# STATE EFL TEACHERS' TRAINING NEEDS IN WEB 2.0 PEDAGOGY

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**Abstract**

Web 2.0 services and applications help EFL (English as a Foreign Language) teachers to generate material easily, find thousands of ready-made activities on internet, facilitate their resources in the class and create their own learning tasks as well as to improve their learners' foreign language competence through collaborative learning and real-life communication. However, it is crucial for teachers to be able to choose the most appropriate material, methodology and activities to the learners' interests, needs and preferences in order to reinforce positive learning as part of the school course and reach one's teaching objectives. The purpose of this paper is to present and discuss the training needs of state EFL teachers regarding the implementation of Web 2.0 tools in the school classroom. To this end, a quantitative research was carried out to investigate state EFL teachers' training needs in Web 2.0 pedagogy which yields valuable information, mplications and suggestions. The research tool was a questionnaire addressed to 149 in-service state EFL teachers. The research findings highlight that there is a training 'gap' to be filled in order to cover state EFL teachers' personal and professional need to become aware of new technologies as well as of modern teaching methods which interrelate with Web 2.0 tools in order to feel confident to use them effectively in their classroom. The participants of the present study express strongly their need not only to be aware of Web 2.0 tools but also their need to know 'how' to use Web 2.0 technologies in a pedagogically effective way. According to the findings, lack of appropriate and systematic in-service training which could provide essential pedagogical guidance proves to be a major barrier against the effective integration of Web 2.0 technologies into EFL learning. Last but not least, this study reveals the need for a pedagogical 'link' between technology and teaching methodology and provides suggestions for further research as well as for future action towards enhancing Web 2.0 pedagogy training policies.

**Keywords:** Web 2.0 tools, training needs, EFL teachers, Web 2.0 pedagogy, training policies

## 1. INTRODUCTION

Web 2.0 technologies encompass a variety of different meanings that include an increased emphasis on user generated content, data and content sharing, collaborative effort, new ways of interacting with web-based applications, and the use of the web as a social platform for generating, repositioning and consuming content.

In English as a Foreign Language (EFL) education, the most commonly investigated Web 2.0 technologies are blogs, wikis, SNSs and Google Docs which afford great interactive learning opportunities through genuine communication and social interaction in the target language (Campbell, 2003; Lund, 2008; Luo, 2013; Tzotzou, 2014).

Hargadon (2008) gives one of the best descriptions of the educational process relying upon Web 2.0 technologies advocating that there has been a shift "'from consuming to producing', from 'access to information' to 'access to people', from 'learning about' to 'learning to be', from 'passive to passionate learning', from 'presentation to participation', from 'publication to conversation', from 'formal schooling to lifelong learning'…".

Previous studies have indicated that Web 2.0 technologies offer learners the potential for a collaboration-oriented and community-based learning environment (Kessler, 2009; Lee, 2011; Liou and Peng, 2009; Martinez, 2012; Tzotzou, 2016). They can offer great flexibility and variety in EFL learning in terms of scheduling classes, pacing of individual learners, authenticity of tasks, selection of content and new learning opportunities (Al-Ali & Gunn, 2013; Crook et. al., 2008; Debski & Wigglesworth, 2005; D' Souza, 2007; Stockwell, 2010; Wang & Vasquez, 2012).

Research also shows that the teacher is mainly responsible for the effective use of technology in the educational process (Zhao, Hueyshan & Mishra, 2001). It is therefore essential that in-service EFL teachers be trained to effectively use technology for learning purposes by acquiring the so-called Web 2.0 pedagogical strategy. The Web 2.0 strategy can help change the current paradigm of instructional design and bring a new culture of learning moving away from 'static' knowledge acquisition models to more 'dynamic', participatory, flexible and co-designed ones (Reigeluth, 1999).

In light of the above, this study aims to explore and discuss state EFL teachers' training needs in Web 2.0 pedagogy on the basis of modern pedagogical theories and teaching methods underlying Web 2.0 technologies (Tzotzou, 2018). To this end, this study also attempts an overview of the Web 2.0 training programmes for state EFL teachers in Greece so far in order to depict the relative training context which can offer a source of information to help draw conclusions and develop a discussion on the research findings. It is interesting to find out whether the current Web 2.0 training context

affects positively or negatively state EFL teachers' Web 2.0 awareness and implementation in the state-school classroom.

## 2. PEDAGOGICAL BACKGROUND UNDERLYING WEB 2.0 TECHNOLOGIES

### 2.1. Modern pedagogical theories

#### 2.1.1. Constructivism

According to constructivism, learning is an active constructive process in which learners actively construct or create their own subjective idea of objective reality and information linked to prior knowledge (Fosnot, 1996; Mayer, 1992). Active construction of knowledge, as Harriman (2007) asserts, occurs in constructivist Web 2.0 environments where learners can be actively involved in interpreting the external world and reflecting on their own interpretations. Thanks to Web 2.0 technologies, learners take active responsibility of the content as well as the material being learnt while the learning process itself stimulates learners towards achieving the desired learning objectives (Enonbun, 2010). Constructivism is in synchrony with Web 2.0 technology, which is highly interactive, stimulating active user involvement and participation in the development and maintenance of content (Harriman, 2007).

#### 2.1.2. Social Cognitivism

Social cognitivism states that knowledge is the outcome of both social interaction and language usage, and thus is a shared, rather than an individual, experience. Social constructivism traces its ideas back to Vygotsky (1978) who focused on the roles that society plays in the development of an individual, for instance through peer-assisted learning. Salmon (2011) suggests that this theory can be updated and redefined as 'e-social constructivism' taking into account the environment of electronic communication in which e-learning occurs. Web 2.0 technologies that both require and enhance social interaction developing a community of learning are in alignment with this pedagogy. By their very nature, Web 2.0 tools encourage active participation in a shared endeavour with peers placing emphasis on the social context of learning (Linn, 1992; Rogoff, 1994). They can be utilised as learning tools both inside and outside the classroom environment to allow learners to view and comment each others' ideas as well as build upon their knowledge by interacting with their classmates (Matthew, et al., 2009; Woo et al., 2011).

#### 2.1.3. Situated Learning

In situated learning, or otherwise situated cognitivism (SitCog), information processing cannot be de-contextualized, that is separated from the world situation around the individual (Brown, Collins & Duguid, 1989; Elola & Oskoz, 2010; Mills, 2011). Human knowledge and interaction cannot be divorced from the world context and cannot be treated as a disembodied intelligence', that is one that is artificial, unreal and uncharacteristic of actual behaviour. Therefore situated learning helps make sense out of the new Web 2.0 reality given that it views learning as a product of a meaning-making process that cannot be separated from the context of its use (Brown et al., 1989). What really matters is the situation and the parts that people play (Norman, 1993). As Wood (2011) argues, this theory complies with Web 2.0 technology as there is a shift in information processing from only within the individual to within the group and the individual.

#### 2.1.4. Connectivism

Connectivism provides insight into learning skills and tasks needed for learners to flourish in a digital era. This theory stresses the idea that knowledge creation is the aggregation of the activities of many individuals that creates knowledge and places knowledge within the network itself (Siemens, 2005). Connectivism argues that knowledge concerns information that exists across networks, thus, establishing a direct link to Web 2.0 technologies which foster an individual's ability to observe the group through social networking. The ability to work across a range of networks, connections and tools and to integrate them within personally meaningful spaces, extends individual self-conception, self-presentation and self-knowledge (Hall, 2010). This also requires teachers to rethink their pedagogical methods towards developing new skills so that learners are able to function and survive in a new environment where knowledge is collectively created and distributed in a very connected environment (Wood, 2011).

#### 2.1.5. Activity Theory

Another theory that meets the needs of the new Web 2.0 landscape is the so-called 'activity theory' based on learner-centred learning environments which support individual efforts in order to negotiate meaning while engaging in authentic activities. Learning processes result from particular actions in a specific context which eventually benefit learners through expanded knowledge, skills and attitudes while Web 2.0 tools are used to create authentic activities and settings (Land & Hannafin, 2000).

The subsequent section includes the teaching methods which are closely associated with the communicative approach to foreign language learning (FLL) as well as with the pedagogical Web 2.0 integration into the classroom which is a matter of investigation in the present study.

### 2.2. Modern teaching methods

#### 2.2.1. The Project Method

Project Based Learning (PBL) is a methodological approach based on contextualized cooperative learning (Sharan, 1999) which fosters the development of learners' cognitive, social, and communicative skills through their engagement in authentic tasks (Willis &

Willis, 2007). A critical aspect of PBL for language teaching and learning refers to the activities which are highly interactive and integrated allowing learners not only to practise and develop their foreign language (FL) skills in the five macro language learning areas (reading, writing, speaking, listening and interaction), but also to develop interpersonal skills such as team work and community (Dooly & Masats, 2010).

"PBL obliges both teachers and learners to conceptualize the whole learning process as one embedded in a wider context of linguistic and non-linguistic objectives, content and output" (Dooly & Masats, 2010:2). Technology enables PBL providing access to numerous resources and linguistic/non-linguistic input as well as offering online applications which facilitate communication and collaboration with the world outside the classroom through publishing and peer review (Solomon, 2003).

### 2.2.2. Task-Based Learning

According to Richards and Rodgers (2001), task-based learning (TBL) provides learners not only with comprehensible input but also with tasks which require them to negotiate meaning and engage in naturalistic and meaningful communication. Tasks function as "devices for creating the conditions required for language acquisition" (Ellis, 2003: 226). Nunan (2004) defines tasks as communicative acts that are able to stand on their own. "Class behaviour is owned by the whole group, of which the teacher is but one member" (Kohonen, 1992). In the last decades, TBL approaches (Ellis, 2003, 2005; Nunan, 2004; Sun, 2012; Willis, 2009) have emphasized the authentic, creative and spontaneous use of the target language through meaningful and problem solving tasks linking FL use to real-world activities.

In TBL, it is not the content of the lesson that is the focal point or basis for learning but the process of classroom interaction that generates opportunities for learning (Allwright, 1984). Web 2.0 technologies are in alignment with the task-based approach (Nunan, 1991), as they facilitate interaction in the target language; provide authentic input into the learning situation; enhance learners own personal experiences; link classroom language learning with language activation outside the classroom through real-world tasks which are communicative acts carried out in the world outside the classroom (Nunan, 2004).

### 2.2.3. Towards a Communicative Approach

Both PBL and TBL share the communicative approach to FLL making use of real-life situations that trigger communication (Dörnyei, 2009; Spada, 2007) and leave learners in suspense as to the outcome of a class task which varies according to their reactions/responses to real-life. Communicative FL teaching is mainly centred on the learner's participatory experience in meaningful L2[3] interaction in, often simulated, communicative situations through less structured but more creative language tasks (Dörnyei, 2009).

In the communicative teaching approach, learners' motivation to learn the FL comes from their desire to communicate in meaningful ways about meaningful topics while engaged in meaningful contexts with a real communication goal (Hall, 1995; Shrum & Glisan, 2009). To this end, Web 2.0 technologies offer the opportunity for goal oriented, meaningful activities in which learners use the target language to achieve a real outcome while reflecting language use in the outside world (Willis, 1996). Using authentic texts and content in the language classroom with the aid of Web 2.0 tools, learners are provided with a meaningful context that can serve as the springboard for communication, collaboration and interaction (Bustamante et al., 2012). Web collaborative tasks can engage EFL learners in comprehending, manipulating, producing the target language while their attention is principally focused on meaning rather than form (Bustamante et al., 2012; Nunan, 1989).

## 3. WEB 2.0 TEACHER TRAINING IN THE GREEK STATE-SCHOOL CONTEXT

### 3.1. ICT[4] Training

The first pilot training programme, named 'Odysseia' (1996-2001), aimed to train teachers of various specialties in developing basic computer literacy skills widely known as ICT-Level A[5]. A second training programme on ICTs followed, widely known as ICT-Level B, which intends to achieve trainees' familiarization with innovative classroom practices recommended by the new trends in modern education. In particular, it aims to familiarize in-service teachers with current trends in teaching methodology, equip them with modern teaching techniques, train them in applications of new technologies (Web 2.0 tools, freeware applications) as well as ways of integrating them creatively into the classroom; enable them develop professionally and train them in linking pedagogical theory to actual classroom practice. The objectives of the programme are specific and measurable through feedback and assessment procedures.

It is worth noting at this point, that state FL teachers, have never been involved in ICT-Level B training seminars; that is, on how to use ICTs in the educational process, although organized regularly by the Ministry of

[3] L2 stands for the target foreign language.

[4] ICT abbreviation stands for 'Information and Communication Technologies'.

[5] 'Odysseia' was conducted within the framework of the Operational Programme 'Information Society'. Teacher training was conducted annually in Universities in Athens, Thessaloniki and Macedonia. Initially, 135 teachers were trained and then these teachers trained their colleagues in 385 schools, in laboratories equipped by the 'Odysseia' Programme. The basic computer literacy skills included Microsoft Office Programmes (Word, Excel, PowerPoint) and the Internet.

Education for other state-school teachers of other specialties the last decade. As Tzotzou (2017) argues, in fact, there is a training 'gap' to be filled in order to cover state EFL teachers' professional need to become aware of new technologies and use them effectively in their classroom.

### 3.2. Moodle Seminars

The advancement of technology has brought about new potentials and perspectives to teachers' training through modern e-learning methods which enrich and improve the training process. Since 2007, a pioneer optional seminar entitled 'Exploitation of Techniques of Asynchronous and Distance Learning via Moodle[6] Platform of Electronic Learning' has been carried out in regions all over Greece and addressed to state school teachers of all specialties. Teachers have the opportunity to familiarize themselves with several Web 2.0 applications, new digital tools and techniques of asynchronous learning as well as the GSN[7] services.

In the meantime, during the school years 2012-2015, a new short-term optional seminar entitled 'Digital *Foreign Language Classroom in Practice*', addressed exclusively to state FL teachers, aimed to cover their training needs regarding the educational use of new technologies in the school classroom[8]. Its main objectives are FL teachers' skills development on ICTs and free software towards improving their teaching practices and fostering their professional development. Furthermore, the previous school year 2014-15, there was another optional Moodle seminar under the topic 'Digital storytelling for the development of productive and cooperative skills' addressed to EFL teachers in order to familiarize them with the theoretical framework of the digital storytelling and with several tools of digital storytelling through actual practice[9].

[6] 'Moodle' is a an open-source learning platform focusing on interactive tasks such as the electronic assignment submission, chat, forums, games, surveys, etc. It is designed to provide educators, administrators and learners with a single robust, secure and integrated system to create personalised learning environments.

[7] GSN stands for the 'Greek School Network'.

[8] There was a pilot phase in the school year 2011-12 (April-June 2012) in Ilia prefecture in cooperation with the English school advisor Marianthi Kotadaki and, then, since September 2012 FL school advisors from other prefectures joined the training seminar from all over Greece (http://e-learning.ilei.sch.gr/moodle/ ). The seminar lasted 8 weeks and was implemented using the blended method of learning though the Moodle platform including two face-to-face sessions as well as a distance schedule of assignment submission, assessment and feedback. Its main thematic units included Google applications, audio edit, image processing, video management, wiki, blog, comics and presentations, free software, Moodle installation, games, etc.

[9] It was initiated by the English school advisor Marianthi Kotadaki in Ilia prefecture and lasted 8 weeks following the blended model of learning.

### 3.3. School Advisors' Pedagogical Role

In the Greek education system, school advisors[10] are teachers with high academic and professional qualifications officially selected and appointed by the Ministry of Education to cover the educational needs of prefectures all over Greece. School advisors are expected to be very familiar with the target teaching situation and the FL teaching practice/routine of their trainees in the Greek school context in order to take action whenever and wherever needed (Tzotzou, 2017). On that basis, regarding Web 2.0 technologies, normally school advisors should provide pedagogical support to EFL teachers in order to help them develop flexibility in selecting innovative teaching techniques and materials. They should also familiarize EFL teachers with educational technology, develop their Web 2.0 awareness and positive attitude towards new technologies in FL teaching by emphasizing their learning benefits as well as guide them design motivating EFL courses by using Web 2.0 tools in a pedagogically efficient way (Tzotzou, 2017, 2018).

## 4. RESEARCH METHODOLOGY

### 4.1. Aim and Research Questions

The aim of the present study was to explore in-service state EFL teachers' training needs in Web 2.0 pedagogy issues. To this end, the present study investigates state EFL teachers' previous training and experience regarding Web 2.0 tools with explicit reference to the pedagogical theories and teaching methods which interrelate with Web 2.0 technologies.

The research questions were the following:

1. Are state EFL teachers aware of Web 2.0 technologies?
2. How often do state EFL teachers use Web 2.0 tools in their classroom?
3. Are teachers aware of the pedagogical theories and teaching methods underlying Web 2.0 tools?
4. Are state EFL teachers adequately trained to implement Web 2.0 technologies?
5. Do state EFL teachers feel confident to implement the Web 2.0 tools in their classroom?
6. To what extent do state EFL teachers need training in Web 2.0 pedagogy?

### 4.2. Research Approach

The methodology used regarding data collection and processing was the quantitative approach through a questionnaire which was administered to in-service state EFL teachers via internet in order to investigate the main

[10] Their responsibilities include management of educational policy (implementation), coordination and monitoring (institutions/schools units), schoolteachers' in-service training, evaluation of the educational process, counselling and pedagogical guidance of schoolteachers as well as remedial work on their possible deficiencies.

research questions. The quantitative data were analyzed using SPSS in order to achieve both descriptive statistics to measure frequencies (raw data, percentages and tables) as well as correlations between variables through cross-tabulations and the chi-square test. Internal consistency reliability was measured by the Cronbach Alpha[11] coefficient so as to measure the reliability and validity of the data which was found above 0.70 regarding all Likert scale questions, thus illustrating the fact that research variables have high consistency and reliability to a great extent.

### 4.3. Research Tool

The questionnaire was constructed using Google Forms and was developed upon the main aim and the research questions, and administered online. The research questionnaire was first piloted to three EFL teachers and then administered through the internet forwarding the questionnaire link along with a cover letter to in-service state-school EFL teachers almost all over Greece by e-mail. The cover letter informed the participants about the topic as well as the significance of the study emphasizing that their contribution was invaluable as well as anonymity and confidentiality. This online questionnaire was convenient both for the respondents and the researcher as it allowed participants to complete it when it was suitable for them in a short time just by clicking on the answer they choose.

### 4.4. Sampling

The researcher opted for a non-probability purposive sample using convenience sampling and snowballing technique in an attempt to achieve a considerable sample size to allow for statistically significant results. Members of the target population were in-service state EFL teachers who were selected taking into account the geographical proximity, availability, easy accessibility as well as personal acquaintances. Eventually 149 in-service state EFL teachers were the research participants (139 females and 10 males) from different regions all over Greece.

## 5. RESEARCH FINDINGS

### 5.1. Demographics

The respondents were 149 in-service state-school EFL teachers. The vast majority of the participants (93,3%) were female. Most teachers (49%) were 31-40 years old while 12,1% were over 50. As far as academic qualifications are concerned, the sample consists of highly qualified teachers as 42,1% hold a Master's Degree and 35,9% are to complete their postgraduate studies. The majority of the respondents (36,9%) have 11 to 15 years of teaching experience.

**Teaching Experience (in years)**

| | Frequency | Valid Percent | Cumulative Percent |
|---|---|---|---|
| 1-5 | 1 | ,7 | ,7 |
| 6-10 | 30 | 20,1 | 20,8 |
| 11-15 | 55 | 36,9 | 57,7 |
| 16-20 | 38 | 25,5 | 83,2 |
| 26+ | 25 | 16,8 | 100,0 |
| Total | 149 | 100,0 | |

Table 1. Participants' teaching experience

47,7% work in primary schools whereas 45% work in secondary education. Moreover, the vast majority of participants are permanent in-service state-school teachers.

### 5.2. Descriptive Statistics

The majority of teachers (59,3%) are moderately / extremely aware of Web 2.0 technologies (Table 2) and the most popular Web 2.0 tool is YouTube (63,5%) while the least popular application is Podcasting (5,5%). Other popular tools are Skype, Facebook, Google Drive, Google+ and Blogs. Regarding the use of Web 2.0 tools in the EFL classroom, the most frequently used technology is YouTube. Google+, Google Drive and Blogs follow while Twitter and Podcasting are rarely or never used.

To what extent do you think you have developed awareness of Web 2.0 technologies?

| | Frequency | Valid Percent | Cumulative Percent |
|---|---|---|---|
| Not at all aware | 5 | 3,4 | 3,4 |
| Slightly aware | 17 | 11,7 | 15,1 |
| Somewhat aware | 37 | 25,5 | 40,6 |
| Moderately aware | 66 | 45,5 | 86,1 |
| Extremely aware | 20 | 13,8 | 100,0 |
| Total | 145 | 100,0 | |

Table 2. State EFL teachers' Web 2.0 awareness

As far as pedagogical theories are concerned, socio-cognitivism (48,3%), constructivism (47,6%) and situated learning (40,3%) seem to be the most well-known theories while activity theory (30,9%) and connectivism (34,2%) are less prominent. 51% of the respondents are not at all or slightly aware of the activity theory and 49% are not at all or slightly aware of connectivism. Moreover, the vast majority of the respondents (68,7%) need to develop awareness of modern Web 2.0 pedagogical theories much/to a great extent (Table 3).

[11] The internal consistency reliability which refers to 'the homogeneity of the items making up the various multi-item scales within the questionnaire' is measured by the Cronbach Alpha coefficient (Dornyei, 2003: 85). The reliability level is accepted if it is above 0.70 (Cohen et al., 2007).

Do you need to develop awareness or further awareness of the above modern pedagogical theories?

| | Frequency | Valid Percent | Cumulative Percent |
|---|---|---|---|
| Not at all | 4 | 2,7 | 2,7 |
| Slightly | 8 | 5,4 | 8,2 |
| Moderately | 34 | 23,1 | 31,3 |
| Much | 59 | 40,1 | 71,4 |
| To a great extent | 42 | 28,6 | 100,0 |
| Total | 147 | 100,0 | |

Table 3. Need to be aware of modern pedagogical theories

Concerning teaching methods, almost all teachers (over 90%) are aware of modern teaching methods, such as PBL and TBL, and communicative approach is the most frequently used (87,3%) whereas project method (61,5%) and task-based learning (60,1%) are less frequently used. 55,8% are moderately/extremely aware that Web 2.0 technologies are interrelated to the above teaching methods while only a small percentage (29,7%) use Web 2.0 tools frequently in combination with these teaching methods (Table 4).

How often do you use Web 2.0 technologies in combination with the above teaching methods?

| | Frequency | Valid Percent | Cumulative Percent |
|---|---|---|---|
| Never | 12 | 8,1 | 8,1 |
| Rarely | 29 | 19,6 | 27,7 |
| Sometimes | 63 | 42,6 | 70,3 |
| Often | 35 | 23,6 | 93,9 |
| Always | 9 | 6,1 | 100,0 |
| Total | 148 | 100,0 | |

Table 4. Frequency of using Web 2.0 teaching methods

Furthermore, a considerable number of respondents (65,1%) need to develop further awareness of the teaching methods underlying Web 2.0 technologies.

Do you think you need to develop further awareness of the above teaching methods?

| | Frequency | Valid Percent | Cumulative Percent |
|---|---|---|---|
| Not at all | 4 | 2,7 | 2,7 |
| Slightly | 13 | 8,7 | 11,4 |
| Moderately | 35 | 23,5 | 34,9 |
| Much | 65 | 43,8 | 78,5 |
| To a great extent | 32 | 21,5 | 100,0 |
| Total | 149 | 100,0 | |

Table 5. Need to be aware of Web 2.0 teaching methods

Most respondents (46,3%) rarely/never plan a Web 2.0-based lesson although 39,7% state that they know much/to a great extent how to plan a Web 2.0-based lesson (Table 6).

How often do you plan a Web 2.0-based lesson?

| | Frequency | Valid Percent | Cumulative Percent |
|---|---|---|---|
| Never | 22 | 15,0 | 15,0 |
| Rarely | 46 | 31,3 | 46,3 |
| Sometimes | 48 | 32,7 | 78,9 |
| Often | 29 | 19,7 | 98,6 |
| Always | 2 | 1,4 | 100,0 |
| Total | 147 | 100,0 | |

Table 6. Frequency of planning Web 2.0-based lessons

Moreover, 41,9% know much/to a great extent how to select a Web 2.0 tool.

Do you know how to select a Web 2.0 tool for your lesson?

| | Frequency | Valid Percent | Cumulative Percent |
|---|---|---|---|
| Not at all | 13 | 8,8 | 8,8 |
| Slightly | 26 | 17,6 | 26,4 |
| Moderately | 47 | 31,8 | 58,1 |
| Much | 39 | 26,4 | 84,5 |
| To a great extent | 23 | 15,5 | 100,0 |
| Total | 148 | 100,0 | |

Table 7. Awareness of selecting Web 2.0 tools

44,9% know much/to a great extent how to define pedagogical goals for a Web 2.0-based lesson (Table 8) although 40,1% are not at all aware of Bloom's revised digital taxonomy of educational objectives.

Do you know how to define your pedagogical goals while planning a Web 2.0-based lesson?

| | Frequency | Valid Percent | Cumulative Percent |
|---|---|---|---|
| Not at all | 8 | 5,4 | 5,4 |
| Slightly | 30 | 20,4 | 25,9 |
| Moderately | 43 | 29,3 | 55,1 |
| Much | 42 | 28,6 | 83,7 |
| To a great extent | 24 | 16,3 | 100,0 |
| Total | 147 | 100,0 | |

Table 8. Awareness of defining pedagogical goals

At the same time, 42,6% know how to prepare authentic/real-life tasks but 38,3% feel not at all/slightly confident how to plan a Web 2.0-based lesson (Table 9).

Do you feel confident on how to plan a Web 2.0-based lesson?

| | Frequency | Valid Percent | Cumulative Percent |
|---|---|---|---|
| Not at all | 25 | 17,1 | 17,1 |
| Slightly | 31 | 21,2 | 38,4 |
| Moderately | 36 | 24,7 | 63,0 |
| Much | 40 | 27,4 | 90,4 |
| To a great extent | 14 | 9,6 | 100,0 |
| Total | 146 | 100,0 | |

Table 9. Confidence for planning Web 2.0-based lessons

Regarding Web 2.0 pedagogical support, a considerable number of the participants (33,6%) have not received any in-service Web 2.0 training so far (Table 10) and 34,2% have not received any support on Web 2.0 integration into EFL learning so far (Table 11).

Have you received any in-service training on Web 2.0 tools so far?

| | Frequency | Valid Percent | Cumulative Percent |
|---|---|---|---|
| Not at all | 50 | 33,6 | 33,6 |
| Slightly | 23 | 15,4 | 49,0 |
| Moderately | 38 | 25,5 | 74,5 |
| Much | 23 | 15,4 | 89,9 |
| To a great extent | 15 | 10,1 | 100,0 |
| Total | 149 | 100,0 | |

Table 10. Previous in-service training on Web 2.0 tools

Have you received pedagogical support on how to integrate the Web 2.0 tools into your classroom?

| | Frequency | Valid Percent | Cumulative Percent |
|---|---|---|---|
| Not at all | 51 | 34,2 | 34,2 |
| Slightly | 37 | 24,8 | 59,1 |
| Moderately | 33 | 22,1 | 81,2 |
| Much | 21 | 14,1 | 95,3 |
| To a great extent | 7 | 4,7 | 100,0 |
| Total | 149 | 100,0 | |

Table 11. Pedagogical support for Web 2.0 integration

A significant number (60,2%) say that school advisors rarely/never organize seminars on Web 2.0 integration into school practice while the majority of the participants (59,8%) need to be trained much/to a great extent on how to plan a Web 2.0-based lesson (Table 12).

Do you need to be trained on how to plan a Web 2.0-based lesson?

| | Frequency | Valid Percent | Cumulative Percent |
|---|---|---|---|
| Not at all | 4 | 2,7 | 2,7 |
| Slightly | 12 | 8,2 | 10,9 |
| Moderately | 43 | 29,3 | 40,1 |
| Much | 49 | 33,3 | 73,5 |
| To a great extent | 39 | 26,5 | 100,0 |
| Total | 147 | 100,0 | |

Table 12. Need for training on planning Web 2.0-based lessons

It is worth noting that 50,6% of state EFL teachers consider Web 2.0 training extremely important, 39,1% somewhat important and only a small percentage 10,3% consider Web 2.0 training not at all or slightly important as it is obvious in the following table.

Is it important for you to receive training on Web 2.0 technologies?

| | Frequency | Valid Percent | Cumulative Percent |
|---|---|---|---|
| Not at all important | 2 | 2,3 | 2,3 |
| Slightly important | 7 | 8,0 | 10,3 |
| Somewhat important | 34 | 39,1 | 49,4 |
| Extremely important | 44 | 50,6 | 100,0 |
| Total | 87 | 100,0 | |

Table 13. Importance of Web 2.0 training

54,8% of the participants state that they need pedagogical guidance much / to a great extent in order to use Web 2.0 tools effectively in their classroom (Table 14).

Do you need pedagogical guidance in order to use Web 2.0 tools effectively in your classroom?

| | Frequency | Valid Percent | Cumulative Percent |
|---|---|---|---|
| Not at all | 5 | 3,4 | 3,4 |
| Slightly | 17 | 11,5 | 14,9 |
| Moderately | 45 | 30,4 | 45,3 |
| Much | 51 | 34,5 | 79,7 |
| To a great extent | 30 | 20,3 | 100,0 |
| Total | 148 | 100,0 | |

Table 14. Need for Web 2.0 pedagogical guidance

74,3% consider the school advisor's role much/to a great extent important in Web 2.0 training (Table 15) and 53% consider training on GSN services very/extremely important as well.

Is the role of school advisors important regarding Web 2.0 training?

| | Frequency | Valid Percent | Cumulative Percent |
|---|---|---|---|
| Not at all | 1 | ,7 | ,7 |
| Slightly | 9 | 6,1 | 6,8 |
| Moderately | 28 | 18,9 | 25,7 |
| Much | 72 | 48,6 | 74,3 |
| To a great extent | 38 | 25,7 | 100,0 |
| Total | 148 | 100,0 | |

Table 15. Importance of school advisors' role in Web 2.0 training

Regarding the ways state EFL teachers have received training on Web 2.0 tools so far, an amazing percentage of responses (75%) report self-training, Moodle seminars and in-service seminars organized by school advisors. As for teachers' suggestions, they express strongly their need for Web 2.0 training (81.1%); 64,9% of the respondents stress the need to participate in specialized ICTs-B Level training and 51,4% suggest training on the GSN services as well.

### 5.3. Crosstabs-Statistically Significant Results

Cross-tabulation of the findings provided significant information about the relationship between the variables while the chi-square test was used for testing the statistical significance of the cross-tabulation table[12].

In particular, according to cross-tabulation results, those teachers who are not at all/slightly aware of Web 2.0 tools never/rarely plan a Web 2.0-based lesson ($p$= 0.000, $p$<0.01). This is a significant correlation which reveals that lack of Web 2.0 awareness affects negatively Web 2.0 lesson planning. Another significant correlation is that low confidence influences negatively the frequency of planning Web 2.0-based lessons as those who are not at all/slightly confident never/rarely plan Web 2.0 lessons ($p$= 0.000, $p$<0.01).

Further significant correlations are revealed between awareness of certain Web 2.0 tools and their frequency of use in the classroom. As crosstabs disclose, YouTube is the most frequently used tool because the vast majority of teachers are moderately/extremely aware of this tool ($p$= 0.000, $p$<0.01). GoogleDrive, blogs, wikis are also used quite frequently as teachers state they know them. On the contrary, limited awareness of Podcasting and Edmodo results in their minimal frequency of use ($p$= 0.000, $p$<0.01). However, it is noteworthy that although Facebook is the most popular tool among teachers only a small minority integrate it into the classroom revealing a contradiction which may be due to teachers' lack of training regarding its pedagogical use ($p$=0.007, $p$<0.01).

Other crosstabs indicate that awareness of modern pedagogical theories underlying Web 2.0 technologies affects significantly the frequency of Web 2.0 integration into the classroom. In other words, those teachers who are moderately/extremely aware of constructivism, socio-cognitivism, situated learning, connectivism and activity theory tend to use more frequently blogs, wikis, GoogleDrive and YouTube in their lessons ($p$<0.05).

Last but not least, another significant correlation strongly correlates teachers' previous in-service training on Web 2.0 technologies with their need to receive Web 2.0 training ($p$=0.042, $p$<0.05). In other words, those teachers who have not at all/slightly received in-service Web 2.0 training so far point out that Web 2.0 training is extremely important for them.

## 6. DISCUSSION AND IMPLICATIONS

According to the participants' responses, the majority of state EFL teachers seem to be aware of Web 2.0 applications to a considerable extent but they hesitate to use them in the school classroom. The most popular Web 2.0 technologies seem to be YouTube as well as GoogleDrive, blogs and wikis whereas the vast majority of them never use Podcasting and Edmodo, probably due to lack of awareness and training which reveals the low frequency of Web 2.0 implementation.

The majority of state-school EFL teachers are moderately aware of modern pedagogical theories interrelated with Web 2.0 tools and need to develop further awareness due to lack of focused in-service training in Web 2.0 pedagogy. According to the quantitative data, although most teachers use communicative, project and task-based methods of learning very often, they rarely implement these methods in combination with Web 2.0 tools because they need to develop further Web 2.0 pedagogical awareness.

The research findings obviously show that state EFL teachers have never participated in ICT-B Level training/certification so far. Their Web 2.0 training was unsystematic and sporadic so far, taking part in Moodle seminars or workshops usually organized by some school advisors, which means that their Web 2.0 training was basically optional, non-typical and rudimentary. In other words, previous training paradigms prove to be inadequate and ineffective failing to meet state EFL teachers' professional need to become aware of Web 2.0 pedagogy issues (Tzotzou, 2018).

[12] Chi-square tests whether or not two variables are independent. If the variables are related, then the results of the statistical test will be 'statistically significant' and we 'are able to reject the null hypothesis', which means that we can state that there is some relationship between the variables. If the variables are related (i.e. the observed table relationships would occur with very low probability, say only 5%) then we say that the results are 'statistically significant' at the '.05 or 5% level'. This means that the variables have a low chance of being independent. SPSS marks statistical significance at the 0,05 and 0,01 levels or smaller. If the p-value is less than the chosen significance level then the null hypothesis is rejected (Cohen et al., 2007). In the crosstabulation tables of the present research the p-value was found less than 0,05 which means that the variables are associated and the null hypothesis is rejected.

What is clearly revealed is that, on the one hand, EFL teachers do not feel confident to implement Web 2.0 tools (Dawes, 2001); on the other hand, this lack of confidence is directly associated with their low Web 2.0 competence which results from lack of Web 2.0 training. In the literature, lack of Web 2.0 training along with deficient pedagogical training on 'how' to use digital tools in the classroom are major hindrances to Web 2.0 implementation in the classroom (Gomes, 2005; Pelgrum, 2001; Tzotzou, 2018).

Additionally, state EFL teachers are provided with deficient pedagogical support. The vast majority of the participants confess that they need school advisors' pedagogical guidance whose training role is considered to be extremely important for them. In the same vein, Redecker et al. (2009) and Tzotzou (2018) maintain that there are inherent difficulties in implementing Web 2.0 tools and in changing teaching paradigms without any pedagogical guidance.

The necessity to develop and practice appropriate pedagogy along with the use of Web 2.0 tools is clearly demonstrated in the present research as well as in other studies which illustrate that even after teachers have received training courses in new technologies they still do not know how to use them because they are not trained on how to develop the pedagogical aspects of educational technology (Cox et al., 1999; Shishkovskaya & Sokolova, 2015; Tzotzou, 2018).

## 7. RESEARCH LIMITATIONS

This quantitative research has certainly revealed interesting findings regarding state EFL teachers' needs in Web 2.0 pedagogy but there are certain limitations which are inherent in any research method. A first limitation is that the non-probability, convenience sampling that the researcher used does not allow generalizations (Cohen et al., 2007). It goes without saying that the quantitative findings could be more valid if a bigger sample was achieved, that is if more state EFL teachers were participants in this survey and if a number of the research participants were interviewed as well, thus combining two methods of research to verify and validate further the quantitative results through a qualitative approach as well.

## 8. SUGGESTIONS FOR FURTHER RESEARCH AND FUTURE ACTION

A suggestion for further research could be to carry out a large-scale study involving state EFL teachers from different areas all over Greece on the basis of a probability sample which would bring more representative findings and allow more valid generalizations (Cohen et al., 2007).

Another suggestion could be to combine more methods for data collection in a similar large-scale research in the future through triangulation; for instance by engaging in-service state EFL teachers both in a quantitative and a qualitative research through interviews as well. Last but not least, in a future research more emphasis should be placed on the actual Web 2.0 pedagogical training of state EFL teachers by assessing existing or future Web 2.0 training courses and by exploring whether they integrate modern pedagogical theories and teaching methods which interrelate with Web 2.0 technologies

As for future action, more emphasis should be placed on Web 2.0 training policies by the Ministry of Education by inviting state EFL teachers themselves to participate actively in decision-making processes regarding the organization and planning of Web 2.0 training courses; for instance, by engaging teachers-trainees in needs analysis procedures.

Changing the 'culture' of teaching in this digital era presupposes changing the philosophy and practices of training policies by fostering state EFL teachers' in-service training in Web 2.0 pedagogy issues in a systematic and regular way. Web 2.0 pedagogy should be a principal training goal of official, systematic in-service training in the form of carefully-planned and Web 2.0 targeted courses addressing the majority of state EFL teachers all over Greece. To this end, Web 2.0 training policies should also be trainee-centered and take into serious consideration the main principles of adult learning as well as the great flexibility of digital platforms and the so called distance education while organizing teacher training courses on Web 2.0 pedagogy issues (Tzotzou, 2017).

## 9. CONCLUDING REMARKS

Web 2.0 technologies rely on learner-centred methods which are related to 'situated learning', 'socio-cognitive' and 'constructivist' learning theories, hence moving from the traditional PPP[13] methodology to a 'blended' model of EFL teaching combining learner autonomy with collaborative task-based learning. They offer autonomy, interaction, authenticity and collaboration which are recognized as critical factors to determine successful FLL (Tzotzou, 2014, 2016). To this end, state EFL teachers should be concerned with appropriate and effective methodology, the relevance and authenticity of the tasks as well as the changing roles (Tzotzou, 2018).

The research findings highlight that there is a training 'gap' to be filled in order to cover state EFL teachers' personal and professional need to become aware of Web 2.0 technologies as well as of modern pedagogical theories and teaching methods which interrelate with Web 2.0 tools in order to feel confident to use them effectively in their classroom.

Consequently, getting state EFL teachers to move away from traditional teacher-centred interaction and use

[13] The PPP abbreviation stands for the Presentation – Practice – Production method especially used for teaching structures (e.g. grammar or lexis) in a foreign language starting from presentation and moving through controlled practice to free production. Some of its disadvantages are that the amount of teacher talking time is disproportionately high compared to the amount of learner talking time while focusing on accuracy over fluency and real-life communication is not promoted (Harmer, 2007; Lewis, 1996).

Web 2.0 technologies in a pedagogically effective way requires the acquisition not only of Web 2.0 tools but also the acquisition of a powerful Web 2.0 teaching strategy through systematic and well-organized in-service training on Web 2.0 pedagogy.

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