



## THE USE OF SOCIAL MEDIA ELEMENTS IN DISTANCE LEARNING

**Umit Ferit Aldim and Mustafa Ulas**

*Firat University, Turkey*

Of all the technological and communicational means, social media is the most important one which takes place in nearly all daily activities. It is, after all, evident that every application, every touch on social media has the ability not only to reach but also to appeal to everybody, even simultaneously. Any application that is going to be developed on this environment may go public with real-time updates that otherwise can't be seen in any other means. Based on this point, it can be evidently claimed that the use of social media tools and applications such as Facebook, Twitter is getting commonplace especially on language learning via distance learning systems. In this study, the use of social media tools in the field of language learning and teaching, and expected beneficial outcomes of key elements of social media has been investigated.

**Keywords:** Social media, Online education, Language education, Twitter, Facebook.

### Introduction

Today, the development of information and communication technology (ICT) has been occurring much faster than the developments in all other fields. Its efficiency in several fields such as health, finance, trade and education has been increasing day by day. ICT has an effect on the increase of quality and production in these and suchlike fields. The contribution of data mining to health and finance fields could be given as examples to this increasing effect [1][2][3]. As for education, there are a lot of ICT applications that have significant advantages and support distance learning. The examples to these applications are online examination systems and the systems providing the follow-up for the lessons via the Internet. Among these, the applications depending on the control of the relation and interaction between the learner and the tutor have become more important recently [4] A lot of educational administration software has been developed for this purpose [4][5].

Another important effect of ICT on the lifestyle of the people today has occurred with the increase in the use of social media tools. The fact that social media tools have a structure increasing the social interaction of people independent of time and place give rise to have more effects than in any other technological environments. When an education environment that is independently designed and an educational application performed over social media are compared, it could be observed that the social media application having a higher interaction has more favourable results and it is much more efficient [6][7].

In this study, the search on social networks that have been used recently as an educational platform has brought out the suggestion for the foreign language education model applied parallel to social

networks. Working principle of this model has been discussed and its effects on and contributions to language education have been revised. The system that was applied the suggested model and its results have been studied.

## **E-Learning**

The definition of United States Distance Learning Association (USDLA 2004) is as follows:

"Distance learning is to convey education to distant individuals through the means such as computer, video, multimedia technology, satellite, graphics and audio." Stating that the learner and the teacher are not in the same physical environment, USDLA emphasizes that electronic means or written and printed materials should be used in this educational program. "Distance learning is composed of two main parts; teaching including the teacher and learning including the learner."

When in-class activities could not be performed because of limitations in conventional learning-teaching methods, thanks to distance learning, a teaching method providing communication and interaction among learners, planners and practitioners of educational studies could be used from a certain centre through teaching units especially prepared and several environments. In addition, distance learning is an institutional education program that puts the learner, the teacher and teaching materials in different environments together via communication technologies.

The distance learner, in contrast to any other student, can reach to his learning environment; get in touch with his classmates and teacher synchronous or asynchronous. So, the Internet has caused the biggest change in education ever since the advent of the first printed books roughly 500 hundreds years ago [8]. Today, in over 90 countries, distance learning methods are being used in universities effectively [9]. Not everybody has the chance to receive a proper language education and complete acquisition through the traditional learning methods [10]. That's why distance learning should be available to all public. At the same time the content of the LMS programs should be appropriate for all participants, due to the situational properties of language learning.

## **Language Learning Via E-Learning**

To give language education through ICT-based educational methods is not a new issue. Prior to ICT, education was being given through such methods as TV and RADIO. However, the development of ICT has increased the number and efficiency of these methods. Especially the effect of Web-based social networks has given rise to increase in cooperative learning techniques [7][11].

There are a lot of tools used as distance learning methods. In a study analyzing the advantages of the use of ICT techniques in education, the results showed that web 2.0 technology increased the learners' active education [7][11][12][13]. It is observed that this improves the favourable effect of education method because Blogs and Podcasts are used, the learners meet the education content and the interaction is realized with comments simultaneously [14]. Recently, among distance learning methods, the use of social networks and internet-based interactive education environments have increased. Besides, several studies showing that distance learning methods could be improved by using social network tools have been put forth [15]. In researches, it is seen that through distance learning methods, vocabulary learning/memorizing methods have been improved by making the needs special [16].

## **Social Networks**

Social networks were the issue of many researches in the field of sociology before they became the study field of ICT. The aim of these studies was to analyze the social interaction among the people and the advantages and disadvantages of the results of this interaction. The first studies carried out in the field of

sociology go back to 1925 [17][18]. Another study forms the basis for the evaluation of social network interaction with neighbourhood relations analyzed [17][19].

The increase of the efficiency of social networks in the study field of ICT has been parallel to the increase in the use of Internet. With the development of Web2.0 technologies, the number of applications increasing web-based computer-individual interaction has risen. The spreading rate of individual ideas in the applications has given prominence to the Internet that is a new socialization field. Especially blogs, twitter, podcast, RSS, wikis, social network sites, virtual worlds, video sharing and photo sharing applications are important applications that provides the formation of social network structure [20][21]. When the applications are analyzed, it is seen that they mainly depend on the sharing individual ideas with followers or visitors. This sharing and follow-up increase the social interaction. This interaction formed has advantageous results in many fields such as trade, politics and especially education [7][23].

### **Social Network Tools**

There are many social network means through which the people interact over the Internet. These means have been designed with different data structures and qualities. For example, Twitter that provides the people with sharing their ideas as a short text over a webpage with their followers, YouTube that makes it possible to share videos prepared about any subject and Facebook which provides the sharing of ideas, videos and photos and has a quality of personal portfolio are the most commonly used means. According to the data, every month, individual visitors more than 1 billion watch videos that have 6-billion-hour running time in YouTube. Videos over 100 hours are added to YouTube every minute [24][25]. In an another research, it is seen that the number of active users of Facebook is over 1,1 billion and Twitter has 228 million active users [26]. These results evidently show us how easily you can communicate the people.

### **Social Network-based Learning Technique**

The interaction people over the social network tools and the contribution of this interaction to learning could be accepted as the basis for social network-based learning technique. There are [20][27]. There are a lot of studies carried out about the contribution of Web 2.0 technologies to education.[20][28]. Other studies have dealt with especially the pedagogical aspects. [20][29][30]. In an education system the advantages of collaborative learning have been put forth with the researches as a result of some social network analysis. [6][31][32]. The researches revealed that social network based education methods have a positive effect on the participants [6][33][7][12]. These methods contribute to the formation of a more successful and enjoyable education element [7][12].

### **Advantages and Disadvantages of Social Learning**

Besides education methods developed depending on social networks have many advantages, they also have some disadvantages as well [20]. Just like a SWOT Analysis it can be classified as follows;

#### **Strong Aspects**

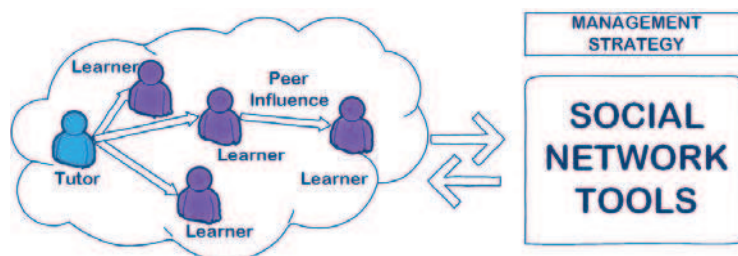
1. Almost unlimited access possibility to education environment
2. A qualified data source providing reliable information
3. A remindful, intensifier and productive information source sharing also in-class conversation
4. Progress steps of productive learning under the control of the learner
5. The learner gain access to more learning sources
6. Extension of education timing to the life of the learner

### Weak Aspects

1. The learners are required to have a high ICT experience and background
2. The applications to be realised through only social network-based education tools are under the control of the learner
3. As the number of the sources is high, it is difficult to find and use the best and the most reliable one.
4. Even if many filtrations are done, there are many data sets causing a confusion
5. There is a lack of gestures and facial expressions
6. Time spent to reach advantageous content

### The Application Developed Depending on the Suggested Model

The structure of social networks supporting the interaction has a quality to lead the education model formed. The suggested model depends on a social-based interaction between the teacher and the learner. With the educational administration strategy and by using social network tools, a cloud-based network will have been established between the teacher and the learner. In figure 1, the social network interaction between the teacher and the learner is stated with a graphic. When the model is evaluated, it is seen that the interaction over social network between participants leads to a learning effect among peers. This behaviour could be shown as the most important advantage provided by social network tools when compared to other ICT-based teaching methods. When a learner shares an education material over Facebook, the largest social network, this can make the extension effect of education material increase with the learner's peer influence.



**Figure 1.** WebBased Interaction Of Learner And Tutor.

There are some main advantages of an educational administration system to be realised over social network tool:

- It has the capability to learn independent from time and place that is available to ICT-based learning techniques.
- In respect of its structure, it supports both synchronous and asynchronous education models.
- Social networks will have the capability to spread the content formed swiftly.
- The development of mobile technologies brought out the increase in the use of social network tools.

The application developed is based on these advantages mentioned above. The integration of social network means and the mobile technologies have reduced the limitations to the access to education. This suggested mixed model aims to use every social network tool effectively. Facebook, Twitter and Youtube networks have been used in this applied model. Interaction techniques change according to each tool

- On Facebook; like, share, comment on

- On Twitter; Retweet, Favourite, Trends, Mention, DM
- On Youtube; Like the stream and share

These applications form an interaction between the learner and his peers and followers with these characteristics. These techniques provide the interaction among individuals and peer influence. The most important contribution of social networks could be stated with these interaction methods. It can be said that education material has indirect advantages through peer influence.

Education content and the methodology formed by the tutor are conveyed to the learners by transforming social network means into required formats. Appropriate education content to social network tool should be prepared as video and text. In the application developed depending on the suggested model, the content in the video format is transferred to the learners over Youtube and Facebook. The content in the text format needs formal changes according to social means. The fact that social network-based education content is visual and it includes fewer texts brings out the increase in its effect. Figure 2 shows method based learning interaction between the teacher and the learner.

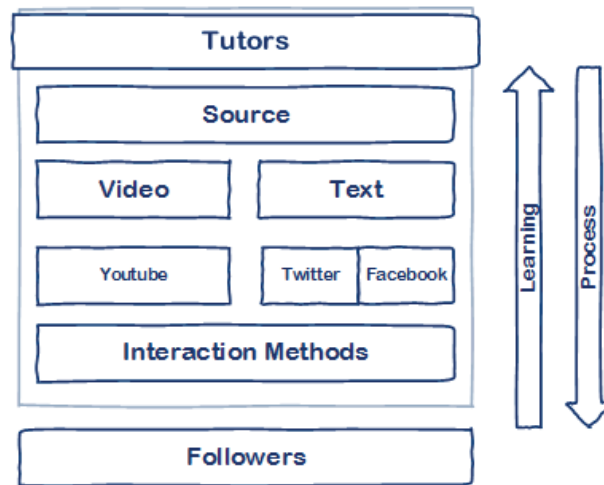


Figure 2. Shows method based learning interaction between the teacher and the learner.

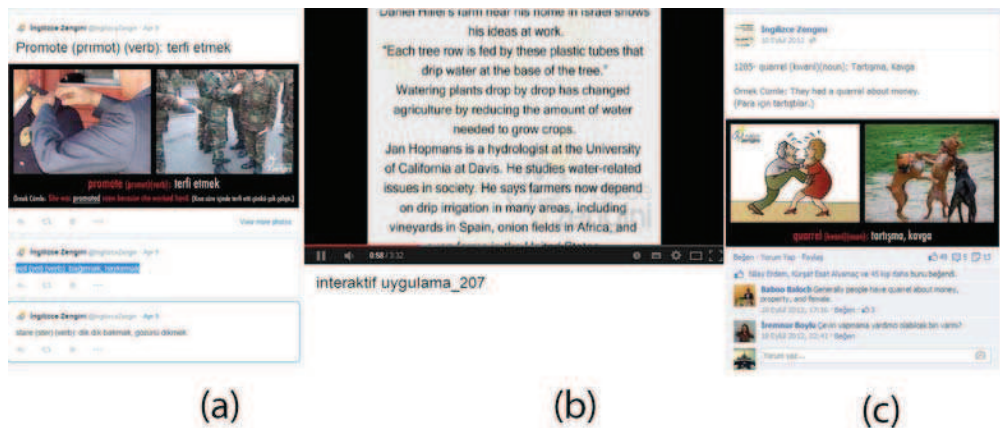


Figure 3. The screenshots of application developed in accordance with suggested model.

Learning stream formed between the teacher and the learner is symbolised. In the application developed as suggested model-based, interaction methods change according to social network tool used.

As seen in Figure 3a, sharing over Twitter is realised through a picture or a text including 160 letters.

As seen in Figure 3b, the fact that the videos available in youtube are linked and shared by the learners show that there is an important interaction and extension effect.

As seen in figure 3c, the content shared over Facebook has the extension effect with the characteristics of like and share.

Also, the possibility to comment provides information sharing and feedback between the tutor, learner and their peers. Over twitter teaching vocabulary is the main goal in the application developed depending on the suggested model. Through Retweet, Favourite, Trends characteristics, the education content of twitter users is provided to extend. Again over Twitter information sharing and feedback are provided through mention, DM between the teacher and the learner.

In figure 3, the screenshots of application developed in accordance with suggested model.

## Result

The distance learning should be available to all public. In connection with this definition, in the application developed, the most important advantage provided by social network tools and advantageous content spreading swiftly over related networks were utilized. Over the multiplier effect of learner-peer relation, the extension capacity of education content has been increased. With this application established on this model, it was aimed to find a solution for the learners' language learning needs by using different social network tools. Today, in learning processes, the effect of a web-based social network which is commonly used by people is utilized. It is aimed to improve the limitations of education environment through the use of social network tools.

## References

1. A. Fischer, F. Fischer, G. Jäger, J. Keilwagen, P. Molitor, I. Grosse, "Exact algorithms and heuristics for the Quadratic Traveling Salesman Problem with an application in bioinformatics", *Discrete Applied Mathematics*, 2014, 97–114
2. Akbal, E. and Ulaş, M., "The Design Of The Web Based Foreign Vocabulary Learning System", *e-journal of New World Sciences Academy, Engineering Sciences*, ISSN:1306-3111, 2012, Vol.7, No.1. Pages:38-46.
3. Fu Xiao, Cheng Fan, "Data mining in building automation system for improving building operational performance", *Energy and Buildings*, 2014, 109–118
4. T. Escobar-Rodriguez, P. Monge-Lozano "The acceptance of Moodle technology by business administration students", *Computers & Education*, 2012, 1085–1093
5. M. Kaya, "Distance education systems used in universities of Turkey and Northern Cyprus", *Procedia – Social and Behavioral Sciences*, 2012, 676 – 680.
6. S. Maglajlic, C. Gütl, "Efficiency in E-Learning: Can Learning Outcomes Be Improved by Using Social Networks of Trainees and Tutors?" *Interactive Collaborative Learning (ICL)*, 2012 15th, 26-28 Sept. 2012, 1-8
7. V. Donmus, "The use of social networks in educational computer-game based foreign language learning", *Procedia Social and Behavioral Sciences*, 2010, 1497–1503
8. Draves, W. A. (2000). *Teaching online*. River Falls, NJ: LERN Books.
9. Gürüz, Kemal. "Dünya'da ve Türkiye'de Yükseköğretim, Tarihçe ve Bugünkü Sevk ve İdare Sistemleri" ÖSYM Yayınları, 2001-4, Ankara.
10. Rogers, P. L. (2001). *Traditions to transformations: The forced evolution of higher education*. *Educational Technology Review*, 9(1). Retrieved March 11, 2002, from <http://www.aace.org/pubs/etr/rogers.cfm>
11. Butler-Pascoe & Ellen, E. (1997). *Technology and Second Language Learners*. *American Language Review*, Volume 1(3).
12. Ajjan, H. & Hartshorne, R. (2008). *Investigating Faculty Decisions to Adopt Web 2.0 Technologies: Theory and Empirical Tests*. *The Internet and Higher Education*, 11(2), 71-80

13. M.Pieri, D.Diamantini, "An E-learning Web 2.0Experience", 5th World Conference on Educational Sciences - WCES 2013.
14. Z. Amir, K.Ismail&S.Hussin, "Blogs in Language Learning: MaximizingStudents' Collaborative Writing", *Procedia Social and Behavioral Sciences*, 2011, 537–543
15. H.Cho, G. GaY,B.Davidson, A.Ingraffea, "Social networks, communication styles, and learning performance in a CSCL community", *Computers&Education*, 2007, 309–329
16. S. ÇELİK, V. TOPTAŞ, "Vocabulary learning strategy use of Turkish EFL learners", *Procedia Social and Behavioral Sciences*, 2010, 62–71.
17. A. Degenne, M.Forse, "6 Introducing Social Networks" , SAGE, 9 Haz 1999
18. George Simmel, "TheSocialTheory", University of Chicago, 1925
19. Park, R. E.,Burgess, E. W. And McKenzie, R. D. eds. "Thecity", University of Chicago Press, Chicago, IL, (1925).
20. Dr Mona Ahmed Kadry, Abdul Rahman Mohsen El Fadl, "A proposed model for assessment of social networking supported learning and its influence on learner's behaviour", *Interactive Mobile andComputer Aided Learning (IMCL)*, 2012 International Conference, 6-8 Nov. 2012, 101 – 108.
21. Boyd, D. M.,&Ellison, N. B. (2008). "Social network sites: Definition, history, and scholarship". *Journal of Computer- MediatedCommunication*, 13, 210-230.
22. Shu-HengChen, "Computationally intelligentagents in economics and finance", *Information Sciences*, 2007, 1153–1168
23. X. Zhonga, , j. Lu, "Publicdiplomacy meets social media: A study of the U.S. Embassy's blogs and micro-blogs", 2013, 542–548 <http://www.youtube.com/yt/press/statistics.html>, 2014
24. I. Claros, R. Cobos, "Social Media Learning: an Approach for Composition of Multimedia Interactive Object in a Collaborative Learning Environment", *Proceedings of the 2013 IEEE 17th International Conference on Computer Supported CooperativeWork in Design*, 2013.
25. Global Web Index Research Institute, March, 2013
26. Coutts, J.,Dawson, K., Boyer, J. &Ferdig, R. (2007). "Will you be myfriend? Prospective teachers' use of Facebook and implications for teacher education. In C. Crawford et al. (Eds.), *Proceedings of Societyfor Information TechnologyandTeacherEducation International Conference 2007* (pp. 1937-1941). Chesapeake, VA: AACE.
27. Crook, C.,& Harrison, C.. "Web 2.0 technologies for learning at key stages 3 and 4: Summary report. Retrieved October14, 2008, from [http://schools.becta.org.uk/uploaddir/downloads/page\\_documents/research/web2\\_ks34\\_summary.pdf](http://schools.becta.org.uk/uploaddir/downloads/page_documents/research/web2_ks34_summary.pdf)
28. Charnigo, L.,&Barnett-Ellis, P. (2007). Checking out Facebook.com: The impact of a digital trend on academic libraries. *Information Technologyand Libraries*, 26, 23-34.
29. Hewitt, A. & Forte, A.. "Crossing boundaries: Identity management and student / faculty relationships on Facebook", Presented at the Computer Supported Cooperative Work Conference, Banff, Alberta, Canada, 2006.
30. C. Haythornthwaite, "Social Network Methods and Measures for Examining E-learning", *Social Networks*, Citeex:10.1.1.135.6993, 2005.
31. M.A. Chatti, M. Jarke, and D. Frosch-Wilke, "The future of e-learning: a shift to knowledge networking and social software", *Int. J. Knowledge and Learning*, Vol. 3, Nos. 4/5, 2007, pp. 404–420.
32. Z. Wang, L. Li, "Enable Collaborative Learning: An Improved ELearning Social Network Exploiting Approach", *Proceedings of the 6<sup>th</sup> WSEAS International Conference on Applied Computer Science*, Hangzhou, China, April 15-17, 2007.