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Participant behavior and content of the online foreign languages learning and teaching platform



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ARTICLE INFO

Article history:
Available online 16 May 2015

Keywords:
Foreign language
Predefined content
Learning tools
Social network
Open educational resources
Distance learning

ABSTRACT

The paper describes the results of an experiment in building an online platform for learning foreign languages that allows people to teach their native tongue without being professional instructors. This platform allows audio and video connections between the participants and includes an interface with predefined interactive lessons. The content is presented in the form of bilateral scenario cards. Each of the participants (the student and the teacher) follows their own version of the cards in the video chat. For each card presented to the student there is a corresponding card for the teacher containing step-by-step instructions for reading the text out loud or asking the student a question and showing the correct answer. The student can use prompts and translations if s/he does not understand the teacher. The teacher does not have to prepare for the lessons, because the system contains all the necessary teaching materials. This system allows separating the lesson material from the teacher. Thus, the teacher can be any native speaker. The main constituents of content development are: dual language prompts, repetition, comprehension, and a dictionary. Four levels are implemented: preschool, beginner, intermediate, and advanced. Four languages are currently supported: English, Spanish, German, and Russian.

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1. Introduction

The paper describes a newly developed open educational resource for learning foreign languages from native speakers, called i2istudy. The learning is achieved by using pre-defined educational materials through live online interaction between the teacher and the student. This is why the system is called i2istudy, "eye to eye", based on the peer2peer principle (Benta, Bologa, & Dzitac, 2014; Hsu, Jub, Yen, & Chang, 2007; Osipov, Nikulchev, Volinsky, & Prasikova, in press; Osipov, Volinsky, & Grishin, 2015). This technology was constructed on a step-by-step methodology of learning a foreign language, patented in the US (Osipov & Prasikova, 2013).

Based on the Ambient Insight study, the worldwide demand for English online education has reached \$1.31 billion in 2011, and has been growing by 22% annually, reaching \$2.58 billion in 2016 (Adkins, 2014). The English language will account for 61.7% of the market in 2016. Thus, the overall foreign language online market will be \$4.18 billion. According to the same study results, which were presented on the website of the International

Consultants for Education and Fairs (2012), the main trends leading to such substantial growth are:

- 1. Consumer demand for online foreign language education products.
- 2. Recent explosive growth of mobile subscription value-added services in the foreign languages area.
- 3. Digitization efforts speared by the leading academic institutions.
- 4. Digital migration of the international publishing houses.
- 5. Lack of offline language teachers (World wide web, 2012).

This study also shows that there is a growing demand for language courses from the middle class of the growing economies in the Southeast Asia, India and Eastern Europe due to the unprecedented growth of the smart phone and tablet markets. Global trends affected by the popularity of online foreign languages learning have been taken into account during the development of the technical system (Duman, Orhon, & Gedik, 2014). The shortage of professional native speaker teachers has been reflected in the system content development. As a result, bilateral cards have been developed for the student and the teacher, allowing any native speaker to teach his or her mother tongue to another person without special teaching skills or knowing the foreign language. This is

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Table 1The list of the leading countries from which the users have registered with the corresponding number of the registered users.

Abbreviation	Country	Number of users			
UA	Ukraine	7754			
RU	Russian Federation	6204			
PK	Pakistan	5715			
KZ	Kazakhstan	3255			
VE	Venezuela, Bolivarian Republic of	3124			
PH	Philippines	2075			
BY	Belarus	2035			
EG	Egypt	1526			
MX	Mexico	581			
MD	Moldova, Republic of	479			
US	United States	466			
TR	Turkey	398			
MA	Morocco	395			
DE	Germany	338			
CZ	Czech Republic	255			
FR	France	231			
GB	United Kingdom	215			
CO	Colombia	192			
AM	Armenia	175			
KG	Kyrgyzstan	161			
ES	Spain	158			
IN	India	150			
GE	Georgia	149			
IT	Italy	148			
SA	Saudi Arabia	143			
DZ	Algeria	138			
AZ	Azerbaijan	134			
AE	United Arab Emirates	130			
ВО	Bolivia, Plurinational State of	122			
RO	Romania	118			
EE	Estonia	104			
IL	Israel	88			
UZ	Uzbekistan	88			
PL	Poland	88			
LV	Latvia	81			
TJ	Tajikistan	79			
SK	Slovakia	57			
BE	Belgium	56			
CN	China	55			
HU	Hungary	52			
GR	Greece	52			
	Other	1286			

the main competitive advantage of the developed system. The state-of-the-art in social networking language education, along with the available commercial systems with a short description are presented in Appendix A. However, there is no other system, allowing two people to have a meaningful conversation in a foreign language without knowing a common language, except for the i2istudy.

In other words, i2istudy allows all native speakers, not necessarily professional teachers, to teach their native language in a network setting (Buga, Căpeneață, Chirasnel, & Popa, 2014; Vick, Crosby, & Ashworth, 2000; Zolfaghar & Aghaie, 2012). Every user is the teacher and the student in this system at the same time. As a student, the person learns foreign languages, and as a teacher s/he teaches others their native language (Howatt, 2006). The system is based on the latest available web technology (Girgin, 2011;

Lee & Markey, 2014). Table 1 shows the list of the leading countries from which the users have registered in the i2istudy system, confirming the interest in online foreign language education in countries with developing economies. Users have registered from a total of 145 different countries, and the system has over 55,000 users as of April, 2015.

1.1. Research objectives

The primary research objective is to determine if two people unfamiliar with each other, one acting as a teacher, and the other acting as a student could jointly follow the pre-defined lesson scenario using the step-by-step peer-to-peer system (Koa, 2012; Renié & Chanier, 2006). During the experiment, over 40,000 users registered in the i2istudy system. People registered as a result of advertising placed in the Facebook social network. The advertisement suggested registering in the i2istudy system and learning foreign language for free in exchange for teaching one's native language. This advertising was displayed in English and Spanish-speaking countries, Germany and Russia. As a result, 39,729 users registered in the system over the course of five months, and 28,180 users wanted to learn English, 8711 users wanted to learn Spanish, 1028 Russian, and 1791 German. Herewith, 14,943 users said that their native language is English, 20,673 Russian, 204 German and 3843 Spanish (Table 2).

After registration the users were asked to select the role of student or the role of teacher and select a potential partner to start a dialogue, based on the step-by-step instructions. In the system, each phrase is displayed for the student and for the teacher with additional comments. The teacher and the student can see and hear each other in real time. They also see synchronized teaching materials. In addition, there is a chat window, which allows both parties to type instant messages to each other (Farr & Riordan, 2014; Kim, 2014; Kötter, 2001). About 20% of the registered users fully participated in the project (Table 3). The rest were intimidated by the other party, or rejected invitations of the other users to conduct the lessons. Moreover, some of the registered users could not properly configure the hardware (the camera and the microphone) for the live video and audio feed.

The system currently includes four levels: (1) Preschool; (2) Beginner; (3) Intermediate and (4) Advanced. Each user was given an option to select the foreign language level and the specific lesson theme. The most popular lessons for August 2014 are listed in Table 4. Thus, it is clear that the most popular level is the Beginner (8 lessons), followed by the Preschool (5 lessons), Intermediate (5 lessons), and Advanced (2 lessons).

1.2. Learning and teaching principles

The main learning and teaching principles of the i2istudy are:

(1) Adults can learn like children (Estes, 2014). This means that the language learning materials were created as a game. Adults, similar to children, learn faster when information is logically presented in small portions, with increasing level of complexity, and most importantly, with pictures or video

Table 2Newly registered users' distribution by the native language.

Month	01.12-31.12	01.01-31.01	01.02-28.02	01.03-31.03	01.04-30.04	01.05-31.05	01.06-30.06	01.07-31.07	01.08-31.08
New users by languages									
Russian language, users	1069	3671	191	94	746	2186	3220	4329	1762
English language, users	178	746	68	25	295	978	4005	5582	2539
German language, users	15	22	3	3	6	22	29	38	14
Spanish language, users	17	43	12	3	79	760	903	1644	372

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