0.77	-0.30	0.41
			FAE	0.13	0.26	0.60	-0.37	0.64
			MSE	0.97	0.57	0.09	-0.16	2.10
			BE	-0.03	0.18	0.89	-0.38	0.33
			TSSE	0.08	0.25	0.73	-0.40	0.57
			FLE	0.45*	0.21	0.03	0.04	0.86
		BE	CITE	-0.51	0.42	0.23	-1.33	0.32
			ES	0.08	0.19	0.67	-0.29	0.45
			FAE	0.16	0.26	0.54	-0.36	0.68
			MSE	0.99	0.57	0.09	-0.14	2.13
			SE	0.03	0.18	0.89	-0.33	0.38
			TSSE	0.11	0.25	0.66	-0.39	0.61
			FLE	0.47*	0.21	0.03	0.06	0.90
		TSSE	CITE	-0.62	0.45	0.17	-1.50	0.27
			ES	-0.03	0.25	0.90	-0.53	0.47
			FAE	0.05	0.31	0.87	-0.57	0.67

			MSE	0.88	0.60	0.14	-0.30	2.06
			SE	-0.08	0.25	0.73	-0.57	0.40
			BE	-0.11	0.25	0.66	-0.61	0.39
			FLE	0.37	0.27	0.18	-0.17	0.91
		LE	CITE	-0.98*	0.43	0.02	-1.83	-0.14
			ES	-0.40	0.21	0.06	-0.82	0.02
			FAE	-0.32	0.28	0.26	-0.88	0.24
			MSE	0.52	0.58	0.38	-0.63	1.67
			SE	-0.45*	0.21	0.03	-0.86	-0.04
			BE	-0.47*	0.21	0.03	-0.90	-0.06
			TSSE	-0.37	0.27	0.18	-0.91	0.17

Spss Results for Item 17

Dependent Variable		**(I) Departmnt**	**(J) Department**	**Mean Difference (I-J)**	**Std. Error**	**Sig.**	**95% Confidence Interval**	**95% Confidence Interval**
							Lower Bound	**Upper Bound**
		CITE	ES	0.86*	0.41	0.04	0.06	1.67
			FAE	0.72	0.45	0.11	-0.16	1.61
			MSE	1.50*	0.67	0.03	0.17	2.83
			SE	0.77	0.41	0.06	-0.03	1.57
			BE	0.69	0.41	0.09	-0.12	1.50
			TSSE	0.35	0.44	0.43	-0.52	1.22
			FLE	1.10*	0.42	0.01	0.27	1.94
		ES	CITE	-0.86*	0.41	0.04	-1.67	-0.06
			FAE	-0.14	0.26	0.59	-0.65	0.37

PRESANTATION	Item 17		MSE	0.64	0.56	0.26	-0.48	1.75
			SE	-0.09	0.18	0.59	-0.44	0.25
			BE	-0.17	0.18	0.34	-0.54	0.19
			TSSE	-0.51*	0.25	0.04	-1.00	-0.02
			FLE	0.24	0.21	0.25	-0.17	0.66
		FAE	CITE	-0.72	0.45	0.11	-1.61	0.16
			ES	0.14	0.26	0.59	-0.37	0.65
			MSE	0.78	0.59	0.19	-0.39	1.95
			SE	0.05	0.25	0.85	-0.45	0.55
			BE	-0.03	0.26	0.90	-0.55	0.48
			TSSE	-0.37	0.31	0.23	-0.98	0.24
			FLE	0.38	0.28	0.17	-0.17	0.93
		MSE	CITE	-1.50*	0.67	0.03	-2.83	-0.17
			ES	-0.64	0.56	0.26	-1.75	0.48
			FAE	-0.78	0.59	0.19	-1.95	0.39
			SE	-0.73	0.56	0.20	-1.84	0.38
			BE	-0.81	0.57	0.15	-1.92	0.30
			TSSE	-1.15	0.59	0.05	-2.31	0.01
			FLE	-0.39	0.57	0.49	-1.52	0.74
		SE	CITE	-0.77	0.41	0.06	-1.57	0.03
			ES	0.09	0.18	0.59	-0.25	0.44
			FAE	-0.05	0.25	0.85	-0.55	0.45
			MSE	0.73	0.56	0.20	-0.38	1.84
			BE	-0.08	0.18	0.65	-0.43	0.27
			TSSE	-0.42	0.24	0.09	-0.90	0.06
			FLE	0.34	0.20	0.10	-0.07	0.74
		BE	CITE	-0.69	0.41	0.09	-1.50	0.12
			ES	0.17	0.18	0.34	-0.19	0.54
			FAE	0.03	0.26	0.90	-0.48	0.55

			MSE	0.81	0.57	0.15	-0.30	1.92
			SE	0.08	0.18	0.65	-0.27	0.43
			TSSE	-0.34	0.25	0.18	-0.83	0.15
			FLE	0.41*	0.21	0.05	0.00	0.83
		TSSE	CITE	-0.35	0.44	0.43	-1.22	0.52
			ES	0.51*	0.25	0.04	0.02	1.00
			FAE	0.37	0.31	0.23	-0.24	0.98
			MSE	1.15	0.59	0.05	-0.01	2.31
			SE	0.42	0.24	0.09	-0.06	0.90
			BE	0.34	0.25	0.18	-0.15	0.83
			FLE	0.75*	0.27	0.01	0.22	1.29
		FLE	CITE	-1.10*	0.42	0.01	-1.94	-0.27
			ES	-0.24	0.21	0.25	-0.66	0.17
			FAE	-0.38	0.28	0.17	-0.93	0.17
			MSE	0.39	0.57	0.49	-0.74	1.52
			SE	-0.34	0.20	0.10	-0.74	0.07
			BE	-0.41*	0.21	0.05	-0.83	0.00
			TSSE	-0.75*	0.27	0.01	-1.29	-0.22

Spss Results for Item 18

Dependent Variable		**(I) Department**	**(J) Department**	**Mean Difference (I-J)**	**Std. Error**	**Sig.**	**95% Confidence Interval**	**95% Confidence Interval**
							Lower Bound	**Upper Bound**
		CITE	ES	1.17*	0.40	0.00	0.38	1.96
			FAE	0.28	0.44	0.53	-0.59	1.14

EVALUATION	Item 18		MSE	1.17	0.66	0.08	-0.13	2.47
			SE	0.92*	0.40	0.02	0.14	1.71
			BE	0.76	0.40	0.06	-0.03	1.56
			TSSE	0.70	0.43	0.11	-0.16	1.56
			FLE	1.83*	0.41	0.00	1.02	2.65
		ES	CITE	-1.17*	0.40	0.00	-1.96	-0.38
			FAE	-0.89*	0.25	0.00	-1.39	-0.40
			MSE	-0.01	0.55	0.99	-1.10	1.08
			SE	-0.24	0.17	0.16	-0.58	0.10
			BE	-0.40*	0.18	0.02	-0.76	-0.05
			TSSE	-0.47	0.24	0.05	-0.95	0.01
			FLE	0.66*	0.21	0.00	0.26	1.07
		FAE	CITE	-0.28	0.44	0.53	-1.14	0.59
			ES	0.89*	0.25	0.00	0.40	1.39
			MSE	0.89	0.58	0.13	-0.26	2.04
			SE	0.65*	0.25	0.01	0.16	1.14
			BE	0.49	0.25	0.06	-0.02	0.99
			TSSE	0.42	0.30	0.17	-0.18	1.02
			FLE	1.55*	0.27	0.00	1.02	2.09
		MSE	CITE	-1.17	0.66	0.08	-2.47	0.13
			ES	0.01	0.55	0.99	-1.08	1.10
			FAE	-0.89	0.58	0.13	-2.04	0.26
			SE	-0.24	0.55	0.67	-1.32	0.85
			BE	-0.40	0.55	0.47	-1.49	0.69
			TSSE	-0.47	0.58	0.42	-1.60	0.67
			FLE	0.67	0.56	0.24	-0.44	1.78
		SE	CITE	-0.92*	0.40	0.02	-1.71	-0.14
			ES	0.24	0.17	0.16	-0.10	0.58
			FAE	-0.65*	0.25	0.01	-1.14	-0.16

			MSE	0.24	0.55	0.67	-0.85	1.32
			BE	-0.16	0.17	0.35	-0.51	0.18
			TSSE	-0.23	0.24	0.34	-0.70	0.24
			FLE	0.90*	0.20	0.00	0.51	1.30
		BE	CITE	-0.76	0.40	0.06	-1.56	0.03
			ES	0.40*	0.18	0.02	0.05	0.76
			FAE	-0.49	0.25	0.06	-0.99	0.02
			MSE	0.40	0.55	0.47	-0.69	1.49
			SE	0.16	0.17	0.35	-0.18	0.51
			TSSE	-0.06	0.24	0.79	-0.55	0.42
			FLE	1.06*	0.21	0.00	0.66	1.48
		TSSE	CITE	-0.70	0.43	0.11	-1.56	0.16
			ES	0.47	0.24	0.05	-0.01	0.95
			FAE	-0.42	0.30	0.17	-1.02	0.18
			MSE	0.47	0.58	0.42	-0.67	1.60
			SE	0.23	0.24	0.34	-0.24	0.70
			BE	0.06	0.24	0.79	-0.42	0.55
			FLE	1.13*	0.26	0.00	0.61	1.65
		FLE	CITE	-1.83*	0.41	0.00	-2.65	-1.02
			ES	-0.66*	0.21	0.00	-1.07	-0.26
			FAE	-1.55*	0.27	0.00	-2.09	-1.02
			MSE	-0.67	0.56	0.24	-1.78	0.44
			SE	-0.90*	0.20	0.00	-1.30	-0.51
			BE	-1.06*	0.21	0.00	-1.48	-0.66
			TSSE	-1.13*	0.26	0.00	-1.65	-0.61

Spss Results for Item 19

Depende	**(I)**	**(J)**	**Mean**	**Std.**	**Sig.**	**95%**	**95%**

nt Variable		Depar tment	Depar tment	Difference (I-J)	Error		Confide nce Interval	Confide nce Interval
							Lower Bound	Upper Bound
E V A L U A T I O N	Item 19	CITE	ES	1.08*	0.41	0.01	0.28	1.89
			FAE	0.61	0.45	0.17	-0.27	1.49
			MSE	1.17	0.67	0.08	-0.16	2.49
			SE	1.03*	0.41	0.01	0.24	1.84
			BE	0.71	0.41	0.09	-0.10	1.51
			TSSE	0.65	0.44	0.14	-0.22	1.52
			FLE	1.40*	0.42	0.00	0.58	2.24
		ES	CITE	-1.08*	0.41	0.01	-1.89	-0.28
			FAE	-0.47	0.26	0.07	-0.98	0.04
			MSE	0.08	0.56	0.88	-1.02	1.19
			SE	-0.04	0.18	0.81	-0.39	0.30
			BE	-0.37*	0.18	0.04	-0.73	-0.01
			TSSE	-0.43	0.25	0.08	-0.92	0.06
			FLE	0.33	0.21	0.12	-0.08	0.74
		FAE	CITE	-0.61	0.45	0.17	-1.49	0.27
			ES	0.47	0.26	0.07	-0.04	0.98
			MSE	0.56	0.59	0.35	-0.61	1.72
			SE	0.43	0.25	0.09	-0.07	0.93
			BE	0.10	0.26	0.71	-0.41	0.61
			TSSE	0.04	0.31	0.90	-0.57	0.65
			FLE	0.79*	0.28	0.00	0.25	1.35
		MSE	CITE	-1.17	0.67	0.08	-2.49	0.16
			ES	-0.08	0.56	0.88	-1.19	1.02
			FAE	-0.56	0.59	0.35	-1.72	0.61
			SE	-0.13	0.56	0.82	-1.23	0.98

			BE	-0.46	0.56	0.42	-1.57	0.65
			TSSE	-0.52	0.59	0.38	-1.67	0.64
			FLE	0.24	0.57	0.67	-0.89	1.37
		SE	CITE	-1.03*	0.41	0.01	-1.84	-0.24
			ES	0.04	0.18	0.81	-0.30	0.39
			FAE	-0.43	0.25	0.09	-0.93	0.07
			MSE	0.13	0.56	0.82	-0.98	1.23
			BE	-0.33	0.18	0.06	-0.68	0.02
			TSSE	-0.39	0.24	0.11	-0.87	0.09
			FLE	0.37	0.20	0.07	-0.03	0.77
		BE	CITE	-0.71	0.41	0.09	-1.51	0.10
			ES	0.37*	0.18	0.04	0.01	0.73
			FAE	-0.10	0.26	0.71	-0.61	0.41
			MSE	0.46	0.56	0.42	-0.65	1.57
			SE	0.33	0.18	0.06	-0.02	0.68
			TSSE	-0.06	0.25	0.82	-0.55	0.43
			FLE	0.70*	0.21	0.00	0.29	1.12
		TSSE	CITE	-0.65	0.44	0.14	-1.52	0.22
			ES	0.43	0.25	0.08	-0.06	0.92
			FAE	-0.04	0.31	0.90	-0.65	0.57
			MSE	0.52	0.59	0.38	-0.64	1.67
			SE	0.39	0.24	0.11	-0.09	0.87
			BE	0.06	0.25	0.82	-0.43	0.55
			FLE	0.75*	0.27	0.01	0.23	1.29
		FLE	CITE	-1.40*	0.42	0.00	-2.24	-0.58
			ES	-0.33	0.21	0.12	-0.74	0.08
			FAE	-0.79*	0.28	0.00	-1.35	-0.25
			MSE	-0.24	0.57	0.67	-1.37	0.89
			SE	-0.37	0.20	0.07	-0.77	0.03

			BE	-0.70*	0.21	0.00	-1.12	-0.29
			TSSE	-0.75*	0.27	0.01	-1.29	-0.23

Spss Results for Item 20

Dependent Variable		**(I) Department**	**(J) Department**	**Mean Difference (I-J)**	**Std. Error**	**Sig.**	**95% Confidence Interval**	**95% Confidence Interval**
							Lower Bound	**Upper Bound**
EVALUATION	Item 20	CITE	ES	1.08*	0.41	0.01	0.28	1.89
			FAE	0.61	0.45	0.17	-0.27	1.49
			MSE	1.17	0.67	0.08	-0.16	2.49
			SE	1.03*	0.41	0.01	0.24	1.84
			BE	0.71	0.41	0.09	-0.10	1.51
			TSSE	0.65	0.44	0.14	-0.22	1.52
			FLE	1.40*	0.42	0.00	0.58	2.24
		ES	CITE	-1.08*	0.41	0.01	-1.89	-0.28
			FAE	-0.47	0.26	0.07	-0.98	0.04
			MSE	0.08	0.56	0.88	-1.02	1.19
			SE	-0.04	0.18	0.81	-0.39	0.30
			BE	-0.37*	0.18	0.04	-0.73	-0.01
			TSSE	-0.43	0.25	0.08	-0.92	0.06
			FLE	0.33	0.21	0.12	-0.08	0.74
		FAE	CITE	-0.61	0.45	0.17	-1.49	0.27
			ES	0.47	0.26	0.07	-0.04	0.98
			MSE	0.56	0.59	0.35	-0.61	1.72
			SE	0.43	0.25	0.09	-0.07	0.93

			BE	0.10	0.26	0.71	-0.41	0.61
			TSSE	0.04	0.31	0.90	-0.57	0.65
			FLE	0.79*	0.28	0.00	0.25	1.35
		MSE	CITE	-1.17	0.67	0.08	-2.49	0.16
			ES	-0.08	0.56	0.88	-1.19	1.02
			FAE	-0.56	0.59	0.35	-1.72	0.61
			SE	-0.13	0.56	0.82	-1.23	0.98
			BE	-0.46	0.56	0.42	-1.57	0.65
			TSSE	-0.52	0.59	0.38	-1.67	0.64
			FLE	0.24	0.57	0.67	-0.89	1.37
		SE	CITE	-1.03*	0.41	0.01	-1.84	-0.24
			ES	0.04	0.18	0.81	-0.30	0.39
			FAE	-0.43	0.25	0.09	-0.93	0.07
			MSE	0.13	0.56	0.82	-0.98	1.23
			BE	-0.33	0.18	0.06	-0.68	0.02
			TSSE	-0.39	0.24	0.11	-0.87	0.09
			FLE	0.37	0.20	0.07	-0.03	0.77
		BE	CITE	-0.71	0.41	0.09	-1.51	0.10
			ES	0.37*	0.18	0.04	0.01	0.73
			FAE	-0.10	0.26	0.71	-0.61	0.41
			MSE	0.46	0.56	0.42	-0.65	1.57
			SE	0.33	0.18	0.06	-0.02	0.68
			TSSE	-0.06	0.25	0.82	-0.55	0.43
			FLE	0.70*	0.21	0.00	0.29	1.12
		TSSE	CITE	-0.65	0.44	0.14	-1.52	0.22
			ES	0.43	0.25	0.08	-0.06	0.92
			FAE	-0.04	0.31	0.90	-0.65	0.57
			MSE	0.52	0.59	0.38	-0.64	1.67
			SE	0.39	0.24	0.11	-0.09	0.87

			BE	0.06	0.25	0.82	-0.43	0.55
			FLE	0.75*	0.27	0.01	0.23	1.29
		FLE	CITE	-1.40*	0.42	0.00	-2.24	-0.58
			ES	-0.33	0.21	0.12	-0.74	0.08
			FAE	-0.79*	0.28	0.00	-1.35	-0.25
			MSE	-0.24	0.57	0.67	-1.37	0.89
			SE	-0.37	0.20	0.07	-0.77	0.03
			BE	-0.70*	0.21	0.00	-1.12	-0.29
			TSSE	-0.75*	0.27	0.01	-1.29	-0.23

Spss Results for Item 21

Dependent Variable		**(I) Department**	**(J) Department**	**Mean Difference (I-J)**	**Std. Error**	**Sig.**	**95% Confidence Interval**	**95% Confidence Interval**
							Lower Bound	**Upper Bound**
EVALUATION	Item 21	CITE	ES	0.79	0.41	0.05	-0.01	1.60
			FAE	0.39	0.45	0.39	-0.49	1.27
			MSE	1.17	0.67	0.08	-0.16	2.49
			SE	0.94*	0.41	0.02	0.14	1.75
			BE	0.50	0.41	0.22	-0.31	1.31
			TSSE	0.40	0.44	0.37	-0.47	1.27
			FLE	1.16*	0.42	0.01	0.33	2.00
		ES	CITE	-0.79	0.41	0.05	-1.60	0.01
			FAE	-0.40	0.26	0.12	-0.91	0.11
			MSE	0.38	0.56	0.51	-0.74	1.49
			SE	0.15	0.18	0.38	-0.19	0.50

			BE	-0.29	0.18	0.11	-0.65	0.07
			TSSE	-0.39	0.25	0.12	-0.88	0.10
			FLE	0.38	0.21	0.07	-0.04	0.79
		FAE	CITE	-0.39	0.45	0.39	-1.27	0.49
			ES	0.40	0.26	0.12	-0.11	0.91
			MSE	0.78	0.59	0.19	-0.39	1.95
			SE	0.55*	0.25	0.03	0.05	1.06
			BE	0.11	0.26	0.67	-0.40	0.62
			TSSE	0.01	0.31	0.97	-0.60	0.62
			FLE	0.77*	0.28	0.01	0.23	1.33
		MSE	CITE	-1.17	0.67	0.08	-2.49	0.16
			ES	-0.38	0.56	0.51	-1.49	0.74
			FAE	-0.78	0.59	0.19	-1.95	0.39
			SE	-0.22	0.56	0.69	-1.33	0.89
			BE	-0.67	0.56	0.24	-1.78	0.45
			TSSE	-0.77	0.59	0.19	-1.93	0.39
			FLE	0.00	0.57	1.00	-1.13	1.13
		SE	CITE	-0.94*	0.41	0.02	-1.75	-0.14
			ES	-0.15	0.18	0.38	-0.50	0.19
			FAE	-0.55*	0.25	0.03	-1.06	-0.05
			MSE	0.22	0.56	0.69	-0.89	1.33
			BE	-0.44*	0.18	0.01	-0.79	-0.10
			TSSE	-0.54*	0.24	0.03	-1.03	-0.06
			FLE	0.22	0.20	0.28	-0.18	0.63
		BE	CITE	-0.50	0.41	0.22	-1.31	0.31
			ES	0.29	0.18	0.11	-0.07	0.65
			FAE	-0.11	0.26	0.67	-0.62	0.40
			MSE	0.67	0.56	0.24	-0.45	1.78
			SE	0.44*	0.18	0.01	0.10	0.79

			TSSE	-0.10	0.25	0.69	-0.59	0.39
			FLE	0.66*	0.21	0.00	0.25	1.08
		TSSE	CITE	-0.40	0.44	0.37	-1.27	0.47
			ES	0.39	0.25	0.12	-0.10	0.88
			FAE	-0.01	0.31	0.97	-0.62	0.60
			MSE	0.77	0.59	0.19	-0.39	1.93
			SE	0.54*	0.24	0.03	0.06	1.03
			BE	0.10	0.25	0.69	-0.39	0.59
			FLE	0.76*	0.27	0.01	0.24	1.30
		FLE	CITE	-1.16*	0.42	0.01	-2.00	-0.33
			ES	-0.38	0.21	0.07	-0.79	0.04
			FAE	-0.77*	0.28	0.01	-1.33	-0.23
			MSE	0.00	0.57	1.00	-1.13	1.13
			SE	-0.22	0.20	0.28	-0.63	0.18
			BE	-0.66*	0.21	0.00	-1.08	-0.25
			TSSE	-0.76*	0.27	0.01	-1.30	-0.24

Appendix C: Ethics Committee Approval

Sayı: ETK00-2019-0005 01.02.2019

Konu: Etik Kurulu'na Başvurunuz Hk.

Sayın Şeyma Özvataf
Bilgisayar ve Öğretim Teknolojileri Eğitimi Yüksek Lisans Öğrencisi

Doğu Akdeniz Üniversitesi Bilimsel Araştırma ve Yayın Etiği Kurulu'nun **01.02.2019** tarih ve ***2019/03-01*** sayılı kararı doğrultusunda **"An Assessment of Web 2.0 Practical Content Development Self Efficacy Beliefs of Teacher Candidates"** adlı çalışmanızı, Doç. Dr. Ersun İşçioğlu danışmanlığında araştırmanız, Bilimsel ve Araştırma Etiği açısından uygun bulunmuştur.

Bilginize rica ederim.

Prof. Dr. Fatma Güven Lisaniler
Etik Kurulu Başkanı

FGL/ba.

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Appendix D: Originality Report

Turnitin Originality Report

Thesis_V07 by Seyma Ozvataf

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