Cirip.Eu – An educational microblogging platform around objects 2.0

Carmen Holotescu, Gabriela Grosseck
Politehnica University of Timisoara, West University of Timisoara, Romania

Summary

In recent years, the most daring player in the social media arena proved to be the microblogging technology, the most energetic in this field being Twitter, raising the interest of the educational actors. A number of microblogging platforms dedicated to education were implemented, such as Edmodo, Plurk, Cirip.eu or Twiducate. In this context, the paper aims to provide an overall analysis of the microblogging platform Cirip.eu for educational directions such as: information and knowledge management, courses enhancement, delivering online courses, collaborative projects, communities of practice, hosting different workshops, conferences or scientific events, building e-portfolios, etc.

Thus, the main aspects of the paper will regard the following:

1. The facilities offered by Cirip.eu recommend it as a modern and flexible mobile Social Learning Management System (mSLMS), integrating users' Personal Learning Environments;
2. How microblogging can be integrated with other Web2.0 technologies, and into the Open Educational Resources movement;
3. How the experience and the new pedagogical approach in using microblogging can be captured and formally represented as learning design objects;
4. How learning design objects can be shared, discussed, improved, reused on the microblogging platform.

Keywords: microblogging, education, learning design, Cirip.

Note to the reader:

This paper is part of a broader approach of the authors regarding the use of microblogging in education in order to investigate the degree of integration of this technology in didactic activities, to identify models and examples of good practices in teaching, to identify both opportunities and disadvantages, limits and barriers for learning, to define indicators of social interactions in the microsphere useful for a quality management of educational activities, to identify success factors, directions and future trends etc. (see previous papers published by the authors).

Facilities of microblogging platform Cirip.eu

As the technology of microblogging is adopted in a variety of contexts, its usefulness becomes more and more compelling and appealing for educational actors (Borau et al., 2009; Grosseck and Holotescu, 2008; Parry, 2008). As popular microblogging platforms used in education we mention Twitter, Cirip, Edmodo, Plurk and a recent one, Twiducate, the first three of them featuring in the Tops 100 Tools for Learning 2009/2010, compiled by Jane Hart from Centre for Learning & Performance Technologies (Hart, 2009; 2010).

Cirip.eu was launched in the spring of 2008 by Timsoft, a company specialized in eLearning and mobile applications, under the coordination of the first author.

Besides the facilities of a microblogging platform, Cirip.eu benefits of the advantages of being an innovative and efficient environment, with characteristics such as (Grosseck and Holotescu, 2009; Grosseck and Holotescu, 2010):

1. Embedding multimedia objects in notes (see Figure 1). Images, audio and (live) video clips, live-streaming, presentations, files, google docs and forms, cognitive visualizations as diagrams, learning designs as mindmaps;
2. Sending and receiving messages not only via the web but also by mobile, SMS, IM (Yahoo and Jabber), e-mail, Firefox/Chrome extensions, FF Ubiquity, API, Twitter, RSS, Adobe AIR, desktop and other 3rd party applications;
3. Creating public or private user groups. Collaboration groups can be created between the participants in an event, members of a class or university year, for a course enhancement or in order to run an entire online course. Groups have an announcements section (Group News), where moderators can post notes and materials such as SCORM/LOM objects, for group activities;
4. Domain specification for microblogs and groups. This simplifies the search for microblogs or groups of a certain domain, for example educational microblogs or groups used for online courses or workshops;
5. Monitoring RSS feeds for sites, blogs, social networks or search feeds;
6. Tagging the content;
7. Creating and conducting polls and quizzes (which can be answered online or by SMS);
8. Visualizing statistics and representations of the users/groups interaction networks;
9. Multilingual interface. The platform can be accessed in three languages: Romanian, English and German, facilitating an international collaboration (soon Italian and French).
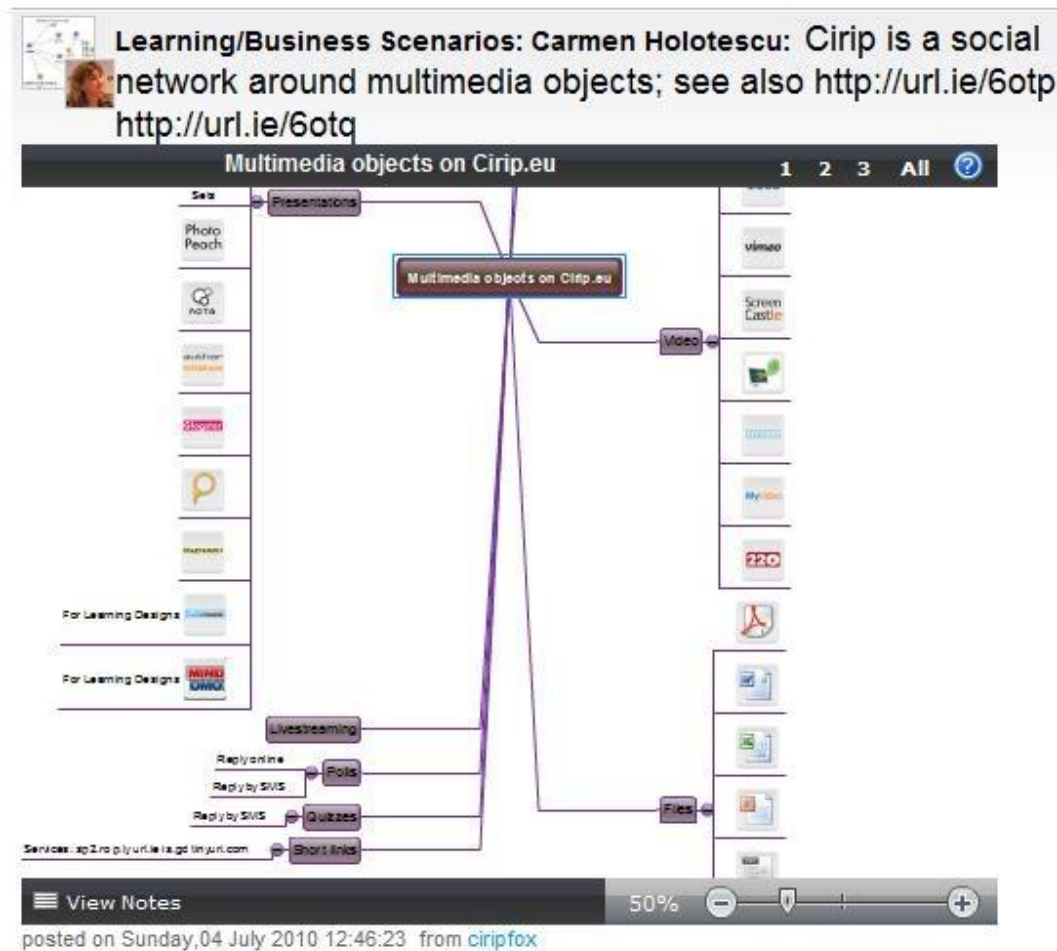
Figure 1 – Multimedia objects embedded in Cirip.eu messages, source:
http://www.cirip.ro/status/3109554

Cirip.eu as social network around objects2.0

Cirip.eu integrates a wide range of Web2.0 applications and social networks organized around educational resources, many of them included in Tops 100 Tools for Learning (Hart, 2009; 2010). This integration is realized in order to encourage teachers and students to discover those Web2.0 applications and social networks and integrate them in their teaching/learning activities.

The platform allows the creation of a personal profile/portfolio including ideas, projects, research and information resources, multimedia objects created individually or collaboratively. All users' activities are developed in a dynamic manner and follow a continuous evaluation process by communicating with members of groups or of the platform. Thus on Cirip each member can build not only a Personal Learning Environment but also a Personal Learning Network (see Figure 2).
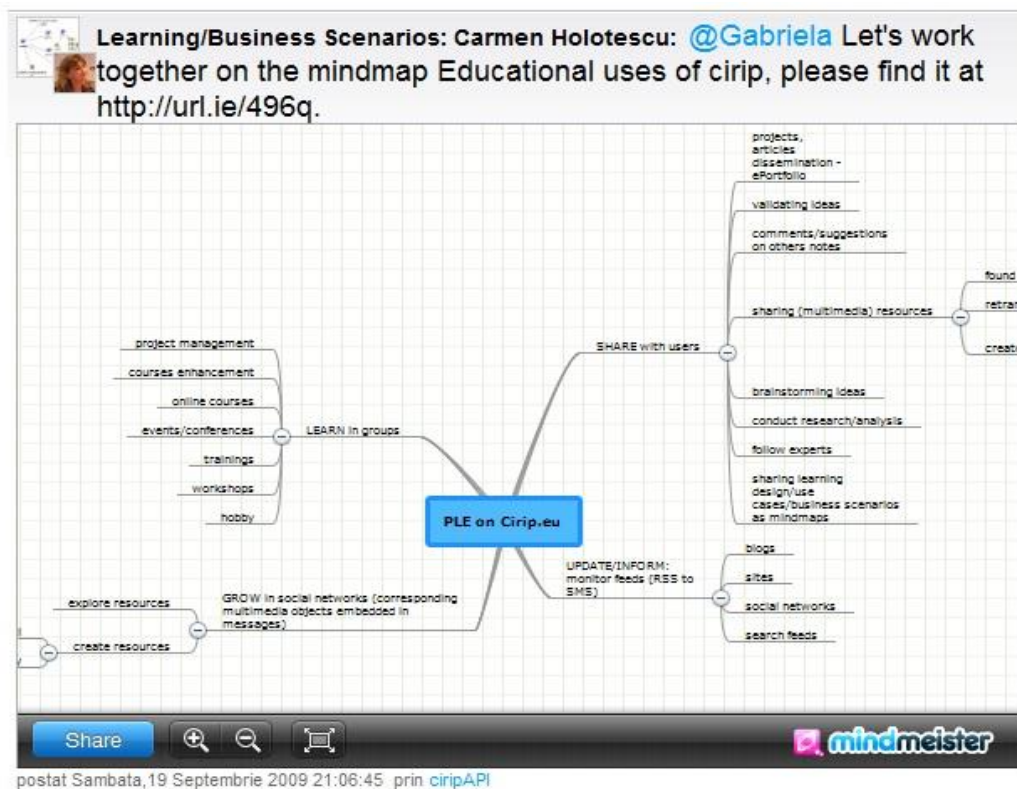
Figure 2 – PLE on Cirip.eu, source http://www.cirip.ro/status/1629920

From this perspective and according to classification of (Stutzman, 2009) and analysis of (Conole and Culver, 2009), Cirip is a profile-centric network and a social network around PLE objects.

Furthermore, Cirip is a social network around multimedia objects, thus an object-centric network:

- the objects are part of the communication-conversation flow of the platform;
- the objects connect Cirip with other social networking / Web2.0 applications organized around educational objects;
- objects can be shared, reused, validated, created or recreated individually or collaboratively – we can say Cirip offers an opening to Open Educational Resources (OERs);
- meta-objects meaning objects of learning design can be created, specifying learning scenarios, best practices for integrating new technologies in education etc.

By extension, public or private groups can be considered as social objects transforming Cirip in a social learning management system (SLMS), or a social network around SLMS objects.

Cirip.eu as a social network around leaning design objects

According to Stutzman (2009), learning design aims to enable reflection, refinement, change and communication by focusing on forms of representation, notation and documentation, also to support teachers in making pedagogically informed, better use of technologies. The scope of learning design is to improve the quality of the learning experience, learning outcomes and learner support.

As Ebner et al. (2010) note, there has been increasing research done on the use of microblogging in learning scenarios. Therefore, a few months ago, the authors have opened a group of learning design (LD) to share best practices (at http://cirip.ro/grup/lds). LD group members can be teachers, practitioners in education, trainers, students, but also other persons interested to maximize the benefits of using social media (in particular Cirip.eu) for career development or business.

The aims of the group are:

- to support innovative strategies in order to engage and empower teachers and learners and make learning more accessible and participative;
- to inform about the learning design domain and its importance for the educational process;
- to encourage the sharing of effective pedagogies experiences and the integration of new technologies in education;
- to create, discuss, analyze, evaluate, improve, adapt, and reuse such best practices represented as learning designs;
- to get learners' feedback, empowering them as creative participants in the design of learning;
- the scenarios refer to formal, non-formal and informal education, to educational events, to social learning in general.

The discussions and exchange of experiences in the group dedicated to learning design both assess the value of technology-enhanced learning and bring new resources and information in the field.

The «Announcements» section of the group presents the Learning Design field, together with notable projects: variants of EML, the Educational Modeling Language developed by the Valkenburg Group, IMS-LD standard, JISC Design for Learning Program, modeling tools such as LAMS, Reload, CopperCore, CompendiumLD, etc. (Conole, 2010). If other communities of practice related to LD are hosted by dedicated platforms, the LD group on Cirip.eu is integrated on the platform where these scenarios are used effectively, so they can be validated and improved (see Figure 3). Thus, the possibility to communicate and collaborate around the LD meta-objects makes Cirip similar to Cloudworks, but Cloudworks is a network focused strictly on LD (Conole and Culver, 2009).

For the purpose of the research, the authors chose mindmaps and diagrams, with the corresponding Web2.0 applications Mindmeister, Mindomo, Spicynodes and Diagrammr as solution for nonformal representations of learning design. These are accessible to non-technical users, can be collaboratively edited and can be embedded in Cirip notes.

Thus the conversation in the group is built around these learning design objects. They can also be considered meta-objects, as they reflect scenarios for different activities on the platform. It is useful to specify a LD for each course/educational activity hosted in a

group, which can be improved while running the activity, then share in LD group and reuse it in other similar activities. For each complex LD is possible to open a separate group on Cirip.

Consequently, the LDgroup encourages peer-working and peer-mentoring in creating/recreating scenarios, but also in preparation and facilitation of courses and educational events. Thus, a teacher or facilitator can apply successful scenarios, and can be assisted/helped in facilitating the course by a more experienced colleague. Feedback will be brought in LD group, by teachers and participants for all member's benefit.
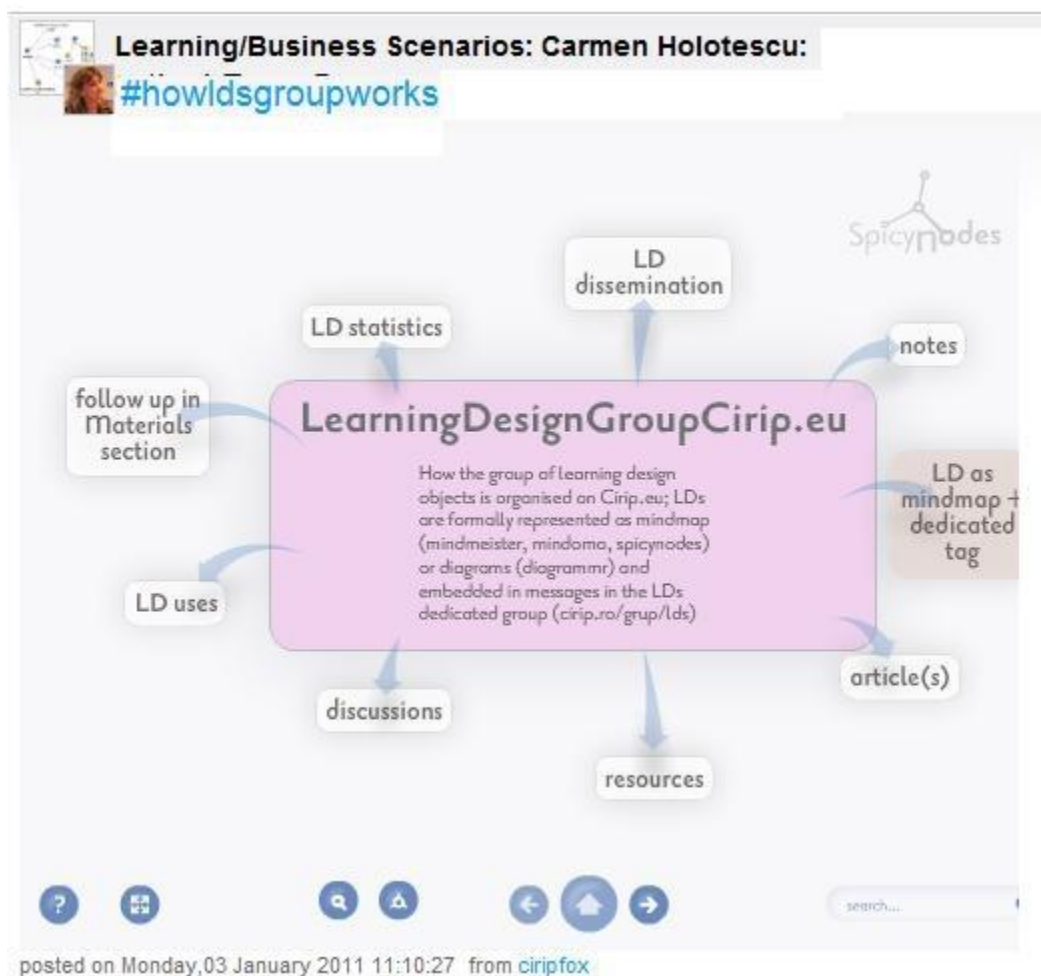

Figure 3 – Scenario for the LD group http://cirip.ro/grup/lds, source:
http://www.cirip.ro/status/4360149

Like all communication and collaboration on Cirip, the LD group is an illustration of J. P. Rangaswami's metaphor: «Conversations grow around social objects, much like pearls grow around microscopic dust. Social objects are about growth, they are live» (Rangaswami, 2008).

Educational uses of the platform

Cirip.eu is a dynamic, user-centred environment that engages participatory experiences, collective learning, transforming the traditional, online and blended learning spaces in many ways (see Figure 4):
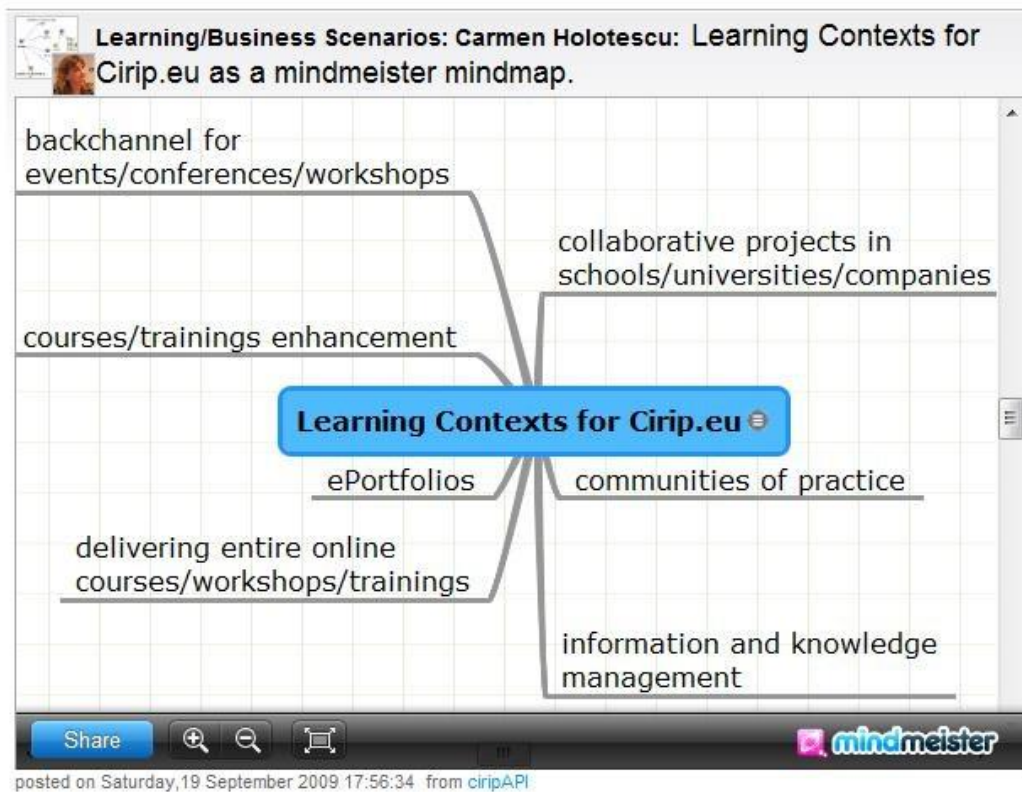

Figure 4 – Learning/Training/Practising contexts on the microblogging platform Cirip.eu, source: http://www.cirip.ro/status/1629510

In the last two years, on the microblogging platform Cirip.eu, formal and informal courses and trainings (hosted in private or public groups) for pupils, students, teachers, trainers, employees in schools, universities, companies have been organized by different institutions or during European educational projects. The statistics, timelines, network sections and different visualizations of these groups proved a high interest and involvement of participants.

Usually the interaction in this groups and on the platform continues after the courses/trainings ended. The members continue to learn and to practise the knowledge gained during the courses (the continuous activity being illustrated by the timelines of the participants' microblogs). The learning community built in each group is enlarged with Cirip members such as students, trainers, teachers, and specialists, becoming a real community of practice.

Many of those who participate in formal activities build their own Personal Learning Environment/Network (PLE/PLN) on Cirip to connect, communicate, collaborate and/or

share ideas and resources with the users they follow. PLEs/PLNs (can) contain also (see Figure 2):

- groups for national and international conferences, workshops, events, project management;
- sites/blogs/networks feeds and search feeds;
- social networks providing educational objects/OERs (Open Educational Resources), which can be included in messages etc.

A special attention is directed to the meta-learning contexts as spaces through which Cirip users become aware of their learning and knowledge growth. Thus, in the special group on the platform dedicated to learning designs (The Learning Scenarios group – lds), the teachers/trainers discuss, validate and improve the scenarios of learning activities and courses they develop, formalizing them as mindmaps embedded in Cirip notes. Another advantage is that they can also find peers for peer-mentoring their courses.

However, for the large category of learning activities on the platform we tried to readapt the taxonomy of Bloom (Churches, 2009):

Table 1 -Bloom taxonomy rewritten for the on-line environment of Cirip

| Level / Category	Key words/Examples of activities
REMEMBERING	1. Retrieving: messages can be sent and received online through Web, email, mobile, SMS/IM/Jabber/Gtalk/mJAVA, firefox extension CiripFox/iGoogle cGadget/ciripAIR, FF Ubiquity, Twitter account/from RSS2cirip; 2. Listing: widgets on sites, notifications by email, SMS, iCIRIP; 3. Basic search on different criteria; for each search an RSS feed is generated: a) search messages – in all public messages, in personal messages, in accounts/feeds/current groups or in followed feeds/groups; b) search users after different criteria at *Users* page (name, gender, location, microblogging domain); c) search groups after criteria – at *Groups* page (name, moderator, type); d) search feeds – at Feeds page (name, URL); 4. Social networking – each microblog has a network section, displaying followers and followed users, groups and feeds; 5. Highlighting through *Real-Time Wall* and *Timeline*(Figure 5); 6. Locating/finding with maps (see also http://www.cirip.ro/cirip/map).
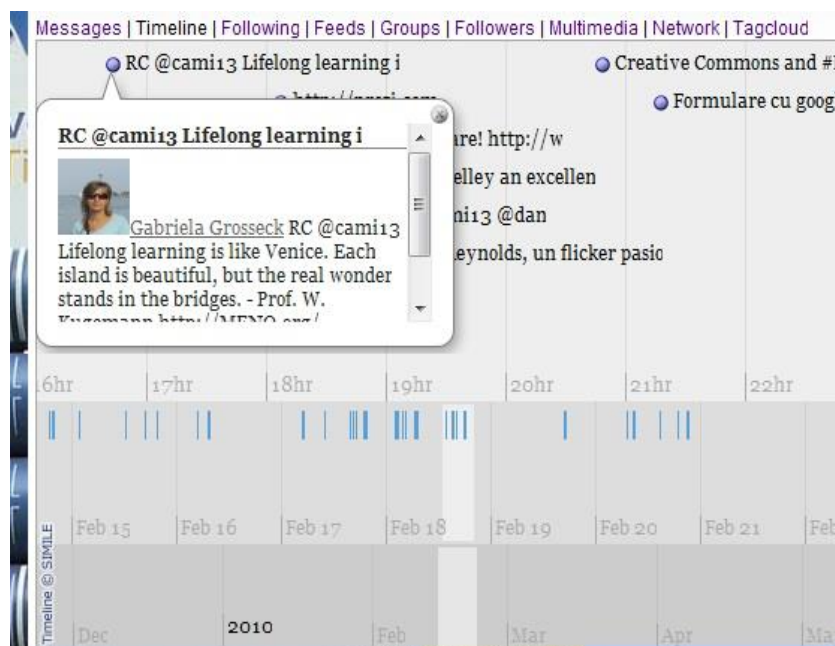
Figure 5 – The *timelinesection* for a microblog, source: http://www.cirip.ro/u/Gabriela/timeline

UNDERSTANDING	1. Advanced searching with Twingly;
	2. Categorising and tagging (see TagCloud sections for microblogs, groups, feeds);
	3. Commenting (see reply messages with @ and RC and email for an entire group);
	4. Annotating: bookmarklet button Cirip (Send on Cirip);
	5. Subscribing (RSS2cirip, monitoring RSS blogs, other sites);
	6. Twittering – Twitter integration (cirip2twitter, twitter2cirip – at message level, user (authentification) or for import to/from groups);
	7. Classifying/comparing (with *TOP* statistics, *Network* from each user microblog menu);
	8. Summarising: collaborative documents (voicethread, dotsub, mindmeister);
	9. Collection/explanation: mindmapping in courses strategy (in collaborative or individual settings) – mindmeister, mindomo, spicynodes, diagrammr;
	10. Show &tell: audio/video recording tools – vocaroo, seesmic and lifestreaming – qik.
APPLYING	1. Loading: any type of file (pdf, doc, xls, odt, etc);
	2. Illustration: capzles (historic tale construction application);
	3. Screencapturing: screenr, screenjelly, screencastle;
	4. Presentation with prezi, glogster, authorstream, capzles, notaland;
	5. Interview: any audio recorder – > mp3 files are embedded in messages; vocaroo, lifestreaming;
	6. Uploading: flickr, picasa, photopeach, youtube, vimeo, slideshare;
	7. Sharing: links (shorten), audio (eok, deezer, blipfm, trilulilu), video (youtube, vimeo, 220.ro, myvideo), presentation (slideshare, photopeach);
	8. Editing: dotsub, google docs (students can work in collaboration).
ANALYSING	1. Polls and surveys (polls and quizzes can be created and responses can be sent through Web and SMS, and poll facility from Photopeach and Google Form);
	2. Mindmaps: mindmeister, mindomo, spicynodes, diagrammr;
	3. Graph – any image (by URL) can represent the result of a graph utility, google drawings.
EVALUATING	1. Commenting: @ replies and through RC;
	2. Testing (Quizz and Polls, google forms);
	3. Moderating, collaborating, networking – the user is turning into content creator/group facilitator.
CREATING	ALL of the multimedia objects embedded in messages.

Furthermore, by valorizing the mobility parameters of the Cirip.eu platform we expand the learning towards ubiquitous spaces – available to anyone, anywhere, at anytime and from any anything (read device/technology/apps). Thus, through an approachbased on *mobile technologies, multimedia (embbedd) objects* and *microblogging* we adopted a m^3 *learning strategy* for the purpose of increasing knowledge and learning in authentic environments.

32

The Cirip specific features for mobile learning presented in Table 2 are based on the (Patten, Arnedillo Sanchez and Tangney, 2006) framework, having particular meaning and implementation (Holotescu and Grisseck, 2010):

Table 2 -M^3-learning features

Category	Cirip specific features
Administration	– Joining groups can be realized by using a mobile browser or the mobile version m.cirip.eu or via SMS; – Mobile number or username can be issued for authentication; – Recover password via SMS; – After sending a SMS with the group name and a keyword, the learners receive a response via SMS with courses or exams schedules, or their grades.
Reference	– Using a mobile browser, students can access course materials published as RSS-LOM objects in groups space; – Also they can access multimedia resources (open educational resources) embedded in messages.
Interaction	– Share and ask opinions from peers or other members using a mobile browser or via SMS; – Students can follow members, groups and feeds via free SMS; they can specify the time interval for SMS delivering, also when these alerts should be stopped or restarted, by texting *Cirip on/off*; – During the f2f courses and activities, if teachers agree, students can send SMS including questions, comments in groups, for future reflections; also their observations during activities outside universities; – Send feedback/comments/questions via SMS to dedicated groups, during workshops or conferences; – Participate via SMS in polls and quizzes operated during courses or events.
Multimedia Collaboration	– Create collaborative multimedia objects in groups dedicated to courses or to teamwork; – Comment videos by sending SMS in courses/teams groups; the messages are exported as a .srt file and used to subtitle the video clips; – Send images, (live) video / audio clips during events, activities.
Meta-Collaboration	– By communicating with members and groups, in a continuous evaluation process, integrating (search) feeds and collaborative activities/resources from other social networks, members can build and manage mobile Personal Learning Environments; – Scenarios for teaching and learning represented as mindmaps are discussed/improved by using a mobile browser, in a group dedicated to learning designs.
Localization	– Using a Cirip mash-up implemented on the augmented reality browser Layar, one can geo-locate, find information and join different groups; the mash-up is important especially for finding groups for workshops, events, trainings, being a valuable facility for educational marketing.
Facilitation	– Groups moderators can send alerts via SMS to groups members, announcing news or updates with a high priority; – By following users, groups and feeds via SMS, teachers/trainers receives updates related to courses in real-time; thus they can participate in discussions, give feedback via SMS, being present even when they don't have access to internet; – Groups moderators can create dynamic responses to administrative aspects asked by members via SMS (see *Administration*).

Final remarks

Our activities and research in the last two years on the platform allow us to state that Cirip.eu has facilities for delivering successful and quality online courses, trainings, workshops, international projects' meetings etc. The communication, authoring, monitoring, statistical facilities foster Cirip.eu as a modern, free, mobile social LMS which integrates many Web2.0 technologies, and also allows users to develop their PLEs/PLNs. Furthermore, if Twitter and other microblogging platforms offer mainly the practice context, we point out that Cirip could provide formal training frameworks and meta-learning contexts which can be adapted to any type of learning activities. These facilities position Cirip.eu within the spectrum of educational services for an efficient continuous education, training, learning and personal development.

However we do consider that the success key in using microblogging platform Cirip.eu in education is to be aware of the fact that there is a relationship between the user, the technological environment and his learning activities and also to avoid the risk of emphasing the technology and not the pedagogy.

Although we refer explicitly to Cirip.eu, our remarks may also apply to other microblogging platforms/services like Twitter, Identi.ca, Plurk, Edmodo, Yammer, etc. «Think of it this way: Microblogging is the way in which you choose to speak, while Cirip.eu is the tool you use to talk to the world» (Livingston, 2010).

References

Borau K., Ullrich C., Feng J. and Shen R. (2009), Microblogging for Language Learning: Using Twitter to Train Communicative and Cultural Competence. In M. Spaniolet al.(Eds.), *ICWL 2009, LNCS 5686*, Springer-Verlag, Berlin Heidelberg, pp. 78-87.

Churches A. (2009), *Bloom's Digital Taxonomy*, URL: http://edorigami.wikispaces.com/Bloom%27s+Digital+Taxonomy

Conole G. and Culver J. (2009), Cloudworks: *Social networking for learning design*, Ascilite Conference, URL: http://www.ascilite.org.au/conferences/melbourne08/procs/conole.pdf

Conole G. (2010), Learning design making practice explicit. In: *ConnectEd Design Conference*, 28 June – 2 July 2010, Sydney, Australia.

Dunlop J.C. and Lowhenthal P.R. (2009), Instructional Uses of Twitter, Chapter 8, pp. 45-50. In P.R. Lowenthal, D. Thomas, A. Thai, B. Yuhnke (Eds.), *CU Online HandBook. Teach differently. Create and Collaborate*, University of Colorado Denver.

Ebner M. et al. (2010), Microblogs in Higher Education – A Chance to facilitate informal and process-oriented learning? *Computers & Education*, doi: 10.1016/j.compedu.2009.12.006

Grosseck G. and Holotescu C. (2008), *Can we use Twitter for educational activities?* Proceedings of the 4th International scientific conference, elearning and software for education, Bucharest, 17-18 April 2008, URL: http://adlunap.ro/else/papers/015.-697.1.Grosseck%20Gabriela-Can%20we%20use.pdf

Grosseck G. and Holotescu C. (2009), *Indicators for the analysis of learning and practice communities from the perspective of microblogging as a provocative sociolect in virtual space*, in 5th International Scientific Conference eLSE – eLearning and Software for Education, Bucharest, 9-10 April 2009.

Grosseck G. and Holotescu C. (2010), *Microblogging Multimedia-Based Teaching Methods. Best practices with Cirip.eu*, paper presented at World Conference on Educational Sciences, Istanbul, Turkey, 4-8 February 2010 – Innovation and Creativity.

Hart J. (2009; 2010), *Tops 100 Tools for Learning*, URL: http://c4lpt.co.uk/recommended

Holotescu C. and Grosseck G. (2009), *Using Microblogging For Collaborative Learning*. In New Technology Platforms for Learning – Revisited. LOGOS Open Conference on strengthening the integration of ICTresearch effort, 19-20 January

2009 Budapest, Hungary, EDEN – European Distance and E-learning Network, pp. 71-80.

Holotescu C. and Grosseck G. (2010), *Mobile learning through microblogging*, paper presented at World Conference on Information Technology, Istanbul, Turkey, 6-10 October 2010.

Livingston B. (2010), Using Web2.0 Technologies, *INFOLINE*, vol. *27*, n. 1001, ASTD Press, URL: http://goo.gl/8oFvs

Parry D. (2008), *Twitter for Academia*, 23 January 2008, URL: http://academhack.outsidethetext.com/home/2008/twitter-for-academia

Patten B., Arnedillo Sanchez I. and Tangney B. (2006), Designing collaborative, constructionist and contextual applications for handheld devices, *Computers & Education,* vol. 46, pp. 294-308.

Rangaswami J.P. (2008), *Musing about Social Objects: Molluscs that Matter*, URL: http://confusedofcalcutta.com/2008/02/16/musing-about-social-objects-molluscs-that-matter

Reinhardt W., Ebner M., Beham G. and Costa C. (2009), *How people are using Twitter during conferences*. In V. Hornung-Prähauser, M. Luckmann (eds.), 5th EduMedia conference, Salzburg, pp. 145-156.

Stutzman F. (2009), *Information Seeking During a Life Transition*, AOIR 2009 Doctoral Colloquium, Milwaukee, URL: http://fredstutzman.com/papers/AOIRDC2009_Stutzman.