Abstract—Microblogging is the Web2.0 technology with the most important impact in 2008, with applications in many domains, including education. On a microblogging platform, the users can send and receive messages via the web, SMS, instant messaging clients, and by third party applications; the most known platform is Twitter. With a solid experience in using Web2.0 technologies in education, the authors are trying to provide arguments for using microblogging platforms in education, underlining the advantages, but also possible bad points. The article presents a microblogging platform specially designed for education, called Cirip.ro, which offers facilities such as live video / audio messages, multimedia objects embedding, private and public groups, feeds monitoring. Some concrete examples are presented, in which the platform is used for courses enhancement, for communities of practice, but also for delivering entire online courses. How to facilitate such projects, how to integrate other Web2.0 technologies, how to evaluate students portfolios and participation are underlined too.

Index Terms—Web2.0, collaborative technologies, microblogging, education, social learning

I. INTRODUCTION

Microblogging is a Web2.0 technology and a new form of blogging, that let the users publish online brief text updates, usually less then 140-200 characters, sometimes images too. The posts can be edited and accessed online, or sent as SMS, e-mail or via instant messaging clients. Usually the microblogs authors embed their posts as a widget on blogs or sites.

Microblogging enables a real-time interaction between users, using different devices, technologies and applications [1]. The best known microblogging services are Twitter, Tumblr, Pownce, and Jaiku [2] and, recently Edmodo. There are also local microblogging systems, very appreciated among Romanian Internet users, like Cirip.ro, Zazazoo.ro and Logoree.ro.

Even though Twitter seems to be the most popular microblogging system, recently teachers and students tend to use a special platform designed for education called Edmodo.com to send “notes, links, files, alerts, assignments, and events to each other”. Other educational uses of microblogging can be found in Ref [3] and [8].

The paper will describe the facilities of the microblogging platform Cirip.ro, and how it can be used in education.

II. MICROBLOGGING WITH CIRIP – CURRENT ISSUE

Cirip.ro is a microblogging platform specially designed for education and business, launched this year in March, implemented by Timsoft, a company specialized in e-learning and mobile applications, under the first author's coordination. The platform has many educational uses, for information and knowledge management, for courses enhancement, for delivering entire online courses, for collaborative projects in universities, for communities of practice, or for eportfolios.

Besides the facilities that Twitter offers, Cirip.ro comes with the following:
- Users have the possibility to specify the domain about which they will write the notes; this makes finding microblogs from a specific domain easier, particularly the educational ones;
- Creating user groups; pupils, students, teachers can create public or private groups(in the private ones the notes are visible only for members);
- The possibility to embed images, audio and (live) video files, presentations, documents in notes;
- The possibility to subscribe to search feeds or to feeds offered by sites / blogs / social networks – the same as users and groups, the feeds can be monitored, online, by IM, or by SMS.

The interface is in Romanian and in English, facilitating an international collaboration.

Many statistics and visual representations offered by platform are useful for quantitative and qualitative evaluation.

The platform has a few thousands users, an important percentage being pupils, students and teachers.

During June 4-18, 2008, the authors developed and moderated an online course, in a private group. It is a world premiere, the first online course developed and run entirely on a microblogging platform.

In the next paragraphs we will present the first entire online course run on Cirip.ro, which gave us the opportunity to gain valuable experience and to reach useful conclusions for the current courses run for different universities or for continuos education.

The aim of this course was to find out if microblogging can be integrated in the lifelong learning / teaching / collaboration / business / blogging. The topics addressed were: microblogging platforms, Twitter facilities, Cirip.ro facilities, uses in education, uses in business, uses in blogs promotion etc.

Using microblogging in education.
Case Study: Cirip.ro

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We wanted to investigate:
- how to integrate microblogging with other Web2.0 technologies;
- if a microblogging platform, in particular Cirip.ro, can be used as a Learning Management System (LMS), and if it has the needed facilities to run an online course;
- what are the differences between facilitating an online course on such a platform and one in a classic LMS.

III. GROUP FACILITIES

The course was hosted and run in the private group **cursmb** of the microblogging platform Cirip.ro.

A group has a special section for announcements (**Group News**) - another original element of the platform, where the moderators can post notes and useful materials for the group activities (figure 1).

The authors have published in the announcements both notes on the proposed activities and course resources (mainly tutorials on course topics, with a variety of multimedia elements).

The discussions on the proposed themes were realized through messages sent by the participants in the group space. Messages can be sent/monitored online (web site or CiripFox – a Firefox extension) or as: SMS (it’s simple to track the group messages via mobile phone); instant messages; e-mail (daily notices with followed messages, answers, new followers or news are received by those who activate this option); it is also possible to send e-mail messages on Cirip.ro, including in groups.

Other valuable options are the facilities to send live video/audio messages and to integrate multimedia objects in the notes, all of them becoming part of the information/communication flow (eg. audio clips saved on a server or vocaroo, audio clips from e-ok.ro, trilulilu or deezer; flickr or tincyp images, youtube, seismic, vimeo, veeno or dotsub videos; slideshare, voicethread or flowgram presentations; pdf, docs or spreadsheet files etc.).

Besides discussions and debates conducted by the wide range of messages we carried out a series of collaborative exercises, which will be presented in the next section.

IV. PARTICIPATION IN DISCUSSIONS

Although initially 50 people have registered, 40 of them have actively participated. The participants were mainly educational actors (students, teachers, developers, librarians etc.). They appear in the members section of the group (figure 2). For each member, the total number of contributions in the group is listed. The **Network** option shows a graphical representation for the group.

There were almost 1100 messages written in the group, approximately 100 after the end of the course. On average, each member wrote 25 messages, which demonstrates an interested participation, and involvement.

The **Tagcloud** group section (present for any microblog too) allows interesting observations regarding the terms that appear most often in messages, the most active users, resources specified most frequently in messages. In figure 3 one can see the 50 words that have appeared most often in the last 500 messages.

Topics **Tagcloud** and **Network** are interesting features of the groups created on the Cirip.ro platform, useful in analysing the interactions in learning or practice communities.

To evaluate the participants we have considered:
- number and quality of messages sent in course group
- the eportfolio which consists of public and private messages
- number of followers/followings/groups/feeds
- number of messages sent to other participants, reactions to messages
- direct communication with other participants and other users of the platform.

The timeline, network, tagcloud sections of microblogs and groups offer useful data for evaluation.
V. COLLABORATIVE ACTIVITIES AND THEIR RESULTS

In this section we offer an overview of the collaborative activities carried out during the course, which involved the use of other Web2.0 technologies. For most of the participants this was the first contact with them, so in advance helpful information was offered:

1. **Puzzle images** - we proposed a combination word - picture (Creative Commons from flickr) to be associated with microblogs and / or microblogging. Towards the end of the course this exercise was redone, to see if the opinion about microblogging was changed during the course.

2. **A collaborative collection on del.icio.us** created during the course, which was enlarged and used after the course end.

3. **Translation of “Twitter in Plain English” video**, which is part of the Common Craft Show collection. Video is posted on dotsub.com, where the transcript was translated through collaborative editing a document on writeboard.com.

4. **A voicethread object** with text and audio comments submitted by members.

5. **Notes on a Flickr image**. Starting from wordle.net, a resource suggested by a participant - TBD, a tagcloud (fig. 4) with the words that appeared most frequently in the aprox. first 600 messages of the course was generated.

6. **A code of good practice on microblogs** with items written by the participants using the collaborative platform writeboard.com.

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<th>skills</th>
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<th>CIRIP.RO</th>
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<th>interest</th>
<th>ideas</th>
<th>live</th>
<th>demand</th>
<th>do</th>
<th>How do I ..?</th>
<th>Does anyone know if ..? etc.</th>
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One can observe: the most active members, nouns, verbs, and notions that appeared most often in discussions, participation and also a warm and open atmosphere between participants.

VI. GENERAL REMARKS

The course promoted values and attitudes among participants as followed in the lines bellow. Above all, through the course we promoted an ambient awareness for „communication, connections, and immediacy in 140 Characters at a time” [5], seldom seen in other on-line learning situations:

- interest in life-long learning; motivations and flexibility in developing their own educational and vocational route
- respect and confidence in themselves and others
- facilitate mutual awareness; responsiveness to the emotions of others
- valuing interpersonal relations - to learn how to take turns in speaking
- the course turned into an interface to own experiences - developing the skills to meet the demands of social life in general
- analysis of real needs and problems (examples: How do I ...? Does anyone know if ..? etc.) and building polls (which are Ciriposphere verbs - the metaphors of microblogging).

During the course the participants developed the public part of their microblogs: writing public messages, following and discussing with other users, validating the topics of the course, monitoring feeds, and being part in other groups. After the course ended, they continue to activate on the platform, communicating and collaborating with facilitators and other participants. This is an important advantage of this platform, the learning community continuing to be active after the course ended.

The course has also allowed:

- a wide variety of expression forms (voice, video, images etc.) using mashup tools already tested in education, for communicating personal and didactical experience
- the application of effective and flexible techniques in using microblogging in education
- reversibility of messages
- to build a set of best practices
- promoting personal blogs
- export microblogs notes on the blogs
- "ambassadors" of ideas / concepts / events
- humor, good mood.

There were also:

- moments of inertia (see group timeline for messages distribution in time)
- certain technical constraints (do not forget that it is a platform in continuous development and improvement), messages without dissipation
VII. CONCLUSIONS AND FUTURE WORK

For the authors of this paper, microblogging, and especially Cirip.ro, proved to be an effective tool for professional development and for collaboration with students, that can change the rules of the courses and models good pedagogy responsive to student's learning needs. Furthermore, as a social networking / microblogging platform, Cirip.ro provides valuable interactions in educational context, acting as a social factor in a course management system [4].

We appreciate that the microblogging platform Cirip.ro has facilities which permit delivering successful and quality online courses; the communication, authoring, monitoring, statistical facilities make Cirip.ro a modern free LMS.

To facilitate an entire online course or a part of a course on such a platform requires specific facilitation skills, and collaborative technologies knowledge. The effort and time needed are more important than those for an online course hosted on a classic LMS. We would recommend to run entire online courses on Cirip.ro only if the course duration is of a few weeks, otherwise the facilitation and communication become too demanding for teachers and students.

Future developments:
- Tags will be implemented to classify notes and to organize the groups mesages in topics defined by the facilitator.
- The authors intend to develop a specification for evaluating students eportfolio and participation in courses run or enhanced by microblogging.
- Scenarios for using microblogging together with different collaborative technologies in formal and informal courses will be modelled using Educational Modelling Language[9].

In conclusion, respecting the learning time budget, each teacher can choose to use microblogging to enhance her/his course. This is the option recommended by the authors of this material due to the following considerations: the need for personal development and planning issues related to the future course and a curriculum microblogging can be built based on the principle of learning spiral.

REFERENCES


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