Grant Agreement Number 612367

irresistible

Including Responsible Research and innovation in cutting Edge Science and Inquiry-based Science education to improve Teacher's Ability of Bridging Learning Environments

D6.3 Social Media

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1. Executive Summary

Web 2.0 is the second generation of World Wide Web that integrates users' inputs rather than displaying static web sites. In other words, users interact, share, create, discuss, and collaborate with each other in a social environment, so called, Social Media. It has been reported by a survey company that internet users have been spending more time with social media than any other type of web sites (Nielsen, 2012). Social media has been an important medium for communication all around the world. Facebook, Twitter, Google+ are some of the social media environments commonly used for social networking. Recently, they have been used for educational purposes (Bosch, 2009; Churcher et. al., 2014; Dunn, 2013). Due to its popularity and common use, social media has been selected as a major tool for communication and dissemination of this project to its target audiences.

The purpose of Deliverable 6.3, Social Media, is to report how a variety of social media tools are being used to disseminate information related to the goals, strategies, methods, and the materials related to the project. To this end, D6.3 demonstrates how some examples of social media environments have been adopted by project partners. The social media environments selected to be used in the project include Facebook, and Twitter. In addition, communication tool such as WhatsAppwas made use of.

The partners reported how they implemented the social media while working with their local teams in the first 6 months of the project. The Turkish team reported that they have started to use Facebook, Twitter, Google+ and WhatsApp after they started to work with their local community of learners. They created an open Facebook group to share resources such as videos, educational materials, and news clippings. For the same purpose, a Twitter account was opened; however, it was not functional between March, 27th and April 3rd, 2014 while the Twitter was banned in Turkey. Later, a Google+ account was created and started to be used by the members of the community of learners, but it was noticed that Google+ account has not been posted as much as Facebook. In addition, WhatsApp application has also been used for scheduling and communication purposes. Facebook was also used by Israeli team through a closed group form. The group members communicated and shared resources through posting this closed group page. Some of the partners (Greece and Finland), stated that they will be starting to use an open Facebook group when they start meeting with their CoL groups. The Romanian team started a special Facebook page for sharing resources for its CoL..

2. Social Media in Education

Web 2.0 refers to the second generation of World Wide Web which allows users to contribute the content rather than just displaying the static content. Kaplan and Haenlein (2010) defined social media as "a group of Internet-based applications that build on the ideological and technological foundations of Web 2.0 and that allow the creation and exchange of user-generated content" (p.61). Social media has been popular recently, as reported in a Survey implemented in the US in 2012, that internet users have been spending more time with the social media than any other web sites (Nielsen, 2012). The most popular social media sites all around the world are Facebook, Twitter, Google+. Facebook is the largest online social network founded in 2004. In 2008 Facebook had 100 million users, and as of March 2013 has 1.11 Billion (URL-1).

Considering the needs of new generation, or digital natives (Prensky, 2001), recently, social media have started to be used in education in various content and different levels (Bosch, 2009; Churcher et. al., 2014; Dunn, 2013). Besides social networking, Facebook has also been used for academic purposes as a learning management system to check logistics (e.g. class venue, time) or access materials (e.g. assignments, project documents, lecture notes) by university students (Bosch, 2009). Dunn (2013) investigated which social media university students use and their beliefs about using social media in teaching and learning environments. They reported that Facebook was the most popular social network (86%), followed by Twitter (41%) and Google+ (24%). They surveyed 231 students and then carried out with a smaller, experimental group – of 28 students. They were exposed to social networking as a means of communicating collaboratively with peers and academic staff through a closed Facebook group to share ideas, thoughts and resources for a period of 6 weeks. As a result, the majority of the students indicated that Facebook group interactions improved their learning experience. In another study by Churcher et. al. (2014), instructors used a Facebook community of practice of 30 students in their traditional-style classrooms by virtual class discussions. The authors reported that implementation of Facebook in a regular class increased students' awareness of their classmates' opinions, especially for controversial ideas; and decreased disconnect between professor and students. Rap and Blonder (2013) examined under which conditions and how Facebook groups can be used for learning chemistry in high school classes. The authors reported that the interactions occurred throughout Facebook were mainly on learning management (e.g. uploading content, managing information etc.) and in the social context (e.g. encouragement).

Twitter, which brings a new form of literacy (Greenhow & Gleason, 2012) has also used for formal and informal learning. It has been found that Twitter has positive effect on students' engagement, learning outcomes and social interaction (Junco, Heiberger, & Loken, 2011; Greenhow & Gleason, 2012) in various learning settings.

Due to their popularity and research findings on using social media in education, Facebook, and Twitter have been selected as the means of social media that could be used for communication and dissemination of the project to the target audiences.

2.1. Use of Social Media in the Project

Partners of Irresistible, decided to use social media for various interactions, especially for the interactions among the community of learners. The countries that have already started to work with their community of learners have set up pages or groups for the intended social media. How social media have been used during the first 6 months of the project and how they are planned to be used

are described in the following section. Table 1., given below summarizes the social media environments and tools have been used and will be used by the partners.

Table 1. The list of social media environments used or planned to be used by the partners.

Team	Facebook	Twitter	WhatsApp	Local Website	Blog
RUG				✓	
WIS	✓			✓	
IPN					
DM					✓
BOZIG	✓	✓	✓	✓	
IEUL	✓				
UNIPA	✓				
JYU	✓				✓
UNIBO	✓				
UOC				✓	
JU	✓			✓	
VUT	✓			✓	
UH	✓				✓
EF	✓				

2.1.1. Facebook Groups

a. Turkey

Turkish team decided to use an open Facebook group for their Community of Learners (CoL) after the second CoL meeting, on February 7th, 2014. The main purpose of having a Facebook group is to encourage interaction, sharing and communication within the group. The group members have been sharing recent news, tasks, ideas, videos, and issues about the nanoscience and nanotechnology. Initially, the group started with 10 CoL members, later other Facebook users who had seen the group posts liked the posts and requested to join the group. Currently, there is 21 members are associated with Nanoscience and Nanotechnology Community of Learners (Nanobilim ve Nanoteknoloji Öğrenme Topluluğu) and 25 posts until April 27th. Figure 1 shows a sample page from the Facebook group of Turkish CoL.

The local Facebook group of Turkey has been linked to project website (http://www.irresistible-project.eu/index.php/tr/local-info-tr) through the local info section of Turkish translation of the website. The Facebook group has also been linked to the local website (http://www.irresistible-turkiye.com/) by showing an icon of Facebook at the top right corner.

Figure 1. A sample page from the Facebook group of Turkish CoL.

b. Israel

Israeli group opened a public Facebook group, Irresistible Group, for the purpose of communication and interaction among their Community of Learners. The group started on November 11th, 2013, with 10 members. Later one more member was added to follow the posts on group. The members post videos, news, photographs, regarding their group interactions and the topic of the module under development. Until April 24th, the group had 31 posts. The local Facebook group of Israeli team has been linked to project website (http://www.irresistible-project.eu/index.php/en/local-info) through the local info section of the page in English. Figure 2 shows a sample page from the Facebook group of Israeli CoL.

Figure 2. A sample page from the Facebook group of Israeli CoL.

c. Italy

Italian team also opened a publicF acebook group on April 22nd, 2014 to communicate and disseminate information regarding their module on Nanotechnology. The group started by 5 members aiming to reach more participants. The local Facebook group of Italian team has been linked to project website (http://www.irresistible-project.eu/index.php/en/local-info) through the local info section of the page in English. Figure 3 shows a sample page from the Facebook group of Italian team.

Figure 3. A sample page from the Facebook group of Italian CoL.

d. Romania

The Romanian IRRESISTIBLE team has opened a Facebook page in April 2014. The main purpose of this social media page is to make known to the educational community and general public, the particular developments and results of IRRESISTIBLE project in Romania. In this respect, researchers, teachers and students interested in the topic of RRI in Nanomaterials (the topic selected by the Romanian CoL) are invited to visit this Facebook page. Figure 4 illustrates a sample page of the Romanian Facebook page. The local Facebook group of Romania has been linked to project website (http://www.irresistible-project.eu/index.php/en/local-info) through the local info section of the page in English.

Figure 4. A sample page of the Romanian IRRESISTIBLE Facebook page.

During the first 6 months of the project, only Turkish and Israeli research teams started to work with their CoL groups, therefore they created Facebook groups to enhance interaction with their CoL. Partners from Greece, and Finland reported that when they start working with their CoL, they will also use an open Facebook group to disseminate and raise awareness of the project. In Romania, the project related Facebook page is opened to all the researchers, teachers and students interested in the project topics.

e. Poland

The Polish team has created a closed group of 17 members. They have been using this platform for communication, event planning, and material sharing (working doc, photos, educational resources, links, etc.). The local Facebook group of Polish team has been linked to project website (http://www.irresistible-project.eu/index.php/pl/local-info-pl) through the local info section of the page in Polish. Figure 5 shows the screen shot of Polish Irresistible Facebook Group.

Figure 5. A sample page of the Polish IRRESISTIBLE Facebook page.

f. Portugal

The Portuguese IRRESISTIBLE team has opened a public Facebook group in September 2015 to disseminate project information to the educational community and general public in Portugal. In this respect, researchers, teachers and students interested in the topic of RRI in cutting edge science are invited to visit this Facebook page. Figure 6 illustrates a sample page of the Portuguese Facebook page. The local Facebook group of Portugal has been linked to project website (http://www.irresistible-project.eu/index.php/pt/local-info-pt) through the local info section of the page in Portuguese.

Figure 6. A sample page of the Portuguese IRRESISTIBLE Facebook group..

g. Greece

Greek team created a Facebook page in Greek for the local audience. They drafted various text chunks for the page and uploaded all announcements and other information for the project activities. The local Facebook page of Greek team has been linked to project website (http://www.irresistible-project.eu/index.php/el/local-info-gr) through the local info section of the page in Greek. Figure 7 shows a screen shot for the project's Facebook page created by the Greek team.

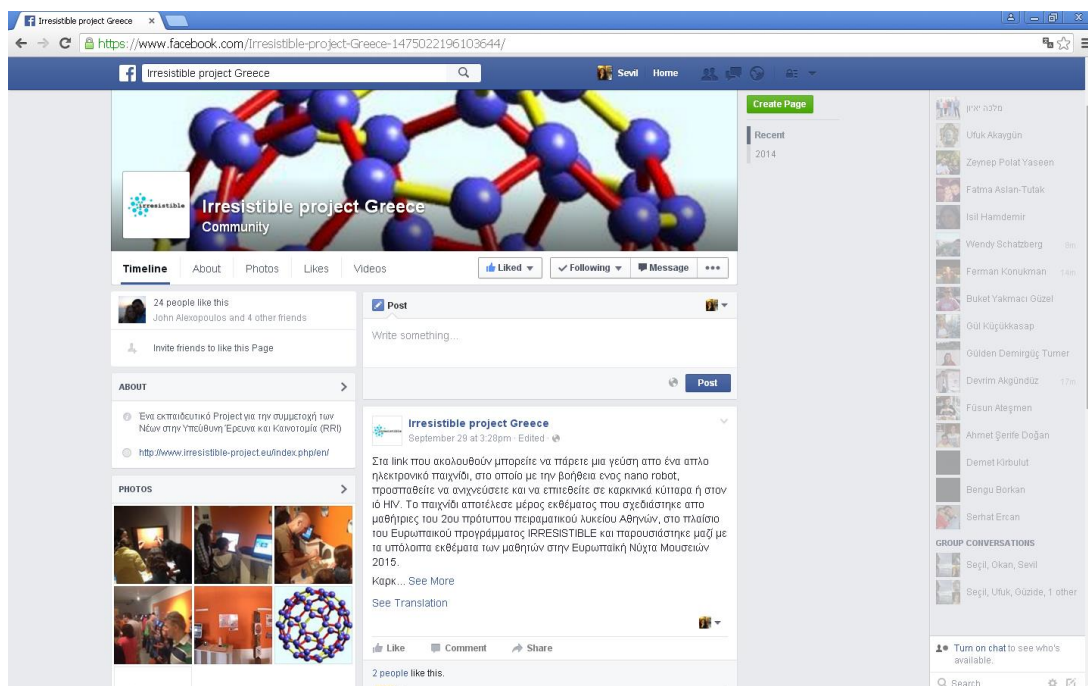Figure 7. Screen shot of a Facebook page created by Greek team

2.1.2. Twitter

a. Turkey

The second social media environment has been used by Turkish group is Twitter. It has been selected to be used because of its popularity and increasing number of users. Even though it was banned by the government for a certain period of time (March 21st – April 3rd 2014), after it was started to be used, the number of users sharply increased by 50%, and the number of tweets increased by 30%, just in one day (URL-2). As of today, Twitter is not abandoned any more, yet it still is one of the most popular social media used in Turkey. For this reason, Turkish team decided to use Twitter as another social media in the project. They created a Twitter account, Irresistible-Türkiye (@irresistible_TR) and started to follow related users and tweet about nanotechnology which is the topic of the module to be developed. Figure 8 shows a sample page from the Twitter account of Turkish CoL.
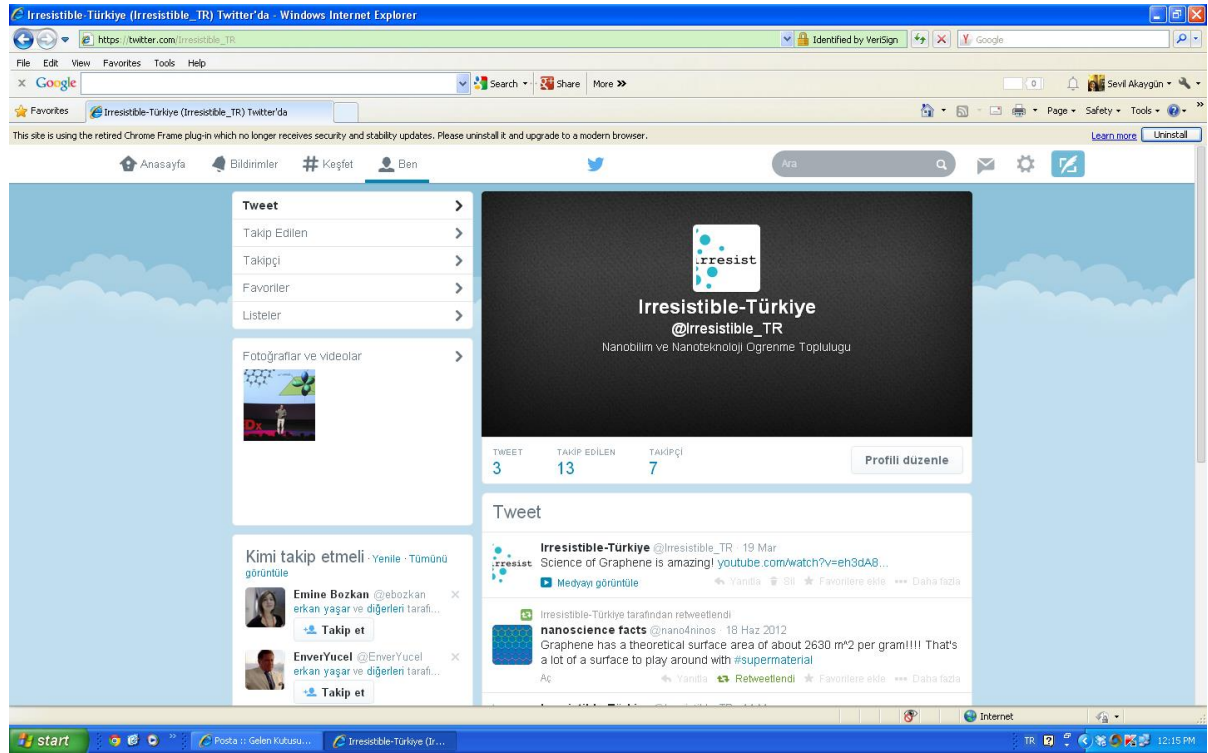
Figure 8. A sample page from the Twitter account of Turkish CoL.

The Twitter account of Turkish team has been linked to project website (http://www.irresistible-project.eu/index.php/tr/local-info-tr) through the local info section of Turkish translation of the website. This account has also been linked to local website (http://www.irresistible-turkiye.com/) by showing an icon of Twitter at the top right corner.

2.1.3. WhatsApp

a. Turkey

WhatsApp which is a smartphone and tablet application designed for communication has been used for the CoL interactions in Turkish team. A communication group was formed on March 7th, to be mainly used for scheduling and communication. It has been seen that teachers usually responded to WhatsApp message quicker than replying an e-mail. So, it has been preferred especially when fast communication is needed. Figure 9 shows a sample screen from the WhatsApp group of Turkish team.

Figure 9. A sample screen from the WhatsApp group of Turkish team.

2.1.4. Local Project Website

a. Poland

Polish team has started to use the local project website for communicating information about the project to their audience in March 2014. The team uses website to share documents, ideas, drafts, resources, as well as to provide information. Figure 10 shows a sample screen from the local project website of Polish team.

Figure 10. A sample screen from the local project website of Polish team.

b. Israel

Israeli team has started to use the local project website for communicating information about the project to their target groups. The team uses website to disseminate ideas, announcements, and to provide information. Figure 11 shows a sample screen from the local project website of Israeli team.
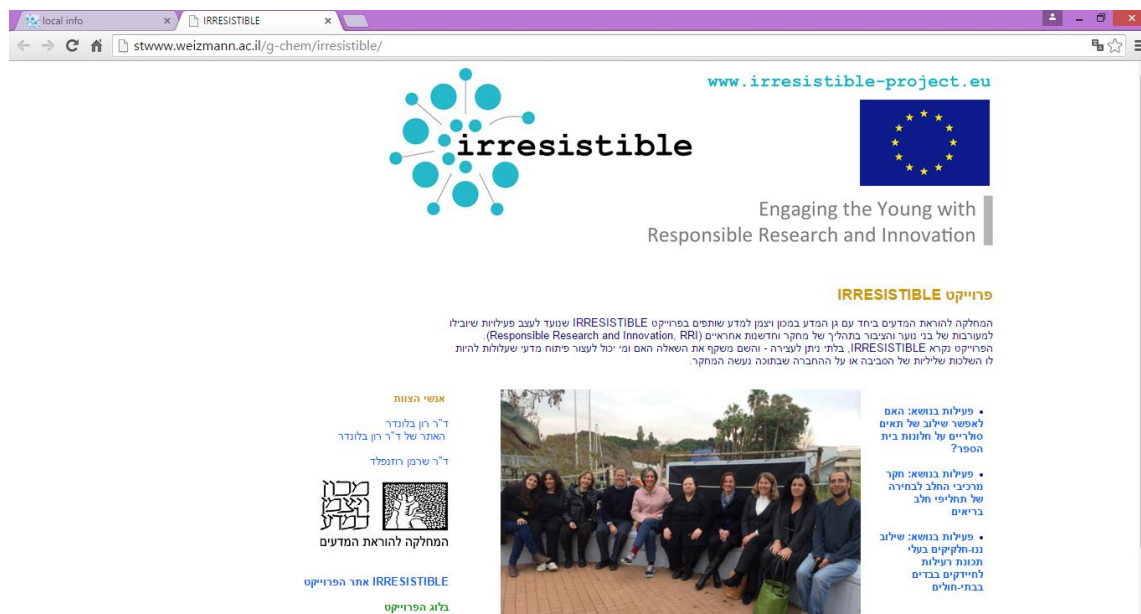

Figure 11. A sample screen from the local website of the team from Weizmann Institute, Israel

c. Romania

The Romanian team has been using their local project website for communicating information about the project to their target groups. The team uses website to disseminate ideas, announcements, and to provide information. The local website has been linked to project website through the section of local info (http://www.irresistible-project.eu/index.php/en/local-info). Figure 12 shows a sample screen from the local project website of Romanian team.

Figure 12. A sample screen from the local project website of Romanian team.

d. Greece

The Greek team has been using their local project website for communicating information about the project to their target groups. The team uses website to disseminate ideas, announcements, and to provide information. The local website has been linked to project website through the section of local info (http://www.irresistible-project.eu/index.php/el/local-info-gr). Figure 13 shows a sample screen from the local project website of Greek team.
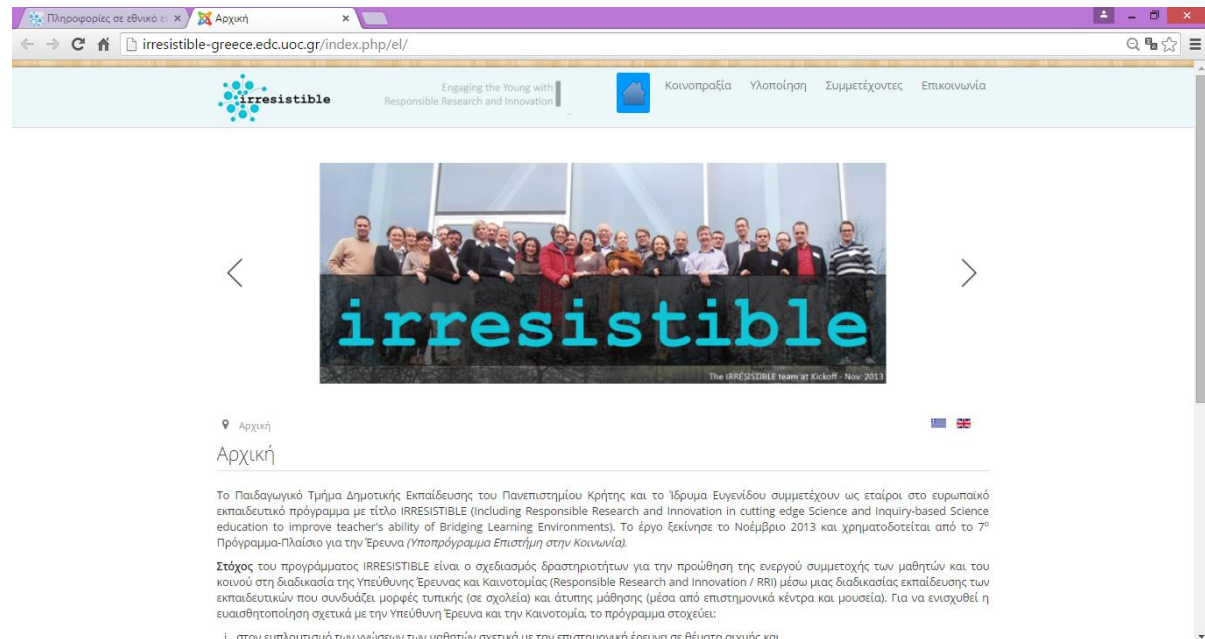

Figure 13. A sample screen from the local project website of Greek team.

2.1.5 Project Blog

a. Germany

The team of Germany created the project blog, in February 2014, to share information about the project and disseminate the outputs to target audience. Figure 14 shows a sample screen from the local project blog of German team.
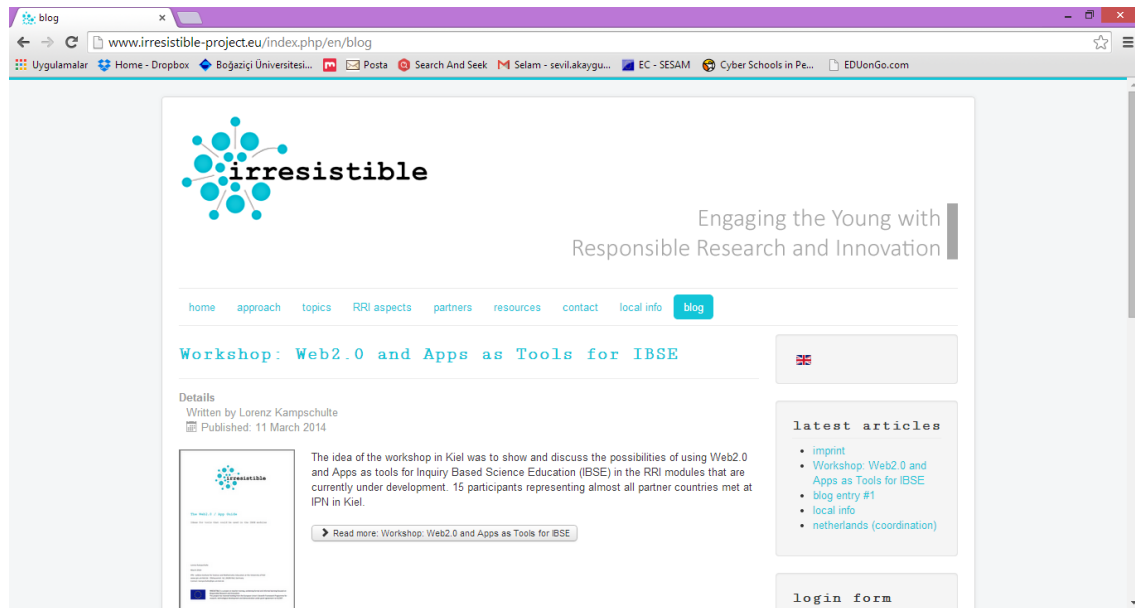
Figure 14. A sample screen from the project blog prepared by the team from IPN, Germany.

b. Finland

The Finnish team created the project blog to share information about the project and disseminate the outputs to target audience. Figure 15 shows a sample screen from the local project blog of the Finnish team.
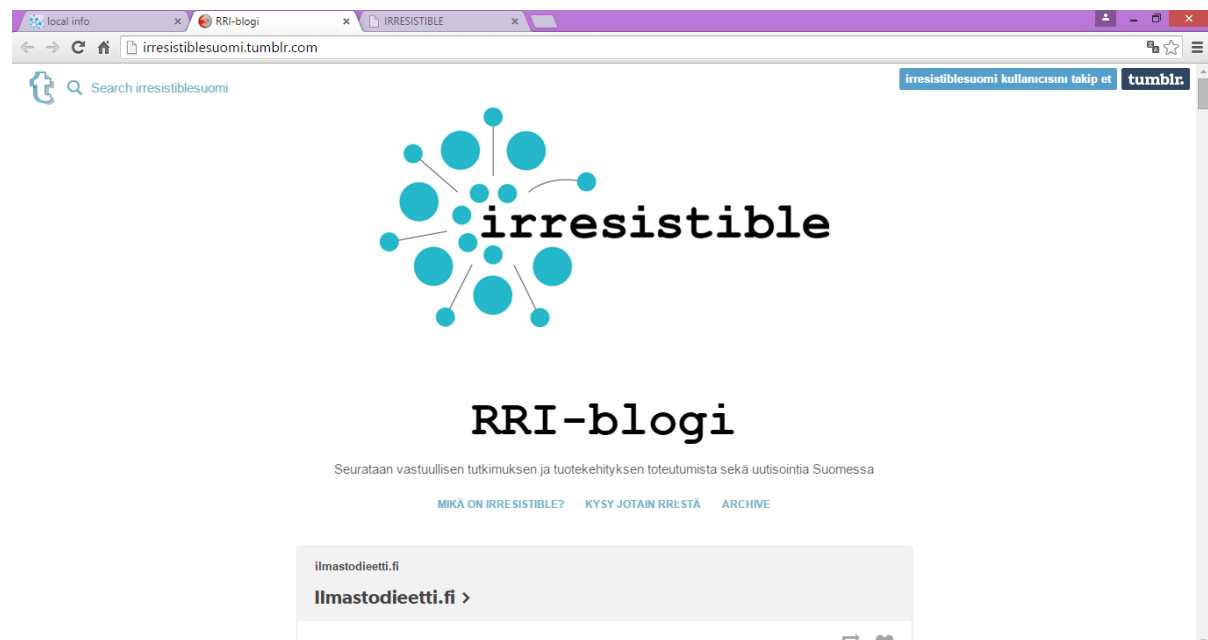

Figure 15. A sample screen from the project blog prepared by the Finnish team.

3. CONCLUSIONS

In conclusion, the web 2.0 tools and environments have becoming more and more popular as users spend a great deal of the internet-using time on social interactions (Nielsen, 2012). Recently, the social media, including Facebook and Twitter, have been used for educational purposes (Bosch, 2009; Churcher et. al., 2014; Dunn, 2013) not only as a tool for learning management, but also an environment for interaction and learning (Rap & Blonder, 2013).

Due to increased popularity and common use, social media have been selected as another environment for communication within the CoL groups and dissemination of this project to its target audiences. To this end, partner countries decided to select various social media platforms and web 2.0 environments that are most suitable for their purposes. Teams of Turkey and Israel created Facebook groups to facilitate interactions within their communities of learners. The teams of Finland, and Greece plan to use Facebook groups after they start their CoL meetings. Twitter was also preferred by Turkish group due its popularity and visibility. Besides social media, other communication tools and systems were also used by the partners. These include WhatApp used by Turkish team, local webpage preferred by Polish, Romanian, Greek, Israeli, and Turkish teams, and the project blog designed by German and Finnish teams.

All the tools and environments have been frequently in use and will be used for the next 2 years. Therefore the all the entries and posts on the groups, websites, and blogs will form valuable resource for the other participants and target audience.

Annex

Facebook Groups and Pages:

https://www.facebook.com/groups/580300538713742/

https://www.facebook.com/groups/482734615173219/

https://www.facebook.com/groups/1410039162601026/

https://www.facebook.com/pages/Irresistible-Project-Romania/796541593692065?ref=br_tf

https://www.facebook.com/groups/irresistible.portugal/

Twitter:

https://twitter.com/Irresistible_TR

Moodle:

http://meduc.fc.ul.pt/course/enrol.php?id=651

Redmine:

https://www.ssai.valahia.ro/redmine/projects/irresistible

Local Project Website:

http://www.zmnch.pl/index.php?option=com_content&view=article&id=125&Itemid=112

http://stwww.weizmann.ac.il/g-chem/irresistible/http://irresistible.ssai.valahia.ro/main/index?lang=en

http://irresistible-greece.edc.uoc.gr/index.php/el/

Project Blog:

http://www.irresistible-project.eu/index.php/en/blog

http://irresistiblesuomi.tumblr.com/

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URL-2. http://t24.com.tr/haber/twitter-yasak-dinlemedi-atilan-tweet-sayisi-yuzde-30-artti/254057 Date of retrieval, 15. March. 2014.