

Preservice EFL Teachers' Use of Symbaloo as a Learning Path to Create Online Activities

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Abstract

This study investigated pre-service EFL (English as a Foreign Language) teachers' experience in creating online learning resources for fourth-grade level learners. Several groups of students created digital content and activities for the elective course 'Materials Design in Teaching English'. The study followed the case study research design. At the very beginning of the study, the participants were surveyed on their choice regarding the level and the coursebook for which they would prepare the online/digital materials. Based on the decision of the majority, it was decided that they would consider the fourth graders in the primary school. The participants created online activities based on the objectives of each specific unit and presented their activities to their classmates. Each group of students shared their comments and suggestions regarding the content and the design of the activities, as well as their experience while designing and creating these online activities. The findings indicated that the students found creating digital content for teaching EFL enjoyable despite several challenges, such as learning how to create digital content and working online. The students also underscored the importance of the efforts and time required to plan, create, integrate, and organize the materials and websites. The study also implied that pre-service language teachers could improve their digital skills and self-efficacy through the courses integrated into teacher training programs.

Keywords: Online learning, activities, Symbaloo, learning path, material development, EFL, pre-service teachers

Introduction

Technology has changed our lives in several ways, and new technological devices have enabled different ways of accessing and processing information. In less than seconds, new information can be accessed and/or generated on various websites through several devices, such as smartphones and tablets (Gimeno-Sanz et al., 2014). In addition to uses such as entertainment and business, the resources available on the Internet are also used to support teaching and learning practices. There are a variety of websites and applications that teachers and learners can use for several purposes, ranging from creating and practicing readily available online language activities to personalized learning environments where learning can take place at learners' own pace (Aşıksoy, 2018; Gorla et al., 2019; Selwyn & Gorard, 2016).

Language teachers are willing to benefit from online materials and applications as a response and solution to the challenges that they face in their teaching practices. Many language teachers face the challenge that there is little time left for recycling previously learned and practiced language skills and components (e.g., Merga et al., 2021). This is mainly due to several factors, such as the requirement to cover the curriculum and high-stakes exams such as university entrance examinations (Cheng et al., 2008; Yilmazer & Özkan, 2017). To overcome this issue, teachers often assign homework to encourage learners to recycle and practice what they do in the face-to-face classroom. In online, blended, or flipped learning contexts (Flavin, 2020; Russell & Murphy-Judy, 2021), recycling activities might be carried out using several websites and tools, such as *Kahoot*, *WordWall*, and *Socrative* (Bayram & Baturay, 2022; Chidike Onah et al., 2021; Quiroz et al., 2021).

To utilize the benefits provided by online, blended, or flipped learning contexts, language teachers are to be provided with the necessary training and practice not only in deciding on the appropriate websites and applications but also the necessary skills to create and design their materials. Therefore, in addition to the choice of websites and applications for language learning and teaching, online material development plays an important role, which has received during and after the COVID-19 pandemic, during which an important shift to digital teaching and learning in learning and teaching languages as well as in education in general. This shift has also led to the Great Online Transition (Howard et al., 2022), resulting in increased use of digital sources such as video conferencing tools and language learning resource websites, and it is also due to note that because many institutions plan to move some of their teaching and learning practices online in the post-pandemic situation.

Considering all these, it is a fact that teachers play an important role in creating and designing materials, which are in line with the local curriculum's objectives, and this process requires training and practice and a careful organization of the activities on a single website rather than requiring learners to move from one source of website to another. While there are studies conducted on pre-service and in-service language teachers' intention of integrating technology into the language classroom, their beliefs, and experience (Batane & Ngwako, 2017; Farjon et al., 2019; Lai Wah & Harwati, 2021), the use of Web 2.0 tools, websites, and applications for a variety of reasons (Başaran, 2022; Inayati et al., 2021; Karakaş & Kartal, 2020), there is a paucity of research conducted on pre-service language teachers' experience with designing online activities on a single platform where learners can consolidate learning what they have learned and practiced in the physical classroom. The significance of the current study can also be related to the development of online materials and future online syllabi for language teacher training programs, their design, and the curricular development of teacher training programs.

Literature Review

During the pandemic, both learning, teaching, and recycling activities have moved online, and this transition to online learning has been most unplanned and rapid. This led to various challenges for both in-service and pre-service teachers and students, such as ensuring participation, sustaining motivation, and interaction, and teachers utilizing

numerous tools and websites. For example, the study conducted by Boonmoh et al. (2022) investigated how teachers in Thai utilized technology tools and websites in secondary schools. The findings of the study indicated that teachers mainly used websites such as Kahoot for motivating and engaging students through game-like activities in addition to other purposes such as assessment. This rapid and sudden transition has also indicated the vital role that training programs play in utilizing and selecting appropriate tools and websites for learners. This role has been stressed by Hubbard (2021) and Hubbard and Levy (2006), indicating the importance of technical and pedagogical training.

Providing teachers and instructors with training programs focusing on the appropriate use of technology has been always a concern for all stakeholders involved in language teaching and learning. Scholars from all around the world suggested various models and frameworks regarding Computer Assisted Language Learning (CALL) and/or Technology Enhanced Language Learning (TELL) teacher education such as the Technological Pedagogical Content Knowledge (TPACK) by Mishra and Koehler (2006), CALL teacher education Model including CALL knowledge and CALL skill by Hubbard and Levy (2006, 2016), and TPACK-in-Action model focusing on learning-by-doing approach (Tai, 2015). In all these approaches, although there are some differences at certain levels, both technological skills and pedagogical skills are emphasized the effectiveness of the use of technology is equally important as well as the knowledge of how to use a specific device or tool (Ramírez et al., 2021; Torsani, 2016).

It is a fact that teachers need to keep up to date with the continually evolving technology, to understand the technology and utilize it in teaching and learning, which is crucial for effective learning and instruction. This requires teachers to act as lifelong learners and effective practitioners. Lai Wah and Harwati (2021) investigated the factors that would affect pre-service teachers' intention of using technology in teaching English. The participants of the study included 257 ESL pre-service teachers in Malaysia. According to the results of the study based on the questionnaire distributed to the participants, the participants' intention to integrate technology in teaching English was determined to be positively affected by technological, pedagogical, and content knowledge (TPACK), which underscored the importance of the competences regarding pedagogical skills as well as digital literacy skills.

Batane and Ngwako (2017) investigated how pre-service teachers used technology during their practice teaching. The participants were enrolled in a 1-year teacher training program. Based on the interviews and document analysis, it was determined that the majority of the participants did not integrate technology in their lesson plans during practice teaching although they indicated that they had high competency in the use of technology. Several reasons were indicated by the participants. One major reason was that adequate resources were not available to the participants, and they felt that they were not required to benefit from technology as they did not observe their mentor teacher use any technology.

Farion et al.'s study (2019) focused on the effects of pre-service teachers' attitudes and beliefs regarding technology integration. A total of 398 first first-year pre-service teachers at a language Dutch university majoring in various programs including English were the participants of this study. According to the study, attitudes and beliefs were determined to be the leading and the strongest factors that led the teachers to integrate technology. The results also indicated that the experience with the technology affected technology integration significantly.

The study conducted by Anas et al. (2022) included language teachers of an Indonesian Vocational Higher Education and focuses on teachers' self-reported data and the interview responses. The responses were related to their digital literacy skills about the adapted ECCR model, which included four elements of digital language teacher professional development: Exploration- gaining knowledge and skills on digital technologies; Communication- developing and improving interpersonal skills while interacting with others; Collaboration- networking with other teachers and experts to improve skills and knowledge, and Reflection- thinking on the use of technologies used critically). The results indicate the role of increased awareness, positive perceptions, and motivation in CALL teacher education, which can be achieved through relevant training programs (Akayoğlu, 2021; Aşık et al., 2020; Hubbard, 2021). Therefore, courses offered in teacher training programs need to increase awareness about the role of technology and consider it an integral part of instruction and a crucial element of personal and professional life.

As part of these training programs, online material development plays an important role (e.g., Başal, 2013; Krajka, 2012), and this role has gained much attention during and after the COVID-19 pandemic since many institutions plan to move some of their teaching and learning practices online in the post-pandemic situation. Although there are many materials and software available for language learners on the Internet that learners can use at their own pace (Abbas & Bidin, 2022; Beaven, 2021; Godwin-Jones, 2021; Kılıçkaya, 2018), teachers have a crucial role in creating and designing materials in line with the objectives of the local curriculum, which requires training and practice.

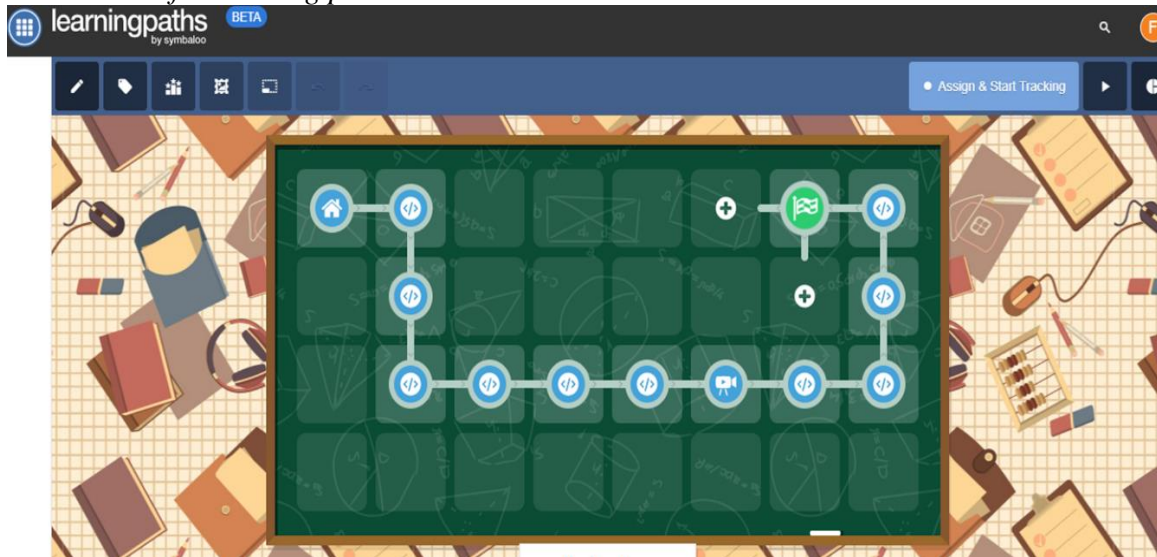
Related to creating online materials for language teaching and learning, Noviarani et al. (2021) investigated how EFL teachers developed online teaching materials during the Covid-19 pandemic. The study benefited from a qualitative case study research design in online teaching materials. The results indicated that the participants in the study considered several principles of online teaching materials, such as paying attention to student learning styles and benefiting from audio-visual elements while creating online materials. It was also concluded that the participants preferred materials to be studied at any time and place with(out) the support of a teacher. In another recent study, Werner and Küplüce (2021) investigated 20 foreign teachers' perspectives on their future practices during and after the pandemic. Conducting a qualitative content analysis, they tried to determine the possible changes in the future regarding their professionalization. The results indicated that integrating digital tools was among the frequently mentioned factor to be considered in teaching English after the pandemic. Moreover, the participants also indicated that online teaching and learning were valuable since learners were provided with the opportunity to decide on when and where to carry out the activities.

The research reviewed so far indicates several principles and necessities as to teaching and learning online and considers language teachers' perceptions and views in their teaching contexts. However, there is research needed to investigate how teachers, and especially pre-service teachers, can benefit from online activities by integrating them into one platform as a learning path. Therefore, the current study aimed at investigating pre-service language teachers' experience using Symbaloo as a learning path for preparing online activities outside the classroom.

Symbaloo, which is available at <https://learningpaths.symbaloo.com>, is a website and a learning context that can be used as one platform for classroom resources, such as online activities, exercises, and tasks. These resources are easily stored on a dashboard,

which can take the role of the homepage. The learning path (Figure 1), which is a special section of Symbaloo, allows teachers to create lesson plans or activities that their students can follow step by step (Symbaloo, 2022; Symbaloo Learning Path, 2021).

Figure 1
Screenshot of a learning path



Theoretical background

To train pre-service language teachers and to present to them the benefits of technology in the language classroom, they should be encouraged to be informed about the technological tools and resources available, and to utilize these tools and resources in various learning tasks while improving their digital literacy skills. To achieve this, pre-service teachers can also learn from each other in a community of practice while they were engaged with the training program and recommendations regarding how technology could support language teaching by integrating online materials and resources using technology.

The elective course offered to the participants was designed based on the philosophy of social constructivism. As indicated by Leonard (2002) and Illeris (2018), in social constructivism, the social dimension of the content building is stressed in a community of practice, which is, in this course, realized through collaborative learning. Therefore, the course focuses on how to help students construct content and activities that are not fixed to a single way of thinking or mental construct (Bredo, 1997). In other words, the participants were not led toward a certain set of behavioral changes based on a predetermined set of instructor-based objectives, but to express their views and create their content in a relaxed and open environment. Therefore, in social constructivism, ideas are concerned with the methods through which students construct their mental structures while interacting with their environment, including their teachers and their classmates.

The most obvious suggestion of social constructivism regarding instructional approaches is that learners are provided with the opportunity to engage in situations where they will challenge their thinking and views. Another main proposal of social

constructivism is the importance of learners engaged with social group learning and peer cooperation (Akayoğlu, 2019; Schunk, 2014).

Hence, in the current study, through the online activities that the participants created and published on Symbaloo and group reflections in which they reflected on their own experiences and actions, the participants were encouraged to be actively involved in their learning process by communicating with other participants, as well as the lecturer, talking about and sharing their experiences and opinions, and co-constructing knowledge. The participants were provided with hands-on, self-directed activities that focus on design and exploration, which are for organizing learning settings. Moreover, the main strategy in the course focused on “learning by doing and while doing”.

The participants were encouraged to be actively involved in the design of learning materials by choosing the tools and applications that they consider relevant and appropriate and developing language activities and exercises in groups for direct use in their lessons. Therefore, the training tried to benefit from both theoretical knowledge and practice. In the current study, it was aimed not only for the participants to obtain skills but also to achieve increased self-efficacy for learning while they are modeling during the activity of creating and watching one another. This process is also believed to change the role of these pre-service language teachers as contributors in the process (Laakkonen, 2011) and also online material creators. To realize the aim of the study, the following research questions were proposed:

1. Did the participants find Symbaloo useful while creating online activities?
2. What were the reasons that participants described as most prevalent for considering Symbaloo useful?
3. What were the reasons that participants described as most prevalent for considering Symbaloo not useful?

Methodology

Research design

The study employed a case study research design (Mackey & Gass, 2022) to investigate the participants’ experiences in preparing materials for a specific target group using the learning context, Symbaloo, as a learning path. The study focused on learners’ reflections and experiences in their specific context.

Research context

The context of the study included the division of English Language Teaching in the Department of Foreign Language Education at a state university in Turkey. The study took place in a teacher training program in the spring semester and was based on the elective course. This EFL teacher training program follows the curriculum of English language teaching as indicated by the Council of Higher Education (CoHE, 2018). The main objectives of the elective course offered by the researcher included familiarizing students with major approaches and frameworks of criteria for materials design and the online tools and websites available. The content is in line with that of the Materials

Evaluation and Design class offered in the fourth year of the program; however, the course on which the current study was based focused on creating online materials. Several textbooks, articles, and websites were used as the course reading materials (e.g., Howard & Major, 2005; McDonough et al., 2013). The course, on which the current study was based and whose details have been provided in Appendix B, aimed to prepare pre-service teachers for future teaching by presenting several tools, technical information, and pedagogical practice, which is referred to as future self-directed learning by Robb (2006).

Participants

The participants of the study were selected based on convenience sampling and included 30 preservice EFL teachers (ELT- English Language Teaching students) who enrolled in the elective course offered in the Department of Foreign Language Education. All the students were Turkish students and were accepted to the language teaching program through a nationwide university entrance examination. Before the elective course, the participants had completed several courses on EFL methodology, teaching language skills, and translation courses. Moreover, they completed two courses on the use of technology in the classroom. The participants included 20 female and 10 male students, and they were aged between 20 and 22.

Data collection instruments

The study benefited from two data collection instruments: a short online survey and a semi-structured interview. The online survey was prepared using Goggle Form and included two questions focusing on whether the use of Symbaloo was found useful for creating online activities and the reasons that participants described as most prevalent for considering Symbaloo useful / not useful for creating online activities. The use of this short survey aimed to prevent the possible negative effect on response and abandonment rates and to determine the areas that would be discussed in detail during the interviews. An expert opinion was acquired to determine whether the questions on the online survey are effectively and efficiently assessing the desired construct. Moreover, at the end of each interview, the participants were invited to expound on their thoughts on each question.

Procedure

At the end of the course, each group of students shared their views and suggestions regarding their experience while designing and creating online activities using the tools discussed/shown throughout the course. The study was carried out in the Materials Design in Teaching English during the Spring Semester of 2022. The participants were informed about the purpose of the project in the course, and their consent to participate in the study was obtained through a content form explaining the details of the study. Due to the Covid-19 pandemic and the decision of the Senate regarding the current pandemic situation, and regulations of the university, the study was conducted online, and all the assignments and lectures were conducted online.

During the first week, the participants were introduced to the course, and several other issues such as teaching with and without a coursebook and framework of materials

and methods were discussed before the participants got familiar with the selected websites/tools to be used for creating online materials (Appendix). The participants were also provided with hands-on experience in using Symbaloo to create a learning path with the tools that they would learn in the latter weeks of the course.

The participants were surveyed on their choice regarding the level and the coursebook for which they would prepare the online/digital materials, and based on the majority's decision, it was decided that they would prepare these online materials for the coursebook for fourth graders in the primary school, which included ten topics/units: Classroom Rules, Nationality, Cartoon Characters, Free Time, My Day, Fun with Science, Jobs, My Clothes, My Friends, Food and Drinks. The participants working in groups of three or four used Symbaloo to create online activities based on the objectives of each specific unit and presented their activities to their classmates, who were asked to provide their comments and suggestions regarding the content and the design of the activities. Appendix A provides links to some of the activities created by the participants.

Data analysis

At the end of the course following the presentation of all the projects and online tasks created by the groups of participants (Appendix A), they were asked to share their views on the use of Symbaloo as a learning path for online activities via a Google Form, where their responses were made anonymous. Semi-structured online interviews through ZOOM were conducted with only 8 of the participants as they were the only participants who agreed to share their views and opinions in an interview. The same questions were directed to the participants regarding the use of Symbaloo; however, they were requested to explain the reasons by giving examples and also were encouraged to add their further views and suggestions in detail. The researcher took notes of the participants' responses. The data collected were subject to content analysis, which was used to quantify and analyze the certain reasons provided by the participants. A conceptual content analysis was conducted by following the steps: Analyzing the words and sentences, determining the concepts (reasons), coding for the frequency of a concept, and analyzing the results. The responses obtained were coded into more manageable categories to summarize the data. The data obtained through the online questionnaire were also presented in frequencies, while the interview responses were mainly used as quotations to support and exemplify. The researcher and another expert in the field worked together to categorize and analyze the responses of the participants.

Results

Research question 1. Did the participants find Symbaloo useful while creating online activities?

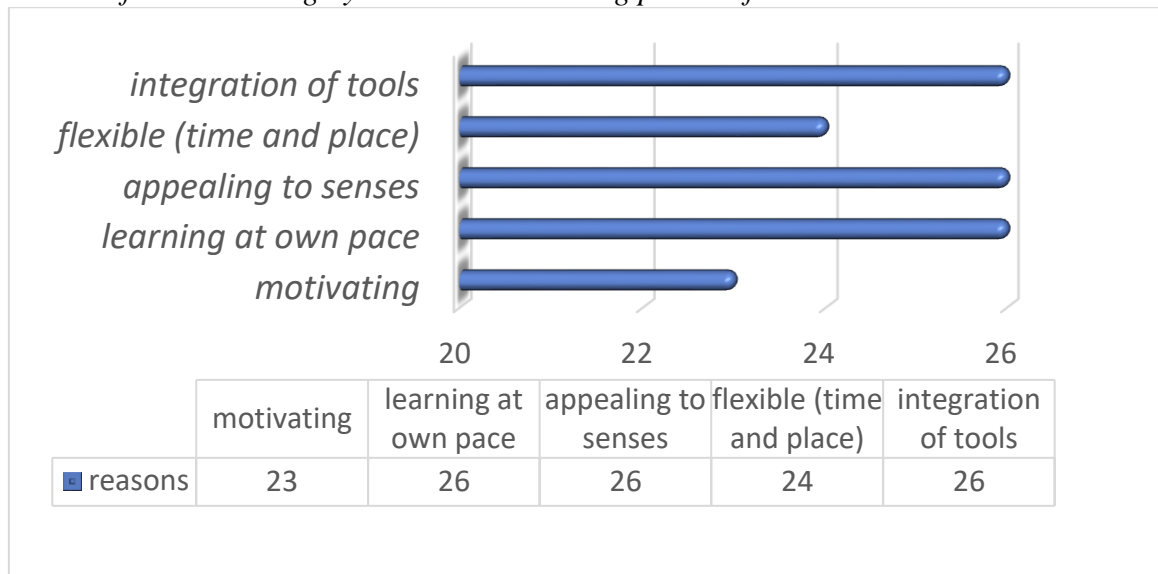
The analysis of the responses indicated that a great majority of the participants considered Symbaloo useful as the learning path for creating online activities (n = 28). However, two of the participants did not agree with the rest of the participants due to several reasons that would be presented and discussed in the next sections.

Research question 2. What were the reasons that participants described as most prevalent for considering Symbaloo useful?

The responses to the online survey were analyzed in terms of why Symbaloo was considered useful and resulted in five major reasons: integration of tools, flexibility (time and place), appealing to senses, learning at own pace, and motivation (Figure 2).

Figure 2

Reasons for considering Symbaloo as a learning path useful



Integration of tools. 26 of the participants indicated that integration of tools was one of the major benefits of creating online activities and using Symbaloo as the learning path. There are several tools and websites on the Internet that allow teachers and learners to benefit from audio and video materials- *WordWall*, and *Liveworksheets* to name a few. Often, teachers and learners might need to visit several websites to do online activities and move from one website to another. However, Symbaloo acts as the space where different tools and websites can be integrated under one page. One participant expressed this as follows:

There are so many websites on the Internet and every day we learn about a new one. I have to visit each website for the activities. However, we learned how to combine these activities into one space while using Symbaloo and the learning path. The activities are placed in just one place, like a unit of a book or chapter. [Participant ID 1].

Similar to this point, another participant added that:

I believe that the great benefit of using Symbaloo was that it allowed me to use all the activities in one place. In this way, students do not have to move from one page to another and it would be easier to follow the activities. Otherwise, it would be rather difficult for learners to focus. [Participant ID 4].

Flexibility (time and place): Many of the participants (n = 24) indicated that the major benefit of using Symbaloo as the learning path was its flexibility in terms of time and place. These participants indicated that learners could do these activities at any time and at any place provided that they had the necessary resources such as the Internet connection and the devices. According to the participants, learners were allowed to interact with the activities whenever and wherever they wish, although there might be specific deadlines set to manage student learning. One participant indicated this as follows:

I found creating these online activities useful and effective. I have two reasons for this. Firstly, learners could do these activities when it is the right time. I mean, they can do it in the evening or at night without caring about the time. The second is that they can even do the activities on their tablets and mobile phones on the bus or during the break. That is a great feature. [Participant ID 4].

Another participant indicated the importance of flexibility as follows:

In the classroom, each student has to follow the activities in the same order and at the same time. But using this website, when teachers create online activities, students can visit the website whenever it is appropriate. [Participant ID 3].

Appealing to senses: 26 of the participants underscored the importance of appealing to the senses of learners while creating online activities within a learning path. The participants stated that using audio and video materials on the Internet, it was possible to present audio-visual materials to the learners easily rather than providing only print materials or worksheets to learners. One of the participants expressed this as follows:

As a group, we created online activities and combined them in our learning path. The activities included audio-visual elements that would be used to communicate a unique material for learners. Our learners not only listened but also viewed visual elements in the materials. We included elements like pictures, video, audio, graphics, and many others. I believe that these materials would increase the learners' attention. [Participant ID 8].

Another participant indicated the major benefit of creating digital materials as follows:

The major benefit of using technology to create materials is I think combining audio and video materials easily to practice skills such as listening. Compared to the past, I can say that it is much easier to combine pictures and many other resources. Materials are no longer limited to print resources. [Participant ID 7].

Learning at own pace: One of the other benefits indicated by the participants was related to learners' decision on the speed and timing of their learning experience, which

is also called self-paced learning. The responses indicated that online learning activities that the participants created for the course provided learners with the opportunity to decide on the timing they would like to proceed. Moreover, it was also stated that learners did not need to complete the activities at the same time and speed as others. The learners also did not have to wait for others to finish or for the teacher to receive feedback on their performance. Two of the participants explained this benefit as follows:

I believe that one of the major benefits of these online activities is that our students can process and learn at their own pace. It is great for students to choose what to study, when and for how long. Students can do the same activity as many times as they want, and they can spend more time on the activity they like or they have problems with. [Participant ID 7].

It is great for teachers to create online activities that students can do at your own speed. I mean, they can decide on their progress and they can spend more time on the activities that they choose or they think more enjoyable and useful. This is not something that you can do in the physical classroom. [Participant ID 1].

Motivation: The participants also found online activities motivating not only for themselves but also for learners who will do these activities. Most of the participants indicated that they were motivated to learn about the tools and websites related to English language teaching and learning and to improve their digital literacy for online materials development. In the same vein, they also thought that the learners would also be motivated to do the activities as they included games, audio, and video materials. Regarding this view, two of the participants stated that:

The activities were motivating. We have combined videos and pictures to create vocabulary games in addition to speaking activities. Moreover, they were all presented on one webpage where they could do the activities and follow the learning path. We were also motivated as it was great to see how we created those activities while improving our knowledge of online tools and websites. [Participant ID 7].

I enjoyed the process while we were creating the activities. We not only learned about the new tools and resources available but also practiced how they could be used in online activities considering our learners' needs and the objectives of the curriculum. [Participant ID 6].

Research question: *What were the reasons that participants described as most prevalent for considering Symbaloo not useful?*

The two participants who found the learning path activities not useful provide only two reasons for their decision: time-consuming and technology dependency. During the interviews, two of these participants indicated that:

We created online activities and spent a considerable amount of time on them during the course. I mean although we worked in groups; we had to discuss the plans, and the activities and then we had to turn these activities into online activities. We spent a considerable amount of time. If we do the same in the real classes that we will be teaching in the future, that means a lot of time and effort. [Participant ID 2].

I value these online activities but I believe that we need to be careful about the time and efforts that are needed to create these online activities. They require a great deal of time to find the materials and create these activities and then integrate them on the Symbaloo website. [Participant ID 5].

The other participant explains that although there are various benefits of creating online activities and tasks for learners, this might also increase teacher and learner technology dependency. This participant explains this as follows:

I believe that creating online activities and asking students to do the activities online might also increase the time spent in front of the computers. I mean, rather than handwriting and reading on paper, learners can lose the human sides of learning and teaching or experience. [Participant ID 5].

These activities might also increase the time spent in front of the screen and the technological devices used. Sometimes it might be difficult to benefit from these activities if any technological requirement such as the Internet may not be available. [Participant ID 2].

Discussion

The current course utilized a specific tool to integrate a variety of tools and websites that aim to support language teaching and learning on one platform. The main was not merely linked with the participants' increasing knowledge of the use of this tool in their future teaching context. In addition to using Symbaloo to create online activities and exercises, the participants also needed to choose and evaluate the most useful online activities regarding the level and the coursebook. Since the course was also taught online during the pandemic, the participants not only experienced the benefits and/or challenges of online teaching and learning in their courses but also in the current study where they needed to consider the objectives of the curriculum and the technological tools available. On the other hand, technology dependency and the efforts to create these online/digital activities have also been raised.

The participants highly valued that Symbaloo allowed them to combine several activities and host them on the same website. Based on their responses helped them not only keep students focus on the activities and refrain them from moving from one website to another. This evidence informs that the participants tried to avoid the distraction of using several tools at the same time as often teachers must utilize several services at several websites and applications.

The participants also integrated several skills such as listening and writing into their activities on the same platform using Symbaloo. This finding also corroborates the findings of the study by Werner and Küplüce (2021), which indicated that teachers highly valued integrating skills online, which is believed to help learners to develop their ability in several skills needed in real-life contexts.

The participants' responses also reveal that flexibility in terms of time and place is among the major reasons why they considered Symbaloo useful as the learning path. This flexibility can be viewed as an advantage for both the teachers and the participants. The participants of this study designed their activities without being limited to any time or place that the targeted groups of students could do anywhere and any place if they had the necessary Internet access and a device that could view the activities. This finding was in line with that of the study conducted by Noviarani et al. (2021), Werner and Küplüce (2021), and Howard and Scott (2017), which also indicates that online learning provides learners with the opportunity to choose the time, place and the device while carrying out these activities. This might be attributed to the fact that learners do not need to follow strict time limits and are limited to a physical classroom. However, despite these benefits, it is also due to note that technological infrastructure still appears as the basic requirement to benefit from these activities.

The participants provided two other major reasons to indicate the benefits of using Symbaloo: appealing to senses and learning at one's pace. Regarding the former, it might be well stated that the major advantage of creating online activities within a learning path is that audio-visual content can be easily integrated into the activities and tasks. Compared to the content printed on paper, online activities can easily combine audio and video elements to practice skills such as listening. The responses of the participants also indicate that they are particularly interested in using audio-visual elements in activities to promote practice outside the classroom. Therefore, as also suggested by Anas et al. (2022), during individual technology courses or in the whole training programs, pre-service and in-service language teachers should be guided and allowed focus on what they are mostly involved in and consider useful rather than forcing them to learn about the areas that they have little interest or experience.

Another useful feature of Symbaloo activities is learning at one's own pace, which indicates the learners' decision on the speed and timing of completing the online activities. The participants' responses indicate that, unlike any classroom practices where learners often must complete the activities in the same order and at the same speed, the online activities are created to allow learners to complete the activities. As shown by other studies (Beaven, 2021; Godwin-Jones, 2021; Kılıçkaya, 2018), with the enormous number of materials and websites available on the Internet, learners can practice language skills and do a variety of activities easily. The participants in the current study also indicated this as the prevalent con of creating and using online materials. There are many materials and software available for language learners on the Internet, which learners can use at their own pace; however, they need to be guided by their teacher depending on learner needs. The participants' selected views on learners' practice at their own pace are consistent with relevant research (e.g., Çakmak, 2019; Du, 2013; Tullis & Benjamin, 2011), which indicates that the main advantage of online learning and teaching activities, including mobile-based applications is learning at their own pace in addition to other benefits such as the flexibility in terms of pace and place provided to learners.

The final reason the participants found Symbaloo useful is that the online activities created in the learning path are motivating. Although this factor received the lowest frequency in the list, most of the participants indicated that they enjoyed and were motivated to discover new tools and integrate them into the learning path via Symbaloo. It can be also stated that their interest and motivation increased as a result of the benefits that this tool provides to them. As for the learners, it is proposed that learners will also find the activities that appeal to all senses using a variety of content such as video and simple interactive games. This finding is also in line with that of Boonmoh et al. (2022), indicating that when online materials are used in teaching and assessment contexts, learners are more motivated to carry out the activities. As also indicated by several studies conducted by Akayoğlu (2021), Aşık et al. (2020), and Rakıcıoğlu-Söylemez and Akayoğlu (2015), teachers' awareness and motivation might be increased by introducing them to new tools and activities that will help to make activities more engaging and productive. In addition, as indicated by Lamb and Arisandy (2020), if learners are willing and can be motivated to learn outside the classroom using a website or mobile applications, this can lead to higher amounts of input that they will receive.

In the lectures, it was noted that they would need to invest time and effort to create the online activities and combine them as a learning path in Symbaloo. During the interview, this participant was informed that despite requiring some time and effort in the beginning, these activities could be re-used for any groups of students at the same level in the future. It should be also noted that teachers can also change and reuse materials on the Internet by using open educational resources (OER) (Kılıçkaya & Kic-Drgas, 2021). Regarding technology dependency, the other participant indicated that creating online activities would also lead teachers and students to spend a lot more time in front of the computer in addition to the other requirements, such as a reliable Internet connection. It was also stressed that this would also lead to equity problems for those who did not would like to use these activities or who did not have the necessary resources, such as a laptop or a computer. Considering this response, one might respond by saying that for those students who could not have access to these resources, print materials could be used to compensate for the online activities; however, this might not be a solution for interactive games and activities using audio materials.

Based on the analysis of the participants' responses, the review of the relevant studies, and findings, the following implications might be proposed regarding designing and creating online materials: Symbaloo learning paths can be utilized in classrooms where some of the learning activities can be carried out online. These online activities based on learning paths might be a suitable way for recycling previously learned items. In this way, teachers can provide their learners with the opportunity to revise the previous items without limiting themselves to classroom time. When learners' weaknesses are determined, supplementary materials and activities can also be presented to learners. Since classroom time is limited and there might not be enough time left to practice skills such as listening and speaking, online activities can provide learners with the opportunity to use and integrate all skills. Online activities are mainly carried out outside the classroom, and learners are empowered by autonomy to choose the activities they would like to do at their own pace. To achieve these, Ertmer and Ottenbreit-Leftwich (2010) suggest that

Because teachers work within specific contexts, situated professional development can more readily target teachers' specific needs, building self-efficacy and eliminating some of the barriers related to school culture (p. 276).

While there might be certain advantages, it is also necessary for teachers to consider that creating online materials using any tools requires investing time and effort and might increase the time spent in front of the screen, which might lead to discomfort (Shadieff & Yang, 2020). Therefore, each activity and task might be carefully analyzed to determine whether any other way of writing or oral activity can be a quick solution.

Conclusion

The current study aimed at investigating pre-service language teachers' experience using Symbaloo as a learning path for preparing online activities outside the classroom. The participants included 30 pre-service language teachers enrolled in an online elective course 'Materials design in teaching English, which was offered in the spring semester and whose objectives included familiarizing students with major approaches/frameworks of criteria for materials design and the online tools and websites available, allowing students to engage in online materials development. As a partial requirement of the course, the participants were asked to prepare online activities using the tools/websites discussed throughout the course using Symbaloo as a learning path, which is a website that allows creating and integrating online materials in a lesson plan such as videos, quizzes, and educational games (Evans Heath, 2020). The responses provided by the participants of the study indicated that they found Symbaloo helpful as a learning path due to several reasons. One was that the Symbaloo Learning path enabled creating online activities from other websites quickly and efficiently. Another reason was that the activities were more like gaming-style digital lesson plan activities, which made it possible to integrate exercises and activities from other websites such as *Edpuzzle* and *WordWall*. According to the participants, the main advantage of creating these learning paths was that they could complete the activities at their own pace. However, the participants underscored the importance of the efforts and time required to plan, create, integrate, and organize the materials and websites in the digital plan.

Limitations and Suggestions for Further Research

The current study and the findings obtained were only limited to the participants' perceptions regarding their performance in using a tool to create online activities in an online elective course. Therefore, the findings may not be generalizable to other contexts but can be transferred to similar situations where pre-service language teachers would like to improve their digital literacy, online materials design, and development. Moreover, although the participants created online tasks and activities using learning paths since the data were only based on the participants' self-reported data, further research can also benefit from other sources of data such as assessment of materials created for future use. This assessment can be made in real classrooms where participants would carry out their practice teaching in schools during their last year. In this way, the perceptions of the

participants can be compared with the quality and the sustainability of the online materials created. Moreover, mentor teachers at schools can also cooperate with the participants to study the effects of these materials on the students.

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Appendix A

Selected online tasks created by the groups

Tasks

<https://wordwall.net/play/12582/980/473>

Projects

<https://learningpaths.symbaloo.com/preview/L213256/>
<https://learningpaths.symbaloo.com/preview/L214631/>
<https://learningpaths.symbaloo.com/preview/L207598/>

Appendix B

Course description

DEPARTMENT OF FOREIGN LANGUAGE EDUCATION
MATERIALS DESIGN IN TEACHING ENGLISH SPRING 2021

Course Description and Goals

This course, a continuation of Teaching Methodology courses offered in the department of foreign language education, aims to enable students to acquire skills necessary for developing materials for language teaching. Main objectives include familiarizing students with major approaches/frameworks of criteria for materials design and the online tools and websites available, allowing students to engage in online materials development.

Materials

McDonough, J., Shaw, C., & Masuhara, H. (2013). *Materials and methods in ELT: A teacher's guide* (3rd ed). Wiley-Blackwell.

Article by Howard & Major (pp. 101-109)

Various websites/tools and blogs such as
<https://sandymillin.wordpress.com/2021/03/13/technology-tools-for-teaching-beginners-online/>

Office Hours

Office hours when students wish to meet the lecturer will be held online using ZOOM. Please use the following ID and password to join the online meeting on Mondays, between 18.30- 19.10.

Meeting ID: 745 3398 0096 Password: 3iS16r

Class regulations and student responsibilities

Students are expected to attend each class regularly. In accordance with the university senate decisions, students do not have to attend the online lectures; however, they are to watch the recorded sessions before the end of the semester. Active class participation is essential and students must show that they are engaging with course readings and by orally contributing thoughtfully to in-class discussions. Everyone in this class expected to treat one other with respect, regardless of diverse viewpoints, beliefs, or backgrounds. Offensive communication such tone of voice and gestures directed against anyone will result in immediate dismissal.

Course Requirements and Grading

All the students are to take the online Midterm exam, and the Final exam (presentation and online material design), which will account for 40% and 60% of their final grades respectively.

Tentative Schedule

Week	Topic	Sources
Week 1 March 10	Introduction to the course Teaching with and without coursebooks	Course policy Requirements
Week 2 March 17	The framework of Materials and Methods	McDonough, Shaw, & Masuhara (pp. 3-16)
Week 3 March 24	Guidelines for designing effective English language teaching materials Websites/tools for online materials <i>Lesson writer</i>	Howard & Major (pp. 101-109) https://lessonwriter.com/
Week 4 March 31	Websites/tools for online materials <i>Edmodo</i> <i>Symbaloo</i>	https://new.edmodo.com/ https://learningpaths.symbaloo.com/
Week 5 April 7	Websites/tools for online materials <i>Wordwall</i> <i>Jigsawplanet</i> <i>Edpuzzle</i> <i>Storyjumper</i>	https://wordwall.net/ https://www.jigsawplanet.com/ https://edpuzzle.com/ https://www.storyjumper.com/
Week 6 April 14	Websites/tools for online materials <i>Nearpod</i> <i>Liveworksheets</i> <i>Padlet</i>	https://nearpod.com/ https://www.liveworksheets.com/ https://padlet.com/
Week 7 & 8	Midterm Week (April 21 & April 28)	
Week 9 May 5	Websites/tools for online materials <i>Quizlet</i> <i>Classtools- Vortex</i> <i>Educaplay</i> <i>Autodraw</i> <i>Vocaroo</i>	https://quizlet.com/ https://classtools.net/vortex/ https://www.educaplay.com/ https://www.autodraw.com https://vocaroo.com/
Week 10 May 12	Q & A Session	Students can ask questions about their presentations, their plans, etc.

Week 11 May 19	Presentations (Materials Design)	Group 1, 2
Week 12 May 26	Presentations (Materials Design)	Group 3, 4
Week 13 June 2	Presentations (Materials Design)	Group 5, 6, 7
Week 14 June 9	Presentations (Materials Design)	Group 8, 9, 10