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Original article

Development of Social Parent Education Platform for the Prevention of Child Neglect and Abuse

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Abstract

Child neglect and abuse is one of the most important problems of modern societies. Studies show that this problem continues to increase day by day in many developed and developing societies. In this context, a parent training program development project was carried out in order to prevent child neglect and abuse, supported by the Turkish National Agency within the scope of the Erasmus+ KA2 project. In this study, the development processes and theoretical bases of the Social Parent Education Platform, which was developed to bring together the educational content created within the scope of the project with the users and to provide parent education with social media-based content, are included.

Keywords: Child Neglect and Abuse, Social Media, Learning Management System, Adult Education.

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INTRODUCTION

Child neglect and abuse is the most important public health problem of modern society (Zeanah & Humphreys, 2018:637). The neglect and abuse of children, who are the guarantee of the future of societies, can have consequences that can have lifelong effects. The transition of modern societies from the extended family to the nuclear family, the working status of both parents, and the fact that children go out to environments such as kindergartens and schools outside the supervision of the family at a very young age have made child neglect and abuse more noticeable. The first and most important measure that can be taken against this situation is to increase the level of knowledge and awareness of parents about child neglect and abuse. For this purpose, it is aimed to develop a social parent learning platform in order to prevent child neglect and abuse within the scope of the study.

Today, learning is considered as a life-long process apart from compulsory formal processes. While the phenomenon of education is considered as preparing individuals for life and raising the qualified workforce needed by the society, the approach has changed in the last half century as preparing individuals for all life-long and changing processes. Many universities have accelerated the preparation of educational content for individuals from all walks of life, apart from their students, within the scope of lifelong learning. In this process, online course systems have been established and millions of people have access to thousands of courses in all fields, not just vocational, through these systems. At this point, on-demand learning becomes a lifestyle in modern society (McLoughlin & Lee, 2007). People demand and use such content in order to cope with different situations in a more qualified way at any stage of their lives. In this context, learning is a social and continuous process in which even adult people continue to interact and learn (Kind & Evans, 2015:124). Individuals are constantly seeking information to solve a problem at work or school or just to satisfy a curiosity (Dabbagh & Kitsantas, 2012:3). For example, children who were raised with traditional approaches within the extended family in the past are raised by parents who need great guidance in the shrinking nuclear family in today's world. Many parents access educational content on their children's psychological and physiological development, health, nutrition and social needs through online platforms and search for other parents' experiences through forums. All these demands reveal the need for the production of qualified information in a wide range. In this context, social media-based systems such as Facebook, Twitter and Youtube are also used for professional learning communities (Mazer, Murphy, & Simonds, 2007; Goodyear, Parker & Casey, 2019). However, the fact that everyone can share in these social media tools, whether professional or not, and the fact that the content in these systems stands out according to the number of views rather than being created by experts, causes the circulation of unscientific content widely. These unscientific contents, which are mostly developed by non-professional experts, are consumed by a large part of users as if they are correct information.

Other studies show that individuals use social media for personal reasons, but rarely for educational or learning purposes (Hew, 2011). According to Bercovici (2010), individuals generally use social media for interactive participation in the social environment. In this case, of course, it is possible to talk about the vehicle effect. Accordingly, regardless of the content they contain, popular social media tools create similar perceptions even in different content types due to the effect of the tool on users.

This situation creates a great risk for social media-based learning. In order to prevent this problem, instead of using the existing social media systems within the scope of the project, it is aimed to develop a system that has the control mechanisms that professional professionals share accurate information with scientific content and that also allows users to create a personal learning environment. In order to establish the scientific basis of the developed system, the theoretical foundations in the literature were examined and the platform was developed on this axis.

LITERATURE REVIEW

Social Learning Theory

Social learning theory emerged as a reaction to behavioral theory. In social learning theory, the contact and experiences of the individual with other people in social life come to the fore. According to the social constructivist perspective, learning is a process that varies from individual to individual and focuses on the learner rather than the teacher (Kompen et al., 2019). Albert Bandura accepted learning as a social activity by modeling others, and Lev Vygotsky claiming that we learn through social interaction (Taylor & Hamdy, 2013; Yardley, Teunissen & Dornan, 2012). Dewey, one of the pioneers of the theory, sees school as a part of civil society and argues that learners should be encouraged to act as members of society and direct their interests in collaboration with others (Field, 2001). Vygotsky, another important name of the theory, states that learning takes place in the social environment with the interest of the learner and the guidance of the teacher (Riddle, 1999). Social learning theory is an important step in achieving interaction, participation and active collaborative learning between students and instructors (Carlile, Jordan & Stack, 2004; Vygotsky, 1978). Learning is a life-long process that depends on accepting continuous change (Hermansen, 2005). At the same time, learning is considered as a social discourse rather than an individual acquisition (Hanson & Sinclair, 2008; Lave & Wenger, 1991).

Today's technologies have transformed social integration and communication into a technology-based one. At this point, social learning theory has maintained its importance for technology-based social learning environments. It is discussed that new learning environments and strategies can be designed with Web 2.0 tools based on social learning theory (Mondahl, Rasmussen & Razmerita, 2009). In this respect, the theory necessitates the provision of foundations such as active participation in technology-based learning environments, cooperative learning, freedom to construct their own learning

processes, observing the social reaction to a behavior-phenomenon, and autonomy to decide what the learner wants to learn.

Social media-based learning tools provide active collaborative learning, reflection of cognitive skills and motivation of metacognition (Anderson, 2012). On the other hand, Koh, Herring, and Hew (2010) and LaRue (2012) found evidence that the exchange of ideas and information among participants in a learning community increases intrinsic motivation to learn. With social media-based tools, individuals are not only in the position of seeking information and passive consumers, but also in the position of producing information through their sharing (Dabbagh & Kitsantas, 2012:3). These systems also offer highly self-motivated self-regulated learning environments (McLoughlin & Lee, 2010). With all these aspects, social media-based learning tools are one of the most effective tools in creating the learning environment required by social learning theory.

Technology Acceptance Model

All technology acceptance theories are designed to measure the degree of acceptance and satisfaction of individuals towards any technology or information system (Momani & Jamous, 2017:51). The most widely accepted and used model among these models is the one developed by Fred D. Davis (1985) based on the Theory of Reasoned Action. Later, this model has undergone various revisions by the researcher himself and different researchers.

The Technology Acceptance Model suggests that perceived usefulness and perceived ease of use are the two most important individual beliefs about the use of an information technology (Li, 2010). According to this, perceived usefulness means "the degree to which a person believes that using a particular system will improve job performance" and perceived ease of use means "the degree to which a person believes that using a particular system will be effortless" (Davis, 1989:320).

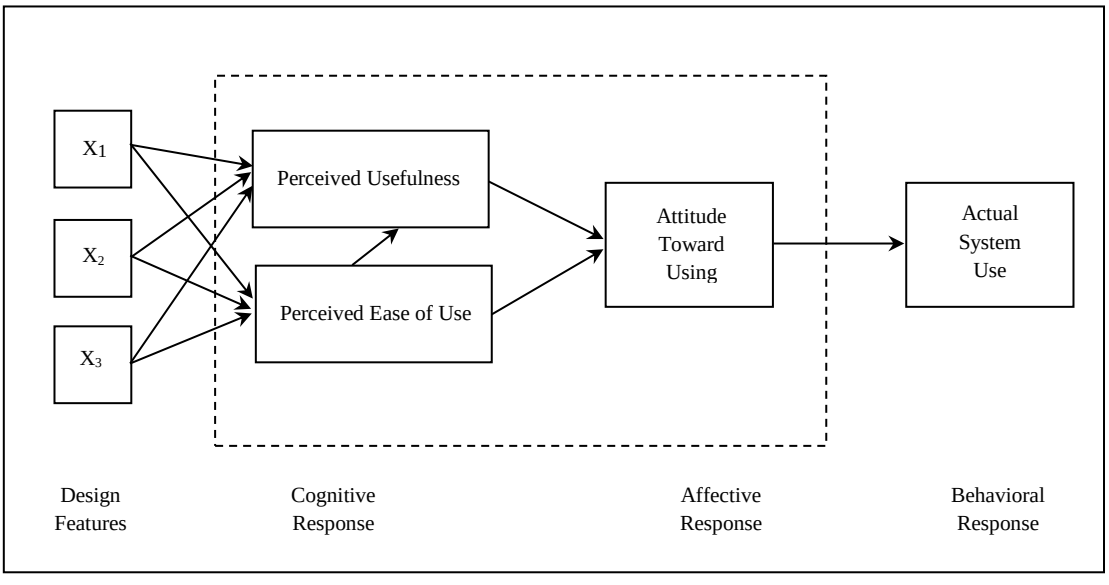

Figure 1. Technology Acceptance Model (Davis, 1985:24)

According to Davis (1985: 24), a potential user's general attitude towards using a particular system is assumed to be the main determinant of whether he or she uses the system. Attitude is a function of two main beliefs. These are perceived usefulness and perceived ease of use. Perceived ease of use has a causal effect on perceived usefulness. Design features directly affect perceived ease of use.

All these components constitute the acceptance model of the individual against the new technology. This model is extremely important for the widespread use of a new technology. Consideration should be given to the perceived usefulness and perceived ease of use, which form the backbone of the model, in all educational software development processes.

Personal Learning Environments (PLEs)

One of the newly developing concepts in the field of educational technologies is personal learning environments (Valtonen et al., 2012). This concept emerged from discussions among a large group of professionals interested in designing and supporting online learning environments (Martindale & Dowdy, 2010). Learning networks where individuals can personalize their learning environments by allocating a set of tools that connect people and resources to meet their learning interests and needs with new technologies are called Personal Learning Environments (PLEs) (Thu et al., 2012). The common feature of all early definitions of personal learning environments is that the learner can control his own learning process (Martindale & Dowdy, 2010). In this respect, it places learners in a central role as designers of their own learning environments (Schaffert & Hilzensauer, 2008).

Personal learning environments represent a paradigm shift (Elliott, 2010). It is an easy-to-use environment based on the idea that learning is a continuous and ongoing process provided by a multitude of resources and people (Shaikh & Khoja, 2012). These environments aim to provide various tools to support a student's individual learning (Attwell, 2009). Personal learning environments are more effective in addressing student control and personalization issues that are not usually found in corporate learning management systems (Dabbagh & Kitsantas, 2012:4). McGloughlin and Lee (2010) suggest that personal learning environments enable students to take responsibility for their own learning by encouraging them to choose a variety of tools and resources to create, organize and package learning content in order to learn effectively and efficiently. What stands out here is that learners can use customizable tools in all processes from producing knowledge to using it in the learning environment.

Martindale and Dowdy (2010) argue that personal learning environments are the result of the content creation, organization and sharing features that social media provides to students. Many people, especially with the spread of social media tools, have moved from being the only consumer of the information produced to the position of producing and structuring the information. The information created by the users has been presented to the access, comment and appreciation of other users and a new information production methodology has been developed. At this point, learners have moved from

being passive information consumers to active information producers, constructors and consumers at the same time in online environments. These environments are environments where students construct knowledge socially with the help of knowledgeable peers and educators (Drexler, 2010; McLoughlin & Lee, 2010). Personal learning environments provide more responsibility and more independence for learners (Attwell, 2007).

According to Van Harmelen (2006), the characteristics of these environments allow students to control and manage their own learning processes are;

a. setting their own learning goals,

b. manage both content and learning process

c. communicating with others in the learning process and thus achieving learning goals.

Dabbagh and Kitsantas (2012) proposed a three-stage framework based on the interaction levels provided by social media tools to develop students' self-regulation skills and assist educational institutions and educators in creating personal learning environments. These stages are; (1) personal information management, (2) social interaction and collaboration, and (3) information collection and management. Accordingly, they suggest that this three-stage process should be taken into account in order to create a personal learning environment in social media-based learning.

While it is thought that personal learning environments can be used as a harmonious combination of existing social media or Web 2.0 tools, the difficulty of using these tools together and the fact that their main function is not an educational activity creates an important problem area. For this reason, there are considerations for constructing these environments as special systems.

Social Media Based Learning

Social media tools have become an indispensable part of daily life in the last 20 years. Many users spend most of their day interacting with such tools. This situation, of course, brought up the use of these tools, whose general function is social communication, for educational purposes, and a significant number of studies have been carried out in this area in recent years. At this point, it is thought that social media leads to higher performance levels due to its positive effects on the learning process (Ertmer et al., 2011; Larusson & Alterman, 2009). At the same time, it is stated that the use of social media as learning tools can connect informal learning to formal learning environment (Chen & Bryer, 2012).

Social media refers to a wide range of applications that allow users to create, share, comment and discuss a large amount of digital content (Moghavvemi, Sulaiman, Jaafar & Kasem, 2018:38). The fact that users are in a position to produce information and actively participate with the information they produce also creates collaborative learning environments. This contextual collaboration integrates content sharing, communication channels and collaboration tools into an integrated user experience that

enables new levels of productivity (Geyer, Silva Filho, Brownholtz & Redmiles, 2008). At the same time, social media tools are seen as educational platforms with significant potential as they encourage critical thinking among students (Mason, 2006). In addition to all these opportunities, there are various criticisms of the use of social media tools, especially for educational purposes. At the top of these is the fact that users take part in these systems for personal reasons rather than learning purposes (Bercovici, 2010; Hew, 2011). This is perhaps the most important problem of social media-based learning.

DESIGN AND DEVELOPMENT OF THE SOCIAL PARENT EDUCATION PLATFORM

The Social Parent Education Platform (SocialPEP) has been developed taking into account the theoretical bases in the literature. The data structures of popular social media tools have also been taken into account in order to preserve the advantages such as independent knowledge production, high participation and collaborative learning environment provided by social media-based learning systems. Green and Hannon (2007:26) suggested that learning has four basic components: generating knowledge and finding knowledge, doing something with it, sharing it with an audience, and reflecting on it. Social media-based learning systems are intended to provide all of these components. At the same time, theoretical foundations and application suggestions for social learning were also taken into consideration during the design and development stages.

Multi-Language Support

The system has been developed with multi-language support to work in six different languages, namely Turkish, English, Italian, Spanish, Lithuanian and Greek. The system presents the public posts made in the language they registered to the users and the posts made by other users followed by the users in the general flow area.

Registration

The simplest possible registration form fields were used for registration in the system. Users can only register to the system by entering their name, surname and e-mail address. The development of profile data can be done from the profile information field after registration.

User Types

There are two different types of users in the system: "User" and "Author". While it is sufficient to register in the system to become a user, the approval of the system administrators is required to become an Author. Authorship role in the system; It is an authorization given as a result of examining the professional expertise of individuals with academic expertise in the field. In addition to the articles from the authors that will contribute to the prevention of child neglect and abuse in the fields of academic expertise, there are also articles on child health, psychological and physical development, education,

children's games, parent activities, etc. They are also expected to write articles that they can contribute to parents. The posts of the authors are shown to all users in the language they are a member of, whether they follow or not.

Users, on the other hand, can see the posts of other users they follow in their general streams and authors in the language they are registered with. Apart from this, they can also share, comment, like and follow through their own accounts.

New Post

Users can make two different types of original posts on the system: “Post” and “Corner”. Apart from this, they can publish the contents of external sources in the form of "External Post" from their own sharing areas by simply adding their links. When these contents are clicked, users are directed to the original source site of the post. The title, text and, if any, images of the content shared in external posts are automatically added to the share. Users can publish any web page as external posting, and they can also share videos on popular video platforms by simply adding their links. In this way, existing content that can be evaluated within the scope of parent education can be easily shared over the system and a content pool can be developed. The features of a share published on the system and the actions that users can take regarding this share are as follows;

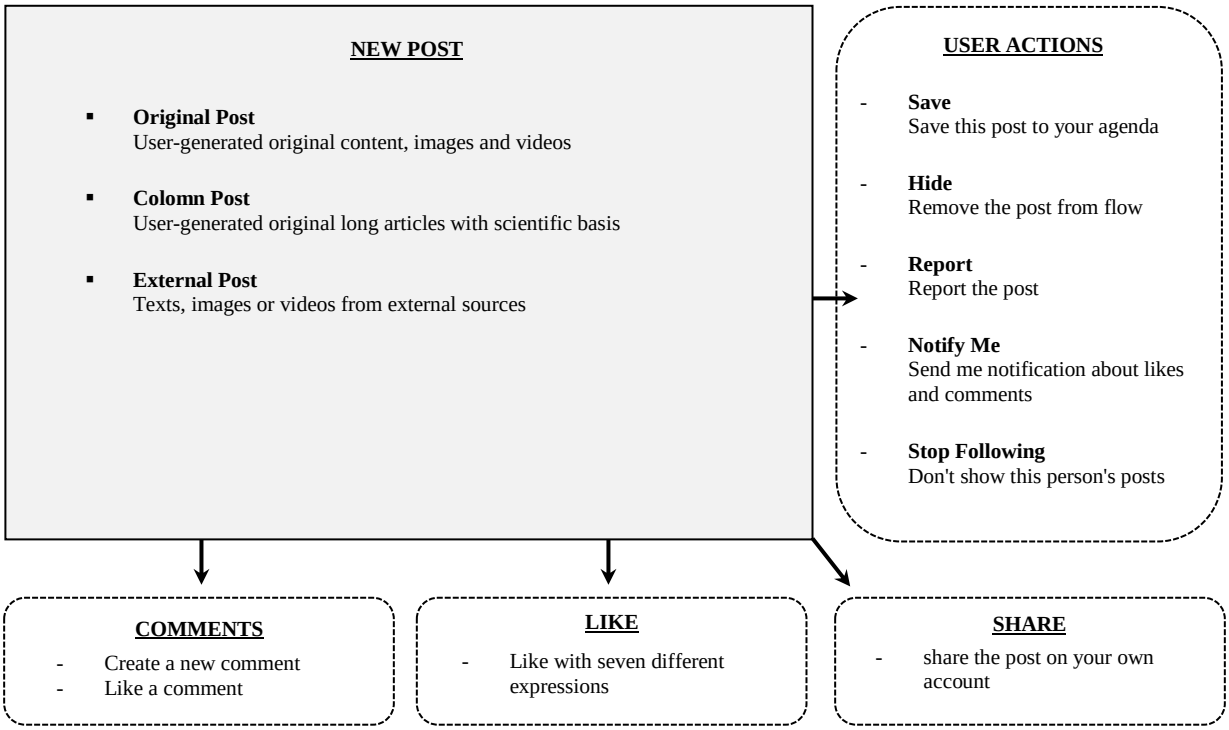

Figure 2. Share types and actions users can take

Regardless of the post type, users can perform the operations on the post as shown in Figure 1. These processes allow users to contribute to the dissemination and development of content. At the same time, it makes important contributions to the realization of the theoretical foundations.

User Actions

User actions include actions that will not affect other users in each share and that other users cannot see.

Save: This process allows any content to be saved by the user in his personal agenda to prevent it from being lost in the general flow. In this way, the user can easily access the content from his personal agenda and create his own personal favorite content whenever he wishes.

Hide: This process helps the user to permanently remove the relevant content from their stream. It helps to remove the elements that will harm the perceived usefulness of the system by preventing the user from coming across content that disturbs, dislikes and dislikes. This process is also used by administrators to detect content that disturbs users.

Report: This process is one step beyond the hide process. The content related to the report operation is both removed from the user's flow and reported to the system administrators. When a certain number of complaints about the same content are received, the system removes the content from all users' streams and sends it to administrator review without the need for administrator control. In this way, the system automatically purifies itself from negative content. In the event that a certain number of shares of a user are reported, that user's account is also automatically suspended. Hide and Report operations are very important operations to control and filter the content quality of the system and to ensure that the perceived benefit is kept at a high level.

Notfiy Me: With this process, the user follows the related content more closely. The user is informed by receiving notification about all comments and likes made about this content. In this way, they can follow other user actions about the content they are interested in and can see the discussions-comments about the content. For example, for a sharing about a child's disease, users can closely follow the development of the content by receiving regular notifications about the contributions of other users to this content with the "Notify Me" process.

Stop Following: With this process, users can prevent all the shares made by the owner of the relevant share from falling into their own streams without unfollowing them. In this way, it is ensured that content that is of interest to them is always included in their streams.

Other Actions

Apart from all these processes, users can also make comments, likes and shares that can be seen by other users and the owner of a share.

Comment: Users can contribute to any post by commenting. They can also like any comment made for related content. In this way, a participatory discussion environment about the content can be created. At the same time, the personal experiences and thoughts of the parents about the content and the reflections of the content in real life can be collected.

Like: With this process, the user can express his positive or negative thoughts by choosing one of the emojis representing seven different emotional states related to the post. In this way, general mood reflections related to the content can be collected. This process is extremely important in terms of collecting the general mood, which cannot be expressed in writing, with emojis and seeing the feelings of the general audience about the subject in other users.

Share: With this process, it is ensured that a share made can be re-shared in order to fall into the flow of the user's own follow-up list in his own account. In the re-sharing process, the information of the original owner of the content is included.

Tag

All posts in the system can be tagged with various tags during the creation phase. In this way, users can make tag-based inquiries from the search section and list the posts for the relevant tag. At the same time, they can follow the current topics from the popular tags area.

Notification

Users are informed about the developments regarding the posts they have created or followed on the system with the help of notifications. The owner and followers of the post receive notifications for likes, comments and shares for a notification. Some of these notifications are also sent to users via e-mail. In this way, the continuity of the interaction of the users with the system is ensured.

Follow

Users can follow other users registered in the system. In this way, the shares made by each other fall into the general streams of the followers. Author type users in the system are included in the streams of all users, whether they are followed or not.

Profile

Users can see and edit account information in the profile area. They can edit their follower and follower lists, profile photos, password information, account settings and privacy settings through this area. At the same time, account freezing can be done from the profile area.

General Flow Module

The shares of all user types in the system are shared in the general flow module with the most recent post at the top. In the general flow, the posts work in such a way that new content is loaded as the end of the page is reached with the endless flow feature.

Training Module

Under the training module, posts containing training content that can only be edited by system administrators are listed. The posts in the training module have the same features as the posts in terms of software features. Users can perform all the operations they can do to a normal sharing type regarding the training content in the training module.

Agenda Module

With the Agenda module, users can save all the content they call "Save" in the system, whether it is sharing or educational content. In this way, favorite content is prevented from being lost among a large number of posts and users are enabled to archive these content.

THEORETICAL APPLICATIONS OF THE SOCIAL PARENT EDUCATION PLATFORM

Vygotsky (1978) argues that learning is basically a social activity consisting of a combination of collaborative activities, communication and interaction with others believed to develop cognitive and critical thinking skills. SocialPEP is designed to support collaborative learning, active participation, peer communication and interaction, which are the pillars of social learning theory. The system's aim of especially parent education and the fact that a large part of the participants are parents, causes a learner mass to seek solutions to similar problems. At this point, the autonomy of the users to produce information and the fact that the produced information is open to the access and contribution of other users creates a collaborative learning environment. The fact that users can stay in constant communication with other users and participate in critical discussion environments through comments also provides the basis for the most important requirements of social learning. Particularly, a group with similar concerns, interests and learning needs can improve the knowledge area they feel lacking by contributing to each other and discussing the information produced by experts through comments.

Another theoretical basis that is considered during the platform development phase and emphasized in the design processes is the Technology Acceptance Model. The model is predominantly shaped on perceived usefulness and perceived ease of use. At this point, it is known that perceived usefulness greatly affects perceived ease of use. In order to increase the ease of use in the design process, all design elements are designed in a simple way away from complexity. It has been developed with information entry and publication algorithms similar to the data procedure structures of widely used

social media platforms in order to avoid confusion and difficulty in information processing processes and software procedures. In this way, users can use the platform with the user actions they are accustomed to from many social media tools. Unlike other social media platforms, the platform also includes author posts and central training content that will be included in the streams of all users. With these contents created by academic experts, scientific information is provided to users. This setup has been specifically designed to have a positive effect on the perceived usefulness of the system.

Personal learning environments were also examined as another theoretical basis used during the platform development phase. Personal learning environments are generally considered as groups of people who share common learning/professional interests, where interactions through discussion, analysis and problem solving result in professional learning (MacPhail et al., 2014; Parker, Patton & Tannehill, 2012). At this point, SocialPEP is a special system that aims to bring together a group of learners with similar learning needs. In the system, the learner and the teacher have similar authority in the processes of knowledge generation, interpretation, participation and communication, and the learner contributes not in the passive listener-consumer position, but in the active-producer position. At the same time, in order to customize the learning content, the features like recording the information in the system design and development stages in the agenda, hiding-blocking the content or content provider that is not of interest, reporting positive-negative moods to educational content with the appreciation module, filtering the information in the field of interest with the labeling module offer users all the requirements of personal learning environments.

Finally, in order to provide social media-based learning, which was examined on theoretical grounds, the system was designed as a customized version of popular social media tools, taking into account the theoretical bases in educational technologies. An existing popular social media tool is not used due to its possible disadvantages, and a special social media-based learning system has been developed that can work as a personal learning environment suitable for the purpose. The common algorithms of social media platforms were taken into account as module structure, data entry, data processing, recording and design structure. The data processing structure and theoretical areas of the social parent learning system, which was developed considering all these theoretical bases, are as follows;

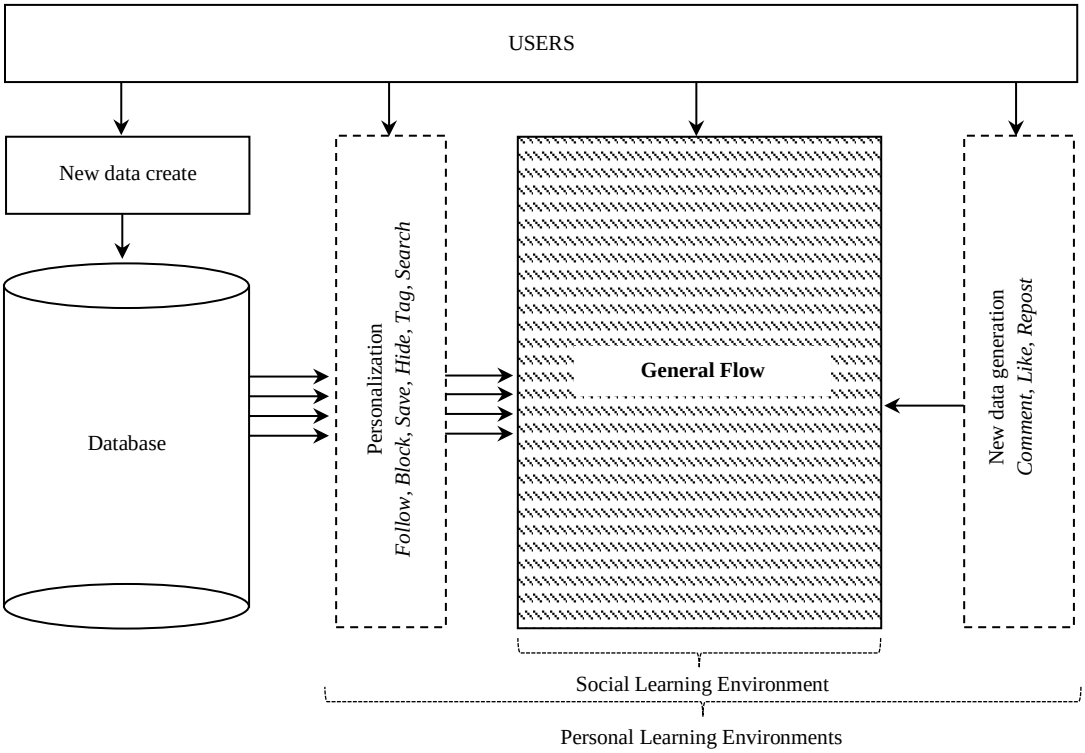

Figure 3. SocialPEP data processing structure

In the data processing structure of the platform, data providers are users. Users are included in the common database with the information they produce and are filtered by other users' personalization settings and made available to other users. It creates a social learning environment by developing the information in access with the comments and likes of other users. Personal learning environments are created with the processes of personalizing the master data, filtering and contributing to the data.

CONCLUSION AND DISCUSSION

Learning management systems are generally used as supporting systems in formal education processes. Since these systems are equipped with the requirements of formal education, they are teacher-centered rather than learner-centered and do not have sufficient flexibility. Few systems that are structured for mass instruction and that can serve lifelong learning are widely used. This situation leads to the use of social media-based systems for mass education and to try to reach large masses on these systems. Although there are many studies in the literature that show the benefits of using social media-based systems for educational purposes, there are also studies that reveal various disadvantages. This situation necessitated that the learning system planned within the scope of the study should be made through a special system instead of existing learning management systems or popular social media systems. In particular, it is aimed to develop a unique social media-based mass learning management system with algorithms based on theoretical foundations. Care was taken to create a customizable learning environment for the developed system.

It is argued that personal learning environments are the next step in the development of educational technologies, introducing new tools and learning practices to meet the needs of the information society, and replacing traditional learning management systems (Mott, 2010). The most basic feature that distinguishes these environments from traditional learning management systems is that knowledge generation, structuring and selection tasks are not done only by educators, but learners are included in this process. In this respect, it is considered very difficult for traditional learning management systems to carry out this function due to their existing structures. It is obvious that the personal learning environments approach will create radical changes in the conventional structures of learning management systems. The main discussion here is whether the existing learning management systems are incompetent in this area and social media tools whose main purpose is not learning management can be used directly with the PLEs feature. In this respect, it is seen that there is a need for a new software approach that will combine the knowledge generation and collaborative aspects of social media tools with the pedagogical power of learning management systems.

Although the concept of lifelong learning has gained such an important dimension in recent years, there is no educational software with process management suitable for this purpose. It is obvious that in this new and different field, it is necessary to establish workflows that will support the mixed processes of formal education and informal education. These systems, which should have the ability to bring together different people from different parts of the society under various learning communities, must overcome the difficulties that traditional systems do not encounter. The aim of this study is to develop an original learning system for a specific subject that falls within a mass problem area.

DECLARATIONS

Author Contributions: The authors contributed equally to the study.

Disclosure statement: No potential conflict of interest was declared by the authors

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