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PRE-SERVICE EFL TEACHERS' ATTITUDES TOWARDS TEACHING ENGLISH IN THE METAVERSE

İNGİLİZCE ÖĞRETMEN ADAYLARININ METAVERSE ORTAMINDA İNGİLİZCE ÖĞRETİMİNE YÖNELİK TUTUMLARI

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ÖZ: Son zamanlarda İngilizcenin sanal gerçeklik teknolojileri kullanılarak öğretilmesine yönelik çalışmalar giderek artmaktadır; ancak alanyazın incelendiğinde metaverse ortamında İngilizce öğretimi kapsamında yapılan çalışmaların sayısının halen sayıca az olduğu görülmektedir. Bunlar göz önüne alındığında çalışmanın amacı İngilizce öğretmen adaylarının metaverse ortamında İngilizce öğretimine ilişkin görüşlerini araştırmaktır. Bu kapsamda Türkiye'deki bir devlet üniversitesindeki 13 İngilizce öğretmeni adayıyla nitel bir çalışma yürütülmüş ve veri toplama işlemi odak grup görüşmeleri aracılığıyla yapılmıştır. Katılımcıların seçiminde adayların gönüllülüğü esas alınmıştır, ayrıca amaçlı örnekleme veri toplama yöntemi benimsenmiştir. Odak grup görüşmesi yoluyla toplanan veriler içerik analizi kullanılarak analiz edilmiştir. Araştırmanın bulgularına göre metaverse ortamında İngilizce öğretimine dair katılımcıların hem olumlu hem de olumsuz görüşleri bulunmakla beraber olumsuz temalar daha öne çıkmaktadır. Ayrıca katılımcılar Türkiye'de metaverse ortamında İngilizce öğretimine ilişkin bazı endişelerini dile getirmişlerdir. Bununla birlikte, katılımcıların çoğu kariyerlerinin ilerleyen dönemlerinde metaverse ortamında İngilizce öğretmeye yönelik olarak dengeli bir entegrasyonu savunurken, bazı katılımcılar ise geleneksel yöntemlere bağlı kalmak istediklerini ifade etmişlerdir. Sonuç olarak, bu çalışma İngilizce öğretimi alanına metaverse'ün dahil edilmesi konusunda güncel ve kapsamlı bir bakış açısı sağlamanın yanı sıra gelecekteki araştırmalar için öneriler sunmaktadır.

Anahtar kelimeler: metaverse, sanal dünya, İngilizce öğretimi, eğitimde teknoloji entegrasyonu, sanal evren, İngilizce öğretmen adayları

ABSTRACT: Recently, the studies on teaching English via virtual technologies have been increasing; however, to the author's knowledge studies in the existing literature concerning the metaverse are still not at a desirable level. Thus, the aim of this case study is to investigate the pre-service teachers' views on incorporating the metaverse into English language teaching. To accomplish this aim, 13 pre-service English language teachers are interviewed employing a focus group discussion. Purposive sampling is adopted to select the participants. The data gathered through the focus group discussion are analyzed using content analysis. The findings of the study indicated that there were both positive and negative views of participants considering the incorporation of the metaverse into English language teaching. Also, it was found that participants expressed some concerns about employing the metaverse in teaching in Türkiye for several reasons. In addition, most students advocated a balanced integration for applying the metaverse in their future teaching concepts, while some were opposed to it. In conclusion, this study can provide an up-to-date and comprehensive perspective on the issue of integrating the metaverse in the field of English language teaching, as well as offering insights, suggestions, and recommendations for future research.

Keywords: metaverse, virtual worlds, English language teaching, technology integration, virtual environment, pre-service English teachers

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GENİŞLETİLMİŞ ÖZET

Giriş

Son yıllarda Bilgi ve İletişim Teknolojilerindeki (BİT) yenilikler, sanal dünyaların da kullanımının artması ile çevrim içi eğitim kavramını örgün eğitim alanının ötesine taşıyarak güncel teknolojilerin eğitime entegrasyonunu sağlamıştır. 3 boyutlu sanal dünyalar, katılımcıların gerçek zamanlı olarak birbirleriyle etkileşimde bulunmalarına ve oluşturdukları avatarlarını (dijital temsilcilerini) kullanarak gerçekte içinde bulunmadıkları bir dünyada var olma deneyimi yaşamalarına olanak sağlayan bilgisayar tabanlı bir ortam olarak tanımlanabilir (Schroeder, 2014, 1996; Kim, Lee ve Thomas, 2012). Bununla birlikte, sanal dünyalarda katılımcılar, tasarımcı tarafından ortaya koyulan nesneler ve koşullarla eş zamanlı bir iletişimde bulunabilirler. Eğitimde sanal dünyaların kullanımı, katılımcıların herhangi bir sınırlama olmaksızın oluşturulan evrende diğer katılımcıların avatarları ile iletişim kurmaları, belirli görevleri tamamlamaları ve hedef dilin kültürüne ait ögelerin öğrenilmesi gibi durumlar nedeniyle pratiklik sağlamaktadır. Ayrıca sanal dünyalar özgün bir ortamda öğrenmenin gerçekleşmesini desteklemesi, durumsal ve deneyimsel öğrenmeyi geliştirmesi nedeniyle birçok branşta eğitim amaçlı da kullanılabilir. Bu sanal ortamlar metaverse'ler olarak da adlandırılabilir dolayısıyla tek bir metaverse evreninin olmadığı, farklı kullanıcılar için farklı amaçlara hizmet eden birçok farklı evrenin var olduğu ileri sürülebilir. Örneğin; Second Life (SL), Opensim, Active World, Quest Atlantis, Fuvle, Celestia, Stellarium ve Cubix Editor gibi eğitim bağlamında kullanılan birçok metaverse evreni bulunmaktadır (Demirer ve Erbaş, 2016).

Alanyazın incelendiğinde, sanal dünyalar aracılığıyla İngilizce öğretimi konusuna yönelik son yıllarda yapılmış pek çok çalışma bulunmaktadır (Arslantaş ve Tokel, 2018; Bamanger ve Gashan, 2019; Berns, González-Pardo ve Camacho 2013; Chen, 2016; Chen ve Kent, 2020; Dalgarno ve Lee, 2010; Garrido-Iñigo ve Rodríguez-Moreno, 2013; Grant, Huang ve Pasfield-Neofitou, 2013; Güzel ve Aydın, 2016; Kaplan-Rakowski, 2011; Molka-Danielsen ve Deutschmann, 2009). Ancak alanyazında metaverse adı altında metaverse evreninde İngilizce öğretimi üzerine yapılan yeterli çalışmaya rastlanmamıştır. Dahası mevcut olanlar ya yazarın belirli bir alandaki yansımalarına (Ortega-Rodriguez, 2022) ya da iş birliğine İngilizce öğretiminde sanal dünyalara atıfta bulunan metaverse uygulamalarına odaklanmaktadır (Suzuki vd., 2020). Ancak sorun, alanyazında var olan çalışmaların metaverse kavramı adı altında direkt olarak sanal dünyaları ifade etmesidir yani bu iki kavramı tek bir çatı altında birleştirmesidir.

Dolayısıyla İngilizce öğretiminde metaverse kavramıyla ilgili çalışmaların eksikliği göz önüne alındığında, bu çalışma, İngilizce öğretmen adaylarının metaverse bağlamında İngilizce öğretmeye yönelik tutumlarını incelemeyi, olası sonuçlarla birlikte metaverse'in Türkiye'de uygulanabilirliğini araştırmayı ve gelecekteki öğretmenlik kariyerlerinde metaverse'ü uygulamaya yönelik görüşlerini analiz etmeyi amaçlamaktadır. Bu amaçlar doğrultusunda, çalışmada aşağıda verilen sorulara cevap aranmaktadır:

1. İngilizce öğretmeni adaylarının metaverse ortamında İngilizce öğretimi konusundaki tutumları nelerdir?
2. İngilizce öğretmeni adaylarının metaverse'te İngilizce öğretiminin Türkiye'de uygulanabilirliğine yönelik tutumları nelerdir?
3. İngilizce öğretmeni adaylarının gelecek kariyerlerinde metaverse'te İngilizce öğretmeye yönelik görüşleri nelerdir?

Yöntem

Bu çalışmada, katılımcıların bakış açılarına ilişkin verilen konu hakkında görüşmeler yoluyla derinlemesine bir analiz yapmak için nitel araştırma yöntemi olan vaka çalışması benimsenmiştir. Bu çalışma, Türkiye'deki bir devlet üniversitesinde 2021-2022 eğitim-öğretim yılının ikinci döneminde gerçekleştirilmiş olup çalışmaya 4. sınıf 13 İngilizce öğretmeni adayı katılmıştır. Katılımcıların seçimi, amaçlı örnekleme yöntemiyle yapılmış ve katılımcıların gönüllülüğü esas alınmıştır. Görüşme esnasında katılımcıların anonimliğini korumak için katılımcılara rastgele numaralar verilmiştir. Verilerin toplanmasında yarı yapılandırılmış odak grup görüşmesi tekniği benimsenmiştir. Katılımcılar uygunluklarına göre 3 gruba ayrılmış ve araştırmacı tarafından hazırlanan 4 görüşme sorusu katılımcılara sunulduktan sonra katılımcıların da izni ile görüşme kayıt altına alınmıştır. Her odak grup görüşmesi genellikle grup başına 35 dakika sürmüştür. Veri analizi, tümevarımsal nitel içerik analizi yoluyla yapılmış olup, tüm gruplarla görüşüldükten sonra veriler yazıya dökülerek kodlar, kodlarla ilişkili alt temalar daha sonrasında ise de ana temalar belirlenmiştir. Veri güvenirliğini sağlamak adına bir devlet üniversitesinde

görev yapmakta olan İngilizce öğretmeninin desteğiyle kodlar tekrar gözden geçirilmiş ve araştırmacının kendi saptadığı kodlarla karşılaştırılmıştır.

Bulgular ve Tartışma

Metaverse ortamında İngilizce öğretimine yönelik katılımcıların tutumlarına odaklanan birinci araştırma sorusunda, odak grup görüşmelerinden elde edilen veriler ile çeşitli temalar belirlenmiştir. Kimi temalar metaverse'ün uygulanmasına dair İngilizce öğretmen adaylarının olumlu görüşlerini yansıtırken kimi temalar ise olumsuz görüşlerini ifade etmektedir. Katılımcılar tarafından metaverse'ün olumlu yanları olarak dile getirilen temalar arasında metaverse'ün öğretmen ve öğrencilerin teknolojideki yeniliklere ayak uydurmasına olanak sağlaması ve bu sayede İngilizce öğretmen adaylarının metaverse'ü İngilizce öğrenme ve öğretme konusunda yenilikçi bir yaklaşım olarak benimsedikleri sonucuna varılmıştır. Ayrıca geleneksel sınıf ortamında öğretmenin sınıfa getirebileceği durumların sınırlı olduğu ancak metaverse'te hem deneyimsel öğrenmeye hem de gerçek hayata yönelik materyallerin dahil edilerek öğrenmeyi daha kalıcı hale getirmek için oluşturulan bir dizi esnek görevin bulunduğu katılımcılar tarafından ifade edilmiştir. Bu sonuçlar, Choi ve Kim (2017) ve Krokos, Plaisant ve Varshney (2019) tarafından gerçekleştirilen araştırmaların bulguları ile de benzerlik göstermektedir. Bununla birlikte katılımcılar metaverse'ün öğrencilerin kültürlerarası iletişim yetkinliğinin arttırılmasına katkı sağladığını ve esnek öğrenmeyi desteklediğini belirtmişlerdir. Bu sonuçlar, Zheng (2020)'nin verilerini destekleyici niteliktedir. Katılımcılar, metaverse'ün öğrencilerin hedef dile maruziyetinin arttırılmasında destekleyici bir rolünün olduğunu da savunmuşlardır. Metaverse'ün oyunlaştırılmış öğretimi benimsemesinden dolayı öğrenciler için motive edici olduğu ve bu hususta da teoriden pratiğe geçişi kolaylaştırmayı sağladığı da katılımcıların dile getirdiği olumlu görüşler arasındadır. Dahası metaverse'ün motive edici özelliği alanyazında yapılmış olan birçok çalışmada da ortak bulgu olarak karşımıza çıkmaktadır (Allcoat vd., 2021; Limniou, Roberts ve Papadopoulos, 2008; Shim vd., 2003).

Bununla birlikte katılımcılar bazı temalarda metaverse'e yönelik olumsuz görüşlerini de dile getirmişlerdir. Katılımcılar, öğretmenlerin ve velilerin metaverse'te İngilizce öğretimine yönelik çekimser davranabileceklerini belirtmişlerdir. Diaz (2020) tarafından da ortaya konulduğu üzere, odak grup görüşmesinde katılımcılar metaverse'te İngilizce öğretebilmek için öğretmenlerin, anlamlı bir öğrenme ortamının oluşması için de öğrencilerin bir eğitime tabii tutulmaları gerektiğini ifade etmişlerdir. Kimi katılımcılar ise, Ortega-Rodriguez (2022)'in de ifade ettiği üzere öğrencilerin gerçeklik algısını kaybedebilecekleri ve metaverse ortamında uygunsuz içeriklerle karşılaşabilecekleri endişesini dile getirmişlerdir. Öğrencilerin bu tarz problemlerle karşılaşmaması için alınabilecek tedbirlerin ve güvenlik önlemlerinin de metaverse ortamında pek yeterli olmayabileceğine yönelik endişelerini belirtmişlerdir. Buna ek olarak öğrencilerin fiziksel sağlıklarının da fazla bilgisayar ortamına maruz kalmaktan dolayı zaman içinde bozulabileceğini savunmuşlardır. İngilizce öğretmen adayları, metaverse'ün genç öğrenenler tarafından kullanılması ve metaverse ortamında katılımcıların kendilerini avatarları ile temsil etmeleri hususlarında ise hem olumlu hem olumsuz görüş belirtmişlerdir. Sonuç olarak, metaverse'te İngilizce öğretimine yönelik odak grup görüşmelerden olumlu ve olumsuz temalar elde edilmiştir, Bununla birlikte katılımcıların metaverse'te İngilizce öğretimine yönelik tutumlarında olumsuz temaların daha baskın olduğu görülmüştür. Bu durum, öğrencilerin geleneksel öğretme ve öğrenme alışkanlıklarına bağlı olmalarından ve yeni teknolojilere adapte olabilme, esnek bir öğrenme ortamına katılmayı deneyimleme konularında ise çekimser davranmalarından kaynaklanıyor olabilir.

İngilizce öğretmen adaylarının metaverse'te İngilizce öğretiminin Türkiye'de uygulanabilirliğine yönelik tutumlarına odaklanan ikinci araştırma sorusunda ise, katılımcıların Türkiye'nin eğitim alanındaki gelişmelere ayak uydurmak için zamana ihtiyacı olduğunu ve çeşitli koşullar nedeniyle Türkiye'nin bu teknolojiyi kullanmaya henüz hazır olmadığı katılımcılar tarafından dile getirilmiştir. Bunun başlıca sebeplerinden biri, öğretmenlerin Bilgisayar ve İletişim Teknolojileri araçlarının kullanımı konusunda yeterince yetkin olmaması olarak belirtilmiştir. Ayrıca, bazı öğretmenlerin geleneksel öğretim yöntemine tamamıyla sadık kalmayı tercih ettikleri de bazı katılımcılar tarafından ifade edilmiştir. Araştırma sorusunun bulguları, katılımcıların Türkiye'nin metaverse ortamında İngilizce öğretimi için henüz hazır olmadığı konusunda hemfikir olduğunu göstermektedir.

İngilizce öğretmen adaylarının gelecek kariyerlerinde metaverse'te İngilizce öğretmeye yönelik tutumlarına odaklanan üçüncü araştırma sorusunda ise katılımcıların çoğu metaverse'ü dengeli bir şekilde kullanmaya yönelik olumlu tutumlarını belirtmişlerdir.

Sonuç

Özetle, metaverse'ün İngilizce öğretimine dahil edilmesi konusunda İngilizce öğretmen adaylarının çeşitli görüşleri bulunmaktadır. Ancak katılımcılardan bazıları metaverse'ü deneyimlemeye daha istekli iken, bazıları geleneksel öğretim yöntemlerine bağlı kalmayı veya metaverse'e daha dengeli bir şekilde yaklaşmayı tercih etmektedir. Bu sebeple, metaverse'te İngilizce öğretiminin uygulanmasına yönelik bazı önerilerde bulunulabilir. Örneğin; hizmet içi eğitimlerde öğretmenler teknolojinin kullanımı ve İngilizce öğretimine dahil edilmesi konusunda bilgilendirilmelidir. Aynı zamanda, sınıftaki her öğrencinin birbirinden farklı olduğu bilinci de öğretmenlere kazandırılmalıdır. Bu sayede öğretmenler bazı öğrencilerin dijital unsurların entegrasyonuyla daha iyi öğrenebileceğini, bazılarının ise geleneksel öğretim yöntemlerini daha çok tercih edebileceğini fark edebilir. Bunlara ek olarak, eğitimde teknoloji entegrasyonu hakkında bilgi sahibi olmak, öğretmenlerin kendilerini güncel tutmaları ve mesleki gelişimlerine katkıda bulunmaları açısından önemlidir. Bu nedenle, İngilizce öğretimine metaverse'ün dahil edilmesi, öğretmenlerin kendilerini geliştirmeleri ve yenilikçi yaklaşımlara daha açık olmaları hususunda iyi bir adım olabilir.

INTRODUCTION

In recent decades, innovations in Information and Communication Technologies (ICT) have focused on virtual worlds, expanding the concept of online education far beyond the field of formal education. 3D virtual worlds (VWs) can be described as a computer-based setting that allows participants to interact in real-time and have the experience of being present in a world they are not actually in by using avatars, which are placeholders they construct (Kim, Lee, & Thomas, 2012; Schroeder, 1996). According to them, virtual worlds offer chances for real-time communication within a purposely constructed environment with objects and conditions created by the designer. According to Kim et al., (2012, p.3), the virtual world is "a new computer medium that allows many users to simultaneously access the same computer-generated space as virtual placeholders called avatars" (as cited in Grant, Huang & Pasfield-Neofitou, 2013). Those avatars allow participants to experience a fully immersive world where they can perform different tasks with their representatives. Those tasks can be designed by the teacher as well as designed by the participants. The fact that the metaverse provides this flexibility in preparing the tasks can enhance both students' creativity and learner autonomy, which was also supported by the findings of the research carried out by Yeh & Lan (2018). Furthermore, as stated by Mayrath, Sanchez, Traphagan, Heikes & Trivedi (2007), it is imperative to provide guidance to the world in order to establish a more meaningful learning environment or evaluate the meaningfulness of a learning space. Assigning tasks to participants can enhance their critical thinking skills and motivation levels in a virtual environment. In the environment, selected tasks were considered by the teacher in terms of the availability to the real world and the applicability as well as course outcomes and the needs of the participants.

In the educational context, using virtual worlds is practical as participants can engage in a virtual world without any boundaries. VWs can be used in many branches for educational purposes as they provide learning in an authentic environment and enhance situational and experiential learning. These virtual environments can be referred to as metaverses. Therefore, it can be asserted that there is not only one metaverse but there are metaverses serving various aims for different participants. For instance, there are several VWs utilized in the educational context, such as Second Life (SL), Opensim, Quest Atlantis, Celestia, Stellarium, and Cubix Editor (Demirer & Erbas, 2016).

According to the study carried out by Kim, Ke & Paek (2017), it was found that integrating Opensim can enhance students' motivation level on the way of learning English. In the study of Zheng, Young, Brewer & Wagner (2009) on Quest Atlantis, it was stated that participants who engaged in the virtual world with authentic tasks improved their critical thinking levels. Additionally, participants were provided with an opportunity to develop their reading and writing skills through the use of authentic language. Celestia is a 3D virtual game that incorporates gamification into language learning. Stellarium, similarly, can be utilized for vocabulary development and can be integrated into Content-Based Instruction (CBI) to facilitate teaching with various embedded topics. While Cubix Editor allows participants to form 3D objects, it can facilitate students' spatial ability and creativity, as stated in the study of Cristou et al., (2007). Along with those VWs, Second Life, the most prominent virtual world, was introduced in 2003 by

Linden Lab (Linden Lab, 2013). It allows participants to engage in a 3D virtual world with placeholders and makes them experience the VW with various meaningful tasks.

In addition to virtual reality, teachers can benefit from augmented reality (AR) and mixed reality (MR) that can be combined into the theme of extended or cross reality (XR), the so-called the metaverse in the teaching process. The metaverse refers to immersive technologies representing and projecting data (Mystakidis, 2022). Augmented reality is a setting that combines the actual and the virtual world by allowing participants to interact in real time (Gómez & Palomo, 2016). AR enhances the physical experience by incorporating digital inputs and virtual features into the real world (Ibáñez & Delgado-Kloos, 2018). In the existing literature, many studies are carried out on teaching English towards integrating augmented reality (Alsowat, 2017; He, Ren, Zhu, Cai & Chen, 2014; Liu & Tsai, 2013; Tsai, 2020). Also, the fact that AR generally does not require any additional equipment such as glasses or headsets and is easily accessible via phones provides advantages in terms of usage. Mixed reality is a term used for a technology combining both AR and VR. Physical interaction with virtual items in the real world is possible using MR, although it, like VR technology, requires glasses (Yusoff, Ibrahim, Zaman & Ahmad, 2011). It can be said that integrating MR into education is an effective teaching style (Ke, Lee & Xu, 2016). When it comes to the term metaverse which has emerged lately and is very popular these days, can take its place among XR technologies in the grouping.

Looking at the meaning of meta and verse, it is a combination of "the prefix "meta" (meaning "beyond") and the suffix "verse" (shorthand for "universe")" (Dionisio, Burns & Gilbert, 2013, p.6). The metaverse is a three-dimensional virtual world where the participants from the real world interact with avatars simultaneously. There are numerous metaverses, from CitySpace, which appeared between 1993 and 1996, to one of the most popular ones, Second Life, developed in 2013. The world of technology has been using these platforms for years without identifying them as "metaverses".

In teaching English through virtual worlds context, lots of studies on virtual reality have been conducted in recent years (Arslantaş & Tokel, 2018; Bamanger & Gashan, 2019; Berns, Gonzáles- Pardo & Camacho, 2013; Chen, 2016; Chen & Kent, 2020; Dalgarno & Lee, 2010; Garrido-Iñigo & Rodríguez-Moreno 2013; Grant et al., 2013; Guzel & Aydın, 2016; Grant et al., 2013; Kaplan-Rakowski, 2011; Molka-Danielsen & Deutschmann, 2009). However, under the name of the metaverse, there has been a lack of studies in the English language teaching field. To the author's knowledge, there have not been many studies on the metaverse in recent years. Moreover, the existing ones either focus on the author's reflections on the given field (Ortega-Rodriguez, 2022) or the application of the metaverse referring to the VWs in collaborative projects (Suzuki et al., 2020). However, the problem is that the concept of the metaverse used here refers to the virtual worlds under the name of the metaverse. The actual meaning of the metaverse, which is an immersive world requiring the use of VR glasses, is not meant in the studies. Thus, considering the lack of studies on this new concept in English language teaching, this study aims to examine the pre-service EFL teachers' attitudes towards teaching English via the context of the metaverse, investigating the applicability of the metaverse in Türkiye with the possible outcomes and analyzing their opinions on applying the metaverse in the future teaching career.

In line with these purposes, the present research study addresses the following questions;

1. What are the attitudes of pre-service EFL teachers on integrating the metaverse into English teaching?

1.1 What are the pre-service EFL teachers' attitudes towards the applicability of the metaverse-based English teaching in Türkiye?

1.2 What are the pre-service EFL teachers' opinions on applying the metaverse in their future teaching context?

METHODOLOGY

Research Design

The present study adopts the qualitative research method of a case study. The qualitative method is used in this study to make an in-depth analysis on the given issue concerning the participants' views via interviews. According to Flyvbjerg (2011, p.301), a case study is an intensive analysis of a single example, referring that "Case studies are intensive. Thus, case studies compromise more detail, richness, completeness, and variance". Moreover, the qualitative research method is employed as it deeply explains human behavior patterns by focusing on experiences and attitudes by making them explain "how, why, or what they were thinking, feeling, and experiencing at a certain time or during an event of interest" (Tenny, Brannan & Brannan, 2022, p.1).

Participants

This study took place in the second semester of the academic year of 2021-2022 at a state university in Türkiye. Participants are the 13 EFL pre-service teachers from the English language teaching program. The participants all have experience teaching English through practicum courses. The selection of participants was done by employing purposive sampling, and the volunteerism of the participants was taken as a basis. Numbers were given to protect the anonymity of the participants.

Data Collection Tools

Semi-structured focus group interviews were adopted to collect the data. Focus group interviews are an interview method in which a group of participants selected by the researcher engage in a collaborative discussion, think critically, produce various arguments for each other's ideas, and discuss these arguments on a specific topic (Gibbs, 2012). Thus, in order to employ focus group interviews in this study, the participants were divided into three groups according to their convenience time, four interview questions prepared by the researcher were presented to each focus group and audio recorded with the participants' permission. The focus group interviews generally took 35 minutes per group.

Data Analysis

Data analysis was done through inductive qualitative content analysis. Qualitative content analysis is defined as "a research method for the subjective interpretation of the content of text data through the systematic classification process of coding and identifying themes or patterns" (Hsieh & Shannon, 2005, p.1278). After interviewing all the groups, data were transcribed, and the codes were identified, then they were included in the themes. To provide reliability, with the support of an in-service teacher in the department of English language education, the codes were reviewed again and compared with the ones determined by the researcher herself.

RESULTS AND DISCUSSION

1. Attitudes of Participants on Teaching English in the Metaverse

In line with the first research question, which attempted to investigate participants' attitudes, several themes were emerged from the focus group interviews and they were categorized as seen in Table 1 and Table 2.

Table 1.
Perceived positive attitudes of participants towards integrating the metaverse into English language teaching

Themes	Representative excerpts

Suitability for being innovative	"It is a good technology to keep up with the developing era." (P1) "New generation love engaging in the technology thus for being innovative it can be helpful." (P2) "It is a great innovation." (P3) "It is not an option but a necessity for teachers to be innovative for our era." (P6) "New generation was born into that technology so as language teachers we need to adjust ourselves." (P2)
Suitability for experiential learning and authentic tasks	"The metaverse can be the best option for experiential learning because we can not exhibit every situation that we want in our traditional classroom. Moreover, teachers can create authentic real-life problems to evoke students' critical thinking skills." (P1) "It allows students to learn within a meaningful context." (P12) "Real life-oriented tasks will take students' attention." (P2) "It is good for students to experience the tasks." (P7)
Suitability for developing Intercultural Communicative Competence (ICC)	"When we teach language, we also expose students to the culture and traditions so with the metaverse we can teach different cultures, traditions, lifestyles so the world will be less racist." (P1) "It promotes the cross-cultural communication." (P8) "It enhances the ICC level of students." (P5) "It is good for ICC levels of participants." (P7)
Suitability for task flexibility	"Teachers can create contexts similar to a real-life environment." (P4) "Teachers can create whatever task they want based on their imagination." (P1) "They can be in anywhere they want as there is no limitation." (P13) "There are lots of options for creating tasks." (P4) "It serves a ubiquitous teaching environment." (P10) "I do not think that it can be adapted to any unit in the MoNE book such as "Facts about Türkiye." (P14, P2) "We can create tasks on the things we can not take in a classroom environment." (P11) "Tasks are time-saving for the teacher." (P11) "There is teacher freedom for creating tasks, it is like participating in an Erasmus program for students." (P7)
Suitability for motivating participants	"It is a motivating tool." (P8) "It enhances students' motivation." (P5) "It can not be denied that this new world will be motivating." (P6)
Suitability for young learners	"I would use it with the young learners to make the structures more concrete with the tasks." (P2) "I think it can be more effective with young learners." (P12)
Suitability to expose participants to the target language	"They can communicate with native speakers and they can be exposed to language more." (P13) "They can practice the all skills of language (P8) They can encounter with natives and make practice." (P4) "They can get the accent easier for being exposed to the target language." (P1) Students can interact with other people so it enhances the exposure." (P6) "Communication is easier in a virtual environment." (P9) "Students will be more exposed to the English." (P11)
Suitability to provide the transition from theory to practice	"Participants need to use the grammar structures that they learned to communicate with other users in the world so it will be a transition from theory to practice." (P13)
Suitability for gamified teaching	"Learners will feel themselves as in a game." (P6) "It is like a game." (P9)
Suitability for avatar use	"Avatars are beneficial for seeing their reflection." (P11). "Avatars are sensible especially for shy students." (P2)

Table 2.
Perceived negative attitudes of participants towards integrating the metaverse into English language teaching

Themes	Representative excerpts
Problems in teacher & parent preferences	"We may have problems with the consent from the parents to participate students into the metaverse." (P4) "Traditional teachers may not want to integrate the metaverse into ELT." (P12)
Problems in teacher & student training	"Teachers themselves do not know how to use technology properly." (P5) "We need to prepare our students before making them use the metaverse." (P4) "Teachers are not compatible enough about technology." (S12) "We need to train teachers." (P3, P11)

Problems in psychology of users	"Learners can exhibit abusive behaviors towards others such as cyberbullying so it can be harmful to their psychology." (P1, P9) "They may lose their sense of reality." (P1, P10, P11) "Users' attention span can be less day by day." (P7)
Problems in setting boundaries, management and security	"You can not really control your students and they may come across with inappropriate contexts." (P2, P5) "There is no limitation in this virtual world, it is hard to control students and too much freedom harm students." (P8) "Participants may encounter with bad examples." (P4) "Students can face with the violence or abusive behaviors." (P9) "Teachers do not have any control when students face with people with bad intentions." (P5) "There can be some security problems." (P7, P11) "You can not manage students as you do in the traditional classroom." (P3)
Problems in accessing materials/ expenses	"Our students have problems in accessing the technological materials." (P4) "Accessing the headsets is the greatest problem as they are expensive." (P13) "Materials are expensive." (s12, P2, P10, P14) "It may not be possible for each person to meet its expense." (P6) "As the materials are expensive, I do not think that everyone can buy it." (P7, P11)
Problems in using with young learners	"I would be super careful to use it with young learners." (P11) "Young ones can face with inappropriate context also they can use the sense of reality." (P11) "Young ones might consider it as a game and may not take it seriously." (P3)
Problems in using avatars	"Avatars may limit the real communication between students (not seeing each other face to face)." (P13) "Young age groups may lose their sense of true self by adopting their avatars too much." (P12). "Avatars can be confusing for the teacher as you do not know which one belongs to which student." (P11)
Problems in physical health	"It may reduce physical activities that will result in problems in health." (P1, P4) "They just sit in real life so being exposed to the metaverse may harm their physical health." (P1) "They may have eye problems and headache." (P4) "They may face with VR sickness." (P11) "It can make students' body lazier." (P10)

As shown in Table 1, participants have some positive attitudes towards integrating the metaverse into English language teaching. Considering the benefits of teaching English via the metaverse, several themes are encountered multiple times in the table. For instance, it can be concluded that participants advocate the fact that the metaverse allows teachers and students to keep up with the innovations in technology. P6 added, *"For the teacher, it is not an option but a necessity to be innovative to catch the today's era."* Similarly noted by P2, *"Being innovative and adjusting ourselves is important for language teachers as new generation were born into that technology and it is what they got used to."* Thus, it can be concluded from the comments that pre-service teachers are aware of the value of being innovative. They perceive the metaverse as a new approach to learning and teaching English.

Moreover, in the traditional classroom environment, the situations that the teacher can bring into the classroom are limited. However, the metaverse provides a range of flexible tasks that the teacher creates both to stimulate students' critical thinking abilities and to make the learning more permanent with including the authentic and real-life oriented materials. It is in line with the findings of the study by Krokos et al. (2019), asserting that the students taking part in the virtual reality experiments remembered more information and applied what they had learned better. According to Choi & Kim (2017), the metaverse enhances students' engagement in the experiential context, such as visiting museums. Also, participants asserted that the authentic tasks in the metaverse prepare students for appropriate situations in case they encounter similar circumstances in the real world. P1 stated the following;

"The metaverse can be the best option for experiential learning because we can not exhibit every situation that we want in our traditional classroom. Moreover, teachers can create authentic real-life problems to evoke students' critical thinking skills as well as their creative side".

Along with experiential learning, task flexibility is another theme that was stated by the participants. The abundance of options offered within the learning spots in the metaverse gives teachers the opportunity to develop or modify the tasks. As stated by P1 and P4, *"As long as teachers use their imagination they can create limitless tasks and they can get facilitated from the options for creating tasks in the metaverse."* In contrast to positive statements, some of the participants advocated that some of the units in the MoNE book can not be adjusted into the metaverse as they reflect culture-specific elements of

Türkiye. As P14 and P2 stated the following "*I do not think that it can be adapted to any unit in the MoNE book such as "Facts about Türkiye."*

In addition to the task flexibility, participants asserted that the metaverse environment allows students to gain and develop their intercultural communicative competence. Zheng (2020) advocates that the metaverse provides gaining a cultural understanding of the target language. In the metaverse, students will be exposed to cross-cultural elements which result in being aware of that culture's norms and traditions. Also, being familiar with the living style of the target culture results from communicating with the natives of that specific culture. Thus, it can be concluded that the metaverse not only allows students to develop their ICC level but also makes them exposed to the target language as well as its cultural elements. As stated, *"When we teach language, we also expose students to the culture and traditions so with the metaverse we can teach different cultures, traditions, lifestyles ..." (P1). "They can communicate with native speakers, and they can be exposed to the language more" (P13). "Students can interact with other people, so it enhances the exposure "(P6).* Moreover, participants agreed on the fact that the metaverse can be seen as a motivating tool, and it includes the gamified aspects, which will result in the students perceiving English as a game rather than a necessity or a compulsory course given by an authoritative teacher. Allcoat et al., (2021) advocated that the use of virtual worlds in teaching enhances students' motivation and so it has an influence on the academic achievement levels of students. Also, in the study of Shim et al., (2003), it was concluded that participants find a virtual setting to be intrinsically motivating. Similarly, Limniou, Roberts & Papadopoulos, (2008) advocated that virtual worlds are more engaging and motivating compared to the traditional classroom environment and the 2D worlds.

Along with the positive statements of participants, there are several negative themes encountered, as shown in Table 2. Those perceived themes include the problems in preferences of the teacher and the parent, teacher & student training, psychology of the students, creating boundaries, accessing materials, and the physical health of the users. The majority of participants were in agreement that teachers and students need to be trained since they might not be familiar with the term or how it is incorporated into the teaching of English. Participants also stated that teachers' technological literacy needs to be improved to integrate such technology into their teaching process. Diaz (2020), stated that adaptation to virtual worlds requires having knowledge on the ICT skills and their management so the activities to train teachers are important.

Besides, some of the participants asserted that integration of the metaverse may not be a good idea for students' psychological well-being, advocating that they can face inappropriate contexts as well as the threat of losing their sense of reality. In line with the findings of the present study, Ortega-Rodriguez (2022) stated that the "development of the metaverse could blur the boundaries between the real and virtual worlds. This suggests there is a need to design and develop an ethical code to act as a guide to using the metaverse with greater safety" (p.12). However, in the study of Grant et al., (2013), students felt secure in the virtual setting and at ease communicating using their avatars which is not expected considering the findings above. Also, participants stated that eye problems, headaches, and sickness resulting from the excessive use of VR glasses can cause physical issues affecting the physical health of the students in addition to their mental health. Moreover, all of the participants stated that teachers can not hinder students' encounters with abusive or inappropriate contexts so it leads to some problems in controlling the students. P5 added that;

"As a teacher, I want to have the authority of my class, and I am in favor of the traditional thinking style. In the metaverse, I can not provide my authority so I am sure that it will make me stressed just in case they are exposed to the abusive behaviors of the other users".

Similarly, some of the students expressed their concerns about the teacher and parent preferences. As P9 noted, *"Some of the parents do not allow teachers even take the pictures of students, in this case, I do not think that all the parents will have the consent on the participation of their child into the metaverse"*. In addition to this, P12 stated, *"Some of the traditional teachers may not want to integrate the metaverse into the teaching process".* Those findings reveal that there are several opinions on the integration of the metaverse resulting from the different thinking styles and the characteristics of the participants. While some prefer mentioning the positive themes, some insist on focusing on the negative ones.

In addition to the positive and negative statements of the participants, there are some controversial opinions regarding using avatars and employing the metaverse on young learners. While some of the

participants asserted that the use of avatars is helpful for students to see their reflection, some of them objected to this idea, advocating that avatars hinder the natural communication between the students and are not the same as seeing one another face to face. Similarly, on the issue of employing the metaverse on young learners, some of the participants said that the tasks in the virtual world can help to make the language structures more concrete, and it is helpful for young learners as they may not perceive the abstract structures. However, some of them argued against this point of view stating that young learners are more vulnerable to the inappropriate context and they may face the dangerous people that will result in the problems in their psychology. Furthermore, young ones can lose their sense of reality, leading them to believe that they are simply avatars rather than humans.

1.1 Attitudes of Participants on the Applicability of the Metaverse in Türkiye

According to the second research question focusing on the participants' attitudes on employing the metaverse in English language teaching in Türkiye, nearly all of them stated that there are some problems in integrating the metaverse, sharing the same negative opinions with some parts of the first research question. All of the participants asserted that Türkiye needs time to keep up with the advancements in the educational field considering the metaverse. The majority of them claimed that due to several circumstances, Türkiye is not yet prepared to employ such a technology. One of the leading reasons stated by the participants is the fact that teachers are not competent enough in the use of ICT tools and having the knowledge on the integration of such technological tools into teaching. Also, it was stated by some participants that some of the teachers are in favor of the traditional teaching method. Thus, even if the metaverse technology were completely accessible to everyone, there would be some instructors resisting being innovative and continuing to insist on the traditional methods. They claimed that more teacher familiarity with the metaverse in Türkiye is necessary in order to include such technology in language learning and teaching. Therefore, participants indicated that Türkiye needs more time to adjust and keep up with the new technologies in the metaverse field. Lastly, one of the participants added P2;

"There are lots of children in need of special education in Türkiye. In the case of switching into the metaverse, it might be challenging and discouraging for them. Considering the classrooms in Türkiye, there is a high possibility of having a child *with special education so those children are not participating the class just because of their features would not be fair".*

The findings of the research question indicate that the participants agree that Türkiye is not yet ready to teach English over the metaverse. Also, certain problems, including the teacher training and the thinking style of the teachers, need to be solved to incorporate such a technology into English teaching.

1.2 Attitudes on Participants on Applying the Metaverse in Future Teaching Context

In the last research question investigating the EFL pre-service teachers' opinions on applying the metaverse in their future teaching context, there are several views that participants hold, and their opinions generally differ from each other in terms of the frequency of integration of the metaverse. Most of them stated that they would not use it constantly as follows: P3: "I love technology, *so I would integrate the metaverse into teaching. However, I wouldn't use it all the time since I want to manage my classroom and I believe it is challenging to do so while using the metaverse full-time".* P11: *"I would want to use it for being an innovative teacher but I would prefer to use it occasionally since I am the kind of educator that prefers to interact with students in person".* P7: *"I would mostly use it to make students experience the real-life oriented tasks".* P8 *"If I had the opportunity, I would use it in a balanced way".* P5: *"I would use it but I have some concerns on the classroom management. Thus, not using it constantly makes more sense to me".* P2: *"I would use it in a balanced way with the young learners as they need more concrete items in teaching, I think that the metaverse can aid it".* P12: *"I would incorporate it into my lesson for young learners, but I feel anxious that they would lose their sense of reality and believe they are just avatars. Therefore, it is preferable to use it in a balanced way".*

In contrast to the participants advocating the integration of the metaverse in a balanced way, only one of the participants expressed her determination to integrate the metaverse into English teaching full-time.

"I would absolutely utilize it full-time if I had sufficient financial support. It's a great concept, and I can't wait to give it a try. I would try it right away if I could. It should be used by all English teachers, especially if they want to catch up with the time" (P6).

Contrary to those who wanted to use the metaverse full-time and part-time, some participants refused to integrate the metaverse into language teaching and learning as follows: P10: *"I do not think I want to use it in the future because I really do not trust the media and I am not in favor of leaving the classroom walls that much".* P14: *"I would not use it because I do not think that it is a long-lasting process. I feel like it will be over once you take off your VR glasses".* P9: *"I am not planning on using it as I do not find it reliable. There are lots of people in the world and my students can face with the dangerous ones".*

CONCLUSION, IMPLICATIONS AND LIMITATIONS

The present study aimed to investigate pre-service teachers' attitudes towards integrating the metaverse into the English language learning and teaching process via focus group interviews. Considering the research questions one by one, several themes were identified by employing the content analysis. It was found that participants had both positive and negative opinions on incorporating the metaverse. For the positive themes, participants stated that the metaverse allows teachers to be innovative and provides preparing classroom materials and tasks in a flexible environment. Also, it was asserted that students would engage in authentic tasks, which would result in exposing them to experiential learning. In this way, it was mentioned that students will be more exposed to the target language and the speakers of that language, which will also lead students to develop intercultural communicative competence. Moreover, it was indicated that the metaverse helps students to internalize the given tasks and also enhances the transition of the newly received inputs from theory to practice in an authentic environment. As the last positive theme mentioned by the participants, it was indicated that the metaverse environment motivates students as it serves as a tool for gamified learning. For the negative themes, participants asserted the problems in training the teachers, convincing the traditional instructors to adopt the metaverse, and setting boundaries for the students. In addition, it was mentioned that participants are worried about students' mental well-being and physical health. Coming to the controversial themes, while some of the participants stated that employing the metaverse on young learners would be their priority, some of them advocated the opposite opinion. Opponents asserted that the metaverse can be harmful to young learners' psychology by exampling the use of avatars. They stated that they were worried that young learners would adopt avatars too much, resulting in losing their sense of reality. On the other hand, some of the participants stated that employing the metaverse can be better for the young ones to understand the abstract items. Moreover, using avatars can be beneficial for youngers to see their reflection.

In conclusion, although there are positive themes, considering the other research questions in the study showed that the negative attitudes of participants are more dominant towards teaching English in the metaverse. It might result from participants' overdependence on traditional teaching and learning habits. Also, learners' characteristics may have an influence on their choices for not being ready to adopt the metaverse teaching. The fact that the education system in Türkiye is mostly pen-and-paper-oriented can be another reason for the dominance of negative attitudes. In relation to the second question concerning the feasibility of implementing the metaverse in Türkiye, the overwhelming majority of participants expressed their opinion that it does not seem possible in the near future due to many issues relating to teacher training and Türkiye's current state of readiness. Furthermore, it can result from the teachers' lack of proficiency in utilizing ICT tools and their reluctance to include technology in English language teaching, as this requires abandoning the traditional way of teaching and leaving the habits behind. Therefore, it may be asserted that participants need to observe the extensive utilization of the metaverse in order to convince themselves to integrate this newly developed technology into English teaching. Concerning the last research question focusing on applying the metaverse in future teaching contexts, most of the participants stated that they would prefer integrating it in a balanced way. This can be due to the desire of the participants to retain the authority that they are familiar with from the traditional classroom setting. At the same time, this may be because students have not yet experienced this technology and are not entirely sure what they will encounter.

To sum up, there are several opinions on integrating the metaverse into English language teaching and learning. However, while some of the participants are more willing to experience the metaverse, some of them prefer sticking to the traditional way of teaching or approaching it in a balanced way. Thus, there can be some implications to take into account. For instance, in in-service training, teachers should be

informed about the use of technology and its integration into English language teaching. At the same time, the awareness that every student in the class is different from each other should be brought to the teachers. In this way, teachers can realize that some of the students learn better via the integration of digital elements, while some of them are more in favor of traditional teaching methods. In addition to them, having knowledge about technology integration is important for teachers in order to keep themselves up-to-date and not to hamper their professional development. For this reason, the metaverse integration into English teaching can be a good step for teachers to develop themselves and take a step towards more innovative approaches.

Furthermore, this study has potential limitations, and it can be recommended for future studies to enhance the sample size, obtain the opinions of in-service English teachers, develop a scale on teaching English in the metaverse environment to collect both quantitative and qualitative data, conduct a pre-test and post-test in order to see whether the participants' opinions change after attending English teaching classes in the metaverse environment to better understanding the research topic.

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