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Stefania Aceto, Claudio Dondi, Paola Marzotto

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Pedagogical Innovation in New Learning Communities

An In-depth Study of Twelve Online Learning Communities

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Preface

This report is part of the research project on “Pedagogical Innovations in New ICT-facilitated Learning Communities” (LearnCom),¹ under an Administrative Arrangement between IPTS (IS Unit)² and DG Education and Culture.

The aim of this study is to review and assess the new social and pedagogical approaches to learning that are emerging in new ICT-facilitated collaborative learning settings. In addition to formal education, such communities are increasingly emerging in informal and non-formal lifelong learning environments where learning is happening in a freely organised manner, bringing together learners, experts, and other parties. This study aims to examine these new learning communities in order to find innovative pedagogical and organisational practices that support lifelong learning in different settings and foster innovations in the interaction of teachers, learners and organisations.

The methodological framework for the LearnCom project includes desk research on the existing literature about learning communities;³ the present in-depth case study of 12 different types of learning communities; a validation workshop⁴ in which 20 external experts discussed and provided further input to the research; and a final report.⁵

This report presents the results of the in-depth study of 12 online learning communities. The case analysis examines features, impacts and outcomes of learning in ICT-facilitated learning communities, as well as factors for failure and success, highlighting what lessons can be learnt from online learning communities that could benefit education and training systems.

¹ For more information see: <http://is.jrc.ec.europa.eu/pages/EAP/LearnCo.html>

² The Institute for Prospective Technological Studies (IPTS) is one of the seven research institutes that make up the European Commission's Joint Research Centre.

³ Ala-Mutka, Kirsti (2009). "Review of Learning in ICT-enabled Networks and Communities", EUR 24061 EN.

⁴ Ala-Mutka, Kirsti (2010). "Discussions on Learning in Online Networks and Communities". IPTS Technical Note, EUR 3179 EN.

⁵ Ala-Mutka, K. (2010). Learning in Informal Online Networks and Communities. Final report of the project. EUR 3059 EN.

EXECUTIVE SUMMARY

The main aim of this study is to collect evidence on the learning innovation emerging in online communities and to draw conclusions on the lessons learnt and on emerging models and features that could eventually be transferred to Education and Training systems to support lifelong learning, innovation and change in Europe.

The results presented are based on an in-depth analysis of the pedagogical and organisational innovation emerging from twelve online communities belonging to one (or more) of the following categories:

- *Organization-driven communities* (such as online communities set up by educational institution, workplaces) CEDDET <http://www.CEDDET.org/>
eTwinning- Time after Time, <http://www.etwinning.net/it/pub/index.htm>
- *Production-driven communities* (such as Wikipedia, open source software communities, material repositories) Il Cantiere, http://biasco.ch/wiki/index.php5?title=Pagina_principale
- *Topic-driven communities* (such as lifestyle communities, health communities, professional communities) RezEd, <http://www.RezEd.org/>
TappedIn, <http://TappedIn.org/TappedIn/>
Muxlim, <http://muxlim.com/>
GayTV, <http://www.gay.tv/>
Microbiology Forum, <http://www.microbiologyforum.org/>
Englishforums, <http://www.englishforums.com/>
Tudiabetes, <http://tudiabetes.com/>
Bookcrossing <http://www.bookcrossing.com/>
- *Socially-driven communities* (such as social networking sites, YouTube, gaming communities) Experience Project, <http://www.experienceproject.com/>

The evidence collected shows that, although it is not possible to speak about real pedagogical innovation in online communities, *widespread pedagogical models are challenged by a new balance between learning and teaching*. The balance between providing and constructing knowledge and between acquiring codified knowledge and creating new knowledge are substantially different from the ones we are used to observing in traditional education and training environments. Transmission of codified knowledge constitutes only a small proportion of the learning activities of online communities, whereas a bigger role is played by the interaction among peers, which leads to informal knowledge sharing (often based on members' experience) and knowledge creation (based on a mix of codified knowledge and new knowledge collaboratively developed).

The central role of members (learners) in the learning process and in the process of knowledge creation is not new. What is innovative is that online communities show how this paradigm can be implemented successfully in a new way.

Communities as a space for learning

Each of the analysed communities constitutes a learning community in its own particular way. What they have in common, however, is that most of their members perceive⁶ that significant learning happens unintentionally (with very few exceptions) by means of interaction, knowledge and experience sharing, and material creation and/or sharing.

The study points out that people become members of a community because they share an interest. Regardless of the nature of this interest (be it leisure or work-related, or associated to a shared social condition or identity), members are naturally keen to learn within the specific field addressed by the community. Interest raising and “maintenance” are the key critical factors to keep these communities alive. Furthermore, it was noticed that further growth of the community in the long term depends on the emergence of new issues to be discussed or on setting new challenges for the community. Thus, stimulating curiosity enhances learning. The more people feel they can learn something from a community and share their experiences, projects, and values within it, the more they are likely to stay and perform as active members of that community.

Learning processes within online communities

Members of online communities learn by making and developing *connections* (intentionally or not) between ideas, experiences, and information, and *by interacting, sharing, understanding, accepting, commenting, creating and defending* their own opinions, their view points, their current situations and their daily experiences. Online communities allow, form, guide, foster, and stimulate connections. Learning in online communities takes place through storytelling, making jokes, giving examples, linking and making available different resources, asking questions, providing answers, developing empathy, and simply reading, to list a few examples. Communities provide the context, resources and opportunities to expand the members’ horizons and awareness of themselves and of other members. Personal development goes hand-in-hand with other forms of learning, such as knowledge and skill acquisition for practical and professional aims.

Evidence shows that the interaction among members – regardless of the aims of the community – leads mostly to the acquisition of horizontal skills such as: critical thinking, active participation, sense of initiative and socio-civic competences. Little support is provided to members in structuring and scaffolding their learning or in developing learning-to-learn competences.

The role of communities in enhancing creativity and innovation

Members are stimulated to expand their individual horizons and to develop their thinking skills. They become inherently capable of thinking in a different manner and approaching the world around them from a different perspective. It can therefore be assumed that taking part in online communities enhances creative and innovative skills. Members feel they are outside

⁶ As resulting from surveys and interviews.

predefined traditional and formal learning settings. In traditional and formal learning settings, roles and activities are often predictable and “thinking outside the box” is not always welcome. Community members are part of a “boundless and timeless” zone where people with different backgrounds, knowledge, location, language, religion, experience, values, etc. can provide insights for new approaches to commonly-shared interests and issues and impending change.

Communities grow in terms of quality (and probably of membership) thanks to the contribution of their members, giving them, on the one hand, a strong sense of responsibility and on the other, a feeling of empowerment. Responsibility and empowerment stimulate a positive attitude in members who are smoothly led to being creative and innovative in the way they interact, exchange knowledge, create knowledge and materials, organise events within and outside the community, utilise the available technology, create new tools, and express the need for new tools to support their self-expression.

Communities and equity

The support to equity (in the broad sense of the term) within a learning community is highly dependent on the nature, aims, content, structure, and hierarchal model adopted. The case study analysis highlights that the promotion of equity forms the basis for the establishment of the community. Nevertheless, not all learning communities are inspired by equity or actually promote it in access to learning opportunities. This could be due to the existence, in some communities, of hierarchical structures, predefined requisites and restricted access.

In principle, all members can benefit from the informal and/or formal learning opportunities offered in online communities. However, the ultimate responsibility for learning, as well as the strategy and pace adopted, lies with the individual members. Thus, communities are generally open to all in terms of provision of learning opportunities but members who have not developed learning-to-learn competences are at risk of exclusion. Communities should ensure that all members can acquire and develop learning-to-learn skills so that they can fully reap the benefits of the community.

Evidence shows that supporting members in the acquisition of digital skills is not always a priority for online communities. In communities where no support is provided, potential members with low digital skills risk being excluded, and even in communities where support is provided, members may still have knowledge and skills gaps that must be filled if they are to move from ICT basic skills to digital fluency.

Challenges to benefiting from learning in online communities

Being a member of a learning community implies facing challenges and being ready to accept changes. It also means developing new skills and using existing skills in a different way.

Members can benefit from the community when they are ready to change, innovate and create. Every member decides on their own degree of involvement and spontaneously participates or withdraws from activities. In order to provide more chances to learn, online communities should make sure that their members perceive the added value of their active involvement and participation.

On the management side, evidence suggests the following key challenges need to be addressed to guarantee that members can benefit from the activities of the community, including learning:

- The technology used must evolve to allow the provision of suitable tools that encourage self-expression and social networking;
- The information available in the community must be reliable;
- The interest of community members must be kept alive;
- Members need to be educated, through codes of conduct and rules, to self-manage their learning processes. In communities where learning is an explicit objective, a key concern is to empower individuals' learning attitudes so that management plays a decreasing role in steering the learning process within the community.

The role of ICT for learning in online communities

Evidence suggests that the level of ICT usage within a community generally mirrors the age of the community and the creative force behind it. Communities with greater ICT functionalities tend to be larger, more supportive of interaction among community members and more open to innovation and creativity. A greater provision of communication modes allows a greater level of connectivity among community members. On the other hand, some of the analysed communities support creativity and innovation even though they are not backed up by high-level ICT functionalities. However, interestingly, the more a community grows in terms of members and in qualitative terms, the more the need for technological improvement is perceived.

ICT offers community members the possibility to remain anonymous (e.g. using avatars, nick names). This may support freedom of expression, independent thinking and acceptance of members on the basis of the contributions they make, rather than how they are perceived. This is however a quite controversial aspect: the survey results show that, while some respondents mention the possibility to remain anonymous as an advantage, others have a negative perception and define ICT as “allowing people to hide”.

Members agree that technology is a tool which can be used to break down geographical barriers, allowing greater contact between different cultures, backgrounds, life-styles, and therefore supporting tolerance, respect and democracy, as well as the development of socio and civic competences, cultural awareness and cultural expression.

Lessons learnt for Education and Training systems

The analysis of the online communities highlighted the following conclusions and lessons learnt which could be of benefit for Education and Training systems:

- *Peer-to-peer interaction and individual empowerment are key in enhancing learning and the pleasure of learning.* The eTwinning – Time after Time community shows that even in a formal context, some curricular activities can be planned in such a way that they smooth hierarchical barriers (among teachers and students) and lead all the members of a community, or of a project team, to be considered as peers, independently of their formal role or skills background. In such a context, students feel part of a team of peers and are motivated to contribute to achieving the learning objectives in creative and innovative ways.

- It is essential to make sure that everyone can critically and confidently use the networking technologies at their disposal. Social computing is becoming a mainstream internet use and people of all ages are increasingly joining communities (be it for social, professional development or any other reasons). *Formal education and training systems have a strong responsibility in facilitating the acquisition of such skills to allow people (especially children) to safely “cross the internet roads”.*
- The issue of *reliability* remains a vital concern to be addressed. Recognition of peers as experts (in terms of reliability of the knowledge they bring to the community) is key in enhancing learning among the community members. Nevertheless, reliability of the information provided within the online communities remains a very critical factor. Even when a community’s terms of service does not guarantee the quality and reliability of the information available, members tend to uncritically trust shared information and content. *Again, formal education and training systems should support learners in developing the necessary digital and critical skills to be able to select information and verify its reliability.*

Recommendations for further research

Despite the low number of communities studied, a variety of models emerge in pedagogical, organisational, economic and social terms. Each analysed dimension (longitudinal, pedagogical, resources, organisational, economic, socio-cultural, evaluative) leads to a different clustering of communities, sometimes linked to the reason for their creation, other times linked to their organisational models or even to the supporting technology they use. Even a small sample like the one used here, i.e. 12 communities, shows that the world of online communities is so varied and evolving so quickly that a categorisation is not yet possible. In order to better understand how learning is fostered and how learning happens in online communities, the focus should be shifted to investigating the “DNA” of communities and analysing how and to what extent its different dimensions foster learning.

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1. INTRODUCTION

This report presents the main outcomes of the study commissioned by IPTS to SCIENTER on “Pedagogical Innovation in new learning communities”.

The study focuses on a set of 12 ICT-enabled learning communities, which share the following features:

- 1) The communities are based on collaboration. Particularly, they feature emerging collaboration models that allow new ways of linking individuals from different settings (workers, students, elderly) or new linking and collaboration of different communities (e.g. schools and youth centres).
- 2) The communities are ICT-enabled. An integral part of the community functioning is ICT, either recently emerged ICT or innovative community activities with already established forms of ICT, facilitating the new connections and collaboration.
- 3) The communities facilitate learning. Learning is supported and takes place in the communities. Not necessarily all community members participate with the goal of learning or teaching, but the community is a space where a person can go with the personal objective of learning. If wanted, learning is guided, but does not necessarily (or typically) lead to certificates.

The main aim of the study is to analyse pedagogical and organisational innovation⁷ emerging from the 12 online communities studied. It aims to extract lessons to be learnt in the field, and isolate emerging models and features that could eventually be transferred to Education and Training systems to support Lifelong Learning, innovation and change.

The report is articulated as follows:

- ◆ Chapter 2 “*Methodology*” presents the approach adopted to analyse learning and innovation in online communities and provides an overview of the data collection and analysis process. In addition, the chapter addresses the main problems and challenges faced during the study as well as a set of recommendations for future research in the field.
- ◆ Chapter 3 “*Case Synthesis*” provides a presentation of each of the 12 communities which were analysed, highlighting the main features of each community as well as the most interesting aspects detected in relation to the objectives of the study.
- ◆ Chapter 4 “*Innovation in new learning communities*” presents the analysis of the innovation observed in the 12 analysed communities with particular emphasis on pedagogical innovative aspects.
- ◆ Chapter 5 “*Conclusions*” presents the main conclusions emerging from the analysis and evaluation of pedagogical innovation in the observed communities.
- ◆ Chapter 6 “*Final remarks*” presents a set of overall considerations on the results achieved and on the lessons learnt.

⁷ Pedagogical innovation is here defined as the emergence of new learning models supported by the use of technology and networking technologies. Organisational innovation is here defined as the emergence of new organisational models supporting learning. In both cases the term “new” does not imply emergence of unprecedented models, rather it refers to models which are substantially different from current practices in Education and Training formal contexts.

2. METHODOLOGY

This chapter presents the approach adopted for analysis and evaluation of innovation in online learning communities. It is articulated in three main sections:

- ◆ Section 2.1 presents the approach adopted for analysis of learning in the communities.
- ◆ Section 2.2 presents the approach adopted for assessing the results of analysis.
- ◆ Section 2.3 presents an overview of the data collection and analysis process, highlighting the difficulties met and challenges faced and proposing some recommendations for the conduction of future studies in the field.

2.1 Approach for the analysis of learning in the communities

In the present study learning has been defined and analysed according to the constructionist theories, i.e.:

- ◆ Knowledge is entwined within implicitly knowledgeable activities: informal, unbounded, and often intuitive ways of making sense ('practical wisdom').
- ◆ Knowledge is embedded in social situations, in interaction, and also embodied in our experience of the world: it relates to how we live our lives and make meaning with others.
- ◆ Knowledge is sustained and created in multiple interactions and social practices.
- ◆ Knowledge is a form of meaning creation and sharing, which participants see at that moment as providing acceptable orientations and ways of moving on.
- ◆ Learning is a dialogical process, exploring different ways of seeing and interpreting issues and situations; sharing some sense of situations; and creating possibilities for change.
- ◆ Learning is a dialectical process: exploring the interplay of tensions, contradictions, otherness as a means of opening possibilities for critical thinking and self-reflexivity.
- ◆ Learning means being reflexively aware of how we construct meaning with others in our everyday conversations.

The approach adopted is based on the assumption that a subjective and an objective dimension of learning should be taken into consideration in order to observe how learning takes place within the online environments.⁸ For that reason, the research framework has included the following points of view:

- *Awareness and intentionality* to learn.
- *Perceptions* of individuals on learning taking place in the community.
- *Production and synthesis* of learning within the community.
- *Community facilitation* to learning.

The approach used for studying the identified cases has covered the following dimensions, as seen in Table 1 below: longitudinal (understanding the history of the learning community); pedagogical (understanding emerging learning model); organisational; context; technical; economic; socio-cultural and ethical, evaluative.

⁸ The subjective dimension includes the awareness, perception and intentionality to learn of community members as individuals and as a group whereas the objective dimension is related to what can be observed in terms of community learning dynamics.

Table 1. Learning analysis approach

Dimension	Focus	analyzed aspects
Longitudinal	<ul style="list-style-type: none"> Understanding the history of the learning community. 	<p>Why is the community in place? Who was the LC promoter/initiator? What was the initial need from which the VLC originated? What was the motivation of the initiator/s? How have the initial aims (e.g. learning or discussion topic/theme) evolved over the time?</p>
Pedagogical dimension	<ul style="list-style-type: none"> The recognition and valorisation process of the competences of their members (if the community support their members in the recognition of their own competences). Level of real participation on the community (quantity and quality of the interactions and contributions- communication modalities). The metacognitive component of communication. Motivation for learning. Concept of learning. Articulation (e.g. a unique strand of discussion, several simultaneous discussions). Access to the resources. Re-aggregation forms, reorganization, diffusion and capitalization of the available knowledge and produced knowledge. The combination processes between implicit and explicit knowledge (socialization, outsourcing, combination, internationalization). Competence level towards interaction practices and online communication. The process of construction of results. 	<p>Does learning emerge? How? How is knowledge created? (e.g. generated amongst members, knowledge coming from outside and discussed amongst members) Are previous knowledge/competences recognized and represented within the community? How? How is knowledge distributed and disseminated amongst members? How is knowledge maintained and stored within the community? What is the role (if foreseen) of didactic and reference materials? Have the members realised/developed common outputs? If yes, what are they? Do they produce any results? If so, what are they? How the results have been brought back and re-elaborated within the community? Are the members motivated in learning? How? What are the methods that the community adopts for assessing its results and processes? What is the role of peers in the evaluation process? What when and how does the evaluation process take place?</p>

Table 1. Learning analysis approach

Dimension	Focus	analyzed aspects
Organisational dimension	<ul style="list-style-type: none"> • Methods and implicit and explicit rules for the development of the community. • Roles played. • Improvement of the working performances. • Impact and changes produced at organizational level. 	<p>What are the rules within the community? (typology of participation, recognition of the member, language, use of non-verbal codes, etc.)</p> <p>Typology and timing of the discussion/contribution</p> <p>Articulation of the net (e.g. all to one) What is the role played by the group/treat leader, the coordinator, the animator, etc?</p>
Context dimension	<ul style="list-style-type: none"> • Openness to the outside world. 	<p>Have the members of the community organised activities beside/outside the activities carried out on the net? If yes, what are they? Where and how have they been realised?</p>
Technical dimension	<ul style="list-style-type: none"> • Role and functions of technologies. • Advantages and disadvantages of the use of technological support. 	<p>Which activities within the community (if any) cannot be done without technology?</p> <p>What is the role of technology?</p> <p>What kinds of tools are used?</p> <p>Which activities the tools allow?</p> <p>What kinds of services are available?</p>
Economic dimension	<ul style="list-style-type: none"> • Sponsorship. • Fee for the animators/moderators of the community. • Costs for establishment and maintenance. 	<p>How much did cost to establish the community? How much does it cost to maintain the community? Do the members pay for accessing the community? Are there any sponsors? Are the moderators /animators of the community paid?</p>
Socio-cultural and ethical dimensions	<ul style="list-style-type: none"> • Sense of belonging. • Value system. • Process of recognition, esteem and acceptance amongst members. • e-Identity: Individual and collective identity. • The motivation, interests and “passions”. 	<p>Is it localized in one language only? (Italian, English etc.) Are its members national only? Is the used language only the national one? How is cultural diversity recognised and represented within the community?</p> <p>To what extent the community is open?</p>
Evaluative dimension	<ul style="list-style-type: none"> • How the members evaluate themselves. 	<p>Why does this community work? What are its strengths? What assures its stability? Which kind of problems did the community encounter? What were the solutions adopted?</p>

These dimensions have been explored, through the following methodology:

Observation point of view	Data collection tools	Data collected
<ul style="list-style-type: none"> • <i>Awareness and intentionality</i> to learn. • <i>Individual perceptions</i> of learning taking place in the community. • <i>Production and synthesis</i> of learning within the community. • <i>Community facilitation</i> for learning. 	<ul style="list-style-type: none"> • Survey questionnaire (semi-structured). • Interviews (semi-structured). • Observation grid for materials developed and used within the community. • Observation grid for the online interactions (verbal/textual interactions). 	<ul style="list-style-type: none"> • Number of members. • Where available: Number of active members (percentages of active/silent members). • Interaction profile of the community. • Analysis and interpretation of interaction content. • Analysis and interpretation of shared material typologies. • Analysis and interpretation of produced material (if any).

Based on the above approach, a data collection toolkit was elaborated to support research and analysis of the 12 communities. Information about each community was gathered through desk and field research. The process undertaken for conducting the analysis consisted of the following steps:

- ◆ Step 1: make contact with the community; explain aims and rationale of the research and clarify the support needed by community staff and members.
- ◆ Step 2: once a positive feedback is received, start observation of online interactions taking place in the community.
- ◆ Step 3: become a member of the community (where possible).
- ◆ Step 4: contact the community manager or staff members to make sure the survey is distributed to all members of the community and discuss with them the best strategy for this to happen (mailing list, newsletter, other..).
- ◆ Step 5: contact community manager for an interview.
- ◆ Step 6: during interview with community manager get suggestions on members of the staff and members of the community to be interviewed.
- ◆ Step 7: in case no information is provided on members to be interviewed, select members as of observation of the community dynamics and online interactions trying to involve both active members and lurkers.

Both desk and field research were utilized to get a deep insight of the community dynamics.

As concerns field research, the main tools utilized were interviews to community managers, staff and members and surveys addressing the whole community. Semi-structured interview and survey grids were utilized to investigate the communities.

Such grids were elaborated on the basis of the approach adopted to analyse organizational and eventually emerging learning models in the community and making sure all the highlighted dimensions were tackled. Discourse analysis was used to analyse the results of interviews.⁹

⁹ Discourse analysis is illustrative of a broad family of methods known as ‘interpretive’ (or sometimes ‘critical’) data gathering and analysis techniques. In broad terms, discourse analysis explores and analyses conversational exchanges or written texts, or more particularly the use of language and text in social contexts, and through analysis of the *interaction* or dialogue between speakers, as in Stubbs, M. (1983). *Discourse Analysis: The sociolinguistic analysis of natural language*. Oxford: Blackwell. Discourse analysis is a

As for the analysis of surveys, frequency of distribution, mean, standard deviation and median were calculated (with statistical elaboration depending on the nature of the analysed data). As surveys contained a set of open questions, discourse analysis was utilized to analyse the results related to such questions. Mean, median and frequency of distribution were the basis for the elaboration of survey results related to individual communities.

Interviews addressed a community manager and staff members (where existing and relevant) as well as at least 3 members of the community. Survey questionnaires were directed to all members of the community and were distributed, with the agreement of community manager via mailing list, e-mails or newsletters reaching members individually via mail.

Interview and survey grids are available for consultation in Annex 1 of this report.

2.2 Approach for the assessment of pedagogical innovation in the analysed communities

The combination of results of desk and field research led to the analysis of the pedagogical innovation observed in online communities. Given the fact that most of the analysed communities did not have learning as an explicit objective, the evaluation of organizational and socio-cultural variables contributing to innovation was also considered. As explored in Chapter 5 of this report, learning turned out to be a significant outcome of the analysed online communities, though unexpected and often unintentional.

The results of evaluation are presented in Chapter 4 of this report where particular emphasis is given to the pedagogical innovation which emerged. This is analysed according to the dimensions explored in Section 2.1 of this report.

Moreover, every community was assessed against the following key criteria:

Dimension	Definition
Learning approach	The extent to which the learning is an explicit aim of the members joining the community.
Provision or co-construction of materials	The extent to which the community supports co-construction of material (reports, newsletters, videos, summaries of discussions) or, rather, foresees only uploading (by management or by members) of materials generated outside the community.
Learning outcomes	The extent to which the community supports the acquisition of practical vs. theoretic knowledge (either situated or generic, depending on the nature of the community).
Key competence: digital skills	The extent to which the community supports the development of digital skills as defined in the Recommendation of the European Parliament and of the Council, of 18 December 2006, on key competences for lifelong learning. ¹⁰

methodological approach which uses particular data gathering methods to support interpretation – typically content analysis of text and speech, which shall be combined –for the sake of the study – with the results of online interaction observation. Content analysis typically takes the form of scanning or inspection of the verbatim responses of the interviewees to the question prompts, in terms of either an ante-post (pre-determined) or ex-post (retrospectively applied) structure.

¹⁰ http://europa.eu/legislation_summaries/education_training_youth/lifelong_learning/c11090_en.htm

Dimension	Definition
Key competence: social and civic competences	The extent to which the community promotes social and civic competences as defined in the Recommendation of the European Parliament and of the Council, of 18 December 2006, on key competences for lifelong learning. ¹¹
Key competence: learning to learn	The extent to which the community promotes learning to learn competence development as defined in the Recommendation of the European Parliament and of the Council, of 18 December 2006, on key competences for lifelong learning. ¹²
Key competence: sense of initiative	The extent to which the community promotes sense of initiative as defined in the Recommendation of the European Parliament and of the Council, of 18 December 2006, on key competences for lifelong learning. ¹³
Key competence: cultural awareness	The extent to which the community promotes awareness of one's own culture (the culture of the country/geographical area of belonging).
Key competence: cultural expression	The extent to which the community is promoting members' capacity to express their culture (the culture of the country/geographical area of belonging).
Creativity	The extent to which the community promotes creativity. ¹⁴
Critical thinking	The extent to which the community promotes critical thinking. ¹⁵
Active participation	The extent to which the community promotes active participation.
Sustainability	The extent to which the community represents a highly transient, short-lived phenomenon or is sustainable and evolutionary.
Transferability	The extent to which the learning (what has been learnt and how learning has happened) can be adapted to other situations and the extent to which eventual emerging learning models can be adapted to other contexts.
Social contextualisation	The extent to which the community creation has been driven by a spontaneously-created social movement, or has been developed by an external initiative.
Transition-oriented	The extent to which the example is well-linked to formal transition pathways (e.g. formal training and employment) or de-coupled.

¹¹ http://europa.eu/legislation_summaries/education_training_youth/lifelong_learning/c11090_en.htm

¹² http://europa.eu/legislation_summaries/education_training_youth/lifelong_learning/c11090_en.htm

¹³ http://europa.eu/legislation_summaries/education_training_youth/lifelong_learning/c11090_en.htm

¹⁴ Obviously, creativity means numerous things to different people and can be defined in any number of ways. Creativity can also be defined at many distinct levels -- cognitively, intellectually, socially, economically, spiritually, and from the finite perspective of different disciplines -- business, science, music, art, dance. Here, creativity has to be intended as any thinking process, ability or power to create, to bring into existence, to invest with a new form, to produce through imaginative skill, or to make or bring into existence something new. Creative thinking involves imagining familiar things in a new light, digging below the surface to find previously undetected patterns.

¹⁵ "Skilled, active, interpretation and evaluation of observations, communications, information, and argumentation. Fisher, Alec and Scriven, Michael. (1997) *Critical Thinking: Its Definition and Assessment*, Center for Research in Critical Thinking (UK)/Edgepress (US).

2.3 Overview of data collection

A total of 32 communities were contacted for the realization of the study. Out of these:

- ◆ Fifteen did not reply at all (despite invitation messages which were sent out at least twice within a period of a fortnight).
- ◆ Two replied positively but did not provide any follow up after they learnt the extent of cooperation needed on their side.
- ◆ Two replied negatively.
- ◆ One replied only after completion of the study.
- ◆ Twelve replied positively.

Table 2 below provides an overview of the 12 analysed communities.

Table 2. Overview of analysed communities		
Name and URL of the community	Short description	Dimension
TappedIn http://TappedIn.org/TappedIn/	TappedIn's main aims and objectives are to support the professional development of teaching professionals and help to build new models for professional development for different organizations, universities, local governments and build successful online practices and effective online work models for other interested organizations.	15,000 members Geographic coverage: US
RezEd http://www.RezEd.org/	RezEd can be described as an "expert community" whose participants are committed to explore further the features and potential of virtual worlds for learning. In particular, they pursue the following objectives: <ul style="list-style-type: none"> - To share information on state-of-the-art technologies and practices, and related events and conventions (traditional and online), - To share good practices in the use of virtual worlds for learning purposes, - To refine both conceptual and pedagogical models and practices, - To explore emerging features brought about by the use of virtual worlds for learning, such as ethics and ethical behaviour. 	1,447 members Geographic coverage: worldwide, though mostly US-based
eTwinning "Time after Time" http://www.etwinning.net/it/pub/index.htm	The main aim of the eTwinning "Time after Time" community is to develop intercultural and interdisciplinary knowledge and to develop information on historical developments and the impact of time on society change in 5 key theme areas: War, Fairy Tales, School Memories, Love, and Job.	16 EU schools Geographic coverage: Europe

Table 2. Overview of analysed communities		
Name and URL of the community	Short description	Dimension
CEDDET http://www.CEDDET.org/	<p>CEDDET: The Latin American Experts Network on Public Administration aims to:</p> <ul style="list-style-type: none"> - Promote the collaboration between public organizations and the development of common activities in a Latin American context; - Create a permanent forum to share knowledge, and exchange experiences and good practice; - Improve lifelong learning programs; - Give the opportunity to CEDDET training courses participants to keep in touch. 	<p>770 members</p> <p>Geographic coverage: Spain and Latin America</p>
Il Cantiere http://biasco.ch/wiki/index.php5?title=Pagina_principale	<p>The main aim of the “Il Cantiere” community is to propose and experiment with a collaborative approach which finds a concrete output in the development and production of videos. This is a production oriented community, born to experiment with a collaborative approach to production.</p>	<p>50 members</p> <p>Geographic coverage: Italy</p>
Microbiology Forum http://www.microbiologyforum.org/	<p>The Microbiology Forum allows microbiologists to primarily keep up to date with current requirements and trends, discuss microbiology issues with peers and gain support for new ideas or advice when in need of practical know-how.</p> <p>The main aims and objectives are to:</p> <ul style="list-style-type: none"> - Create an area where practitioners can “benchmark their practices”, share notes, debate and get advice on matters related to their field. - Help practitioners keep up-to-date with new initiatives and thus keep an open mind and facilitate continuous improvement and greater uniformity amongst practices. 	<p>8,372 members</p> <p>Geographic coverage: Worldwide</p>
Englishforums http://www.englishforums.com/	<p>The main goal of the Englishforums is to help people learn English. It is based on the principle of questions and answers, where members of the community both ask the questions and answer to each other. This way they try to gather as much information on different aspects of the English language as possible. It is dedicated to learning a language by involving people from all over the world in a community with a shared goal.</p>	<p>78,000 members</p> <p>Geographic coverage: worldwide</p>

Table 2. Overview of analysed communities		
Name and URL of the community	Short description	Dimension
TuDiabetes http://tudiabetes.com/	<p>TuDiabetes is a social network for people affected by or touched by or living with those affected by Diabetes.</p> <p>The main aims and objectives are to:</p> <ul style="list-style-type: none"> - Share experiences and information, - Learn about the issue, - Socialize and support each other. 	<p>5,801 members</p> <p>Geographic coverage: 158 countries, topped by USA, Canada, UK, Australia and India.</p>
Bookcrossing http://www.bookcrossing.com/	<p>Bookcrossing is a learning community where learning takes place implicitly, primarily through the online interaction of members in forums. Learning in Bookcrossing is focused on the joint interest based on books and literature. Members expand their knowledge of different authors, genres, books and literature, but they also develop critical thinking and ability to argue and discuss different topics related to literature.</p>	<p>700,000 members</p> <p>Geographic coverage: Worldwide, topped by US and Europe</p>
Experience Project http://www.experienceproject.com/	<p>The Experience Project aims at creating a community where people share their experiences about various issues.</p> <p>The main aims and objectives are to:</p> <ul style="list-style-type: none"> - Create a social community where one can anonymously connect with others on topics that are real, that they care about and that matter. - Get people to share their experiences so that they can ultimately, through such interaction, experience their true self. 	<p>More than 1 million members</p> <p>Geographic coverage: Worldwide, topped by US, Canada, UK and India</p>
GAY.tv http://www.gay.tv/	<p>The main aims and objectives of the GAY.tv community are to:</p> <ul style="list-style-type: none"> - Share experiences and information, - Meet people, - Socialize and support each other. <p>The main feature of the community is the gay target audience. The difference between the GAY.tv website community and other gay communities is that it is more like a social network than a dating community.</p>	<p>131,932 members</p> <p>Geographic coverage: Italy</p>

Table 2. Overview of analysed communities		
Name and URL of the community	Short description	Dimension
Muxlim http://muxlim.com/	<p>The main aims and objectives of the Muslim community are to:</p> <ul style="list-style-type: none"> - Enhance the Muslim lifestyle. Through community interactions Muslims are able to enhance their way of life by learning from other Muslims from around the World. - Raise awareness of the Muslim lifestyle. There is a certain amount of prejudice against the Muslim lifestyle and the community helps non-Muslims learn and draw their own conclusions rather than rely on third party opinions. 	<p>150,000 members</p> <p>Geographic coverage:</p> <p>183 different countries topped by USA and UK</p>

The following classification has been adopted for community categorization:

- ◆ **Organization-driven communities** (such as online communities set up by educational institution, workplaces): Often external motivation to participate, to complete a give task. But internal motivation to participate supports learning and continuing participation. Places to learn both externally defined learning targets and tacit knowledge.
- ◆ **Production-driven communities** (such as Wikipedia, Open source software communities, material repositories): Participation motivation may be external, internal or both. It is important to have a sense of doing something important, either for oneself, for other, or both. Learning by producing and then interacting and negotiating with others on the production.
- ◆ **Topic-driven communities** (such as lifestyle communities, health communities, professional communities): Internal motivation to participate, but possibly in order to help oneself to meet external requirements. Learning is about sharing personal topic-relevant experiences and knowledge in order to help others in similar situations (may be job, life or health related skills).
- ◆ **Socially-driven communities** (such as social networking sites, YouTube, gaming communities): Internal motivation to participate, in order to link with and express oneself for others. Learning is about observing other people, exchanging life experiences, learning new perspectives and understanding to enrich and cultivate life.

According to the above classification, the analysed communities can be categorised as follows:

- ◆ **Topic-driven communities:** (RezEd, TappedIn, Muxlim, GayTV, Microbiology Forum, Englishforums, Tudiabetes, Bookcrossing).
- ◆ **Organisation-driven communities:** (CEDDET, eTwinning).
- ◆ **Production-driven communities:** (Il Cantiere).
- ◆ **Socially-driven communities:** (Experience Project).

It goes without saying that this categorization reflects the main aspects of the communities, meaning that communities might show features typical for categories other than the one they have been assigned to. This is for instance the case of the Gay TV and Muxlim which presents many aspects of a socially driven community.

It should be highlighted that:

- ◆ Given the number of communities analysed, the results of this study can only provide exemplary (and not exhaustive) conclusions on the emergence of learning in online communities.
- ◆ The difficulties met in getting support from the communities so to carry out the analysis led to an uneven distribution of communities across the above mentioned categories.
- ◆ For the above reasons, it was not possible to analyse self-organised communities. As a result, all the analysed communities have one (or more) community manager(s).

The following table summarises the level of collaboration of the involved communities in terms of interviews that have been carried out, materials provided and survey responses.

Table 3. Collaboration of the involved communities					
Community Name	Interview Community Manager/Staff	Interview Members	Survey	Observation	Supporting material
TappedIn	2	3	//	x	x
RezEd	1	4	11	x	
eTwinning – Time after Time	3	2	6	x	x
CEDEET	2	3	101	x	
Il Cantiere	1	5	16	x	
Microbiological Forum	1	4	51	x	
Englishforums	1	4	9	x	
Tudiabetes	1	4	105	x	
Bookcrossing	1	3	216	x	
Experience Project	1	4	38	x	
GAY.tv	2	3	488	x	x
Muxlim	1	4	//	x	

In general terms all the selected communities were collaborative. Once contact was made with the community manager, and agreement was taken to proceed, a high level of collaboration was guaranteed in getting interviews with them and getting from them additional contact names of staff to be interviewed (where relevant). In some cases the community managers indicated the names of members to be interviewed. As the research team became member (where possible) of the community, after some time of observation members to be interviewed were identified and contacted directly (in case no suggestion was provided by the community manager or staff).

Getting replies to surveys was instead a much more critical process: the situations encountered can be grouped as follows:

- ◆ For some communities, it took quite a while to convince managers to distribute the survey.
- ◆ For some communities the process of distribution was smooth but the response rate was low. In some cases further pushing on the side of managers worked, in some others it did not.

- ◆ Some community managers did not align to the timing of the study realization and therefore launched the survey independently of the agreed time plan with evident implications in terms of delayed time plan or impossibility to gather a significant number of replies in the agreed timeframe.

2.4 General evaluation and suggestions for the future

As evident from the table 3, the most critical issues which emerged in relation to the 12 community analyses delivered are related to:

- ◆ The impossibility to get a reply to surveys for two communities out of twelve.
- ◆ The impossibility to get access to the online interactions of one community, as no access was provided.

This leads to a more general evaluation of the processes related to the realisation of this study which presented severe difficulties in terms of implementation as reported below.

Many of the communities originally identified had to be substituted due to their unavailability to collaborate. In some it was necessary to look for substitutes at the very last moment in that communities that had originally agreed to cooperate suddenly refused to do so or stopped communications. Considering that e-mail and Skype were (in most cases) the only available contact details of communities (community managers in particular) there was no way to reach community managers who, for any reason, had changed their mind. As shown in the previous section, the fact that a list of potential substitutes had been prepared to anticipate the risk of missing contacts with the communities did not help to avoid extra effort in most of the cases, as the same problem arose with substitutes. In some cases communities agreed to cooperate by claiming they would provide interviewees and support to survey dissemination but then did not do so in the end or did it only at the very last moment, with severe implications for the finalisation of the study. In some cases resistance on the side of community managers in posting the survey was met and it took quite a while to convince managers to disseminate the survey among members. The main reasons for “resistance” were originated by the fact that managers did not want external surveys to interfere with the conduction of surveys which were internally launched and managed or alternatively by the fact that some community managers perceived the survey as a sort of commercial activity. This happened especially in US-based communities. Of course the fact that the investigation did not have any commercial aim was pinpointed, but as said this prolonged further the process of negotiation for survey posting and dissemination.

All in all, the exogenous element given by the fact that the study had to rely on the voluntary decision of communities to collaborate was underestimated and constituted an obstacle in the smooth realisation of the study in terms of compliance to work plan and to a balanced distribution of case studies among the provided categories. For instance, only one production driven community is present in the study as all the others identified did not reply to invitation or replied too late.

Based on the above considerations, the following recommendations are suggested for the conduction of studies involving online communities, with special reference to those run on a voluntary basis:

- ◆ Foresee a longer time frame for the realisation of the study so to take into consideration the exogenous factor given by the fact that successful realisation of the analysis lies mostly in the hands of communities and on their decision to cooperate.
- ◆ Consider the possibility to provide motivational levers for the communities to cooperate such as:
 - ◇ financial contribution,
 - ◇ a paid trip to Seville for the presentation of final results either for the community manager of the best community case or for all cases,
 - ◇ distribution of the final report to communities participating in the study.

The fact that the study was conducted on behalf of a JRC of the European Commission (IPTS) and that the results would be published played a role only in very few cases. Additionally, in most cases collaboration meant an extra and non- remunerated effort for managers and members and this might to some extent explain why some of them refused to collaborate or did not follow up.

In some cases the intervention of IPTS in promoting the study and facilitating contacts played a key role in ensuring follow up. Maybe a higher involvement of IPTS in the first contacts with the communities (for instance a letter sent by IPTS announcing communities will be contacted and explaining why) could help in further motivating communities to cooperate.

3. CASE SYNTHESIS

TappedIn

http://tappedin.org/tappedin/

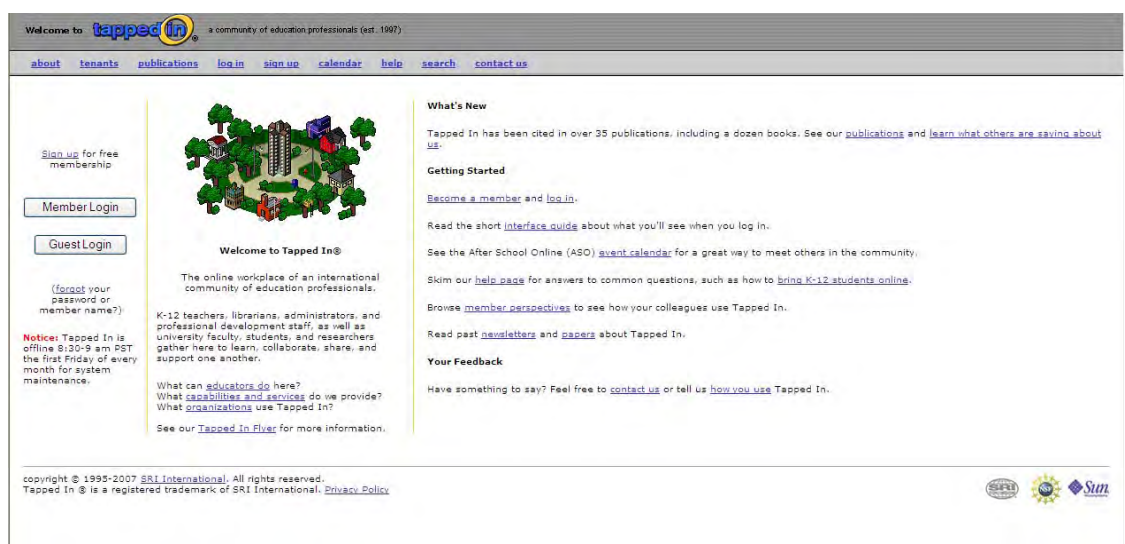


Figure 1: Screenshot of the TappedIn Community

Table 4. Main data TappedIn

Members	15,000
Geographical spread of operations	US
Staff	6 employed, 3 voluntary staff
Field research – survey	/
Field research – interviews	1 Manager 1 staff member 3 members
Observation	Online interaction Content analysis

The community

TappedIn is a community which specifically aims to provide and enhance opportunities for professional development of teachers through ICT.

TappedIn was established in 1997 by SRI International's Centre for Technology in Learning which focuses on significant issues in learning and teaching, and on the ways that innovative uses of technologies can help address those issues. It was originally funded through a research grant awarded by the National Science Foundation (USA) to SRI International's Center for Technology in Learning to establish a test bed community of practice. TappedIn developed into a self-sustainable community over the years, which still serves as a great resource to SRI Centre in their research on online communities, but has fully developed into a wide network of teachers who run their own professional development support.

The community's main aims and objectives are twofold: 1) to support the professional development of teaching professionals: the community works primarily as a community of teaching professionals providing a safe online space to build their skills and further their professional development; 2) to build new models for professional development for different organizations, universities, local governments and successful online practices and effective online work models for other interested organizations: universities, local governments, etc.

Members' profiles and organisation of the community

The community has 15,000 registered members with a number of students involved in classes organised by their teachers who are not registered as members of TappedIn. Members range from primary school to university teachers and include also master and PHD students. According to interviews, it is estimated that 10% of the community members (around 1500) are active members (log on weekly, belong to groups and take part in meetings).

The community is organised around groups that address specific issues. Groups are equally created by volunteer staff and all other members, including very new members. Currently there are 604 active groups in the community. The groups, on average, have between 20 and 70 members and provide: downloadable materials relevant to the group topic; interesting links to other websites; discussion boards; events.

The community's main topics are many and diverse, however they can be clustered into several groups: teaching methodology; teaching resources; content to use in teaching; research topics in education field; research methodology in education field; student support; information on events, news, jobs, grants, etc.

Resources

As far as content resources are concerned, articles, papers, information on interesting websites, tools, and events relevant to teaching are mostly disseminated by members through discussion groups and discussion boards. Each discussion group has a set of downloadable materials and useful links to different websites. Additionally, there is a general library where members and staff can post materials, links to interesting tools and articles relevant to members. A Whiteboard at the "entrance" to the community is available for use by all members to announce events, share information, introduce themselves, share tips and advice on how to use TappedIn, etc. Chat is also available for one-to-one or group chats with other online members.

Regarding the available technologies, TappedIn offers: Customized virtual buildings with public, group, and personal rooms; Tenant-branded membership and log-in pages; Group creation and management; Event rooms with registration, sessions; Calendar system; Job bank; Guests and member access via standard Web browsers; Student accounts; Targeted mailings; Text-based chat and private messaging; Threaded discussion boards in every room; Conversation transcripts automatically emailed; Messages saved for someone who is not logged in; Information sharing and retrieval (File

and URL storage in personal and group rooms; Room "sticky notes" for posting welcome messages, agendas; Tenant, group, and member directories; Search for members and other resources.

Learning in the community

“What we try to provide to our members is a meta community. We aim at creating human social contact which is enhanced through ICT. Our members don’t speak to computers or are guided through some learning process by clicking on instructions, they meet with other people and communicate, build social networks”

(Manager Interview)

TappedIn functions as a “meta-community” and provides its members (membership is free of charge) organized professional development opportunities by arranging regular daily discussion groups (50-60 per month, 2-3 events per day). The discussion groups are public, moderated and always have a presenter who acts as an input speaker on the chosen topic. Members are encouraged to take active part in the discussion groups (attendance varies from between 3 to 20 members). The discussion groups are followed up by a discussion board in which all TappedIn members can take part. A calendar of events is available online on the public page of the website and it is announced a month in advance through a regular newsletter sent out to all members.

According to the opinions of members, gathered through interviews, **learning occurs through interaction and sharing of information and experiences**. This is facilitated by the discussion groups (organized by the community or self-organised by the members) which allow: Exchange of resources (websites, visual tools, lesson plans, articles, etc.); Direct teaching (introduction to the topic, explanation of processes, explanation of terms, etc.); Exchange and sharing of experiences (Concrete experiences in classrooms); Exchange of ideas (Discussion on best methodologies to be adopted).

The main motivation to take part is indeed coherent with the main aim of TappedIn: professional development. Discussion groups initiated by members are related to enhancing their professional skills. Similarly, the discussion boards where members can start different threads on a variety of topics are related to teaching and problems that appear in classrooms where they ask advice from colleagues – e.g. one of the most recent threads initiated by a member is on “How to keep children silent in my classroom?” Another important motivation to join is to expand one’s professional network. TappedIn members join the community to learn, so there is **individual awareness of learning processes taking place every time they log in**.

Knowledge construction happens with knowledge and experience sharing though the process is not structured: based on the results of discussions each member can learn their own lessons. The process of knowledge creation is tracked, but it is then in the hands of individuals how to capitalise the knowledge they have acquired.

TappedIn has the **explicit aim to facilitate learning** for the professional development of teachers. As stated by the community manager, *“TappedIn is not a chat room and is not a forum (although chat and forums are available); it is a community of practice where members log in with a purpose to learn in an organized online manner. Still secondary learning appears between colleagues and members who do build a social and professional network and do spend time chatting and discussing different issues”*

The community is supporting the acquisition of **digital skills**, in that it provides staff support in teaching members how to use Instant Messaging, act in online discussion groups, create profiles, upload material. It also provides more advanced training on moderation of online discussions, organisation of online classes and e-learning classes.

The community *promotes* the **sense of initiative** as it encourages members to use new content, new resources, new methodology and new approaches in their work.

As concerns **learning outcomes**, the community supports the achievement of both theoretical and practical knowledge. The community events always have input speakers who give theoretical and general information, but these are followed by practical advice on how to use the knowledge in classrooms, further supported by the fact that the community works as a platform for knowledge sharing.

Success factors, transferability and sustainability

Success factors and sustainability are intertwined in this community, which works as an **incubator for new communities**. This is at the same time a success factor and a piece of evidence on the support the community provides to the creation (and possibly sustainability) of other communities.

Sustainability of TappedIn as a community itself does not seem to be a challenge, as the community is sponsored by its tenants and managed by SRI International. This allows free membership and (seemingly) no financial challenges.

Challenges instead seem to be more linked to the (technological) evolution of the community into a Web 2.0 environment. No marketing strategy emerges, rather, as from the words of the manager: *“It’s mostly mouth to mouth. We don’t have a particular recruiting strategy. Members just heard of us”*.

Learning happens through interaction, which is facilitated by structured events (and this is said to be organized learning by the management) and by events and discussions organized by the members. The community pushes members to organize their own events. Formal, non formal and informal learning are facilitated by the community. Formal learning happens when the tenant universities use the community as a platform for delivery of their accreditations and certifications. Non formal learning happens when members (teachers of schools and universities as well as pupils, granted access by their teachers) take part to the organized events as part of their activities. Informal learning happens within self-organised events and more in general throughout all kinds of interactions taking place in the community and facilitating knowledge exchange and sharing as well as knowledge creation.

The concept of a meta learning community is indisputably transferable to other professional learning contexts for the variety of options it offers, in terms of content, interaction, networking. As mentioned by one of the interviewed members *“throughout my education I have also used the University’s online discussion board Blackboard. This allowed me to discuss topics and learning with my fellow students as a way to continue the learning process in between face-to-face meetings. The difference between these two mediums is that TappedIn offers you access to a larger learning community, whereas, blackboard was used more as a tool to discuss class work”*.

Most interesting aspects identified in the analysis

One distinctive feature of TappedIn is a **Helpdesk** available to all members, where at least one person is available almost throughout the day to answer questions. Help desk staff are all volunteers, who have been with the community for a long time. They introduce themselves and welcome the new members, give advice on how to get started, encourage members to take active part in the community, prepare some of the events, etc. **They also organize a weekly tour for “newbies”** at a set time announced on the “entrance” to the community where they walk through the community with all the newly registered members who have come to the tour.

Another distinctive feature of TappedIn is **members’ profiles**. Members log in under full names, rather than avatars and create their own profile pages. **Obligatory data shows full name, current work place and qualification of each member**. Data on groups that members are involved in are also a part of the profiles. These are visible to all members who are able to contact each other via private messages. Next to their profile members can create their own member office – a space where they can meet with other members of TappedIn. **Inactive members are excluded** from the community: *“We have a sweeping system that takes off membership of those individuals who have not logged in for a year. So, we don’t have many members who are absolutely inactive, in terms of not even logging into the community”* (Manager Interview).

Members are encouraged to set up and lead their own discussion groups. These can be public, private or restricted upon approval of the initiator and can be announced on the TappedIn calendar or joint whiteboard that is available to all members. Next to member initiated discussion groups, tenants of TappedIn organize their own events – discussion groups, seminars, etc.

These can be advertised in different ways depending on tenant's demands. Members feel very positively about the professional support provided and do have a sense of career enhancement and professional advancement.

Last but not least, **the community provides a platform for provision of credits and certificates to students of classes organized by some of its tenants' universities:** *“We don't use accreditation, credits or certificates. We wanted to, but never really got around to do it. However, some of our tenants, especially the universities, do offer credits and certificates to those who attend their classes and take part in their organised activities”* (Manager Interview).

RezEd

http://www.rezed.org



Figure 2: Screenshot of the RezEd community

Table 5. Main data RezEd

Members	1,447
Geographical spread of operations	Worldwide, though mostly US-based
Staff	2 managers, 50 staff members activated when needed
Field research – surveys	11
Field research – interviews	1 manager, 4 members
Observation	Online interaction Content analysis

The community

RezEd can be described as an “expert community” whose participants are committed to explore further the features and potential of virtual worlds for learning. They are willing to share their experiences and to get to know other people, so to use the available virtual worlds in an enhanced way. Members pursue the following objectives:

- ◆ To share information on state-of-the-art technologies and practices, and related events and conventions (traditional and online).
- ◆ To share good practices in the use of virtual worlds for learning purposes, in a variety of learning / educational settings (K-12, college, university, after-school, etc.) and for different subject matters (e.g. science, foreign languages, etc.).
- ◆ To refine conceptual and pedagogical models and practices.
- ◆ To explore emerging features brought about by the use of virtual worlds for learning, such as ethics and ethical behaviours.

Members’ profiles and organisation of the community

The RezEd community is made up of 1447 members and the number is constantly increasing. As regards members’ social and professional profile, most of the community members work for the academia (786), followed by college teachers (368), professionals working with K-12 students (299), practitioners generally working with students (235), librarians (180), journalists (51). Other information provided showed that many members are bloggers (178), parents (99), general practitioners (68), or working for a foundation (45). The community addresses the needs of those using virtual worlds for learning, regardless of their personal features and conditions.

The community is organized around discussions on the enhancement of virtual worlds for learning. Animators and other members provide specific materials in different forms, such as: text, videos, podcasts, external links, etc. usually such reference materials are intended to stimulate discussion among participants in a given group. On many occasions, activities are organised using members’ islands in Second Life or in other virtual worlds. Community animators and members can set up a Special Interest Group (SIG) with the objective of discussing a certain topic thoroughly; participants can start new discussion threads within a SIG so to focus on a particular aspect of the topic. Discussions are started either by the RezEd staff or by expert members and can be launched either by the community animators or by the members.

The community animators (staff or long-time members with a specific expertise in a given subject matter) launch discussion topics on the community space exploiting different media solutions, such as targeted podcasts featuring interviews to experts; publications uploaded into the Library and given visibility in the community homepage; videos of interesting events to be commented and further elaborated; quotations used as prompts to stimulate reflection and discussion. Participating members can post text, audio and video materials, also creating new discussion threads within the original topic. When the topic has been well covered and examined, and discussion seems to be at a standstill (no more contributions from members), the key outcomes that have emerged from discussion are highlighted and stored for further consideration. **In this respect, the RezEd staff compiles twice a year a comprehensive report of the main outcomes developed by the community.** This report can be downloaded from the RezEd portal or can be ordered in printed format.

Community members can create a discussion group and launch a forum. Other members willing to participate need to join the group and then can start posting text comments and other multimedia contributions (in the form of podcasts, videos, photos). Discussion then progresses as in the “top-down” mode, with no final recap of discussion.

Resources

With respect to the materials/tools/support that are shared and used, the following are particularly common: Articles, papers, publications; Self-produced videos from conferences, seminars, virtual worlds environments (used to explain specific practices and experiences); Podcasts; Photos. A library is also available containing publications, articles, papers, etc. uploaded by the community animators and members.

Regarding the available technologies, the RezEd community portal is interactive in terms of retrieval of information about members and materials (publications, articles, papers, podcasts, events, etc.) that need to be tagged upon uploading. The database used for managing content is part of the so-called “Ning technology” (the Ning platform being the one used to support the RezEd community), specifically developed to create social networks (<http://www.ning.com>). Members’ profile pages are rather simple and only minor customisations can be made. However, there is the facility to add external links to platforms used to edit sound and images or to link to social networks (e.g. MySpace, Facebook, etc.). The community provides the following functionalities: Discussion fora; Podcasts; the Members’ Blogs (all community members can start their own blog within the RezEd portal); the Comment wall (in each member’s profile page other users can leave a message on the “Comment wall”); the Events page (community animators and members can update this public page with information on relevant events); the News page: (community animators and members can add news on research publications, articles, occurrences in members’ life, etc.).

Learning in the community

“RezEd explicitly pursues the goal of stimulating learning among its members, making the best out of diversity (position, experience, professional background)” (Manager interview)

The community provides an informal learning setting where members are voluntarily engaged in learning activities out of their willingness and interest. **Learning among RezEd members is facilitated by the community animators and by expert members** who take the lead in initiating discussions and Special Interest Groups. **Learning happens through knowledge and practice sharing and by interaction.** Participants learn about innovative pedagogical models and learning practices using virtual worlds with young people. Learning occurs using the same tools and support that are to be used with students. Familiarisation with virtual worlds and the related learning models and practices makes community members more interested in the addressed topics and committed to their effective use in their professional life. Interestingly, the community holds a **positive concept of lurking**.

On the side of management, lurking (if temporary) is seen as a way to smoothly get to know the community and its dynamics. On the side of members, *“Observing and learning from the others, behaving as a lurker”* is perceived as a way to learn.

Members’ motivation to be involved in the community mainly relates to professional development (improved knowledge on theoretical approaches related to learning in virtual settings; experience sharing and practice exchange; accessibility to a variety of innovative solutions for learning) and networking (establishing partnerships for research, business, and community action with the youth; increase of individual social networks).

The results of the survey and interviews show that members’ expectations are met in that main benefits in being part of the community are claimed to be: the possibility to get to know about experiences developed by practitioners in other contexts; opening up of interesting opportunities to start new partnerships in community action and research activities. Survey results also show that **membership contributes to improvement in work performance and enhances creativity and critical thinking.** Improvement of **digital skills and sense of initiative** are also claimed to be a benefit gained by being part of the community. The fact that the community involves experts from all around the world and from a variety of professional profiles inevitably improves **cultural awareness,**

as backed from survey results. Interviews highlight that the improvement of **social and communication skills** emerges as a result of being part of the community.

Knowledge construction happens with knowledge and experience sharing through structured (discussions started by animators) and not structured (discussions started by members) processes: based on the results of discussions each member can learn their own lessons. The process of knowledge creation is tracked only for the discussions launched by the community staff.

As concerns **learning outcomes**, the community supports both exchange of practical knowledge and experience and theoretical knowledge. The experiences that are organised by members, such as virtual meetings and other kinds of events in Second Life or other virtual worlds, provide for valuable hands-on practice in the use of such technologies. As from the words of the community manager, *“Learning is an explicit goal but happens informally and unintentionally (...) the issue of measuring learning outcomes has not been addressed. The only possible measure might be their feedback/level of satisfaction once they have applied in their daily activity what they have learnt in the community”*.

Success factors, transferability and sustainability

The main success factor of the community consists in the ever increasing number of its members. The variety in the participants’ profile has also increased over time: besides academicians and educators, also parents, journalists, after-school practitioners and others have joined.

The community provides practitioners with access to high quality resources and research in the field to establish a strong network among those using virtual worlds for learning. In this respect, RezEd is a comprehensive resource for teachers, parents, librarians, after school educators, and those interested in utilising virtual worlds for learning purposes. Interviews and survey results suggest that the community is also successful in terms of providing a platform for networking and research partnerships.

The community has a marketing and visibility strategy which is continuously updated and improved, but *“word of mouth still plays a key role”* in increasing the number of members, as stated by the manager.

The community is **sustainable**, as it managed to move from being funded by a grant from the MacArthur Foundation to being (currently) sponsored by individual citizens as well as from other public and private sources, at national and international level.

The main **challenge** faced by the community is not related to funding nor to technological updates, but rather to assuring that learning processes within the community are self-standing and its members keep them alive with or without the inputs from the RezEd staff. So, if the hierarchical model adopted supports the well functioning of the community the negative side effect is that in some cases it prevents active participation of members.

Some interesting organizational aspects could be transferred with significant impact on facilitating learning, for instance: tracking of discussions outcomes which are summarized in a yearly report freely downloadable from the web site; guided tours for newbies to get to know the community; a positive concept of lurking considered as a necessary step of members’ initiation to the community.

Most interesting aspects identified in the analysis

The community focuses on the many different ways virtual worlds are being used for learning in various settings. It covers both commercial and educational virtual worlds through news updates; multimedia resources; a podcast series with youth, theorists, world builders, practitioners and experts in the field; a best practice report series, various digital media resources, guest-moderated discussions, and more.

Members often organise meetings also outside the community, in Second Life or other virtual worlds. Therefore the activities take place within and outside the community, but always virtually.

The community introduces the concept of “virtual equity”: it is said to be open to everyone interested in virtual worlds. Admission is not subject to any particular restrictions or characteristics (e.g. qualification, job, etc.). RezEd is open to all “*real people and avatars*” willing to contribute to its advancement.

The community is very well organised, sustainable and has a clear marketing and visibility strategy. The hierarchical model adopted supports the well functioning of the community but prevents in some cases active participation.

Guides and toolboxes are provided to help newcomers in the community. It is expected (and accepted) that newcomers will lurk at the beginning to observe how the community works. Lurking, as long as temporary, is considered positively.

Community members look for innovative solutions in using virtual worlds for learning. Creative and innovative contents (e.g. experiences and good practices bringing forward new theoretical models and pedagogical practices) are warmly welcome by community members. In this respect, the community represents a key medium to give visibility to such experiences and to discuss them among peers. The use of advanced technological tools and functionalities is also positively perceived, provided these facilitate operations and do not add useless difficulties.

eTwinning – Time after Time

http://www.etwinning.net/it/pub/index.htm



Figure 3: Screenshot of eTwinning portal

Table 6. Main data eTwinning – Time after Time

Members	15 schools (including teachers, students, local community)
Geographical spread of operations	Europe
Staff	1 manager, 14 teachers, all voluntary
Field research – survey	5 responses
Field research – interviews	1 manager, 1 founder, 3 members
Observation	/ (access not allowed)

The community

The community Time after Time is part of the larger community of eTwinning, aimed at enhancing cooperation among European Schools through the development of ICT enhanced cooperation projects.

The main aim of the eTwinning “Time after Time” community (falling under the “European Citizenship” category) is to develop intercultural and interdisciplinary knowledge on the impact of time on societal changes.

This happens by sharing information on historical developments in 5 key theme areas: War, Fairy Tales, School Memories, Love, and Job, which are developed in class settings in the 14 schools involved and then shared virtually. The secondary objectives of the community are: to provide an innovative learning environment for the students, to provide them with challenging tasks, improve their language and ICT skills and to foster exchange between people from different countries.

Members’ profiles and organisation of the community

The community is made up of teachers, students and school staff of 14 European Schools located in the following countries: Italy (1 school); Lithuania (2 schools); Latvia (2 schools); Poland (2 schools); Bulgaria (2 schools); Slovakia (2 schools); Spain (1 school); Romania (3 schools).

The members are (almost) entirely female. They are in the majority between 46 and 60 years of age, which also corresponds to the information received on the age distribution within eTwinning itself. In the vast majority they are currently employed in secondary education institutions as teachers. Students are not allowed access to the community. Student access only takes place under the supervision of teachers. The materials and contributions developed by students are uploaded in the community by teachers after revision.

Resources

As concerns the eTwinning portal (where the Time after Time community is hosted), initially all members have to register in order to verify that they are representatives of legitimate schools and legitimate partners. eTwinning works in 3 dimensions: the eTwinning website, the eTwinning desktop and the eTwinning Twinspace. These three dimensions have different levels of accessibility for the users: The eTwinning website is accessible to the general public and provides information on eTwinning and general information on the projects being carried out. The eTwinning desktop is accessible only to registered members, which have to be from a legitimate school and legitimate partner. The eTwinning desktop provides: Blog, Chat, Mail, Guestbook, Intranet (for the upload of photos, drawings, documents, information on their school). The Twinspace again is an area limited to the members of a project and provides the specific project work area.

Within Time after Time, members share photographs, pictures, slideshows, documents and PowerPoint’s in the Twinspace of the project relevant to the topic addressed. All the material shared becomes part of a printed publication which constitutes the main outcome of the Time after Time project and community.

Learning in the community

This community serves the aims of the Time after Time project within eTwinning. It was chosen to analyse how and whether learning occurs among members, particularly teachers and students. It is a particular case as **although the activities of the community are originated in a formal environment** (classroom settings of the involved schools) **learning happens mostly informally and unintentionally**. As said above, the main aim of the community is to study (and learn) the impact of time on societal changes across the European countries represented by the partners schools. Both interviews and surveys, however, show that the **community facilitates learning** by supporting the **development of digital skills, social and civic competences, communication skills, language skills** (particularly, learning English as a foreign language). Key competences such as **cultural awareness**

and cultural expression are also developed, in line with the aim of the community to foster European citizenship and interculturality.

Students are the main contributors to the realization of the activities of the community **though they are not granted direct access** to the community, unless under supervision of their teachers. All the material researched and produced by students is uploaded only after validation by teachers. Research and production of material (drawings, documents, interviews, videos) is realized with the support of students' families and more in general of the local community.

Learning happens both in the process of material creation, production and gathering and uploading and in the process of material and experience sharing. This is true for both teachers and students. Additionally, interviews with teachers suggest that the community is used for them as a platform to exchange experiences and know-how on pedagogical issues.

The main motivations for teachers to become a member are: work related (to provide innovative learning environment for students, improve their language and ICT skills); personal (interest in the topic, improving language, critical thinking and ICT skills); social (develop friendships between project partners, continue work in follow-up projects, keep contact outside the project). As regards **students**, they are somehow "pushed" to enter the community though interviews with management highlight that word of mouth has led students not directly involved to ask to be part of the project (thereby contributing to the activity of the community). Significant positive impact has been reported by teachers on the behavioural improvement and increased proactivity and involvement of "problematic" students at drop out risk (defined as "*rebels*").

As no access was provided to the online environment of the community nor to the students involved it is not possible to report the students' **perception of learning** in this community. Interviewed teachers all report learning (ICT, communication, foreign language skills and tolerance) as the main gain of being part of the community both on their side and on students' side. Additionally, on the teachers' side, interviews and (the few) surveys responses show that participation in this community and more in general in the eTwinning projects and related communities has revamped their interest in teaching.

As from the words of the community founder: "*As for myself, taking part in eTwinning has allowed me after more than 20 years teaching to regain motivation and passion for teaching*".

Knowledge construction happens with material (documents, ppt, videos, drawings) and experience sharing processes. The results are documented in a final publication and exhibition.

As concerns **learning outcomes**, the community is strongly involving the experiences of the individuals, their families and of the local community in the process of collecting the information for the project. However the information collected provides also the basis for theoretical knowledge on the cultural differences related to the different subjects of war, fairy tales, love, school memories and work. Teachers use the community also as a platform to discuss pedagogical issues.

Success factors, transferability and sustainability

The sheer number of people now engaged in eTwinning can be seen already as a major **success** – teachers who are trying to work together and improve their teaching skills. The Time after Time community is growing thanks to the progressive involvement of more and more schools throughout Europe. The community is the result of a previously run community within eTwinning and will lead to the creation of a new community in 2010. The presence of a *fil rouge* that supports community evolution is an important result and at the same time an important motivation for members to contribute in an evolutionary perspective.

This aspect makes the community "**sustainable**" in terms of activities, though there is no funding available for this community and all the activities are run on a voluntary basis. In a way, it is the personal interest and passion of the teachers involved that allows the community to survive and evolve.

As concerns the **transferability of the learning model**, the following quote (founder interview) is straight to the point: *“If eTwinning as a whole was used as a teaching model it would be far more efficient than the current teaching models we have. We have to face a decreasing role of the family in educating children (also from a social point of view). Projects like eTwinning help teachers in contrasting this negative trend and support students’ social growth”*.

Most interesting aspects identified in the analysis

The activities of the community are not limited to the classroom, but also **involve the local community** of each partner school (family, friends, the local museum, the local library, etc.) in the process of information finding and collection.

Students are involved in a **self-organised learning process which enhances creativity** *“in the process of documenting the knowledge, by planning to not only collect photographs, documents, drawings, but also conduct interviews with war veterans and the local museum”* and **personal growth**.

The community is an example of a learner-centred environment, where teachers and students act as peers: *“Between the different community members as well as the teachers and the students there is a development of friendship on equal level through the work on this project. It is a shared effort, which unites us.”* (Member interview).

There is **equal involvement of different age-groups and skills sets** (the community involves students both in primary and secondary level education) and **equal relevance of the project content for the different members**. The different topics addressed in the project (War, Fairy Tales, Love, School Memories, Work) reflect the age diversity and the differences in interest in the community. This can also be shown in terms of the main interest the different project partners have in the project. While the older students seem to invest time in producing documentation on some topics the younger students find *“most interesting the Tales drawing and school’s pictures.”* **Consequently the outcomes of the different age groups differ in terms of complexity, but there is no difference made in terms of importance of different contributions in the project.**

The exchange of documents on the same subject (Fairy Tales, war, school memories, etc.) not only supports the individual understanding about ones’ own culture, but also promotes cultural exchange. This exchange of information on cultural differences **raises cultural awareness** by making visible similarities and differences in cultures. This way it provides a lively contribution to the feeling of diversity in Europe. This is also voiced as an explicit motivation of the project partners to join the project: *“I think - our students learn more about their family history, they know more about different countries”* (interview with community manager).

One of the main challenges for the community is of technological nature: while the eTwinning manager mentions in her interview that creativity in the learning process is only limited by the imagination of the teachers, the project members have witnessed that some of their ideas have met the technical limitations of the eTwinning Twinspace.

CEDDET - Latin American Experts Network on Public Administration

<http://www.ceddet.org/>



Figure 4: Screenshot of the CEDDET webpage

Table 7. Main data CEDDET

Members	770
Geographical spread of operations	Spain and Latin America
Staff	10 people including manager
Field research – survey	101 responses
Field research – interviews	1 Manager 1 staff 3 members
Observation	Online interaction Content analysis

The community

The CEDDET Foundation (Centro de Educación a Distancia para el Desarrollo Económico y Tecnológico) was established in 2002-2003. It offers online courses to Latin American Institutions with the objective to improve their management procedures and ameliorate services to citizens. CEDDET aims at sharing knowledge and experiences in Spanish institutions and firms with other countries, mostly in Latin America.

The first courses commenced in 2003 and, in autumn 2005 the first of six project networks was launched. Each network has its own community made up of participants in courses on specific topics. The Latin American Experts Network on Public Management is one of those networks. This community was launched in 2005 and focuses solely on management professions related to Public Management. It is part of the REI project which also includes other communities for Latin American professionals on Energy, Parliament and Quality of service, among others. It aims to: promote the collaboration between public organizations and the development of common activities in the Latin American context.; create a permanent forum to share knowledge, and exchange experiences and good practices; improve lifelong learning programs; give the opportunity to former participants of CEDDET training courses to keep in touch.

Members' profiles and organisation of the community

The community consists of more than 770 registered people who are involved in professions related to public management in Latin American, Spain and Brazil (20 countries). This community is closed, meaning only participants to CEDDET courses with at least 5 years of experience in the field are allowed to become members upon invitation. There is an almost equal distribution among males (51%) and females (49%) and the majority of members are at least graduates (95.4%) and employed on a full time basis (91%).

There are four main activities featuring interaction within the community: thematic forums, expert forums, refreshing courses, drafting and dissemination of the electronic journal.

Thematic Forums address human resources or public administration topics. They are launched monthly and are coordinated either by a community coordinator or by long time members with relevant expertise. The outcomes of the discussions are tracked and considered for dissemination through the electronic journal.

Outstanding public management experts are invited to moderate the Expert forums, organized every six months. When the outcomes are particularly interesting and relevant, the expert is asked to write an article then published in the electronic journal.

Refresher courses usually last one week, with a further week allowed for the completion of tasks and activities. The forum related to the refresher courses is a closed forum for 30 participants maximum. In 2008, two such refresher courses were organized, one on electronic government and the other on citizens services system.

Since the end of 2007 an electronic journal is produced twice a year in collaboration with the community members. An editor in chief is chosen, who is in charge of selecting contents together with the coordination team. It includes interviews, expert articles, forums outcomes and represents a synthesis of all the activities taking place in the community. Also, it includes comments and articles about institutional presentations from member institutions and interesting experiences and practices.

Resources

The platform is built in Moodle software and the following tools are included: online communication tools (forum, internal e-mail and chat): document resources (including the electronic journal), glossary and links. The community offers the following facilities: Registration and tracking facilities; Built-in glossary which allows community members to add new vocabulary and expressions related to their field; Electronic communication support that includes an internal e-mail system, quick message

system, forums with and without a moderator, and a chat room; E-mail and forums which include a HTML and WYSIWYG editor, and make it possible to post text, pictures, hyperlinks and upload documents.

As far as content resources are concerned, articles, papers, information on interesting websites, tools, and events are mostly disseminated by staff and members through discussion groups within Forums. There is a specific area where online courses documentation is stored and the collaboratively built content is disseminated through the electronic journal, published twice a year on the project web site.

Learning in the community

This community addresses the professional upgrade needs of a closed group of Public Administration professionals in a defined and vast area (Latin America and Spain, for a total of 20 countries) **facilitating both intentional and unintentional learning.**

The short term courses have explicit learning aims and are formal learning activities (a certificate is provided once the course is passed) and are organised periodically addressing a restricted group of professionals, possibly coming from different countries of Latin America and Spain so to allow exchange of experiences and practices.

Informal learning takes place through *Thematic and Expert Forums*, organised periodically (respectively once a month and twice a year) and, according to the words of the manager “*by reading the electronic journal*”, which contains the main outcomes of all the discussions held in Forums in the previous six months in the forms of articles and papers or examples of experiences coming from different countries and institutions.

In general terms, as confirmed by the results of the surveys, **learning happens mainly through interaction** allowing sharing of theoretical knowledge and practice exchange among members. Reading and contribution to the drafting of the electronic journal are also quoted as learning activities by community management and members.

This is a closed community where members are invited to participate only when and if fulfilling a set of requirements as explained above. According to the survey results, the two main **motivations to participate** are: to learn through participation; to connect with others having similar experiences and interests for receiving and giving advice. As concerns the benefits gained, these are both professional and social according to management. The same is true from the perspective of members, though more emphasis is put on the added value of networking in terms of keeping in touch with other professionals and sharing experiences and practices.

CEDDET members join the community for their professional development, so there is **individual awareness of learning processes taking place in the community**, especially in relation to the exchange of experiences and good practices among professionals belonging to different countries.

Online interactions within the REI on Public Management community are mainly based on the collaborative **co-construction of practical knowledge** through forum discussions, which confirms the professional oriented nature of this community. This co-construction of knowledge also implies consensus building and a negotiation of meanings as different opinions and ideas come up during the discussion. The new knowledge, collaboratively developed, is tracked and summarised in the form of papers, articles, insights into interesting practices published in the community electronic journal. **Learning outcomes** are therefore more practice-oriented than theoretical though short term courses (which are part of the community activity) provide learning opportunities on theoretical issues.

The nature of the community and the way it is organised allow constant exchange of views and experiences amongst a wide community of members representing different countries and realities. In line with this, the main **competences** that the community helps to develop are, according to survey results: **cultural awareness, cultural expression, critical thinking.** As from the words of one of the members: “*The most valuable thing was, above all, to share experiences. When forums are initiated or*

when one can access any document which has been uploaded by a colleague from any Latin American country, and to be able to analyse and evaluate its viability and applications, the possibility to unite no matter if they come from Spain, Argentina, Colombia or Peru..”

Success factors, transferability and sustainability

According to the management the main **success** factors consist in the capacity to consolidate a critical mass of more than 700 members and to expand it continuously. The capacity to build and maintain a network on public management involving actively participants from 20 countries is also mentioned as a major success.

As concerns **sustainability**, the community is funded through CEDDET by the Spanish Ministry of Economy (main sponsor), the World Bank and other (mostly public) sponsors like ICEX (Institute of Foreign Trade) and AECI (Spanish Agency for International Cooperation). Some sponsors provide contributions (for instance, Fundación Telefónica). Institutions utilizing the community to deliver their courses provide funding for courses organization and networking activities development.

The management highlights sustainability **challenges** in terms of technological update of the community (the Moodle platform has become unsuitable to support the smooth functioning of the community: *“Moodle lacks of some functionalities that the network requires, above all in terms of database, and it is too hard to handle with such a big community of more than 700 people (...) we want to create a directory which allows you to search by territory, country, institution, topics of interest, etc”*).

The combination of formal (short term courses) and informal (forums) learning activities to enhance professional update could be easily **transferred** to other professional contexts. Same is true for the process of tracking and summarizing forums discussions so to allow storage and distribution of the knowledge created through a periodic publication (in this case the electronic journal) within and outside the community.

Most interesting aspects identified in the analysis

This is a closed community where formal learning is an explicit aim (with short term refresher courses), but informal learning also emerges through interaction of participants (Forums) and collaborative knowledge creation (electronic journal), leading to practice exchange among Latin American and Spanish professionals and practitioners in the field of Public Administration.

The community was originated by the request of participants to CEDDET courses, who asked for a virtual platform allowing them to keep in touch after completion of the courses. It therefore originated from a “socialising” need and evolved then into a community facilitating learning.

There is a high level of awareness of the added value the community brings in terms of learning and professional development of its members. This leads the management to constantly reflect on improvements to be made to let participants gain the most out of the community. Over time, the community has evolved from a space where to keep in touch and discuss on topics of interest in an unstructured way to a well structured community where forums are organised periodically under the coordination of the staff or of expert members and where space is provided to external experts to introduce new topics. Realising that there was a high risk of knowledge loss, the management has introduced tracking of all the discussions of the Forums and synthesis of the most relevant aspects emerged and conclusions drawn into a periodic publication available to all members (and planned to be disseminated also outside the community). At the moment, the management is looking for an alternative platform as the current one is not able to support community activities anymore.

The community has a wide geographical spread (20 countries including Latin American countries and Spain) and involves professionals and practitioners interested mainly in exchanging practices and experiences in the field of Public Administration. The cross-cultural collaborative exchange enhanced

by the community leads to the development of cultural awareness and cultural expression competences.

Il Cantiere

http://www.biasco.ch/cantiere

Figure 5: Screenshot of the webpage of "Il Cantiere"

Table 8. Main data Il Cantiere

Members	50
Geographical spread of operations	Italy
Staff	1 manager, 2 staff
Field research – survey	16 responses
Field research – interviews	1 manager 5 members
Observation	Online interaction Content analysis

The community

Il Cantiere is a wiki hosting a self-regulated and production-oriented community. Its main aim is “*to propose and experiment*” a collaborative approach which finds a concrete output in the development and production of videos.

The common, fundamental interest is towards the use of the free software, its operational and cultural consequences. Beside, participants mostly share an interest for socially relevant subjects such as science, environment, new technologies, awareness raising in general. In its first year of activity (the community was launched in April 2008) videos supporting users in the use of Wikipedia and of free software applications have been collaboratively produced.

As from the words of the founder, the community was created to respond to the needs of “*prosumers – producers/consumers*”, *that is to say of the active users who are not interested in a mere passive reception but want to participate in the creation of the show*”.

Members’ profiles and organisation of the community

There are 50 members, only 45 officially registered with the web site and only 20 actually active. They are mostly men (75%), well educated and either employed or full time university students, mostly engaged in scientific and IT sectors. Almost the whole community is Italian and the final products have been released in the Italian language. The community is currently considering translation into Spanish, English and French to widen the spread of operations.

The community is self-organised. Being still quite a young community, activities are still mainly enhanced and started by the founder and manager. Once they are started, however, all members have equal roles and contribute to discussions and production.

Activities are mainly organized through interaction started with one member posing a question or making a proposal for action. Interaction takes place through the website and its tools, mostly through blog posts and the discussions and it is mostly centred on the production of the outputs (namely, videos) although it also implies discussions on topics related to the wider subject of the wiki world, free software and free culture.

When a question is asked, or an issue is proposed, people who have something to say about it, or something to add, can do so on the “discussion” pages. Members comment on the issue or provide information, materials or links to other sources of information. By interacting in such a manner, people get to know each other and discover further common interests, in different fields. Often, as a result, participants may decide to initiate further collaborative interaction, in order to achieve a deeper knowledge and understanding of a specific subject. Members (i.e. registered users) have a personal space where they can post a presentation of themselves, make statements, give personal contacts and list categories of subjects (which may include personal interests, skills, professional experiences and aspirations) under which they provide links to other related sources. In this way members can choose to browse around and see what other common interests they might have with other members and can then decide whether to share and exchange more specific knowledge.

Resources

As concerns available materials, members mostly share technical information, practical hints based on personal knowledge, direct experience, educational or professional background. They provide advice, suggestions as to how to solve technical problems, proposals for changing and developing the project, referrals to authoritative opinions on a specific subject. There is a significant use of linking to other web sources, also for downloading software applications. The content provided by the community is mostly made of links to other web sources where one can find news, articles and papers but, more often, downloads of software applications, software updates, i.e. technical tools. Some links lead to online experiences which can provide useful hints to the project. Last but not least, the community provides access to all the produced videos.

As regards technologies, the project is essentially based on one program which allows the community to exist, work and look the way it does. This program is MediaWiki and through it members can communicate, discuss, share information, post links and materials straight from the website. Other ICT tools are still quite used by the members to communicate among themselves, such as: email clients, internet browsers, micro-blogging, i.e. twitter, and other chat programs (like Skype) and social networks (Facebook).

Learning in the community

“Learning happens in the very process of sharing and confronting with other people, which is at the base of the collaborative approach” (Manager Interview). There is no explicit learning purpose in this community but learning emerges as an informal process.

Learning is related to: a) the use of the website and the program that makes the community work (MediaWiki); b) the topic of the outputs (programs released in the free software environment, i.e. GNU/Linux); c) the online interactive language; d) the collaborative approach and production.

The community collaboratively develops videos related to free software and issues of general interest (environment for instance) and is made of **members who join because of their interest in deepening their technical knowledge, enhancing their creativity and contributing collaboratively to video creation and production**. Some participants are directly motivated by the possibility to gain a technical understanding of how to set up a video, while others are more interested in the collaborative process itself which, at a later stage, could be applied to projects of a different nature. Creativity too seems to be a main motivation as participants can contribute to shape the final output, suggest ideas for new projects and, even by providing minor corrections, feel a degree ownership of the final product. Finally, but equally relevant, members enjoy being part of a challenging innovative project and feel encouraged when meeting other people with the same enthusiasm. They also participate for fun and to enlarge their social network.

Interviews and survey results show a high level of awareness on the side of members and management of learning taking place in the community. **Individual perception of learning** is related mainly to interaction, through which members enhance their **creativity, develop their critical thinking, improve their digital and communication skills and in some cases their foreign language skills** (this regards members involved in the translation of the community main pages into foreign languages).

The main gain perceived by members in being involved in the community is related to the **improvement of self confidence and sense of initiative**: embarking in projects which require a high level of creativity and mastering of IT skills is challenging, but once the concrete results of members' effort emerge (videos) members feel they have learnt and contributed actively to the realization of something important: *“I could see that my contributions had been accepted and were taking visible, concrete shape in the final product, that is the video”* (member interview).

Online interactions are mainly based on the collaborative **co-construction of practical knowledge concretising in the production of videos**. Interestingly, though the community has no explicit learning aims all the videos produced so far are of educational nature as they guide users in the use of (free) software applications. This co-construction of knowledge is the result of consensus building and negotiation among members. The community is used as a platform to take strategic decisions on its orientation following discussions among members. It is interesting to report one case where the idea of producing a video was launched and widely accepted by members at the beginning, but then a deeper discussion led to the jointly agreed decision to skip the production.

Learning outcomes are practice-oriented: facilitating joint materials (videos) construction is what characterizes the community, whereas the provision of theoretical information is only **incidental and functional** to video production.

Success factors, transferability and sustainability

The main **success factors** consist in quality (the videos produced have gained the attention of sector magazines and professionals) and the level of participation leading to such (collaborative) production. The manager also quotes enthusiasm around the initiative as a success in that it is contributing to the development and evolution of the community.

The community receives no funding and gets no revenue from its products. It lives on the voluntary contribution of its manager (and founder) and members. Given its recent creation, the community still relies mainly on the initiatives of the founder, and this is a serious challenge for its **sustainability** according to the same words of the founder.

Transferability is explicitly mentioned by the manager and members as a potential of the community in terms of: use of the MediaWiki program which implies for the users acquisition of technological skills they can then use in the whole, wide wiki world; transferability of the collaborative production model adopted to other concrete output production contexts.

Most interesting aspects identified in the analysis

This is a production-driven and self-organised community with no explicit learning aims. Members join to produce collaboratively in the field of free software. Interviews suggest that their personal esteem of the founder had a role in choosing to join.

Learning is the result of collaborative production and of the discussion, knowledge and experience sharing involved in this process. Despite the community does not have an explicit educational aim, its outputs (videos) are educational.

Creativity and innovation are central to this community. Members are supposed to suggest, advise, propose and update. Each single output, not being pre-determined, must be shaped by all members with creative and innovative ideas.

The community shows **spontaneous self-regulation** of the communication and of the selection of inputs to share. Though the community manager and founder still plays a key role in launching discussions and ideas, all members play a key role in bringing discussions forward and contribute equally and collaboratively to production.

Equity and equality are guaranteed: the community is open to anyone interested and all members are respectful, flexible and open to different viewpoints, approaches, and ideas. Given its nature, the community is mostly made of ICT skilled members. Interviews show however that members with low ICT skills are welcome to join and supported in acquiring the necessary skills to be able to contribute. A strong cooperative spirit animates the community which shows a constructive, fruitful and positive atmosphere.

This community shows that **collaborative production processes** can support informal learning and the acquisition of communication, digital and social skills. Members join to collaboratively produce videos and report that they have improved their ICT skills, their online communication skills, their capacity to understand and accept the viewpoints of others. Additionally, collaborative production in this community helps members to enhance their creativity, to develop their critical thinking and to improve their self confidence and sense of initiative.

Microbiology Forum

<http://www.microbiologyforum.org/>



Figure 6: Screenshot of the Microbiology Forum webpage

Table 9. Main data Microbiology Forum

Members	8,372
Geographical spread of operations	Worldwide
Staff	1 manager
Field research – survey	51 responses
Field research – interviews	1 manager 4 members
Observation	Online interaction Content analysis

The community

The Microbiology Forum involves professionals that deal with the technical or organizational issues related to microbiology. It aims to create an area where practitioners can “benchmark their practices”, share notes, debate and get advice on matters related to their field and to help practitioners keep up-to-date with new initiatives. The community was created in 1992 because there was a lack of training available to people and also a lack of communication with regards to the sharing of know-how. This led to many microbiologists being isolated – not knowing what other companies or individuals were doing in the field. Thus certain anomalous practices started to develop. The community was created to tackle these issues – to create an area where members could compare practices and approaches - ask questions, debate ideas and suggest new ways of thinking.

Members’ profiles and organisation of the community

There are 8,372 registered members in the Forum out of which 3,232 access the Pharmaceutical Micro-Biology Mailing List and 1,105 access the ‘stability testing of pharmaceuticals, medical devices and personal products’ mailing list. Members of the Microbiology Forum are involved in professions that deal with the technical or organizational issues related to microbiology. Survey results suggest that the majority of members are aged 31-60. There is an almost even distribution among males (47%) and females (52%). The majority of members are employed on a full time basis and have at least a higher education degree. The Community is international and has representatives from 88 countries. The majority of members though come from the US and Western Europe. Recently Chinese and Indian microbiologists have joined.

The modes of interaction within the community are organized in the following manner:

- ◆ A newsletter that is sent out to all members of the forum to inform members on specific topics of interest and debate.
- ◆ An active mailing list (working as a Forum) where participants may ask questions, debate issues and get advice from their peers.

Resources

Materials and tools used centre around the topic of Microbiology, namely: Scientific articles and data; News articles; Regulation (laws) and practices.

The ICT-enabling environment is very limited. The Newsletter is created with a basic design programme and distributed via email. The website and the mailing list are subcontracted to a third party. The website is a basic HTML site used to store the newsletters, emails from the mailing list and to update members on conference and important notices.

Learning in the community

Learning happens by “*peer exchange, evaluating discussions, trying to be innovative and being part of an active community*” (Manager Interview).

This **community is indirectly facilitating learning** through its **newsletter** and forum. The newsletter is compiled every month and contains a variety of information. Experts in the field are asked to submit specific articles. Thus members of the forum have access to this resource which allows them to keep up to date with what is happening in the field of microbiology. Participating in the **forum** (which is in fact an email mailing list) implies an interactive process of sharing knowledge/experience, giving advice and encouraging others to try new methods which in turn leads to learning. The email mailing list is also used to discuss articles that appeared in the newsletter and also allows members to bounce ideas amongst peers before actually trying them in laboratories. This is evidenced by the fact that responses to the survey show that 86.3% of respondents participate through the reading of interactions and 68.6% participate by contributing to discussions. The member interviews also show that this process has been quite beneficial to their profession and their acquisition of knowledge.

Membership to the Forum allows access to debates and content that – according to the manager – microbiologists could not access elsewhere. **Individual perception and awareness of learning** is linked to the possibility to benchmark ideas and practices.

There are two main visible **motivations to participate**. These are: knowledge acquisition (the fact that one is privy to this information and is allowed access to debate or raise queries with others that share their same profession is of course a great resource); prestige: being involved, cited and “noticed”, brings with it a certain amount of prestige in the community – but even so outside of the community. As mentioned by the manager: *“In the professional arena, microbiologists are general low within the hierarchy (with other departments and individuals telling them how to do their job). The fact that true the community they are allowed to grow in stature, to see how other companies and individuals are addressing certain issues – this allows them become, and be viewed, as experts in the subject matter at hand”*.

According to the Community Manager, the main type of **benefit** is the opportunity to benchmark their practices. Any practicing competent scientist (for the community is not there to teach you microbiology) can keep up-to-date, learn new practices and share their professional experiences. The community allows them not to be isolated – or be lead in one direction. The community gives them a chance to bounce ideas around. For members, being involved in a community and getting to know people online before meeting face to face at live conferences makes them more comfortable to share their ideas. According to the members’ interviews and survey, the main gains perceived from respondents in being involved in this community are related to: improvement of general knowledge; improvement of work performance; support to doing one’s work better; support to learning relevant to members’ work.

Interestingly, improvement of self confidence is also quoted in surveys as one of the main gains of being member of the community, showing that it has – despite appearance – an impact not only on the professional life of individuals but also on their social life and personal emotional growth.

Whereas the newsletter is provided by the manager, the forum allows for **knowledge creation**, with particular reference on practical knowledge. Observation of online interactions has shown that many members use the email mailing list to query on information and practical advice with regards to the projects they are currently working on. More than often, the process of discussion started by queries leads to practical innovative suggestions on how to proceed.

The very basic technological features of the community do not support the acquisition of digital **skills**. Survey and interview results report very low ranking also with respect to socio and civic competences, cultural awareness, cultural expression and learning to learn. Statements of the manager regarding the support of the community in improving members’ and creativity are not reflected in the survey results where creativity is given a very low ranking. On the opposite side, the majority of members agree on the fact that participation in the community has helped their **critical thinking** as it is helping them ‘think out of the box’ and benchmark their practices.

Success factors, transferability and sustainability

The main **success factors** are the following: longevity (the community has been alive for 16 years); utility (given the increasing number of members over time it is clear that a good purpose it served); high esteem (its content is quoted in various conferences and articles. It has also attracted a good amount of experts who have contributed to the newsletter and the internal debates).

Learning within the community happens by: a) reading the newsletter b) interaction with peers leading to exchange of practices and ideas and to knowledge creation. The ICT used to achieve this are quite basic. This model could be easily **transferred** to other scientific oriented contexts though probably the same impact could not be achieved. The success of the community lies in its uniqueness and in the fact that it has managed to acquire recognition in the microbiology field for the quality of discussions and for providing a space for discussion, which was missing, not in its learning model: *“The community is*

geared to offer the chance of dialogue – this in turn means that not all that is said might be 100% accurate. It's a type of learning one achieves through peer exchange" (Manager interview).

As far as **sustainability** is concerned, the community is managed by corporate sponsors (but no advertisement is allowed in the Forum). This allows maintenance of the community despite the high costs (they pay per email sent - so the more the participation – the higher the expenses). The community manager is considering the introduction of online seminars to widen the facilities available to members and the introduction of video-conferencing facilities (for the latter a fee will be requested to members willing to utilize them).

Most interesting aspects identified in the analysis

This community shows that, even with a basic setup, ICT is able to facilitate interaction with people all over the world that can lead to learning. The Microbiology Forum has been active for over 15 years. Without any sort of advertising it has managed to gather enough publicity (word of mouth, citations etc) to double its membership between 2005 and 2008 and now also has members from 88 countries. This puts emphasis on the need for such a Forum and the importance of the content it generates. The community is financed by corporate sponsors but no advertisements are allowed. This guarantees its independence.

Though the community has made a precise choice not to have a formal role in training, the value of the debates and contents have made the community highly acknowledged, with positive and negative side effects. As stated by the manager: *"The community has been so effective that certain companies are reducing their training budget and encouraging their employees to participate in the community. We have stated that the community is not a training programme, nor was it created to replace training. It is true that learning does happen through the use of the community but in no way should this be used as an excuse not to train one's staff"*.

The community is looking at introducing Online Seminars – something that would be very new for the field of Microbiology and would bring a new dimension to learning to the Forum.

Though the main aim of this community is to support professional development of its members, survey results show an additional side effect of participation in increasing their self esteem and critical thinking.

EnglishForums

http://www.englishforums.com/



Figure 7: Screenshot of the Englishforum webpage

Table 10. Main data Englishforums

Members	78,000
Geographical spread of operations	Worldwide
Staff	1 manager, 6 administrators, 40 moderators
Field research – survey	9 responses
Field research – interviews	1 manager 4 members
Observation	Online interaction Content analysis

The community

Englishforums started in May 2003 as a forum, to help out Frank West's parents who were teachers in an English summer school in Malta. The idea behind it (the mission/philosophy) was to support the students learning English by allowing them to communicate outside the formal learning programme, exchange information, answer each other's questions etc.

For a year it was a hobby done solely by Frank West without any funding. However once the numbers of visitors started growing, it became a business financed by Google ads.

The main goal of the Englishforums is to help people learn English. It is based on the principle of questions and answers, where members of the community both ask the questions and answer each other. This way they try to gather as much information on different aspects of the English language as possible. It is dedicated to learning a language by involving people from all over the world in a community with a shared goal.

Members' profiles and organisation of the community

The community counts 78000 registered members aged from 18 to 70 with the majority in their 20s or 30s. There are slightly more female than male members and, according to the results of the survey, most users have higher education. The community is open to everyone wishing to join - however, basic knowledge of English is a prerequisite to participate.

In the words of the manager, the Englishforums has *a military organisation with a hippie attitude*. *"The organisational structure relays on loyal people who keep answering the questions without any remuneration. From administrators down, everybody is volunteering and doing this on top of their everyday job. The only motive they have for doing this is to help out other people"*. At the time of writing there were 4 staff people working on maintaining the site and working behind the curtains. They are responsible for all the software, organising topics, filtering out spam, but they almost never get involved in the community. From here on the roles are looser. There are 6-7 administrators structuring the pages and making sure the communications on the forums are appropriate. There are about 40 moderators who edit the pages and hundreds of trusted users. The trusted users are regular users, who have been voluntarily taking on more responsibility for answering questions posted on the site. Trusted users are invited to join the organisation in the sort of backroom, where they get more info and support than regular users. After a while they may be promoted to higher positions. According to the manager, **most members are lurkers**.

Participants can interact through **Forums**. These are grouped and form 9 main categories: ESL, Rules of English Grammar, Help and Games; ESL Basic and Easy English ONLY; Teaching English as a Foreign Language - (TEFL); ESL Conversation Topics for Discussion ; ESP - English for Specific Purposes; Debating Society; ESL Writing; General; Newsgroups. As can be seen from the titles of the categories, their main objective is to share information and offer support. Most of it is done in an informal way and is full of fun comments.

Particularly interesting are the forums in Debating Society category where participants polish their English while debating about different hot topics. Additionally, members can interact through **Chat rooms**: there are 9 chat rooms all dedicated to fun chatting. Mostly people go to chat rooms to meet each other and discuss their various cultures.

Resources

There are no special materials provided, however there is a desire to create a library of resources. There are also no specific activities organised. However, the following tools are provided:

- ◇ **List of pictures** posted on the site (mainly these are pictures users put on their profiles). Pictures are tagged to aid finding the relevant picture (nature/animals/flowers, drawing/photo, girls/boys, dark/light, countries etc);

- ◇ **Videos** (one can post videos by putting a link to a YouTube video in their post). As with pictures, videos are also tagged - vocabulary, grammar, pronunciation, articles, extreme sports. Videos offer both useful information for learning English as well as just pure fun and entertainment value;
- ◇ **Tests**. These too are tagged (CAE, CPE, Cambridge, Universities, vocabulary etc).

As regards the technological features, the community offers: forum, a chat page, mailing lists and twittering tools are not yet available and will probably be introduced later.

Learning in the community

Englishforums is dedicated to learning a language by involving people from all over the world in a community with a shared goal. There are no special materials provided, however there is a desire to create a library of resources. There are also no specific activities organised. The reasons for that are twofold. On one hand this community is developing everyday and creating more resources and support for its users. On the other hand there is a policy of loose roles which is adopted to allow every person to develop their own course and adjust it to their particular needs, way and speed of learning. The lack of strict structure is in a way one of the greatest assets of the community. The learning is organized to the extent that questions and answers are grouped together by topic to ease the search for information. There is a general framework of the site within which members create their own content and knowledge.

Based on the observation of the community and reinforced by the interviews and the results of the survey, learning appears to happen in 6 ways:

- ◆ *Learning by reading posts*. This is a passive non-interactive way of learning. Members of the community are mainly lurkers. The site itself is designed to promote this way of learning as it can be simplistically described as a collection of questions and answers. The Englishforums is by the words of the manager one of the first sites to offer such a service. It is not unusual for a question that one might have today to have been previously discussed or answered and this information can be found on the site.
- ◆ *Learning by watching video*. This can be either passive or active- non-interactive way of learning. Videos usually cover a topic related to learning language (pronunciation, accent reduction tips, putting a grammatical rule in context with real situation etc) or experiences of users and how they dealt with problems in learning English (different methods they've used, how to arrange a stay in an English speaking country etc). One may choose to only observe and learn passively or to practice pronunciation for example and learn actively.
- ◆ *Learning by asking questions*. This is an active and interactive way of learning. One posts a question on any matter and later receives a reply. The question can be related to a concrete issue of learning the language (correct use of grammar etc), to a situation where language is used (appropriate way to write a formal letter, CV etc) or to provoke a discussion where the use of language is practiced.
- Learning by giving answers*. This is an active and interactive way of learning. When answering questions one may have to check various sources to make sure to provide a correct answer. In this way one is learning not only the content of the answer but also how and where to find information. An interview with a member revealed she was also learning how to teach English by answering questions and by observing others answering questions. Similarly to learning by giving answers one can also learn by posting tests.
- ◆ *Learning by engaging in communication*. This can be an active or a passive and interactive way of learning. In the chat/forum one may actively learn new grammar rules discussed in the chat/forum and passively learn the grammar used in the chat/forum itself. According to the interviews with staff, engagement in communication is not only beneficial to learning the language but also to learning social skills and developing critical thinking.

- ◆ *Learning by taking tests.* The Englishforums have a section dedicated to tests created mainly by members of the community for others to use and check their knowledge of English. Most of the tests are evaluated automatically and immediately upon the completion of the test so the user gets immediate feedback. Any unclear issues resulting from the test can be further addressed by posting a question on a forum or on chat.
- ◆ *Learning by interacting in English:* the simple fact that members do interact in English implies a further step towards learning the language.

According to the interviews and the survey results, the **spill over from the main activity, learning the language, are also: learning how to teach the language; learning how to find information; learning how to use ICT tools; developing social skills; developing critical thinking.** These learning outcomes are mainly developed unintentionally.

The main **motivations** to participate are to learn the language, help others, meet and socialise. According to the Community Manager, the main **benefit** for the participants is the improvement of their English. However as much of it is done through chatting, social benefits are also prominent. Many of the users develop relationships they maintain also outside the Englishforums. The main learning benefit according to members is the total flexibility in learning the language coupled with the development of the culture of discussion and the building of relationships which they also maintain outside the Englishforums.

The community is oriented to providing knowledge (grammar, vocabulary etc) but it also provides practical advice (pronunciation, how to learn languages etc.). The learning benefit or **outcome** at the moment isn't measured.

Englishforums is focused on information acquisition which is most often acquired in the process of **co-construction**. When there is no clear agreement on an issue the interaction shifts to consensus building which is also an important process to build **knowledge**.

Provided that the rules are there (grammar, pronunciation, etc.) and cannot be “reinvented”, **this community shows an innovative and creative learning model** where knowledge is acquired collaboratively and new knowledge is shared (rather than created) based on the questions posed by participants.

Success factors, transferability and sustainability

The main result is measured on the level of personal satisfaction and development. An example of **success** is that people who could barely speak English are today teaching others in the community.

As regards **sustainability**, Englishforums is funded by Google ads. Most of the work is done voluntarily. There is a plan to get more funding in the future by doing business with language schools, but this requires the development of “*a procedure to rate the schools*” before they are advertised in the community. Management is currently considering taking this step. Management does not feel endangered by competition, in that the community offers much more than other communities dealing with learning English. A case was reported of a student trying to create a community having the same features of Englishforums. This trial failed as none of the members accepted to join, showing a strong brand loyalty. In organizational terms, the most important challenges for the community relate to the issue of keeping a safe environment: “*the main internal problem is misbehaviour of the users. The procedure is that first, the problematic post is discussed among the moderators, and then the person is warned, watched and in worst case scenario banned from the community*”.

This community shows an innovative and creative learning model where knowledge is acquired collaboratively and new knowledge is shared (rather than created) based on the questions posed by participants. This model could be transferred to other contexts, provided that the same constant support and willingness to help others is guaranteed and maintained with the active support of the members.

Most interesting aspects identified in the analysis

The most fascinating aspect about the Englishforums is that beyond just offering information on the English language there are so many cases of **spill over into other areas of personal development**, from building a strong culture of tolerance and acceptance to development of critical thinking among the active members. This isn't the result of what the Englishforums is designed to do, but rather how they do it and it distinguishes them from any other community teaching the language in a more rigid way.

The community is constantly **evolving and upgrading**. Although there are people professionally working on developing it, the community building also builds it spontaneously, bringing in creative solutions." *Also the mission is now clear – to be the best page for learning English and to make learning the language available to everyone. It shifted from being just a forum to discuss issues to actually teaching English*". (Manager interview). Born as a community to support students, it now helps also teachers in better teaching the language and updating/solving doubts.

The community is characterized by **high tolerance** for different opinions and points of view and through discussions on difficult topics it contributes significantly to the development of critical thinking of its members. It also has an extremely strong culture of mutual peer support and giving to the community. Users are at a broadly similar stage in life and share common interests. Students may be matched into groups based on background and skill level.

Englishforums encourages members to be **creative and innovative**. Everyone is free to participate and add information in any way they can think of, from using videos, to creating tests. In fact new ideas and approaches are constantly emerging. Englishforums is a developing learning community. The interview with the manager revealed plans the management has for further development of the site such as creating a library of resources etc. Without constant innovation the site would not be able to cover the growing needs of its users.

The community is defined by the manager as a "***Military organisation with a hippie attitude***". Beside the (few) people working on maintaining the site there are administrators structuring the pages and making sure the communications on the forums are appropriate and there are about 40 moderators who edit the pages. A key role is played by the (hundreds of) trusted users. These are regular users, who have been voluntarily taking on more responsibility for answering questions posted on the site. Trusted users are invited to join the organisation in the sort of backroom, where they get more info and support than regular users. After a while they may be promoted to higher positions.

"Initially there were no policies to shape it. As the forum grew, the policies emerged naturally. However these were perceived as a culture of the forum, as a set of dos and don'ts rather than a set of rules". **There are some policies in place but they are not regarded as policies, they are perceived as the culture of the community:**

- ◆ **The policy on loose roles.** Everybody can be a student and a teacher at the same time – they do not follow the hierarchy of teachers. In fact they wish to do away with roles and rules. To answer a basic question one doesn't have to be proficient in English. He/she may have just been studying the same matter and may be in even better position to answer the question and explain the matter than a highly qualified professor.
- ◆ **The policy on good manner of discussion.** Any foul and aggressive language is discouraged and if need be, deleted. Users who persist to be aggressive and intolerant are blocked from the community. However moderation is policy only in the language used to discuss topics. Extreme viewpoints on matters are in fact encouraged as long as they are expressed in moderate language.
- ◆ **Trust the people you trust.** Moderators once selected are not being regularly watched and are trusted to carry out their work professionally.

One of the **positive side effects of being a virtual environment** is said to be that the impossibility to see whom moderators are talking to and draw conclusions on their age and social status makes it *“much easier on moderators and even other users to halt people who are too extreme in their discussions. In a real life a young moderator might have quite a problem gaining authority over an older person in the community”*.

The community is developing a **plan to award qualifications for the different levels of language proficiency**. This would imply a shift from an informal to a formal learning environment.

TuDiabetes

http://tudiabetes.com/

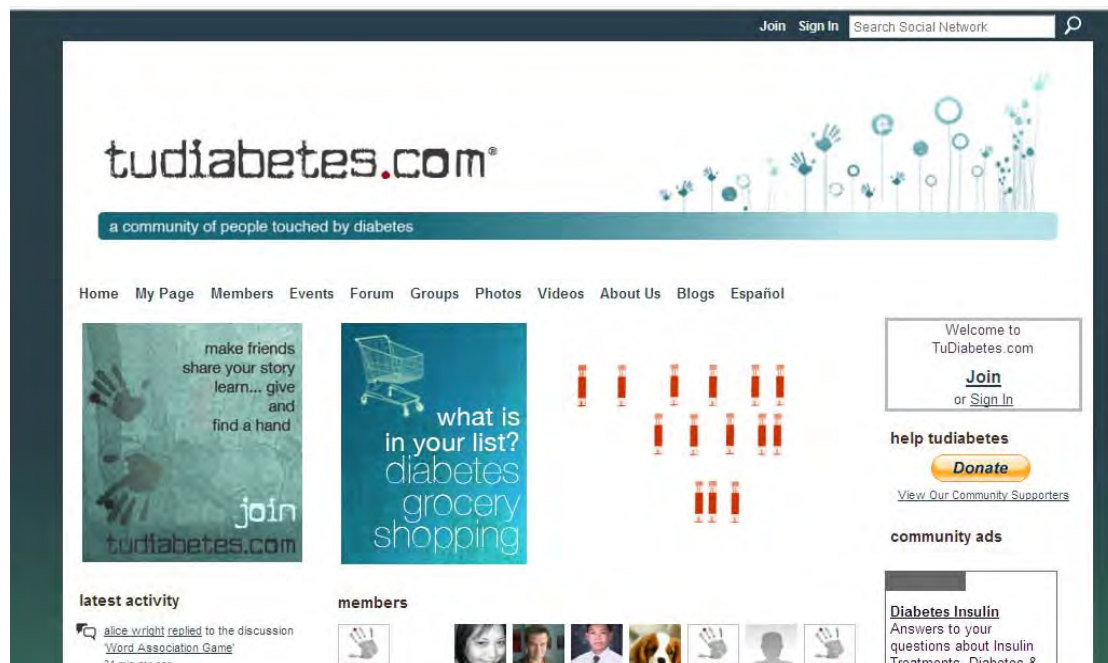


Figure 8: Screenshot of the TuDiabetes webpage

Table 11. Main data Tudiabetes

Members	5,801
Geographical spread of operations	158 countries, topped by USA, Canada, UK, Australia and India
Staff	2 full-time persons, 4 part-time volunteers serving as Administrators, 72 members of a Welcome Committee
Field research – survey	105 responses
Field research – interviews	1 manager 3 members
Observation	Online interaction Content analysis

The community

The TuDiabetes community is a social network for people touched with Diabetes. It was founded by its current manager who – after attending a meeting gathering people affected by the disease- realized the power of a community to share and spread information related to the disease.

“Towards the end of 2006, a thought started brewing in my head: the idea of making Social Networks work for things beyond making friends and socializing”. The community was established in 2007 and is run by the Diabetes Hands Foundation, a non-profit organization based out of California (USA), with the goal of helping connect people touched by diabetes and raising diabetes awareness.

It unites people who have to deal with a common health issue from all around the world, allowing them to interact for their own mutual benefit – be it knowledge, support or simply being part of a community that understands their struggle. It boasts a variety of tools that allow members to communicate with each other and through which informal learning of a social or informative nature occurs. An immense positive feeling echoes throughout the whole community. This strengthens the message that ‘no one is alone’ – which in turn makes the community a very active and supportive one.

Members’ profiles and organisation of the community

Tudiabetes is a social community of 5,801 registered people who have been touched by diabetes. It aims to create an area where members can: share experiences and information; Learn about the issue; Socialize and support each other. The members are diabetic patients, their caregivers, some health professionals and people that work in the field of diabetes. According to survey results, 62.6% are females and 37.4% males. Average age is 30 to 40. Around 60% of members are either full or part time employed. There is a significant percentage of unemployed (19%) and retired people (17%). The majority of members have at least a Higher Education degree.

The modes of interaction within the community are organized in the following manner: the use of Forums for distributing information, discussion and the sharing of experiences; the use of Visual material – namely videos and photos; the use of blogs, mainly to showcase experiences related to the issue being addressed by the community; the use of regional and thematic Groups, in order that the discussion remains relevant to the specific topic in question; the use of an inbuilt Chat system; a Newsletter sent out to keep members updated; the promotion of virtual and non-virtual events related to the community; links to other sites that have knowledge, news and/or information pertinent to the community’s interest.

Initially, members come with an objective (example: to learn more about Continuous Glucose Monitoring systems). Over time, they join groups and participate in discussions where this topic is addressed. Interaction within the forum is generally started by community administrators (from experience or based on current personal situations) or from members (also for the same reasons). In both cases there is no difference in how the discussion will progress and how the content will be generated since ultimately this depends on the members and their motivation. The type of interaction will vary depending on the question/discussion posed but it generally varies also depending on the member who answers (a doctor might point to research, offer emotional support, talk from experience etc). Other interactions are dependent on an individual, or peer-to-peer initiatives (chat, display of videos, links, photos etc).

What is good to note is that the site has a general search engine that will allow you to tap into any content available that you might be looking for. Thus people who only use the site as a resource or who might have joined at a later date can still be privy to previously generated content.

Resources

A variety of materials and tools are used, mostly centred around the topic of diabetes, namely: News articles; Scientific articles and data; Video Documentaries. There is also a good amount of ‘medical support’ from members who are trained in the field and thus offer a measure of support, mainly to

explain certain issues or directing members towards the right way to solve a problem. There is no content provided specifically by the community. A Ning platform is used to create social networks. Google AdSense and Healthline.com are used for publicity and advertisements.

Learning in the community

The **learning happens** in a free form manner through interaction (enhanced by the community Forum) in the following ways: i) a member posing a question and other members addressing that issue with opinions, experiences, documentation etc; or by ii) a member who, having learnt something new, takes the initiative to share it with his peers. In the former case, learning happens and the question is debated and answered. In the case of the latter, learning happens as people acquire the new knowledge and discuss it between themselves. The degree of learning will vary from person to person – since the system relies on the initiative of peers and the reaction of others. A crucial role is played by the administrators – who keep the community alive and buzzing with the constant introduction of issues to be tackled in the abovementioned ways.

Observation of online interaction and survey/interview results suggest that **motivations** to participate are the following: socialization (the community offers them the chance to socialize with people who suffer from the same health issue and who thus can share experiences and support one another); specific interest on the illness (members learn how to better manage their diabetes and have a resource to go back to in times of challenges, when they need support to get over the hump); inclusion (connecting with others like them: belonging and not feeling alone or “different”). The community also supports a good amount of content with regards to diabetes and various ways on how to tackle it so that people who are new to this health issue can get to terms with how to deal with it.

According to the interviews, the **main benefit** is the support and friendship that can be found in participating, as members have a chance to connect with many others that live through the same things they do. As for the survey results, the main perceived gains are the following: Improvement of general knowledge; Support to learn issues important for one’s life outside work; Improvement of self confidence. This was also reflected in the interviews. The community tries to get people affected with diabetes to manage their diabetes rather than manage their life around it.

This in turn helps people to build confidence that they can manage to do this. The benefits participants get by being involved in the community can be considered mainly twofold: Being part of a community where they can socialize; Being part of a community where they can learn, discuss, share and support each other with regards to the health issue of diabetes.

Learning is an informal process in this community. Learning strongly depends on the attitude and perception of its individual members. People join the community to avoid a sense of isolation and to get practical advice and support on how to deal with the illness. **Individual perception of learning** is therefore related mostly to the acquisition of practical knowledge and sharing of experience. As the community generates a strong sense of belonging (some members define the community as their diabetic family) members state they have learnt, inside a safe environment, to be more self confident: *“This community has taught me that I am safe to say what I want but to feel blame and guilt is wrong”* (member interview).

Learning outcomes can be drawn as follows: Knowledge on the nature of diabetes and how to live with it, fight it and make others aware of the nature of this condition; How to interact in a social manner in an online environment – most particularly in an international environment; Offering support (emotional and content wise) to peers; How to seek, acquire distribute and present information. In general, both practical and theoretical information is provided through the community, though members seem to appreciate (and rely more on) the practical one.

As from survey results, members agree that the community mostly helps in improving their life outside work and in **increasing/improving their self confidence**. Since the community is set up in a very socially oriented manner – and since learning is happening through member interactions – the

cultural awareness promoted happens indirectly but quite often. If one looks at the community (also in the group sections) one can see how different religions, for example, cope with the specific health issue. The various lifestyles the members live do overspill into the topic debate and this in turn does create a more profound **cultural awareness**: “*We are going through this diabetic journey as one but on different space ships*” (Member interview).

This same social sphere encourages people to show various **civic competences** – including helping others with their health issues; and actively championing health issues in their communities.

The content available in the community is made available both by administrators and by members. A key role is played by the forum, where interaction allows **sharing and creation of knowledge**.

Success factors, transferability and sustainability

The **main success** of the community is that it continues to reach out to more and more people touched by diabetes. A recurring theme amongst members upon joining the community, is how important it has been for them to have this resource since they no longer feel alone with their disease.

TuDiabetes is run by the Diabetes Hands Foundation, a non-profit based out of California. Funding comes from sponsorships, licensing agreements and donations. Also, it runs Google ads and ads served by another advertising network (Healthline.com). The community addresses a health issue that is yet to be solved – and from the strength of the community, the increase in content and “services” and the dedication of its administrators the community is definitely **sustainable**.

The main challenge is to keep the recognition that the community has gained from health institutions and media as related to the **reliability** of the information spread and shared: “*not far from alternative treatments are claims of a cure for diabetes (there is no current cure for it), so we need to keep a watchful and balanced eye to tell real things from empty promises*”.

Peer-to-peer learning, which is the main form of learning generated by interaction in the community, could be easily **transferred** to other contexts as long as there is proper motivation and organization.

Most interesting aspects identified in the analysis

The community was created by its current manager with the idea to “*make Social Networks work for things beyond making friends and socializing*”.

Tudiabetes uses basic community ICT (though a variety) to facilitate interaction with people all over the world who have been touched by diabetes. **It is not limited to people who have diabetes but has also managed to attract people who deal with the issue in a direct (doctors, parents) or indirect (friends) manner.** It is through this interaction that learning takes place. Learning emerges spontaneously (primarily reading/informative and peer-to-peer learning). Members have the chance to learn from people who have a) already passed to what they are passing through; b) have already researched the topic of query; c) have an opinion/information they would like to share, amongst others.

The site has a general search engine that allows members to tap into any content available. Thus people who only use the site as a resource or who might have joined at a later date can still be directed to previously-generated content.

The motivation behind Tudiabetes is twofold – giving people the knowledge to help them to improve their diabetes management and giving people the chance to be part of a community where they can get support from people who can better understand what they are going through. This enhances a **strong sense of belonging** within members, who claim the community to be their “diabetic family”.

The main challenge to keep the recognition that the community has gained from health institutions and media is related to the **reliability** of the information spread and shared: “*not far from alternative treatments are claims of a cure for diabetes (there is no current cure for it), so we need to keep a watchful and balanced eye to tell real things from empty promises*”.

Bookcrossing

http://www.bookcrossing.com/

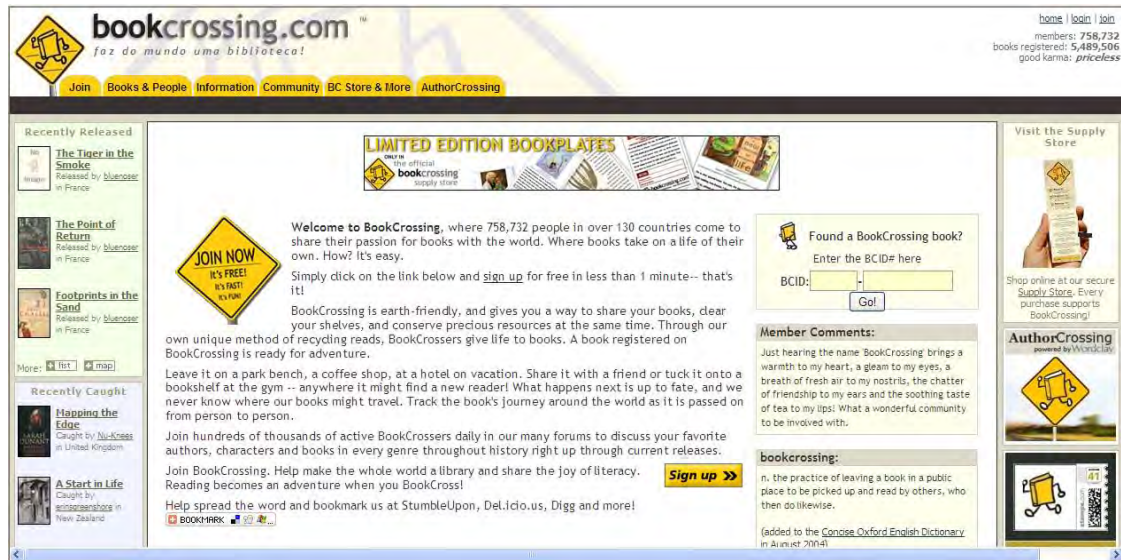


Figure 9: Screenshot of the Bookcrossing webpage

Table 12. Main data Bookcrossing

Members	740,000
Geographical spread of operations	Worldwide, mostly US and Europe
Staff	3 full time, 2 part time
Field research – survey	216 responses
Field research – interviews	1 manager 3 members
Observation	Online interaction Content analysis

The community

“Bookcrossing is a unique social network – it is a bridge between an online community and the real world, it links physical experiences and online interaction” (manager interview)

Bookcrossing website was launched on 17 April 2001. Bookcrossing (also: BC, BCing or BXing) is defined as "the practice of leaving a book in a public place to be picked up and read by others, who then do likewise". The 'crossing' or exchanging of books may take any of a number of forms, including wild releasing of books in public, direct swaps with other members of the websites, or "book rings" in which books travel in a set order to participants who want to read a certain book. The concept itself is the main distinguishing feature of Bookcrossing. The main characteristic of the community is transferring individual process of reading to a group activity in real life.

Members' profiles and organisation of the community

Bookcrossing is primarily a concept which refers to individuals leaving books in random, public places (release of book). The website enables individuals to release the book with a specific code (BCID) and register the books that they have found (caught), thus making it possible for their members to track released books in the world.

The members of the community have a strong passion for reading and are highly motivated to share their passion with others through discussions in forums and through releasing and sharing books. The community has a strong social role for its members as it enables them to share their interest, make friends and meet with other book lovers. Members trickled in at the rate of 100 or so per month until March of 2002 when an article on Bookcrossing was published. Over the past 7 years, Bookcrossing has continued to grow to over 740,000 people worldwide and an average of 300 new members per day. Members are mainly women with advanced education of middle or upper middle class, usually over 30 years of age.

The community is managed by 8 people. In addition distributed volunteers provide easy troubleshooting and feedback to members. The community has a worldwide coverage and though 40% of members are located in the US the proportion of European members is significantly increasing.

Members create profiles (under Avatars) where they record the books they have released and/or found. In addition the members may, and active members do, write about their interests in literature in their profiles, add lists of books they have read, reviews of books, their favourite books and their wish lists to read. The website publishes recent releases and recent caught books for its members to track. In addition to the primary activity, members can take part in the forum discussion online where topics evolve around books – particular books, genres, authors, or reading habits of the members. The Forum is in English, however subsections of the Forum are available in Dutch, French, Finnish, German, Greek, Italian, Scandinavian and Spanish. The discussions are public and not explicitly moderated; any member can start a thread and comment. Newsletters on the activities of Bookcrossing website are published regularly. There is an online Bookshop available for profit part of the website. Next to the online activities, Bookcrossing organizes meetings of Bookcrossing members at the members' initiative, as well as Bookcrossing conventions – larger events that take 2-3 days with bookshop tours, guest speakers, workshops etc.

Resources

The Bookcrossing community doesn't have a specific learning objective, therefore no intentional effort is put into developing learning materials for members. The materials produced are focused on information delivery in a concise, journalist style. There are three types of materials produced: Articles which provide updates on the community and its activities; Newsletters that are delivered to all members and provide news on the community and its activities; a Bookquotes section offers quotes from different authors and books.

As regards the technology, members primarily communicate via a Forum. The Forum is divided in several sections – the Book Talk section and Chit-Chat sections are the most active. Chit-Chat functions as a social forum where random topics are raised and the Book Talk is the section devoted to the discussions on books. The discussions tend to be rather active – with many different members taking part and many replies within a thread.

Learning in the community

“I am sure that some learning happens in the community, but specifically it is hard to think of something” (manager interview)

Bookcrossing is a community with no learning aims. Informal **learning takes place**, primarily through the online interaction of members in forums. Learning in Bookcrossing is focused on the joint interest – books and literature. Members expand their knowledge of different authors, genres, books and literature, but they also develop critical thinking and ability to argue and discuss different topics related to literature. According to interviews and survey results, learning happens mainly by: reading materials and the comments of others; interacting with others; listening to or accepting other people’s opinions.

Bookcrossing is all about personal connections. Reading is often seen as an introspective, solitary activity and it is in part, but Bookcrossing takes the reader out of that mode. People meet via Bookcrossing, conventions and meetings which are self-organised by the members. **Members primarily see the community as useful to their social life and helpful in expanding their own personal knowledge in the area they are interested in – literature.**

The community enables members to interact with individuals who share their passion for books and make friends with them. The social component is additionally strengthened through organised meetings of Bookcrossers. The community does not support or facilitate learning and there is **little individual awareness of learning** due to the implicit nature of the process within the community.

Survey results show that, when asked to reflect on the learning supported by the community, members feel that they: learn to accept and recognize other people’s opinions and values (**cultural awareness**); learn about new books; learn to use tools to organise events (**organisational skills**). Based on observations, members additionally learn to express critical opinions on books in writing (forum) or orally if they attend the meetings thereby enhancing their **critical thinking**.

The main **gains** perceived in being a member of the community are: improvement of general knowledge and cultural awareness; support to meet people and make new friends; encouragement of the joy of reading.

The community is centred on informative and general knowledge, experience and information exchange related to books. Nothing (except for the newsletter and the organisation of face-to-face events) is created collaboratively in this community.

Success factors, transferability and sustainability

According to the manager, the main success consists in “*Growing from a small local website to an international website with several sub-websites in different languages and over 300 new members daily*”. **Success factors** leading to such a wide community are related to the interest shared which constitutes the main motivation for people to join.

As regards **sustainability**, the community managed to grow exponentially thanks to its creative and innovative concept of book sharing and crossing. Despite the high attention of media it is mainly self-funded. Membership is free and that is tenet of the community. Some funds are generated through the sale of supplies related to community activities –for book releases and related Bookcrossing items.

Learning happens unintentionally through members’ interactions so there is no learning model as such to be **transferred**. What is interesting and what seems to animate members’ participation is the fact

that virtual interaction is coupled and followed up with events in presence – where members can actually meet. Besides, the idea to organise events came directly from the members. This organisational aspect could be easily transferred to other contexts and would probably have the same positive impact in terms of motivation and acquisition of organisational skills.

Most interesting aspects identified in the analysis

The innovative element of the community is its orientation to transform what is considered the internal, introverted process of reading to a group process, where also real life activities and social consciousness are developed. The individual process of reading is turned into a group discussion where members discuss what they read, what they plan to read and their views on the books, authors, genres and literature. Furthermore, the members are encouraged to share books not only amongst the people they know but with the society in general. Therefore their sense of social awareness, importance of literature and sharing with others are developed.

The members organize “challenges” where they engage members in innovative and creative ways to engage in the Bookcrossing activity (releasing and exchanging books) as well as reading and reviewing books.

The concept of Bookcrossing (sharing books for free) develops a strong sense of cultural and social awareness amongst the members. The community is open to all people wanting to join with no restrictions. Additionally, the community indirectly supports the development of organizational skills especially in those members involved in the organization of events and conventions.

Participation seems also to empower individuals in terms of increasing their self confidence. One interviewed member also makes indirect reference to Lifelong Learning: *“you're never too old to be actively learning and involved in the community”*.

Experience Project

http://www.experienceproject.com/index.php

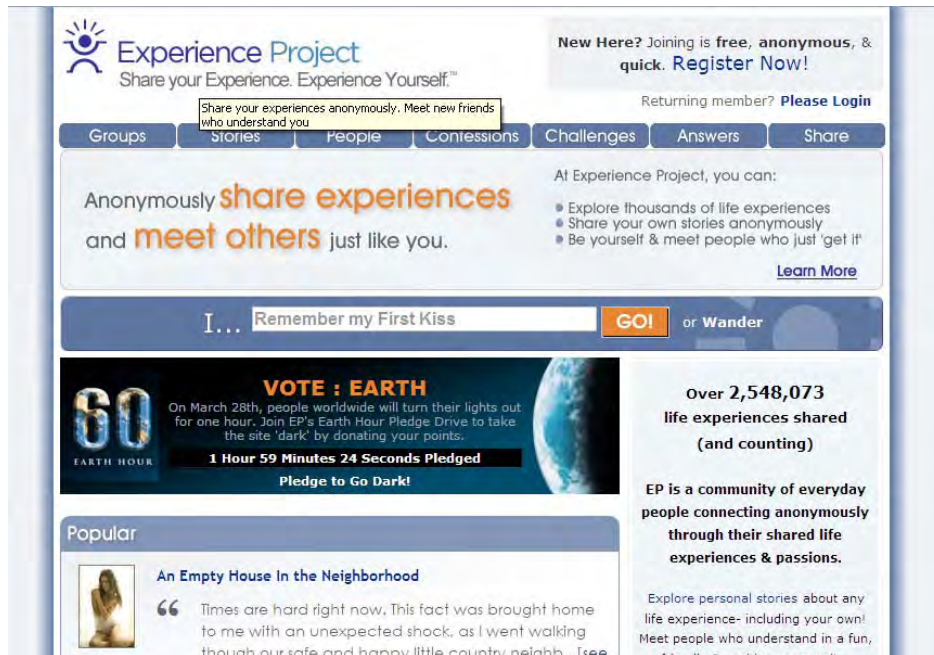


Figure 10: Screenshot of the Experience Project webpage

Table 13. Main data Experience Project

Members	1,000,000
Geographical spread of operations	Worldwide, mostly US, Canada, UK and India
Staff	10
Field research – survey	38 responses
Field research – interviews	1 manager 2 members
Observation	Online interaction Content analysis

The community

The Experience Project (EP) is an online social community that is accessible to all and where people are encouraged to share their experiences, goals, challenges and queries while also offering support and advice to those that need it. The community takes into account the whole of a person's passions and experiences. Anyone can join and anonymously exchange experiences with others.

The main aims and objectives are: to create a social community where one can anonymously connect with others on real-life topics; to get people to share their experiences so that they can ultimately, through such interaction, experience their true self.

The original mission was to create a comfortable, non-judgmental place where anyone could be themselves without fear of embarrassment, and that EP would provide a place for people to realise they are not alone. It has grown tremendously, from the original specific subject of a single illness (multiple sclerosis) to now covering over 2 million life experiences.

Members' profiles and organisation of the community

The community manager quoted that the community has over 1 million members. No statistics exist on members' profiles. Survey respondents were mainly males (71%). Based on survey results, the majority of members (74%) have at least a higher education degree and are aged 30 to 60 (60%). The community *"has a predominantly United States audience, followed by Canada, UK and India. The geographic distribution of the users follows the general distribution of populations - in other words, there is not an over-representation of a given locality"* (Manager Interview).

The interactions within the EP are mainly based on experiences. This means that interaction will either start with someone posing a question and asking for experiences/advice in return; or with someone sharing their experiences/dreams/aims and people reacting to them with their thoughts/advice/ or their own experiences. These interactions are of a social nature – aimed at a receiving information, advice or support.

The methods of interaction are as follows:

- ◇ **Profile interactions:** these are interactions that happen at a members profile page (leaving posts on one's wall or sending mail). Sharing of videos and photos happens here;
- ◇ **Blogging:** members have access to a blog and other members are welcome to comment;
- ◇ **Sharing an Experience:** members can decide to share an experience and other members can do likewise or comment;
- ◇ **Goals/Planning:** members share their goals or their plans and other members can contribute and comment;
- ◇ **Confessions:** a member can confess something and other members rate the confession and comment;
- ◇ **Ask/Experience:** a member puts forward a question – other members supply answers and then the best answer is chosen;
- ◇ **Challenges:** a member sets up a personal challenge and updates the community with his/her progress. Members are allowed to comment and show support;
- ◇ **Surveys:** another utility where members can ask other members a series of questions related to a variety of topics;
- ◇ **Dreams:** a member puts up a dream they had and other members put forward their interpretation.

Resources

The content creation is solely in the hands of the members. Thus the material used may vary depending on the topic being discussed and can range from news articles to statistics and from photographs to videos.

The site's primary structure is life experiences, which take the form of groups. Within these groups there are complete websites, with varied functionality from sharing stories, to blogging, to forums. The technical management of the community is done by third parties.

Knowledge, advice and information is passed on through the interaction between members and this interaction is stored so that other members who presently or in the future might have the need for the same knowledge, advice and information may be able to read the interactions and also learn.

Learning in the community

“(..) users learn from each other's life experiences. This provides wisdom, insight, and a sense of emotional support” (manager interview)

Within the Experience Project **members learn through peer-to-peer interaction**. No content is provided centrally and thus **all content is generated by members** through such interaction. With regards to what is being learnt, the EP has no specific topic – rather it is specific in method – and thus interactions centre on the exchange of experiences. This means that members are learning about a variety of issues – issues that they themselves raise depending on what is happening in their life or what they wish to learn or share.

Apart from practical content based learning (as mentioned above) the interaction provides **social-based improvements – meaning self confidence, critical thinking, respect for others views and opinions**.

According to the interviews and survey, there are two main visible **motivations for participation**. First of all the community has an interesting appeal in the sense that it invites people to share their experiences and discuss them with others in a ‘protected environment’. Thus, **it creates a social community that generates its own content and drive**. The Community is visibly very active and full of interesting topics with which one can interact with in a variety of ways. Secondly, members learn about life experiences - either ones they share or ones they've never had -from others who have had first-hand experience. This is innovative, as this community takes into account **the whole of a person's interests or passions rather than focusing on one particular aspect**. *“Experience Project is a place for people to be themselves, whatever that means to them.” (manager Interview)*.

According to the survey and the interviews, the most common aspects referred to by members in relation to the significance of the **impact of the community** on their personal lives and personal growth are: the availability of a connection with others who have similar experiences and interests; the benefits accrued through the sharing of experience - one may gain support or learning about issues that one is facing in their own life.; improving expression/creativity/ cultural awareness/ self confidence; having fun; avoiding isolation.

Interviews suggest **individual awareness of learning** taking place: a member states *“Being with EP has caused me to research subjects pertaining to famous quotes, philosophy, science, literature, politics, current events, history, religion, statistics, trivia, crypto zoology, languages, psychology, geography, oceanography, music, just to name a few”*.

Another one says that learning *“dawns on you as you go along – when you start finding out things you didn't know about or start comprehending viewpoints you previously didn't understand”*.

Concerning **learning outcomes**, the community is more geared to provide **practical knowledge and advice** and this is reflected in the survey with members saying that the community helped them to learn about issues important for their life outside of work. It is important to note that members do also

supply information/general knowledge. The latter has led members to state (in the survey) that their general knowledge has been improved.

Success factors, transferability and sustainability

The main **success factor** quoted by the manager is: the support the community provides to people in their real lives: *"EP can help people at a point of despair in their lives. Those feeling isolated and hopeless discover they can quickly find others who have been in their proverbial shoes and have survived"*. This is proved by an internally run survey where over 90% of surveyed users said the site had changed their life, and 80% said that it had effected positive change in their physical lives.

Concerning **sustainability**, the Community was self-funded (boot-strapped) for 2 years by the founder. After that, investment (venture) capital was used to help finance the growth of the community. The community offers an opportunity for members to upgrade their membership features by becoming supporters of the site for a small monthly fee, and provides advertising space. Challenges for the community are, in the words of the manager *to remain relevant, keep learning informal and fun and keep interactions at high level*.

The innovative concept of sharing experiences through a safe and protected community is interesting and **transferable**. It would be interesting to create a similar community focused on (Lifelong) Learning Experiences.

Most interesting aspects identified in the analysis

The Experience Project was started initially as a support and information site for Multiple Sclerosis patients. The founder had a very close friend with this diagnosis, and wanted to help, so he set up a website that offered the latest research news. It also offered a forum, which inadvertently turned out to be the star attraction. *"After nurturing this very powerful connection point, the observation was made that what was underlying the value was the ability for strangers to connect over a shared, and important, experience in their lives. Extending that out, every person has something (and often many things) that would benefit from connecting with others who share that experience"* (manager interview).

The EP provides innovative ways of providing members with various fora for discussion. Rather than being based on a structure (such as a blog or a forum), the EP presents possible interactions based on the topic – meaning “sharing of experiences”; “asking a question”; “setting a challenge”; amongst others. Each of these interactions allows for comments and discussion but is presented in various ways and allows for different types of interactions.

The EP has recorded a very high participation rate vis-à-vis the survey and this has been also evidenced in the observation. This is due to the fact that community promotes a positive vibe, allows for anonymity, is very inclusive and social based, and facilitates fast exchanges through its varied methods of interaction.

The EP uses creative ways to encourage its members to interact and this in itself encourages members to interact in a creative manner. As the Community Manager explained, the EP *“is innovative, as this is the first time we have been able to have a product accessible to all that takes into account the whole of a person’s passions in connecting them to others”*.

The community has put in place policies that require respect of everyone, strict enforcement of only positive interactions, and also anonymity in the public sections of the site so no one has to worry about their name being associated with their experiences. This allows people to talk about both their triumphs, but also their challenges (which are often more critical in terms of connecting with others for support) without concern of recognition or embarrassment.

Everyone is welcome to contribute and share their experiences and none are considered to be any better than others. By introducing policies that support equity and also employing staff to aid members, the EP shows that they not only support equity in words but also in action.

GAY.tv

http://www.gay.tv/



Figure 11: Screenshot of GAY.tv webpage

Table 14. Main data Gay.tv

Members	132,000
Geographical spread of operations	Italy
Staff	5 including manager
Field research – survey	488 responses
Field research – interviews	1 manager 1 staff 3 members
Observation	Online interaction Content analysis

The community

Being created as the website of the tv channel GAY.tv (now shut down) which had a young audience, the community has almost maintained this target which is far more willing to interact and participate than an older target usually participating in the more dating-oriented gay communities. The main feature of the GAY.tv community is the gay target audience and it was chosen to analyse what were the benefits and the learning activities in a community which can be related to social inclusion.

One of the aims of the community is to raise members' awareness on specific issues. For instance, a few campaigns have been carried out on safe sex (e.g. a campaign on sexually transmitted diseases which, through the magazine, gave the opportunity to members to comment and share advice and experiences). Another very important aim is giving a positive image of the gay lifestyle, raising awareness on gay people's rights and showing how gay people can lead a happy life.

The members share a sense of belonging to the gay community. From their very active participation it can be argued that they share the same interest in being informed on what happens around them, not only regarding the gay world. The website focus is on gay themes and interests but around 30% of the articles and news are on generic themes of interest.

Members' profiles and organisation of the community

The number of members is around 132,000 and it is constantly increasing. Of these, 80% are men and 18.5% are women, mainly students having an age between 18 and 24. The Community is national (Italy) and has members in almost every part of the country.

Five people are currently working on the website and community: a computer engineer, the website senior editor (the community is strictly linked to the website "Magazine"), the community manager and two web editors.

There are two main types of activities: dating is an important activity going on in the community but the interaction among the members based on discussions on the articles/news published on the website is a very relevant part too. Through this, people can share opinions and can express themselves.

The majority of the members are lurkers and participate in the community only through reading materials and other people's comments. The modes of interaction within the community are organized through forums, chatting and video-chatting. Newsletters are published twice a week and generate discussions through forums. Members can create their own profile page where they can upload and share pictures and videos.

Resources

The content shared mainly relates to: Articles; Newsletters; Contests; Games; Videos. The GAY.tv website and its community are operated by two different companies. Xat production Srl, which firstly created the Gay TV satellite channel and the related website, is now responsible for the infrastructure and all the technical aspects while YAM112003-Endemol is responsible for all the website content creation and management.

Learning in the community

"We do not want to look like we want to teach something. We try to inform our members as much as we can so, apart from our information and awareness campaigns about important issues, I don't think we can say we have explicit learning activities in the community"

(staff member interview)

Learning in this community is incidental and does not happen intentionally. The **community indirectly facilitates learning** through educational campaigns on themes relevant to the members' lifestyle. Due to the tight link with the magazine, the community is considered more like a social network where people can share experiences, knowledge and build their personal identity.

Evidence shows that there is **little awareness and perception of learning** taking place in the community on the side of members. However, when specifically asked, they state what they learn is basically to: accept themselves, accept others and other people's opinions. Surveys results show that the majority of members learned by reading material, reading comments of others and that they contribute mainly by sharing experiences. The observation of online interaction confirms this and further shows that members tend to document themselves to contribute to discussions.

According to the Community manager, there are three main visible **motivations** to participate. These are: **Socializing; Being informed; Sharing experiences**. The survey confirms these are the main motivations of members and adds the interesting aspect of "**not being/feeling isolated**": socialisation, interest sharing, support (68%); individual usefulness (60.9%); social inclusion (41%); fun (39.8%).

According to the interviews, the main perceived **benefit** is the opportunity to avoid isolation by making new friends and participating in a environment where the gay lifestyle is presented in the most positive possible way. The survey confirms this perception and shows the following additional main benefits: **Improvement of general knowledge; Support to learn issues important for one's life outside work; improvement of critical thinking**. Also, the community turns out (again according to survey results) to have helped members to accept their homosexuality; clarify many doubts they had; express themselves.

Survey results and interviews suggest that the main competences gained by members through community participation are: **sense of initiative** (members tend to search for relevant material to contribute to discussion and to introduce new topics) and **cultural awareness**.

The latter is mostly self-referential (meaning that members feel empowered knowing they are not alone) though some members express the wish to get more heterosexual members in the community so to make the LGBT (Lesbian, Gays, Bisexual, Transgender) world more understood.

The community activity is mainly based on inputs given by the editorial staff of the GAY.tv website that provides, through the newsletter, topics which spur discussions on the forum. The community is mainly informative through the newsletters, though the discussions following tend to provide practical knowledge in terms of better (social, health) lifestyle of the community.

Success factors, transferability and sustainability

According to the community manager and a member of the staff the main **success factor** is that community offers an active, positive model for gay people to get in touch with. Members are given the opportunity to be themselves in a positive environment. Moreover, significant results of the community are also the high number of visitors and a good reputation as opinion leaders on LGBT (Lesbian, Gays, Bisexual, Transgender) topics.

As concerns financial **sustainability**, the community is sponsored mainly by Endemol. It is constantly looking for new investors. The management reported that more than often the very provocative nature of the topics discussed has inhibited potential sponsors to invest on the community. For this reason, "hot topics" have been moved from the community main page. The number of members is constantly increasing and therefore sustainability does not seem to be a problem for this community. In an evolutionary perspective, the management is considering to move to Web 2.0 environments.

As said already no learning model emerges in this community. What is interesting and for sure **transferable** is the awareness raising capacity which brings learning outcomes in terms of improved socio and civic competences, cultural awareness, sense of initiative and critical thinking.

Most interesting aspects identified in the analysis

Considering the community target it can surely be said that one of its main aim is to **support equity** and social inclusion by giving the Italian LGBT world a place where social identity is given and members can therefore express themselves regardless of their sexual orientation.

The community appeared to be very lively, active and willing to participate as demonstrated by the very high number of surveys submitted (around 500 in a few days). Both the management and the members felt “empowered” in having been selected as a community to be studied.

Despite the fact that learning is not an aim of this community, the strong awareness raising capacity brings **learning outcomes** in terms of improved socio and civic competences, cultural awareness, sense of initiative and critical thinking.

The community is considered a safe space for members to be themselves and accept themselves. Survey results show that a relevant number of members, helped by anonymity, **have made the first step towards acceptance inside the community.**

Muxlim

http://muxlim.com/

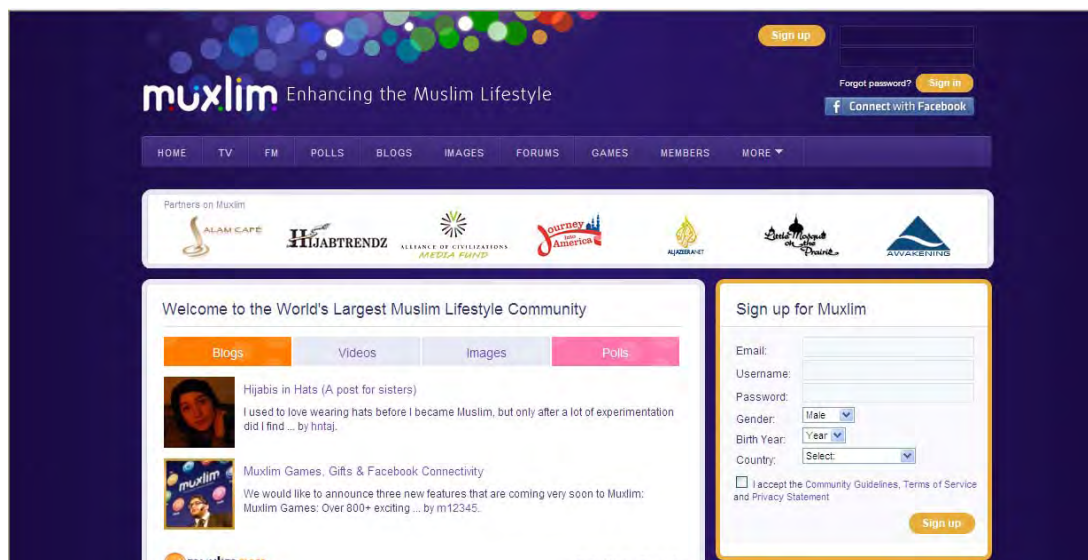


Figure 12: Screenshot of the Muxlim webpage

Table 15. Main data Muxlim

Members	150,000
Geographical spread of operations	183 different countries mostly USA and UK
Staff	1 manager 9 voluntary staff
Field research – survey	/
Field research – interviews	1 manager 2 members
Observation	Online interaction Content analysis

The community

*“Muxlim is a social media site. The sources of the content are the members”
(manager interview)*

The community was created in 2006. It was started by an individual as a hobby – and was not envisaged as a commercial entity at that time – but to be sustainable it was decided to create a company to manage it as the community grew. The main aims and objectives of the Muxlim community are to enhance and to raise awareness of the Muslim Lifestyle.

Members’ profiles and organisation of the community

It is a large community with 150,000 members. The profile of the members is mainly Muslims (98%) with an average age of 25. The majority of members (58%) are single. 55% of members are females and 45% male. Members are living in 183 different countries with USA (36%) and UK (27%) having the largest proportion of Members. The only employed person is the manager, supported by voluntary staff (10 people).

The modes of interaction within the community are organized in the following manner:

- ◇ **TV Section** - members are able to upload and view videos here. Also a number of channels are available (recurrent posting of videos) from specific members or media partners. (example of media partners are Aljazeera News and Fine Media Children);
- ◇ **Polls** - a section where members can post (and reply to) polls on any issue;
- ◇ **Blogs**- each Member has the opportunity to write a blog on whatever topic they would like;
- ◇ **Images** - a section on the community dedicated to the sharing of images;
- ◇ **Forums**: a place where members can discuss and share information. The forum is divided in various topics for organizational purposes;
- ◇ **PAL**: a virtual world providing a new kind of family friendly social online environment for member’s entertainment. All content is generated by members through these varied interactions. The community supplies no content but some content does come from third parties [media partners] through media channels within the community.

Resources

There are various materials used, namely: articles; photos/videos from a variety of sources (news, religion, speeches, entertainment etc). These articles/photos/videos are used to start discussions, strengthen view points, entertainment and sharing of knowledge.

The Muxlim platform is currently built primarily on the Python based web framework Django (<http://www.djangoproject.com/>) by a team based in Finland. Third party technologies and services are also employed. Muxlim is fully cloud hosted using Amazon Web Services. Test-group feedback from Muxlim users and testing is foreseen on a wide selection of browsers before release of updates.

Learning in the community

Muxlim is a community that offers an **informal learning experience** based on member interaction. Members learn about the Muslim lifestyle and, if they do follow such lifestyle, they also learn how Muslims around the world lead their lives. As seen from the interviews and observation of online interactions, **learning happens** through the sharing of information and knowledge and through discussion.

The main **motivation** to participate reflects the aims of the community, i.e.: to enjoy and share the Muslim lifestyle. According to the manager, the fact that the community is unique in its content, aims and objectives enhances motivation. Member interviews prove that the marketing campaigns of the community as well have word of mouth have a significant role in becoming a member.

According to the Community Manager, the main type of **benefit** is the relevance of the community content. An effective engine and a system that delivers relevant and up-to-date content on various aspects of Muslim lifestyles (social, educational, recreational etc) has been created. There is no other community that offers this level of content. Thus members are able to learn about Muslim lifestyle when it comes to sport, fashion, health, entertainment, amongst others. The aim is to supplement other social media – act as an extra flavour – rather than replace them. **Through interaction people can learn to live the life they wish to live** – while being also able to fit in and communicate within one's society. Members meet people from all around the world. They can also find people in their proximity and meet up in a non-virtual setting. **They get community support and this is especially important for people** who are not able to get such support in real life because they might be misunderstood or they **might be a minority**. **The online community inspires members to be active in their own community**. Members also look for entertainment that is relevant to them. Members' interviews confirmed these perceptions.

Interviews to manager and members suggest **there is awareness of learning** taking place in the community, mainly related to the Muslim lifestyle. This has significant implications in terms of acquisition or development of socio and civic competences, cultural awareness and cultural expression, as explored below. **Increased self confidence and pro-activity** also emerge as side effects of being a member.

Muxlim aims at empowering Muslims to be proud of their culture and their lifestyle. Thus, one of the cornerstones of the community is the encouragement of **cultural expression** in order that others can learn how to improve their lifestyle. Also this cultural expression allows non-Muslim members of the community to gain a more first-hand view of what really the Muslim culture is like.

One of the key aims of Muxlim is to enhance **cultural awareness** of the Muslim lifestyle and this is reflected in the various content categories available. The interaction within the community is centred on the Muslim lifestyle but since the community is open to non Muslims a certain amount of cultural awareness with regards to other cultures is also present. Also non-Muslims, through viewing and interacting within the community have the opportunity to learn a lot about the cultural background of Muslims.

The Community has a strong **social and civic focus**. One can see from the community policy that the community aims for the equal treatment of people and the mutual respect of lifestyles.

Members are encouraged to be polite and as helpful as possible. In this respect, the community manager makes reference to the terms of service of the community highlighting the following rules: *All topics are welcome; We expect everyone to respect other people's lifestyle; Be responsible; Complete your profile (your identity); You don't need to be a Muslim.*

The community supports both the sharing of practical and of informative/general knowledge. As from the quote opening this community insight the **content made available in the community comes mainly from the members** (though media partners also have a significant role). The fact that a variety of supports are available indirectly enhances members' **creativity in self-expression** (which not only happens through texts, but also through videos, for instance). The use of videos and particularly cartoons **to share knowledge** on Muslim culture turns out to have educational outcomes (people can learn about Islam history, for instance) and has a significant implication in terms of wide dissemination independently of age and education level.

Success factors, transferability and sustainability

The community is one of a kind and has an increasing number of new memberships. As a community that promotes the enhancement of the Muslim lifestyle, Muxlim is indeed unique and it is evident from its history that the community has already evolved in order to cater for members' demands. The Community Manager has various plans in order to help the community evolve and remain a **successful** venture.

As concerns **sustainability**, the community is managed by a commercial entity with venture capital investors. It receives revenue from advertising and VIP memberships. Members are attracted to the community either by the advertising campaigns promoted by Muxlim or by word of mouth, which still remains a key source to gather new members according to the manager. The **challenges** for Muxlim are mainly to do with the content uploading in a sense that, firstly, apart from the partners, content uploading is solely in the hands of members (so there of course will exist issues of motivation, dedication, in some cases not being able to communicate properly in English etc) and secondly, content is not always properly sourced. The community management does indeed oversee the content to make sure it is of a certain quality (i.e. not abusive, containing bad language etc) but otherwise it is still challenging to keep members motivated and to increase membership and hence the quality of content.

Learning in Muxlim is informal and there is no peculiar pattern emerging to be considered for **transferability**. The available technology and the use members make of it as well as the learning impact it brings are an interesting aspect that could be considered for adaptation to other learning contexts.

Most interesting aspects identified in the analysis

Muxlim is a social/themed community dedicated to the enhancement of the Muslim lifestyle. It is one of a kind and aims at promoting the positive aspects of the Muslim lifestyle through the sharing of knowledge and experiences. Muxlim uses its media to encourage dialogue which in turn leads to informal learning.

Muxlim evolved from a hobby to a business venture. The community manager aims at creating a voluntary branch in order to be able to enter in non-business ventures that may further the cause of Muxlim.

With regards to the technology available to the community and the use members make of it, **creativity and innovation have proven to be important elements**. Various communication tools are available for members and the introduction of a virtual world (currently beta testing) shows that the community is aiming to build and create new ways of interaction. As a scope (of the community) one must note that the creators have been innovative in tackling a niche that has so far been untouched – ie Muslim lifestyle.

This community guarantees equity as anyone is welcome to join and contribute to the community regardless if they are a Muslim or not. Only 2% of members are non-Muslims but this is more an issue of the subject of the community rather than any barriers being in place. When a community, like Muxlim, brings people together from all over the world, regardless of their race, religion etc, and allows them to discuss their lifestyles – one can conclude that equity is being supported. If one looks at the community guidelines one will see that the following headers: “All topics are welcome”; “Respect the lifestyle of others”; and “You don’t need to be a Muslim to be a Muxlim”, amongst others. The fact that the material made available in Arabic is translated (especially videos) proves that equity is actually granted, and not just advertised.

4. INNOVATION IN ONLINE LEARNING COMMUNITIES

This chapter aims to analyse innovation emerging in the 12 online communities studied.

The collected results, as they are from a relatively small number of case studies (in this case 12), cannot and are not intended to be considered fully representative or accurate or exhaustive reflections of the existing/ever-changing face of the world of virtual communities. Nevertheless, by providing an in-depth and precise insight of some specific selected communities, the study can assist in understanding the phenomenon of learning in online communities.

This chapter is structured into two main sections:

- ◆ Section 4.1 provides the analysis of innovation emerging in the communities by comparing, cross-checking and grouping some key aspects/dimensions relevant to learning. The dimensions considered are explored in Chapter 2 of this report.
- ◆ Section 4.2 provides an overall assessment of the analysis and a proposal for further research in the field.

4.1 Analysis of innovation in the 12 online communities

As mentioned in the introduction, the 12 case studies focused on 12 individual online communities and are analysed with the aim of understanding the extent to which learning takes place (formally, informally, explicitly and implicitly).

The learning process (where emerging) taking place in the studied communities has been analysed across a set of dimensions (elaborated from the learning analysis approach presented in Section 2.2), presented below:

a) Longitudinal dimension

This dimension aims at providing an overview of the reasons for creation of the community, on its origin and evolution, on the typologies of its members, on the topics, issues, values which constitute the basis upon which the community lives and evolves.

b) Pedagogical dimension and knowledge cycle (production/creation, sharing, storage, dissemination)¹⁶

These dimensions aim at analysing the emergence of learning processes (implicit or explicit, formal or informal). In case learning processes within the community are observed, learning methods (where existing) are analysed. As concerns knowledge, the way knowledge is created, shared and used is analysed.

c) Role of resources (learning and informative) and technical dimension

This dimension aims at investigating on the available resources in terms of material and technologies and on the role of resources in the functioning of the community, with specific focus – where learning processes emerge – on the role such resources have in supporting learning.

d) Organisational and context dimension

This dimension defines the organisational model of the community by focusing on the role and activities of the community manager, of the staff (be it working on a voluntary basis or paid) and of the members as well as on the openness of the community to the outside world. Where

¹⁶ Knowledge cycle: is derived from Knowledge Management (Nonaka and Takeuchi, Boisot, etc.) and is focused in understanding how knowledge is created/co-produced/derived, shared, used and stored within the community

learning emerges, this dimension shall help identifying the role of these categories in enhancing it.

e) Economic dimension

This dimension provides information on the economic model of the communities and on its financial sustainability potential.

f) Socio-cultural and ethical dimension

This dimension focuses on the value system featuring the community, on the sense of belonging communities generate, on the emerging individual and collective identity, on the motivations, interests and passions shared by members.

g) Evaluative dimension

This dimension aims at highlighting the presence of peer evaluation mechanisms among community members.

The above dimensions have been chosen for the analysis as they contribute to identify the presence of learning processes in the communities (be them explicit or implicit, formal or informal). As evident from the above, they cover different aspects all related to the way learning happens and is supported: provided that most of the analysed communities do not have learning as an explicit object, in case learning happens the above dimensions help to understand eventual emerging models in terms of organisation, supporting resources, role of staff and members.

a) Longitudinal dimension

The reason for the creation of communities is the same across the 12 cases analysed: the intention to share a common interest, be it professional or related to personal needs and experiences. “Il Cantiere”, “Englishforums”, “TuDiabetes”, “Bookcrossing”, “Experience project”, “GAY.tv”, “Muxlim” communities have been established by single individuals or groups of people to respond to personal, social, cultural interests and needs; while “TappedIn”, “RezEd”, “eTwinning – Time after time“, “Microbiology forum” and “CEDDET” communities have all been established as a result of previous projects, training experiences, professional development or in order to answer a specific request. In particular, in the case of CEDETT, the community was initially launched following the requests of participants who had attended e-learning courses and wished to stay in touch and then it evolved into a learning community itself.

In each case there is strong coherence (as one would expect) between the purpose/mission/objective, the topic/subject theme and membership typology. This coherence does not radically change during the community’s lifetime. No major changes in terms of redefining the aims or objectives have occurred within the analysed communities. The reason /rationale behind their origin (need, interest, passion etc) continues to be the key driving element which leads and moulds both the community itself and its individual members.

It seems that the time for “self” has found in the online experience a fertile ground. Looking at the number of current members and the year of establishment of the communities Il Cantiere, EnglishForums, Experience Project, Gay.TV and Muxlim it seems that non-work time¹⁷ has become a privileged space for “building a online communitarian experience”. It is therefore in the new dimension of “the time for self” that new models of self-representation and new forms of aggregations find a fertile environment for growth.

¹⁷ Personal time for oneself, the time that individuals dedicate to their own intellectual, spiritual and physical growth and in some cases, to the consequent definition of one’s own identity or profile.

b) Pedagogical dimension and knowledge cycle (production/creation, sharing, storage, dissemination)

Emerging learning

Learning emerges in all the analysed communities, though taking different forms and features. With the exception of TappedIn, CEDDET, eTwinning (Time after Time) and EnglishForums where learning is an explicit aim of the community, all other communities generate learning as a side effect of their main activities. Nevertheless, the majority of communities (including the above as well as: RezEd, Il Cantiere, Microbiology Forum, Tudiabetes, Muxlim and Experience Project) show individual awareness of learning taking place in the community both at the level of management and at the level of members. Such awareness is coupled with the recognition (by members) of a key role played by the community in supporting learning in the case of TappedIn, RezEd, Time after Time, Microbiology Forum, Englishforums, CEDDET and Tudiabetes.

Throughout all the analysed communities, **learning is informal and happens through interaction, which allows sharing of information, practices and experiences**. Only in the case of CEDDET and TappedIn formal learning is part of the community activities (in that these communities provide respectively access to certificated professional development courses and access to courses offered by tenant universities).

Online interaction (directly or indirectly facilitating learning) happens through Forums, chats, blogs, posts allowing discussions and debates and stimulating members to share information, knowledge and experience and to provide peer support to other members. Such interaction is:

- ◆ Mainly promoted by the management and staff of the communities in the case of CEDDET and eTwinning – Time after Time.
- ◆ Stimulated by both management and members in the case of TappedIn, RezEd, EnglishForums, Tudiabetes, Microbiology Forum, Il Cantiere.
- ◆ Launched by members in the case of Experience project, Muxlim, Bookcrossing, Englishforums, Gay.Tv.

Knowledge

The focus of the 12 communities is set on **knowledge sharing and creation**. With the exception of the Experience Project and Muxlim, where knowledge and materials shared come exclusively from members, all the remaining communities show a balance between the external knowledge and the knowledge generated within the community. Articles, papers, videos, scientific/historical/informative texts posted either by the management or by members themselves generate debates that lead to knowledge creation throughout all the communities.

In Gay.TV, for instance, informative text related to the position of the Vatican towards death penalty for homosexuals in some countries generated a debate that led members not only to debate on the issue and create some forms of consensus building, but also to the retrieval of supporting material to defend pros and cons of the Vatican position. In Tudiabetes, discussion groups focus on specific topics related to the illness and provide both scientific texts (coming from the outside) and experience sharing among members, leading to knowledge creation and support to members on how to deal with specific problems linked to diabetes. In Microbiology forum, knowledge is created collaboratively through peer support within the Forum, where members can post a question on how to address a specific laboratory problem and get hints from other members on how to solve it based on their experience as well as on their knowledge (supported by scientific texts). In eTwinning – Time after Time historical texts or acts are searched for by members to show – for instance- what was happening in their country during the Second World War. Exchange of historical materials through the community leads to knowledge building on cultural, social, historical similarities and differences across countries.

In most of the cases, knowledge is generated within communities through interaction: it is only in a few cases that the **concern exists on how to “store” it and make it available to all members**, regardless of their participation in a given discussion or debate. CEDDET has faced this challenge through the publication of a periodic e-journal containing, beside articles and references to relevant public management experiences in Latin America and Spain - excerpts of the main outcomes of its Forums. In RezEd, the main outcomes of the discussions launched by management and staff are published in a yearly report, whereas the outcomes of the discussions launched by members are not stored. In Tudiabetes, the site has a general search engine that allows members to access any content they might be looking for. Thus, members who join at a later stage or who only use the site as a resource can still be privy to previously generated content and knowledge. The same is true for Englishforums, where knowledge is collaboratively shared through a Q&A system that keeps record of all questions and answers and makes them available to all members forever.

If knowledge is not only shared, but also produced collaboratively throughout the 12 communities, it is only in the case of Il Cantiere that **materials (videos) are produced collaboratively**. Not by chance, this is the only production-oriented community out of the twelve.

In CEDDET and Bookcrossing members collaborate to the drafting of the periodic newsletter/journal under the supervision of the management, whereas in communities such as Experience Project and Muxlim members tend to share their experiences collaboratively thereby expanding their knowledge. The fact that the knowledge generated is stored in some communities (see above) could lead to the conclusion that this is a sort of collaboratively achieved outcome rather than a collaboratively produced output.

As concerns the **nature of the knowledge shared** and created within the communities (what in this study is defined as learning outcome), the following groupings emerge:

- ◆ Communities supporting the development of **informative/general** knowledge (Bookcrossing, GayTV).
- ◆ Communities supporting the development of **practical knowledge** (eTwinning – Time after Time; CEDDET, Il Cantiere, Tudiabetes, Experience Project).
- ◆ Communities supporting both the development of general and practical knowledge (Muxlim, TappedIn, RezEd, Microbiology forum, Englishforums).

In the case of Time after Time, RezEd, Microbiology Forum and Tudiabetes the development of theoretical/scientific knowledge is also supported: in Time after Time the community often becomes a platform to exchange opinion and references on pedagogical issue. The same is true for RezEd. The theoretical knowledge of Microbiology Forum and of Tudiabetes is instead of scientific nature.

Motivation

Motivation to join communities is generally linked to the interest of members in the specific knowledge, information and experience shared in the community for professional or personal reasons. In particular, motivation can be clustered as follows:

- ◆ Professional development: TappedIn, RezEd, Microbiology Forum.
- ◆ Learning: CEDDET, EnglishForums, Tudiabetes, eTwinning – Time after Time.
- ◆ Networking (CEDDET, TappedIn, RezEd, Microbiology Forum).
- ◆ Socialisation (Bookcrossing, GayTV, EnglishForums, Tudiabetes).
- ◆ Knowledge and practice sharing: Il Cantiere, Microbiology Forum, CEDDET.
- ◆ Experience sharing: Experience Project, Gay.TV, Muxlim.
- ◆ Avoiding isolation (Gay.Tv, Tudiabetes).

Two additional motivations featuring only one community each deserve to be mentioned: producing collaboratively (Il Cantiere) and gaining prestige within and outside the community (Microbiology Forum).

As one can see from the above clustering, learning is an objective of members in 4 communities out of 12. However, when one looks at the results of field research (surveys and interviews) it emerges that learning is intentional in 8 communities out of the 12 studied: TappedIn, RezEd, CEDDET, Microbiology Forum, Englishforums, Tudiabetes, eTwinning-Time after Time and Il Cantiere.

Communities' support to learning

What are the elements featuring these communities that lead to **learning support** independently of their main aims? Most of the communities mentioned above are related to professional development (TappedIn, RezEd, CEDDET, Microbiology Forum) and learning is a necessary activity to upgrade professionally. eTwinning – Time after Time is a community developed by school teachers and involving students. It is part of the curricular activities conducted by partner schools and learning is an explicit objective pursued by the community. Tudiabetes and Il Cantiere are interesting in that they support learning as a necessary activity to face the challenge of living with a pervasive illness (Tudiabetes) and to actively contribute to the activities of the community under a common ethic umbrella – free software in the case of Il Cantiere.

In Tudiabetes, members are aware that the more they learn the better they will live their life and the community acts as a filter to the huge amount of (not always reliable) information available on the Internet filtering all the necessary information to members. A variety of materials and tools are used to support learning, mostly centred around the topic of diabetes, namely: News articles; Scientific articles and data; Video Documentaries. There is also a good amount of 'medical support' from members who are trained in the field and thus offer a measure of support, mainly to explain certain issues or directing members towards the right way to solve a problem. In the Il Cantiere community the will to contribute to the production of videos motivates members to learn. The fact that the community is open to anyone interested independently of their mastering level of digital skills implies the need for members with a low level of digital skills to learn. And learning happens through peer support. Besides that, links to relevant web sites, articles and news are provided as well as links to similar co-production experiments that can be of inspiration for the creation of the communities own videos. The videos produced and published in the community web site are themselves of educational purpose and can become a source of learning not only for the wider public (to which videos are primarily addressed) but also for members themselves.

Development of skills and competences

A comparative analysis of the **skills and competences** developed by members through their activities in the community is presented in the table below:¹⁸

¹⁸ It should be noted that only the most quoted developed skills by respondents to interviews and surveys (where available) of each community have been taken in consideration for drawing the table.

Table 16. Skills and competences developed within the analysed communities

	TappedIn	Rezed	eTwinn	CEDDET	Cantiere	Microb	Englishf	Tudiab	Bookcross	Exp P	Gay TV	Muxl
Digital Skills	√		√	√	√							
Sense of Initiative	√		√	√	√		√			√	√	
Socio and civic competences				√	√		√	√		√	√	√
Self-confidence						√		√		√	√	√
Cultural awareness			√	√					√	√	√	√
Cultural expression			√	√					√	√	√	√
Critical thinking			√	√	√	√			√	√	√	√
Communication skills		√	√		√		√					
Organisational skills									√			
Foreign language			√		√		√					
Learning to learn			√	√	√		√					
Creativity	√	√	√		√					√		

The above table shows that communities as a whole tend to support most the development of critical thinking and active participation (present in 8 communities). Sense of initiative and socio-civic competences are enhanced in 7 communities. Cultural awareness and cultural expression are developed in 6 communities. Self-confidence is enhanced in 5 communities. Digital skills, communication skills, creativity and learning to learn competences are supported in 4 communities out of 12. Learning of a foreign language is enhanced in 3 communities (one of them though is explicitly aimed at learning English as a foreign language, whereas in the other two this is a side effect of interaction in the community). Finally, the acquisition of organisational skills is explicitly mentioned only in one community.

If the focus is shifted to the features of the settings allowing the acquisition of such skills, the following considerations emerge:

- ◆ **Digital skills** are enhanced in communities that offer explicit support (either by the management as in the case of TappedIn or by peers as in the case of Il Cantiere) to the use of the available tools and services. In other communities, the development of these skills does not appear to be relevant either due to the very simple technological infrastructure of the community (as in the case of Microbiology Forum) or to the fact that a minimum level of mastering is somehow expected.
- ◆ **Sense of initiative** is fostered in communities that push members to look for ideas, materials, information and knowledge outside the community in order to contribute to increase the knowledge patrimony of all members (as in the case of CEDETT, eTwinning- Time after Time, Il cantiere and TappedIn) or to support their positions in discussions and debates (as in the case of Gay.TV) or to support peers (as in the case of Experience Project).
- ◆ **Socio and civic competences** are enhanced in communities where the motivation of members joining is related not only to the topics/interests/knowledge/experience shared but also to networking (making friends as in the case of Englishforums and Experience Project and enlarging one's professional network as in the case of RezEd).
- ◆ There is no real typical setting emerging for the support to **Self confidence**: in Microbiology Forum members state that participation in the community and knowledge acquired empowers them professionally and makes their self confidence grow. In Tudiabetes the increase of self confidence is linked to an improved capacity to manage one's illness in life with practical suggestions obtained by peers and with access to a wealth of information related to the illness. In Experience Project members gain self confidence by giving and getting support from peers. In Muxlim, joining a group that shares the same culture and religion increases self confidence especially among members residing in areas where Muslims are a minority.
- ◆ **Cultural awareness and cultural expression** are enhanced in communities that have a European or international dimension. This is true for all communities mentioned in the table with the exception of Gay.TV, where awareness was intended by respondents to surveys as linked to the acceptance the LGBT¹⁹ culture and identity.
- ◆ Settings supporting experience/practice sharing enhance the development of **Critical thinking**: in eTwinning – Time after Time members develop critical thinking by sharing cultural, social, historic experiences. In CEDDET and Microbiology forum it is the exchange of practices that supports the development of critical thinking as members are engaged in finding/adapting solutions proposed by peers to their own context. In Bookcrossing and Experience project members develop critical thinking by sharing their experience, understanding and accepting different point of views and supporting peers. In Gay TV and Muxlim – differently from the other communities – critical thinking is enhanced by the mission of the communities: both want

¹⁹ Lesbian, Gay, Bisexual and Transgender.

to spread a positive concept of their members lifestyle within and outside the community. This pushes members to confront with the outside world and revise/reinforce their position through reflection and interaction processes that facilitate the emergence of critical thinking skills.

- ◆ **Communication skills** are enhanced in communities where the management keeps a role in monitoring and guiding the behaviour of members in the community (Rezed, eTwinning and Englishforums). In Il Cantiere, fast, efficient and effective communication is the key to achieving the community objective of collaborative video production. Communication skills are necessary to bring a significant contribution to the community and are developed thanks to peer support among members (usually the most experienced ones giving advice to the less experienced).
- ◆ **Organisational skills** are explicitly mentioned only in the case of Bookcrossing. This is the only community where organisation of face to face events is formally part of the community activities. As events organisation is not pushed nor supported by the management, organisation is solely a responsibility of members. Members state that engagement in this activity on a voluntary basis has improved their organisational skills with significant impact also on their life outside the community.
- ◆ **Foreign language** – the learning of a foreign language is an explicit aim of the Englishforums community. Learning of a foreign language (in all cases English) is a side effect of being engaged in the community and dealing with peers from other parts of Europe (as in the case of Time after Time) or willing to expand the community beyond the national context (as in the case of Il Cantiere).
- ◆ Concerning the **learning-to-learn** competence: eTwinning – Time after Time and Englishforum have a clear educational aim and are therefore providing tools and support services (provided by the community in the case of Englishforums with support from staff, Q&A, tests and by teachers in the case of Time after Time) facilitating the development of this competence. In CEDDET and Il Cantiere the high professional level of discussion leads members to recognise the need to structure their learning process within the community so to improve not only their professional profile but also the organisation of public administration in their country (CEDDET) and the dissemination and use of free software among the wider public in the case of Il Cantiere.
- ◆ As regards **creativity**: in TappedIn the community stimulates members' creativity by pushing them to find new and alternative solutions to practical problems related to the teaching profession. In RezEd it is the focus of the community itself (the use of virtual worlds for learning) that stimulates members' creativity in proposing and testing new learning models utilising web 2.0 solutions. In eTwinning students' creativity is enhanced by allowing them to express what they have learnt in different forms (provision of historic materials, drawings, provision of videos, slides, etc.). In Il Cantiere creativity is at the very heart of the community as members are required to look for creative ways of provision of educational videos on free software use so to be sure the attention of users is caught. Finally, in Experience Project, it is the variety of interaction modes offered (challenges, polls, confessions) that enhances members' creativity in self-expression and support to peers.

Recognition of skills (acquired through community participation or previously developed) does not formally take place in any of the communities analysed. In some communities, recognition of the expertise and value added brought into the community happens through “promotion” to the status of expert members invited to join the staff of the community (for instance Englishforums) and in others it is participation in the community that gives members prestige outside the community and within one's professional environment (this is the case for Microbiology Forum). In eTwinning, the recognition of previously developed skills and titles is explicitly and intentionally not addressed: all members are

peers be them teachers or students. And within the group of students, contributions are valued the same regardless of the level of education (primary or secondary) of students.

Finally, as concerns the **link to formal education** this is present in eTwinning – Time after Time (where the activities of the community constitute part of curricular activities), in TappedIn (where tenant universities use the community as a platform to deliver courses) and in CEDDET (where the community activities represent a follow up of the formal training activities done by members before joining the community). Link to formal education (through provision of certificates of proficiency) is planned in Englishforums whereas Microbiology Forum represents the only case where the link to formal education is explicitly refused. All the remaining communities are not linked nor interested to be linked to formal education.

c) *Role of resources (learning and informative), role of technologies and availability of technologies*

Analysis of the 12 communities shows availability of the following **learning and informative resources**:

Table 17. Learning and informative resources

Articles, papers, links	<ul style="list-style-type: none"> ◆ TappedIn ◆ RezEd ◆ CEDDET ◆ Bookcrossing ◆ Il Cantiere ◆ Microbiology Forum ◆ Tudiabetes ◆ Gay.TV ◆ Muxlim
Podcasts, photos, videos, slideshows	<ul style="list-style-type: none"> ◆ RezEd, ◆ Tudiabetes ◆ Englishforums ◆ Muxlim ◆ Il Cantiere

Particular features present only in single communities are the following:

- ◆ A library is present in TappedIn;
- ◆ Englishforums provides a tests section where members can take tests on their language level;
- ◆ Tudiabetes provides a medical support section where members can ask direct support to doctors;
- ◆ Gay.TV provides a games section that might lead to learning according to the management;
- ◆ Experience project provides sections such as Polls (where members can launch polls on whatever issue they wish to) , Challenges (where members can launch their personal challenge and keep other members informed on the difficulties met as well as get support from members) and Confessions (where members can confess something to other members) where significant knowledge is generated.

With regard to the Provision or Co-Construction of Materials the approaches undertaken by the various communities vary and can loosely be categorised into four groups:

- I: Communities that facilitate and provide materials using resources uploaded by designated experts, managers or moderators.

II: Communities where resources are uploaded and exchanged by community members and informal materials are at the disposal of the all the community.

III: Communities that facilitate the access to co-constructed knowledge derived from selected discussion thread, forum groups and interactive activities taking place amongst community members

IV: Communities that promote joint co-construction of materials through the cooperative and consensual interaction of interested members or member groups.

As shown in the table below a number of communities do not fit precisely into the above categories displaying elements common to more than one group though usually the nature of provision is predominantly associated with one particular category.

Table 18. Provision and co-construction of materials and knowledge

Community	Category ²⁰			
	I	II	III	IV
TappedIn	XX	XX	XXX	
RezEd	XX	XXX	XXX	
eTwinning		XXX	XX	
CEDDETT	XXX	XXX	XXX	
Il Cantiere	XX	XX		XXX
Microbiology Forum	XX	XX	XX	
Englishforums		XXX	XXX	
TuDiabetes	XX	XXX	XXX	
Bookcrossing	X	XXX		
Experience Project		XXX	XX	
Gay TV	XXX	XX		
Muxlim		XXX	XX	

As concerns the **technology** supporting the existence and activities of the communities, there is a wide variety of models, ranging from the Moodle platform of CEDDET to the Ning application of Tudiabetes and Rezed and to the Mediawiki software of Il Cantiere.

All the communities show strong awareness of the key role played by technologies in allowing them to be alive, successful and constantly growing in qualitative and quantitative terms. Nevertheless, only 4 out of 12 see technological evolution of the community as a key challenge to be addressed for sustainability. It is interesting to note, however, how different the technological challenges are among these four communities:

- ◆ CEDDET is considering moving away from the currently used Moodle platform as it does not support the social networking emerging aspects of the community.
- ◆ Similarly, TappedIn is considering moving to Web 2.0 solutions.
- ◆ The Time after Time community would welcome higher capacity to eTwinning communities to upload and share their materials (videos, images, ppt).

²⁰ X= slightly relevant; XX= relevant; XXX= very relevant.

- ◆ Microbiology forum is considering launching online seminars, which they believe would be something completely new and distinctive in the field.

Thus, it can be concluded that, although technological support is recognized as necessary throughout all the communities (and it could not be otherwise as we are dealing with online communities), the extent to which the available technological solutions are utilized by communities varies substantially depending on the specific nature, aims and organization of the community. In the case of Microbiology Forum it is clearly demonstrated that even with a very basic technological infrastructure (based on a mailing list) the community can work well and be efficient and effective. The case of RezEd or of Il Cantiere demonstrate that not all the available technology and social networking tools need to be brought into the community to make it work better: RezEd members often meet or create discussion groups in Second Life and Il Cantiere members communicate not only through the community forum but also through Facebook and Twitter.

As anticipated in the previous section, interaction (generating learning and knowledge creation) mainly happens through forums, blogs and posts. Communities such as Muxlim, Tudiabetes, Rezed, Englishforums and Il Cantiere also utilize videos (either produced externally, or self-produced by members).

What seems innovative and to stimulate creativity is not the technological support available, but rather the availability of different tools that may stimulate and enhance members' creativity. Muxlim and eTwinning – Time after Time show quite different levels of technological development but appear to both stimulate creativity as they allow members' self-expression through a variety of tools (texts, videos, ppt slides, drawings, cartoons). Il Cantiere stimulates creativity by engaging members in a reflection on how videos should be shot to better serve the educational aim on free software application use.

An interesting feature is displayed by the TappedIn and RezEd Communities that provide supporting services to newbies in terms of Helpdesk (TappedIn) and organized weekly tours of the community (RezEd). Both services are aimed at introducing members not only to the structure and organization of the community, but also to the available tools and how they can be used at best.

The technological dimension was investigated also through field research. As one can see in Annex 1 both interview and survey grids contained questions aimed at gathering respondents' opinion on the role of ICT in communities. What emerges from the analysis of replies can be summarized as follows.

- ◆ **ICT is considered as a means for freely expressing oneself and allowing members to play the role of reader and writer at the same time**

The idea that online communities are social places where the development possibilities of the net express themselves at their best emerges. Viewed in this manner each reader is also an editor. There is a significant reduction or loss of central control in favour of common activities where each member enjoys co-ownership of both the responsibility and authority to manage ones activities and knowledge.

This is particularly true for the Il Cantiere, Englishforums, Microbiology Forum, Bookcrossing, "TuDiabetes"; Experience Project; GayTV; and Muxlim communities.

- ◆ **ICT is considered as a means to closely link in people all over the world**

Since the community is not tied to a particular territory /geographical location, an online community finds its link and its founding reason in the sense of "belonging" to a particular content, theme, or problem. Communities without frontiers support cultural and social bonding and are an effective means of combating social exclusion which paradoxically can so often occur alongside the increased technological speed and complexity of modern living. In breaking down geographical barriers technology allows for greater contact between different cultures, however this contact may often manifest itself as a clash of cultures and ICT use to develop borderless communities with multicultural bonds and promote social inclusion goes some way towards combating the side effects associated with

the challenges that elements of technology bring to modern living. ICT as an enabler of networking despite time and spatial barriers turned out to be a quite recurrent answer across surveys of the analysed communities. The possibility to link people all over the world was stated to have two main gains: avoiding the sense of isolation (for instance in Tudiabetes) and meeting people all over the world first virtually and then for real (in Bookcrossing and Microbiology Forum).

- ◆ **ICT is considered as a means to collaboratively produce and share knowledge, best practice and experience**

As emerging for instance from the analysis of Muxlim, ICT and its relevant collaborative tools can contribute to creating a common wealth of knowledge. The members of a community produce outputs in a cooperative way. The outputs (learning, knowledge, understanding) of a community are works in progress and continue to be so as long as the community continues to exist.

d) Organisation and context dimension

Members

As concerns the features of the members involved in the communities, this is very much related to the nature, aims and topics addressed by the community:

- ◆ TappedIn, RezEd and eTwinning members belong to the School and Academia sectors, though over time they have involved also parents (in the case of RezEd and Time after Time) and the local community (Time after Time).
- ◆ Microbiology Forum and CEDDET involve professionals in the specific fields covered by the communities activity.
- ◆ Gay.TV and Muxlim involve members willing to share, discuss and provide a positive concept of members lifestyle and identity
- ◆ Tudiabetes involves members affected by diabetes as well as their carers and professionals in the field
- ◆ Experience project, Il Cantiere and Englishforums involve the widest variety of members willing to share an experience (any kind of experience in the case of Experience Project; the experience of producing collaboratively in the case of Il Cantiere and the experience of learning English having fun in the case of Englishforums).

The active members in the 12 analysed communities conduct different activities: Present themselves within the community; Access information; Upload, retrieve, download resources; Read materials and the comments of others; Request and receive advice, Write or co-write information and/or produce or co-produce resources, Receive support, Offer support to others, Initiate or take part in events and discussions, Share their own opinions and accept or respect other people's opinions

The presence of **lurkers** is notable in some of the analysed communities, namely Bookcrossing and Muxlim. As determined from interview results with community managers, the fact that some members do not actively contribute to the community development but prefer to adopt a more passive role, reading and accessing resources and discussion threads is accepted. Generally speaking, there is no measurement of active and passive members within the communities with the exception of Muxlim community, GayTV community; Tappedin, Il Cantiere.

Codes of conduct

Five communities out of twelve have explicit rules of conduct and guidelines members are required to accept when joining the community:

- ◆ TappedIn requires the members to accept the professional code of conduct of the community;
- ◆ RezEd requires to agree on the Terms of service of the community (legal issues related to the use of the community and its content);

- ◆ Tudiabetes, the Experience project and Muxlim require members to agree and accept the rules of the community. These are defined in the Terms of Use within Tudiabetes and in the Community Guidelines of the Muxlim, Englishforums and Experience Project communities. The three communities show a number of similarities in the guidelines provided. They grant access to people aged over 13 only; they underline that the content displayed is informative only (and in the case of Tudiabetes the fact that members needing health consultancy should address professionals and not just the community is particularly stressed); they provide rules for behaviour inside the community (respect for others, no child harms content, no sexually lascivious material, no aggressive attitude, no racist, sexist, politically or religiously inflammatory posts, no cursing etc). Additionally, they provide guidelines on copyright and on members' responsibility in using the site and posting information and content in the community. In these communities the community manager and staff have a role to check that the policies are respected. In Englishforums, people who post inappropriate messages are communicated with and made aware of why their conduct was considered inappropriate. The moderator will most often suggest how to express the same viewpoint in a more moderate, tolerant way. However, if the person refuses to constructively participate in debates, there is a sequence of actions taken against him/her with the final action being to ban or remove the individual from the community.

All the above communities as well as Gay.TV also provide information on their privacy policy and require members to agree to be allowed to join.

Interestingly, though guidelines related to the rules of the communities exist in five communities, only two highlighted the key role played by these rules in enhancing the well functioning of the community, i.e: Muxlim and Englishforums.

Methods of founding

The analysed communities show different **methods of founding**: Muxlim, Bookcrossing, Tudiabetes, Englishforums, Il Cantiere, and Experience Project were created by a single founder as a hobby or to tackle personal needs or the needs of friends and relatives. Microbiology Forum also originated from a single founder to address a gap existing in the scientific field of Microbiology, i.e.: a space for debate among specialists alternative to conferences and allowing self-expression which is not always guaranteed in organized events. RezEd, CEDDET and TappedIn were originated by institutional actors (Research centres, Foundations, NGOs) whereas Gay.TV stemmed from a TV channel dedicated to the LGBT lifestyle. eTwinning- Time after Time was instead created by a group of teachers in the frame of the eTwinning initiative.

Most communities show an evolutionary nature in that they evolved in time both in terms of organization and structure. The only exceptions are represented by Il Cantiere where the founder still has a predominant role in keeping the community alive and in managing it and by Microbiology forum which, despite its longevity, is still only managed by the founder.

Management

Within the analysed set of communities,²¹ different profiles appear to be necessary for establishment and maintenance:

- ◆ Community manager and supervisor;
- ◆ Staff;
- ◆ Expert members.

²¹ It should be highlighted that none of the analysed communities is self-organised, therefore the statements above are valid for the communities taken into consideration in the study, which all imply the presence of a community manager and of voluntary or paid staff.

The animators and discussion initiators in some cases are expert members (who volunteer) in other cases they are community staff members.

The table below shows the available management and staff per community.

Table 19. Management and staff

Community	Staff and management
Tapped In	1 manager 6 employed staff 3 voluntary staff
RezEd	2 managers, 50 voluntary staff members activated when needed
eTwinning –Time after Time	1 manager, 14 teachers, all voluntary
CEDDET	1 manager 9 employed staff
Il Cantiere	1 manager, 2 staff all voluntary
Microbiology Forum	1 manager
Englishforums	1 manager, 6 employed administrators, 40 moderators (expert members) voluntary
Tudiabetes	1 manager 2 employed staff, 4 part-time volunteers serving as Administrators, 72 members of a Welcome Committee
Bookcrossing	1 manager 5 employed staff
Experience Project	1 manager 9 staff
Gay.TV	1 manager 4 employed staff
Muxlim	1 manager 2 members voluntary

Most communities rely on the work of voluntary staff though some of them, as shown above, also have employed staff. In the case of Englishforums, Tudiabetes and RezEd, expert members may be asked to become part of the staff over time. This is claimed to be a sort of recognition of the added value such members have brought to the community, especially in the case of EnglishForums and Tudiabetes.

The mission and the aims of the communities have not changed over time in any of the 12 cases. What has changed is the general framework guaranteeing sustainability (see below). Managers of the communities play a key role in steering the community, in ensuring the community is well functioning and in reflecting on the changes and innovations needed to keep the community alive. The staff also plays a key role in this sense.

Members' role

However, when it comes to the daily activities of the communities, the role of members becomes the key. Members upload content, materials and information, members participate in the discussions and debates and introduce new issues to be discussed. Regardless of the material distribution model (whether external and introduced by management and staff or introduced /produced by members themselves) the members are making the communities alive and active. And the members represent

the source of inspiration for managers' plans for the future. When looking specifically at learning taking place in the community, this is in most of the cases self-managed: the opportunities are there for learning, offered by the community as such with its structure, organization and aims, but members are free to choose what and how to learn. This is true for all communities, ranging from the ones openly supporting learning like Englishforums (where members state they join to learn English but end up improving their horizontal skills) or Time after Time (developed in the framework of the formal education context, but reaching the most of its educational aims through unintentional and informal learning) to the ones where learning does not exist as an aim (Gay.TV, Bookcrossing) where members develop self confidence, social and civic skills and organizational skills simply by engaging in the community activities.

In some cases, like CEDDET and RezEd for instance, the community offers a support to learning by making available the most significant results of the discussions held in the community. The issue of reliability of the content of discussions remains crucial however, and this is shown in the case of RezEd where only discussions launched and moderated by the community staff are stored in a yearly publication, whereas those launched by the members do not foresee any kind of recapitulation.

In communities where content generation and sharing is solely in the hands of members there is no real rule as concerns the timing of discussion: this is launched at anytime by members themselves. In communities where the management has a role in uploading materials and content (TappedIn, CEDDET, Time after Time) there is a tendency to plan discussions (moderated by staff) though this does not prevent members to organize their own discussion groups. The same is true for communities allowing content uploading both by staff and members.

Relation to external context

As concerns the context dimension, the results of the analysis shows that all communities have a link to the outside world, though this is conceived and expressed by members and staff in different ways, for instance:

- ◆ Bookcrossing: members and management proudly state that the online community often meets in real life. Members themselves (with no support from the management) commit in organizing local events where Bookcrossers can meet.
- ◆ Microbiology Forum: members do meet in real life at conferences but state to prefer online interaction as this allows members to pose questions that would not be posed at conferences, either for lack of time or for the fear of participants to make silly questions.
- ◆ Time after Time involves the local community of the schools taking part in its activities, through interviews and search for relevant material to be posted in the online community.

When addressing the individual dimension, the link with the outside world is more than often linked to the building of one's identity (in terms of personal growth and self-acceptance): Tudiabetes generates a strong sense of belonging and members state they have found in the community their diabetic family and they have learnt to accept their disease by knowing how to manage it in their lives. Gay.TV is helping members to accept themselves and to be more self-confident. Microbiology Forum also increases its members' self confidence and contributes to improve members' work performance. Same is true for TappedIn, CEDDET and RezEd. In the last two cases, the community allows members to expand their professional network and generate new research projects outside the community.

e) Economic dimension

Sponsorship

The communities that stemmed from the initiative of public or private institutions are generally sponsored by the same organisations which helped found the community. This is the case of CEDDET, RezEd and TappedIn. In the case of CEDDET, however, new sponsors have joined over time. eTwinning Time after Time is a public initiative, but the communities populating the portal

(including Time after Time) are run on a voluntary basis. What is offered for free is the infrastructure and a set of services. Muxlim, Tudiabetes, Experience project and Microbiology Forum were born as a hobby or to satisfy a personal interest/need but, with their exponential growth in terms of members, they have managed to raise the attention and funding of private sponsors. Il Cantiere and Bookcrossing, also generated by the personal interests and needs of their founders, are still run on a voluntary basis, though Bookcrossing manages to self-fund part of its activities by selling merchandise labelled Bookcrossing. The Gay.TV community stemmed out of a TV channel and is sponsored by private actors.

To sum up, all the communities but two (Il Cantiere and Bookcrossing) are funded by private or public sponsors with financial contribution and/or contributions in kind (in the case of eTwinning and of the networking services of CEDDET). Out of the two non funded communities, Bookcrossing has adopted self-funding strategies. The fact that this is not the case for Il Cantiere might be due to its very recent creation (one year) though financial sustainability is not mentioned as a critical issue by the manager.

The presence of private sponsors does not seem to worry managers in terms of keeping the community independent. This is mentioned as an issue only in the case of Microbiology Forum (where management states that – though being sponsored by sponsors involved in the pharmaceutical field – the community manages to keep its independence) and in the case of Gay.TV, where the management admits that some potential sponsors have been lost over time due to some of the critical topics dealt by the community, and this has led to the decision to hide (rather than avoid) such topics in ad hoc sections and not in the main community page.

It is difficult to draw conclusions on the role of the economic dimension in ensuring the community stability and growth. Clearly, financial sustainability is key, though sometimes it is in their very nature (mission, interest and experiences shared, knowledge made available and developed collaboratively) that the communities manage to keep existing and expanding. Sponsors invest in communities because they can get access to potential clients for their services (Englishforums or Gay.TV, for instance) or because of the prestige they can gain in being acknowledged as sponsors (as in the case of Microbiology Forum and of CEDDET). Would communities manage to keep existing without sponsors? If we look at Bookcrossing we can see that this is possible, and that self-funding strategies can be adopted to face the financial challenge. On the other side, if we look at the case of Microbiology Forum, there are two key elements guaranteeing the community stability: the organisational capacity of the manager and the uniqueness and reputation the community has achieved in the field. The economic dimension is for sure the most critical one: the community works mainly with a mailing list and the system is so organised that the community has to pay per each email sent. It is quite obvious that without the existence of sponsors the community would not manage to survive, unless revising its economic model.

Success factors and challenges

When analysing the economic dimension, the results of interviews to managers on success factors and challenges of the communities are worth quoting as, though they do not necessarily relate to the economic aspects, they might have economic implications linked to planned future strategies.

Success factors of the communities can be grouped as follows:

- ◆ Increasing number of members (RezEd, Time after Time, CEDDET, Bookcrossing, Tudiabetes).
- ◆ Uniqueness (Muxlim, Microbiology Forum).
- ◆ Utility (Experience Project, Tudiabetes, Microbiology Forum).

Reputation is a success factor for Microbiology Forum as well as of Il Cantiere, where success is related to the recognised quality of the outputs created. Personal satisfaction of members is the main success factor for Englishforums, whereas both Gay.Tv and Muxlim quote the spreading of the positive concept of a lifestyle (LGBT and Muslim respectively) as their success factor.

If we shift to learning challenges within communities, the economic aspect is never mentioned as a challenge, instead:

- ◆ TappedIn, eTwinning, CEDDET and Microbiology Forum see technological evolution of the community as the main learning challenge to be addressed
- ◆ Reliability of the information available in the community is the main learning challenge Tudiabetes and Muxlim have to face.
- ◆ Muxlim also mentions the need to keep the interest of community members alive as a challenge. The same is true for Experience project.
- ◆ The (mis)behaviour of members is the most critical learning challenge for Englishforums.
- ◆ ReZEd's main learning challenge is to spur self-standing learning processes amongst members.

f) Socio-cultural and ethical dimension

The social component is vital in all the analysed communities: members join the community because they want to share their interests, knowledge and experience with peers and enrich their knowledge and experience patrimony.

As explored in the previous sections, the impact communities have on their members in terms of learning is much wider than that expected or – in cases where learning is not an explicit aim neither of the community nor of the members – emerges even if unexpected. The social dimension is essential in enhancing learning as throughout the 12 communities learning (be it formal or informal, intentional or unintentional) happens through interaction. Interaction generates dialogue, debate, consensus building, support, and provides members with an enriching experience.

Members join as individuals and benefit both as individuals and as a group from the activities of the communities. Communities generate a strong sense of belonging not just to the community itself, but also to its members and more generally to the value system featuring the community. This is true especially for the following communities:

- ◆ Tudiabetes: members state they have found in the community their “diabetic family”.
- ◆ Il Cantiere: members are either part of or become part of the free software movement and wish to spread this movement's ethic and value system through the production of videos.
- ◆ Experience Project: members can post their personal challenges and confessions and get support from other members to meet their challenge (for instance: quit smoking) or to overcome the sense of guilt linked to their confession.
- ◆ Muxlim and Gay.TV: members sharing the same lifestyle and religious/cultural/sexual identity join together to learn how to enjoy their identity and to spread (within and outside the community) a positive concept of their lifestyle.
- ◆ Bookcrossing: members also show a strong sense of belonging to the community and to the value systems it implies. Bookcrossers (members defined themselves like this) share the interest and mission to exchange books and the experience of reading books and use the community as a platform to discuss and debate on their reading experience but also to organise real events and provide/get access to tracking of the books they have disseminated and left to be found in their local territory.

eIdentity is key in ensuring facilitation to members interaction. If the fact that members state to be safer when hiding behind a nickname or an avatar is questionable, it is true that, throughout all the analysed communities, the fact that other members are generally not known personally makes individuals feel cosy in the community, and spurs their self-expression. At a later stage, the wish arises to meet peers in person in some communities (Bookcrossing, Tudiabetes, Microbiology Forum and Gay.TV), but in most of the cases this is not felt as necessary by members.

Members do recognise other members as a key patrimony of the community: it is through interaction with other members that they get access to knowledge, information, practices, experiences, advice,

support, entertainment. This process happens independently of the recognition members might get from the management for the contribution they give to the community.

g) Evaluative dimension

Evaluation of learning takes place only in the Etwinning –Time after Time community as students are evaluated by teachers based on their contribution and progress and this becomes part of their formal evaluation within school settings. In all other communities no mechanism of formal evaluation has emerged. In Englishforums and CEDDET, members who have distinguished themselves for the value of the contribution they have given and for their “seniority” in the community are asked to become part of the staff or of a team of expert members. This is an informal recognition not only of the progress they have made individually, but also of the added value they have brought to the community. In Englishforums self-evaluation of members is facilitated through the availability of tests to measure one’s progress.

Formal assessment mechanisms of the communities’ effectiveness in reaching its aims are not in place in any of the communities. Personal satisfaction of members, growth of the community in terms of membership and reputation gained are the indicators communities use to monitor and evaluate their effectiveness. Only in the case of TappedIn surveys are conducted periodically to evaluate the community activities and the learning impact of the community on its members.

Analysis of online interaction throughout the 12 communities suggests the presence of peer-to-peer informal evaluation mechanisms. In other words, during exchange and interaction processes, members tend to evaluate other members’ opinions and positions based on the supporting ideas/materials brought into the discussion within consensus building and persuasion processes.

4.2 Overall assessment

In Section 2.3, the following categorisation was provided to classify the 12 communities:

- ◆ **Topic-driven communities:** RezEd, TappedIn, Muxlim, GayTV, Microbiology Forum, Englishforums, Tudiabetes, Bookcrossing.
- ◆ **Organisation-driven communities:** CEDDET, eTwinning.
- ◆ **Socially-driven communities:** Experience Project.
- ◆ **Production-driven communities:** Il Cantiere.

The results of analysis on innovation taking place in communities as explored in the previous 4.2 clearly shows that this categorisation does not reflect the emergence of similar patterns among communities belonging to one specific category. Despite the low number of communities studied, a variety of models emerge in pedagogical, organisational, economic and social terms.

Each analysed dimension (longitudinal, pedagogical, resources, organisational, economic, socio-cultural, evaluative) leads to different clustering of communities, sometimes linked to the reason for their creation, other times linked to their organisational models or even to the supporting technology they use. Even a small sample like the one that served the scope of this report, constituted by 12 communities only, shows that the world of online communities is so varied and so quickly evolving that a categorisation is not possible, nor does it help in understanding how learning takes place and which lessons can be learnt from formal education and training systems. In order to better understand how learning is fostered and how learning happens in online communities the focus should be shifted on investigating the “DNA” of communities and analysing how and to which extent their different dimensions foster learning.

In Annex 2, a first step is proposed to start the analysis of the communities’ DNA. It is strongly believed that this is the first necessary step to be taken to be able to fully understand the learning phenomenon within online communities and to eventually suggest a set of implementation measures to foster learning in formal education and training systems.

5. CONCLUSIONS

Based on the study results, can we say there is massive pedagogical innovation in the ICT-enabled communities studied?

Probably not, but the balance between known pedagogical models is substantially different: the communities analysed show that the balance between teaching and constructing knowledge and between acquiring codified knowledge and creating new knowledge are substantially different from the ones we are used to observing in traditional education and training environments. Transmission of codified knowledge constitutes only a small proportion of online communities' learning activities, whereas interaction among peers leads to knowledge sharing (often based on members' experience) and knowledge creation (based on a mix of codified knowledge and new knowledge collaboratively developed). The central role of members (learners) in the learning process and in the process of knowledge creation is not a new and innovative paradigm. What is interesting is that online communities show how this paradigm can be implemented successfully. The questions and answers below outline the lessons learnt from the ICT-enabled communities studied which could provide Education and Training systems with ideas on how to enhance learning in new ways.

5.1 What makes online communities a place for learning?

No definition can ever fully or effectively encompass all the diverse elements that contribute to defining a community, let alone a learning community. Simply defining a learning community as “a group of individuals who have a common learning goal“, fails to adequately describe the complex interactions (contextual, motivational, personal, behavioural, values, etc.) which combine to create a satisfactory and effective learning experience. One could go as far as to say that what constitutes a community (be it for learning or not) lies purely in the eyes of the beholder, in this case the member. We have chosen to describe a learning community as “any collective grouping of individuals who share common interests, aims, passions, objectives or circumstances and - through the activity of engagement (active or passive) with other members of the group - expand their level of understanding, awareness, knowledge, experience and horizons”. Each community develops its own unique system of identification, signs, codes, symbols, and recognisable traits. It tries to define its own “particular” mode of activity which is dependent on its objectives and interests, and the unique contributions from each individual member.

Each of the analysed communities constitutes a learning community in its own special way. What these communities have in common, however, is that most of the perceived²² significant learning happens unintentionally (with very few exceptions) by means of interaction, knowledge and experience sharing and materials creation and/or sharing.

People join a community because they share an interest and, independently of the nature of this interest (hobby, work-related, related to a shared social condition or identity), they are naturally keen to learn in the specific field addressed by the community.

Whether learning is an explicit aim of the community or not, some kind of learning always emerges in the ICT-enabled communities studied. Keeping people's interest alive is vital to enhancing their participation (be it active or passive). In turn, high and active participation has positive spill-over effects on learning. Interest raising and “maintenance” is the critical factor in keeping these communities alive in the long term, in making them places where participating and contributing is an enjoyable and rewarding experience, which brings learning opportunities. Thus, the more curiosity is stimulated, the more learning is enhanced. The more people feel they can learn something from the community and share their experience, project, values within the community, the more they will join and stay.

²² By members, as resulting from surveys and interviews.

5.2 How and what are people learning in these communities?

Members of online communities learn by making and developing **connections** (intentionally or not) between ideas, experiences, information, **by interacting, sharing, understanding, accepting, commenting, creating and defending** their own opinions, their current situations and their daily experiences. Within learning communities, connections are formed, guided, fostered, stimulated or simply take place. Storytelling, making jokes, giving examples, linking and making available different resources, asking questions, providing answers, developing empathy, and simply reading are just some examples of interaction which occur within the learning communities discussed. Communities provide the context, resources and opportunities to expand the members' horizons and concepts in relation to themselves and to the other members. Beyond the aspects of personal development lie the measurable parameters of learning such as knowledge and skill acquisition on a personal, practical and professional level.

Evidence shows that the interaction within communities – regardless of their aims or categorisation²³ – leads mostly to the acquisition of horizontal skills such as critical thinking, active participation, sense of initiative and socio-civic competences. Communities do not generally support members in structuring their learning processes and developing learning-to-learn competences. As learning happens mostly informally and unintentionally, the decision to take advantage of the learning opportunities indirectly and directly offered by the communities, and the responsibility for following these through, is left completely up to the members. In some cases the process of building a knowledge patrimony benefitting the community at collective and individual level is facilitated through storage of the knowledge shared and created (newsletters, libraries, e-journals, yearly publications), nevertheless the majority of the communities do not provide any support of this kind.

In online communities, all members are peers. Recognition of previously developed competences and skills does not take place. Members have to show what they know and what they can do to be recognised as a valuable source of information, knowledge and experience by peers and by the community.

Recognition by peers and by the community empowers individuals and spurs on their activity within the community. This has positive implications for the real lives of members, professionally and personally (increased self confidence, increased prestige, improved work-performance, improved self-acceptance).

5.3 What is the role of communities in enhancing creativity and innovation?

The nature of online communities contributes to enhance innovation and creativity. The very fact that individual members' horizons, thinking processes and conceptual visions of themselves, their knowledge, skills base, and their environment have expanded makes them inherently capable of thinking in a different manner and approaching the world around them from a different perspective, which contributes to creativity and innovation. Members are not situated in predefined traditional and formal learning settings where roles and activities are predictable and where “thinking outside the box” is not always welcome.

Community members are part of a “boundless and timeless” zone where people with different backgrounds, knowledge, location, language, religion, experience, values, etc. can provide insight for new approaches to commonly-shared interests and issues and impending change.

The fact that the communities grow in terms of quality (and probably of membership) thanks to the contribution of their members has a two way effect on participants: on the one hand it gives them a strong sense of responsibility and on the other, it empowers them. This stimulates a positive attitude in

²³ See Section 2.3 for a categorisation of the 12 analysed communities.

members who are smoothly led to be creative and innovative in the way they interact, exchange knowledge, create knowledge and materials, organise events within and outside the community, utilise the available technology or create new tools (or express the need for them) to support their self-expression.

5.4 Do learning communities support equity?

The support to equity (in the broad sense of the term) within a learning community is highly dependent on the nature, aims, content, structure and hierarchical model adopted. As can be seen in a number of analysed case studies, the promotion of equity forms the basis for the establishment of the community. In other cases, there are hierarchal structures, predefined requisites and restricted accessibility. This means that not all learning communities are inspired by equity or actually promote equity in access to learning opportunities.

In principle, all members of online communities can benefit from the learning opportunities informally and/or formally offered. However, as stated before, in cases where learning opportunities are offered, the decision to learn, which learning strategy to adopt and the responsibility for following through are left completely up to the members. Thus, communities are generally open to all in terms of provision of learning opportunities but members who have not developed learning-to-learn competences could be excluded (unless the communities themselves support members in the acquisition of this competence).

The fact that these communities are online presupposes that members have access to ICT and to the Internet. This is a critical consideration when analysing equity in online communities. Partly linked to this is the mastery of digital skills: evidence shows that supporting members in the acquisition of digital skills is not always a priority for online communities. Independently of the level of technological development of the platform and tools supporting the activities of the community, members are generally expected to have digital skills involving the confident and critical use of information society technologies for work, leisure and communication. However, evidence suggests that this is not always the case. In some cases, members are supported by the community (through a helpdesk or other support services) or by their peers. Here, members tend to acquire or improve their basic ICT skills²⁴ but receive no support in the acquisition of skills to critically and confidently use technologies and networking technologies. To sum up: in communities where no support is provided, potential members with low digital skills could be excluded; even in communities where support is provided, members may still have knowledge and skills gaps that must be filled if they are to move up from having basic ICT skills to digital skills mastery.

Finally, as regards the issue of social inclusion, this depends on the nature of the community and on its aims and mission. Communities supporting professional development are in principle open to anyone interested without discrimination, but the topic the community deals with naturally acts as a filter to membership. Communities where the social component plays a key role and where members join to share their experiences, values and culture are explicitly open to everyone and encourage members to embrace and accept diversity (of visions, cultures, values, identities). However, the evidence shows that communities which focus on fighting social exclusion tend to be populated mostly by members who are at risk of such exclusion. For instance, Gay.TV and Muxlim wish to share and spread a positive concept of their members' lifestyles and are therefore open to (and willing to enlarge the pool of) potential members who do not share their values, visions of life, culture and identity. However, less than 5% of the members are respectively not LGBT (Lesbian, Gays, Bisexual, Transgender) or

²⁴ The use of computers to retrieve, assess, store, produce, present and exchange information, and to communicate and participate in collaborative networks via the Internet. COM (2005/548) Proposal for a Recommendation of the European Parliament and of the Council on key competences for lifelong learning, Brussels, 10.11.2005, [Http://europa.eu.int/comm/education/policies/2010/doc/keyrec_en.pdf](http://europa.eu.int/comm/education/policies/2010/doc/keyrec_en.pdf)

Muslims. In this case, the opportunity to learn more about a different culture, religion, lifestyle and of the values behind is offered, but not taken up.

5.5 What are the challenges to benefiting from learning in online communities?

Being a member of a learning community implies facing challenges and being ready to accept changes. It also means developing new skills and using existing skills in a different way.

In order to benefit from communities (be they explicitly or implicitly learning oriented), members need to be willing to engage with the community's activities and with other members and be ready to change, innovate and be creative.

Evidence suggests that community management must address the following key challenges in order to ensure that members benefit from the activities of the community, including learning:

- ◆ It must allow technological evolution in order to provide to community members suitable tools and applications which foster self-expression and social networking.
- ◆ It must ensure the information posted within the community is reliable, as members tend to use this shared information (especially when posted by peers) in their lives outside the community (at work, or when they are ill, or dealing with the personal challenges; or learning a foreign language etc.).
- ◆ It must keep the interest of community members alive: for the community to maintain and expand and for its members to keep logging in and participating and learning, the management needs to be creative and innovative. Though members play an important role in contributing to the evolution of communities, steering change remains the responsibility of management.
- ◆ It must deal with the misbehaviour of members which can be a critical factor especially in socially-oriented communities. The existence of codes of conduct and rules for members (who have to accept them as a necessary step to becoming part of the community) does not prevent members from misbehaving. Some communities address this challenge by trying to educate members, others ban them after they have ignored a given number of warnings.
- ◆ It must encourage self-sufficient learning processes amongst members. In communities where learning is an explicit objective, a key concern for management is empowering individuals' learning attitudes. Management would thus play a smaller role in steering the learning process within the community.

In order to be able to fully benefit from their participation within an online community, members should learn:

- ◆ how to use the main communication and collaborative tools made available by digital technologies.
- ◆ how to search, understand, select, handle, modify and create knowledge and information.
- ◆ how to apply methods and techniques to communicate and cooperate on the net in an appropriate manner.
- ◆ to develop curiosity, critical thinking and investigative skills.
- ◆ to develop creative attitudes.
- ◆ to manage change and complexity.
- ◆ to develop self-evaluation and self-analysis skills.
- ◆ to value solidarity, diversity, understanding others and the sense of belonging.

5.6 What is the role of ICT for learning in online communities?

While the level of ICT employed in the different case studies varies in complexity and quality, it is clear in all cases that some level of ICT is required and as such ICT represent a critical enabler, the “life blood” of online communities. ICT supports communication and collaborative interactions.

In an online community, ICT cannot just be considered as a technical interface as it represents the “outward face” of the community.

Communities with greater ICT functionalities are generally those that are larger, more supportive of interaction among community members and more open to innovation and creativity. The greater the choice of communication modes provided, the greater the level of connectivity available to the community members. On the other hand, some of the analysed communities support creativity and innovation even though they are not backed up by high level ICT functionalities. Still, interestingly, the more the community grows in terms of members and in qualitative terms, the more the need is perceived for technological improvement.

The availability of different media and digital tools supports learning by offering members a personalised and diversified way of learning as well as the possibility of expressing themselves in the most appropriate manner. Innovative ICT brings greater functionality and efficiency to the communication process. ICT and its relevant collaborative tools can contribute to creating a common wealth of knowledge. Through their use, the members of a community can collaboratively produce outputs and/or knowledge. Thus, a community’s outcomes (especially when referring to learning, knowledge, and understanding) are continuously evolving and improving for as long as the community exists. Within online communities, ICT offers the possibility for members to remain anonymous (e.g. avatars, nick names) which may support freedom of expression, independent thinking and acceptance on the basis of contributions made rather than the perception of the contributor. Whether this is something positive or negative is quite controversial: the results of surveys reveal that some respondents mention the possibility of remaining anonymous as an advantage, while others see it as a disadvantage as they say that this use of ICT “allows people to hide”.

There is agreement across all the communities that, in breaking down geographical barriers, technology allows for greater contact between different cultures, backgrounds, and life-styles. It is therefore seen as supporting tolerance, respect and democracy and also the development of socio and civic competences, cultural awareness and cultural expression.

6. FINAL REMARKS

The study focused on investigating pedagogical and organisational innovation in online communities based on a set of 12 communities. Online interaction was observed across communities, and managers, staff and members were asked to report on their motivations for joining communities, the benefits they perceived from doing so, the added value they bring to communities and that which they get from being members. The main focus of analysis was learning: how it happens, when it happens, and what the relevance is of organisational, longitudinal, economic, socio-cultural and evaluative dimensions in fostering learning in online communities. The analysis and assessment of results as presented in Chapters 4 and 5 of this report leads to the following concluding remarks:

- ◆ Despite the relatively small sample analysed, it is clear that online communities show such a wide variety of features across the dimensions studied that a **categorisation is not possible**: organisational and pedagogical models are different across communities and clustering is possible across dimensions, but each dimension analysed presents clusters involving different communities independently of the categorisation originally adopted and proposed in Chapter 2.
- ◆ This suggests that – when analysing learning in online communities – a step behind shall be taken, meaning that research efforts shall focus on the **DNA of communities** as a first necessary step to be able to define emerging learning models and to assess their transferability and adaptability to the formal education and training context.

When looking specifically at how learning happens and is fostered in online communities, the following conclusions can be drawn:

- ◆ Though a hierarchy is present in all the analysed communities, **learning mostly happens collaboratively**. Even in the communities (eTwinning, CEDDET, Englishforums, TappedIn) where learning is a declared and formal objective, the top-down approach plays a very limited role - or better, it often evolves into collaborative learning models. Peer learning appears therefore to be the most common learning model in the communities and the surveys and interviews show that it is perceived by members as the added value of participating in communities. Members state that they get the most out of learning experiences in interaction with peers, even in communities where services supporting learning are provided top-down.
- ◆ All the analysed communities play an important role in their **members' empowerment**, not only (and not always) in terms of learning but also in social terms. This is true for all communities independently of their aims, ranging from Tudiabetes and GAY.tv (gathering members at risk of social exclusion) to eTwinning – Time after Time and Microbiology Forum (the eTwinning community aims to support pupils' learning of time impact on societal change and the Microbiology Forum aims to provide a platform for exchange of information and knowledge among microbiologists).
- ◆ **Members empower, and are themselves empowered by, the community**: it is mostly through their activities and interactions that the community is kept alive; it is mostly by the “word of mouth” of members that communities get new members; it is mostly through measuring the personal satisfaction of their members and the reputation the community has gained that management steers the directions for change of the community. This clearly places members at the centre of the community life and functioning: communities are built by and for people willing to share experience, information and knowledge and are maintained (in terms of content) thanks to the contribution of the members.
- ◆ Most of the added value in terms of learning is perceived to come from **informal and unintentional learning** which happens through interaction (participation in forums, discussions and debates, self-production of videos, cartoons, drawings to self-express one's view, collaborative production of material). Field research results suggest that in communities learning happens through the acquisition of horizontal skills such as critical thinking, active

participation, sense of initiative and socio-civic competences. In some communities, ICT skills development is supported. The majority of communities, however, presuppose that members have sufficient ICT competence when they register. In general terms, the difference between digital and basic ICT skills is not recognised, with the result that even in the most technologically-advanced communities, members are not helped to develop the capacity to critically and confidently use technologies and networking technologies.

- ◆ Learning through interaction in online communities contributes to building members' **personal identity**. The acquisition of skills that can also be used in real life (in one's professional and social context), as well as the sense of belonging communities generate, contribute to increasing members' self confidence. Interaction enriches members' knowledge and acceptance of others. Peer support (getting advice and hints from other members on how to improve and use one's knowledge in real life) enhances the sense of belonging to the community and the **collective identity** of members, who feel part of a group of peers, who often become friends or even their virtual family.
- ◆ **Peer-to-peer interaction** is a key element which enhances the pleasure and the joy of learning in communities: members feel at ease when learning from their peers and trust the reliability of the information provided as this is based on experience. Sharing experiences motivates members to learn and to critically reflect on how the experience of others could be adapted to their own contexts.
- ◆ In relation to the above, **the community aspect seems to make a difference in the ways and outcomes of learning, when compared to looser collective activities**. Communities allow collective construction of knowledge through interaction. This is not an innovative concept per se, as mentioned at the beginning of this section. The added value that online communities bring is related to the wider possibilities to connect members beyond space and time barriers, with evident (positive) implications in terms of easier and faster access to information and knowledge and development/improvement of flexibility and open-minded attitudes which result from contact with people with different visions, values and cultures.
- ◆ A recent article by The Economist²⁵ states, based on the results of a study published by the *Journal of Personality and Social Psychology*, that living in foreign countries fosters creativity. In a way, online communities allow their members to meet the challenges an expat meets in real life in terms of **dealing with different cultures and values, developing tolerance and negotiation skills, as well as creativity**. Online communities can be considered as the XXI century adaptation of the Socratic Maieutics, as members learn, in a collective and collaborative way, by asking and answering questions to peers. Members of an online community are "peers" in that they share a common interest, but it is the variety of cultures, values and visions of the peers involved that brings added value to the online learning experience through communities.
- ◆ All that glitters is not gold: evidence shows that there are **limitations and challenges for learning in online communities**. First, interaction - that is at the core of online communities functioning - does not always imply learning, so the temptation to label any kind of interaction within a community as an informal learning experience should be avoided. Secondly, the following weaknesses of online community learning must be kept in mind to avoid "blind take up" of community-based learning models in formal learning environments:
 - a. The evidence gathered shows that members' learning-to-learn competences are taken for granted in online communities. As a result, no guidance is provided to members on how to develop such competences and structure their learning processes.

²⁵ "Expats at work", May 14, 2009

- b. The same is true for digital skills: support is sometimes foreseen on the use of the available technological tools, but no guidance is provided on safe, confidential and critical use of networking technologies.
- c. The correctness and quality of the information and content shared is not guaranteed in the informal online communities studied. As explored later on, this reliability remains a key critical factor for successful learning in online communities.
- d. The majority of the communities studied show little interest in enhancing lurkers' participation. If it is true that passive members can learn by simply "participating silently" in all forms of interactions typical of online communities, ignoring the problem of lurkers' "inclusion and activation" might prevent them from fully exploiting the learning opportunities provided.
- e. One should not expect online communities to be a perfect haven of communication, interaction and learning: user misbehaviour (lack of tolerance, lack of respect) is still a critical challenge communities have to face.

The following three main lessons learnt, based on the above, could be taken into consideration by formal education and training systems:

- ◆ **Peer-to-peer interaction and individual empowerment are vital to enhancing learning and the pleasure of learning.** The eTwinning – Time after Time community shows that even in a formal context, part of the curricular activities can be planned in such a way that they tear down hierarchical barriers (between teachers and students) and consider all the members of a community, or of a project team, as peers, independently of their formal role or skills' background. In such a context, students feel part of a team of peers and are motivated to contribute to achieving the learning objectives in creative and innovative ways. When teachers only provide the objectives of the learning activity and learners are left free to decide which strategies to adopt to achieve them, they feel empowered, their motivation to contribute grows and their critical thinking, self confidence and creativity skills are naturally enhanced. In such a context, "critical students" (such as children at risk of dropping out) also show substantial improvements in behaviour and learning achievements.²⁶
- ◆ ICT plays a key role in enhancing learning in online communities. However, in most cases, the communities are not concerned about how well their members master digital skills. In a world where people of all ages have access to the Internet and are increasingly joining communities (be it for social, professional development or any other reasons), ensuring that people can critically and confidently use the networking technologies at their disposal is vital. **Formal education and training systems should take responsibility for facilitating the acquisition of such skills to allow people (especially children) to safely "cross the internet roads".**
- ◆ Linked to the above, the issue of **reliability** remains a key concern that must be addressed. Members trust other members on the basis of their personal perceptions. Also, as the community acts as a filter to the wealth of information available on the Internet on a specific topic or experience, members do not question the reliability of the information provided. Even though all communities mention in their terms of service that the reliability of the information and content shared is not their responsibility, this does not change the excessive trust member have in believing all the information shared is correct and reliable. Again, formal education and training systems should support learners in developing the digital and critical skills necessary to be able to select information and verify its reliability.

²⁶ This is true across all the analysed communities. eTwinning-Time after Time has been taken as a key example as it has strong links to formal education settings.

ANNEX 1 – INTERVIEW AND SURVEY GRIDS

7. What type of activity/interest is shared?

PROMPTS:

Is it primarily socially oriented (e.g. awareness-raising; community development) or interest-oriented (e.g. skills-based; qualifications-focused)

8. Is there any explicit learning activity?

PROMPTS:

- Are specific materials provided?
- Are specific activities organised?

9. Discuss how learning happens

PROMPTS:

- Do you think that other learning processes are running among the members?
- Could you explain which ones, in your opinion?
- Do you have any observable case of them?

10. In what ways are people encouraged to participate?

PROMPTS:

- How do people typically get involved?
- Is there any form of recruitment campaign?

SECTION B. How is it funded?

PROMPTS:

- Voluntary input of time by leaders, organizers?
- Government funding?
- How much and what is the distribution?
- Voluntary sector funding?
- Subscriptions?
- Fees paid by members?
- Any quantitative data on resources/funding?

SECTION C. History and development

What were the origins of this initiative?

PROMPTS:

- How did it start?
- When did it start?
- Who were the main initiators?
- Why did it begin?
- Was there an original 'mission' or philosophy?
- What specific policies or policy instruments have shaped it?

In what ways has it changed since it began?

PROMPTS:

- More or less participants?
- Different type of client base?
- Increased formal organisational structures and management?
- More/less funding?
- Accreditation procedures introduced?
- Merging or acquisition of other initiatives?
- Different 'mission' or approach?

What major problems have been experienced over the lifetime of this initiative and how have they been overcome?

What were the major successes in the initiative?

SECTION D: Technical Audit

This is a description of the ICT-enabling environment.

Functional configuration – the package of platforms, tools and services used within the community (how are they used?)

PROMPTS:

They would normally include the following:

- Design and production (e.g. authoring tools; multimedia content development software)
- Communication and delivery (tutoring tools, tele-conferencing facilities; mailing lists; fora and discussion lists; chat tools; twittering tools etc.)
- Access and retrieval (databases -; content management systems; computer-based courses, video, etc.)
- Management and Evaluation (information and recruitment tools and facilities, record keeping tools and facilities, tracking tools and facilities, curriculum planning tools, evaluation and assessment tools and facilities)

SECTION E: Outcomes and Impacts

What would you say was the main type of benefit for participants?

PROMPT:

Mainly social, mainly educational, mainly recreational?

2. What would you say are the main learning benefits for participants?

PROMPTS:

- What do they learn?
- What do they get that they don't get elsewhere?
- What is innovative or unusual about this particular form of learning?
- How would you measure the learning benefit or outcome?

3. What would you say are the main social benefits for participants?

PROMPTS:

- Does it expand or add value to their social networks and relationships?
- Does it have any impact on their involvement in their community?
- Does it have any effect on their sense of citizenship?

4. What would you say are the main personal benefits for individual participants?

PROMPTS:

Does it have an impact on self confidence/self-esteem?

5. In what ways do you think this initiative could be improved?

PROMPTS:

- Better access for more and/or different types of participants?
- Topic expert participation?
- Organisational aspects?

Funding?

SECTION F: Case Study Logistics

Explain that we would like to carry out fieldwork. This Section is intended to identify additional key contacts, existing information, and opportunities to do field work.

What other key contacts and informants would you suggest we should approach?

Are there documents, reports or other useful material that could be made available?

3. How would you suggest we go about:

- Observing how this initiative operates on the ground?
- Interviewing actual participants (members) in a group or individually?

4. Is there anything else you feel we ought to know?

- Contributing/Writing of materials developed in the community (e.g. wikis)

5. What did you gain from being involved in this community?

PROMPTS

- Improved your self confidence
- Improved your social life
- Helped you to meet people
- Helped you to make new friends
- Improved your general knowledge
- Improved your work performance
- Helped to do your work better
- Helped to learn issues important for your work
- Helped to learn issues important for your life outside work
- Improved your writing or reading skills in your language
- Improved your writing or reading skills in another language
- Improved your digital skills
- Improved your sense of initiative
- Improved your cultural awareness
- Improved your cultural expression
- Improved your creativity
- Improved your critical thinking
- Other (please indicate)

6. Do you think you have learned something within/from the community?

PROMPTS

- When did you learn?
- How did you learn?
- What did you learn?

7. When did you realize that you were learning?

8. Do you believe you have taught something within the community?

PROMPTS

- When did you teach?
- How did you teach?
- What did you teach?

9. Do you believe you have brought knowledge to the community?

10. In your opinion, what is the contribution of ICT to communities, if any? (could the same happen within the local/real/physical community?)

11. What have been the most positive aspects of getting involved in this community?

SURVEY QUESTIONNAIRE

FOR OFFICE USE ONLY: Please do not complete this Section

Case Study Name:

Location:

date:

Field worker:

Introduction:

Scienter is carrying out a study on how learning takes place in online communities as a part of a broader study on Pedagogical Innovation in New Learning Communities. As a part of that study we are consulting people who participates (actively or silently) in online communities. We are interested in finding out what people benefit from being involved through active or silent participation. Your input will make a valuable contribution to the study and would be much appreciated. Any information you give will remain anonymous and confidential. Please complete the questions below, [then click continue until the end of the survey]. The questionnaire will take about [15 minutes to be completed].

For further information about the study, please contact:

CONTACT DETAILS HERE

SECTION A: Personal details

We would be grateful if you would provide us with a few basic details about yourself. Please tick the relevant boxes.

1. What is your Age group?

- Under 21
- 21-30
- 31-45
- 46-60
- over 60

Are you:

- Male
- Female

3. Current employment status

- Full time job
- Part time job
- Student
- Unemployed
- Retired

4. Please describe your area of work (or last full time job if not currently working):

5. Education and training background

- Left school at 16 or before
- Completed post-16 secondary education
- Higher Education (College or University first degree)
- Postgraduate education
- Professional certificates and qualifications

SECTION B: BACKGROUND TO INVOLVEMENT IN THE COMMUNITY

In this Section, we would like to find out about how and why you participate in this community.

1. How long ago was it when you first started getting involved in the community?

- First time now
- In the last six months
- 6 months - 1 year
- 1-3 years
- 3 -5 years
- 5-10 years

2. Why did you first get involved in (the community)?

Please tick all the boxes that apply

- Because it was a requirement (of your educational institution/working organization)
- Because your friends were already doing so
- Because you thought it was fun
- Because you believed it could help to avoid isolation
- Because you wanted to express, create, reflect
- Because you wanted to be part of a community that does something important
- Because you wanted to learn through participation
- Because you believed you could connect with others having similar experiences and interests for receiving and giving advice
- Because you thought it could be useful for you

3. How often do you participate/enter the website?

- More than once a week
- Once a week
- About once a month
- Less than once a month

4. How do you participate to the community?

- Reading of materials/news
- Reading of interactions (discussion fora, wikis, other)
- Contributing to the discussions (If forum)
- Communicating through blog posts or twittering
- Sending links to materials/documents
- Contributing/Writing of materials developed in the community (e.g. wikis)

SECTION C: Learning and benefits of involvement

In this section we are interested in what you gain from the participation in this activity.

1. What did you gain from being involved in this community?

For each of the items listed, please indicate, in your case, how strongly you agree or disagree by circling the 1-7(1 you totally disagree -7 you totally agree) scale that participating in the community activities has:

- Improved your self confidence
- Improved your social life

- Helped you to meet people
- Helped you to make new friends
- Improved your general knowledge
- Improved your work performance
- Helped to do your work better
- Helped to learn issues important for your work
- Helped to learn issues important for your life outside work
- Improved your writing or reading skills in your language
- Improved your writing or reading skills in another language
- Improved your digital skills
- Improved your sense of initiative
- Improved your cultural awareness
- Improved your cultural expression
- Improved your creativity
- Improved your critical thinking
- Other (please indicate)

2. If you learned something in the community, in which of the following ways do you believe it happened?

For each of the items listed, please indicate how strongly you agree or disagree (1 you totally disagree -7 you totally agree)

- Asking and getting advices
- Searching the best way to help others
- Finding material to contribute to a discussion
- Reading material
- Reading comments of others
- Giving advice
- Accepting other people's opinions
- Interacting with others
- Other (please indicate)

3. Do you believe you have brought knowledge to the community?

If so, in which of the following ways? For each of the items listed, please indicate how strongly you agree or disagree (1 you totally disagree -7 you totally agree):

- Giving advice,
- Commenting other members' posts/materials/etc.,
- Sharing your experiences,
- Posting new threads,
- Creating learning materials with the aim to help others,
- Creating learning materials with others, with the aim to help others,
- Other ways (please indicate).

4. In your opinion, what is the contribution of ICT to communities, if any? (could the same happen within the local/real/physical community? Can you do something with the technologies that you couldn't do without?)

5. What have been the most positive aspects of getting involved in this community?

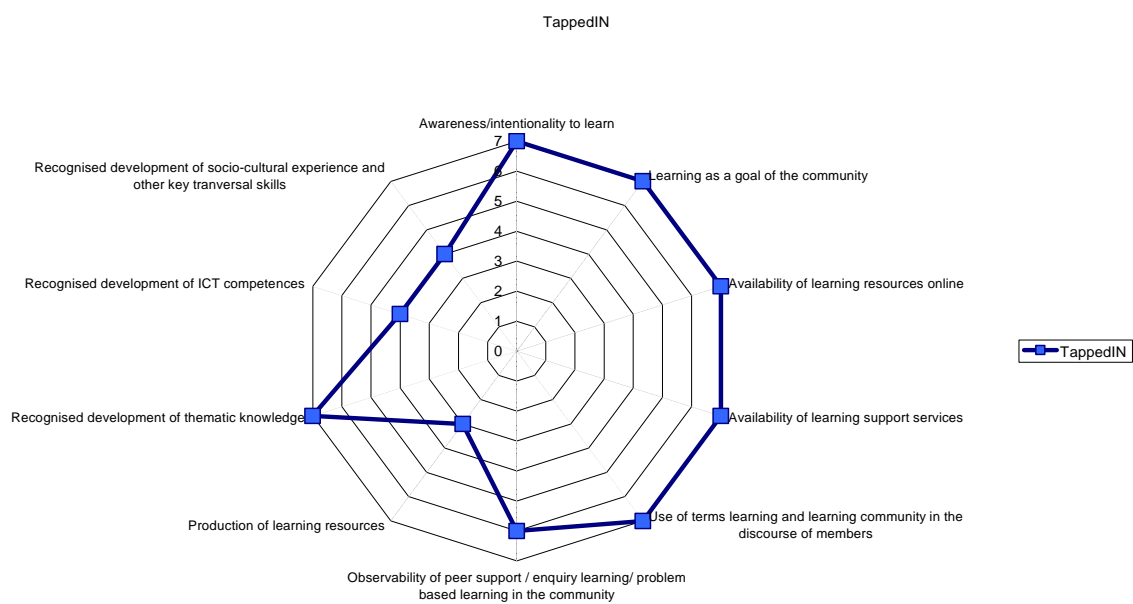
ANNEX 2 – FEATURES OF THE COMMUNITIES STUDIED

The following dimensions have been taken into consideration to draw the spider diagrams below representing graphically the features of the communities as they have emerged as key in detecting learning occurrence in the 12 communities studied:

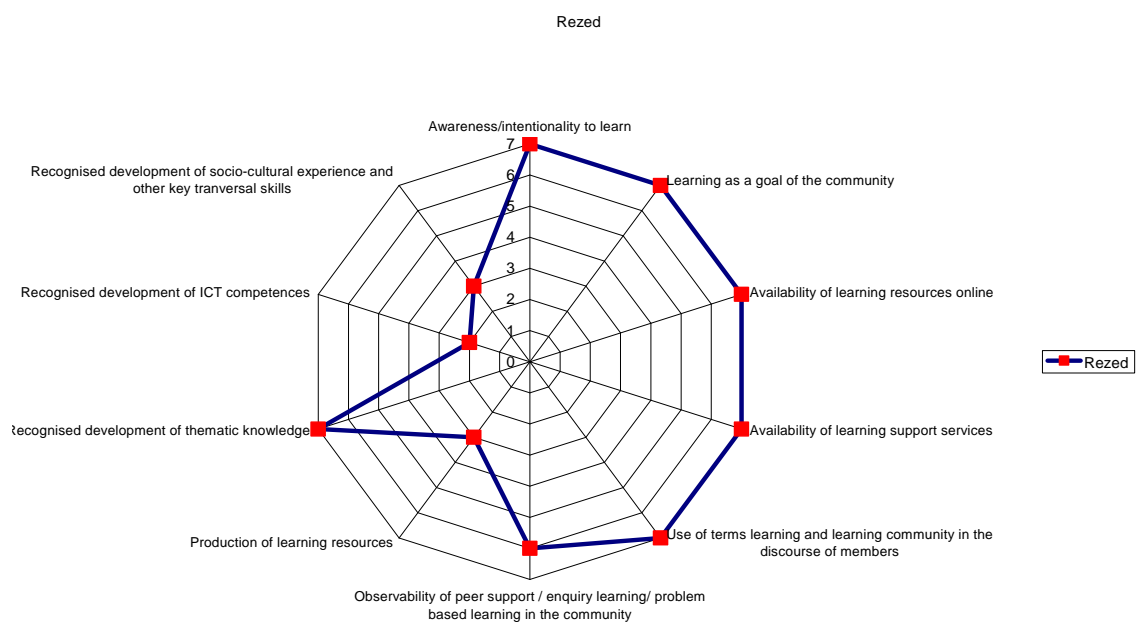
- ◆ **Awareness and intentionality to learn** (the extent to which community members enter the community to learn and/or are aware of learning taking place by participating in the activities of the community);
- ◆ **Learning as a goal of the community** (the extent to which learning is an explicit goal of the community);
- ◆ **Availability of learning resources online** (courses, articles, papers, links, videos that are posted by members or by the managers or by both to share/increase knowledge);
- ◆ **Availability of learning support services** (Helpdesk, virtual tours for newbies, support from staff to facilitate learning of members);
- ◆ **Use of terms “learning” and “learning community” in the discourse of members** (the extent to which members refer to learning in interviews, surveys, online interactions);
- ◆ **Availability of peer support/enquiry learning/problem based learning in the community;**
- ◆ **Production of learning resources** (co-production of learning material, production of reports, newsletters or any other form of resource allowing access to the knowledge patrimony of the community);
- ◆ **Recognised development of thematic knowledge** (the extent to which members acknowledge they have developed/improved knowledge in specific fields thanks to their participation in the community);
- ◆ **Recognised development of ICT skills** (the extent to which members acknowledge that participation in the community has helped them developing their ICT skills);
- ◆ **Recognised development of socio-cultural skills and other key transversal skills** (the extent to which members acknowledge that participation in the community has helped them developing critical thinking, sense of initiative, cultural awareness, cultural expression, communication and organisational skills, creativity).

Below the features of the 12 analysed communities are graphically represented through spider diagrams. Rating on a scale 1 (minimum) to 7 (maximum) has been adopted. Rating is based on the assessment of the research team based on the evidence gathered.

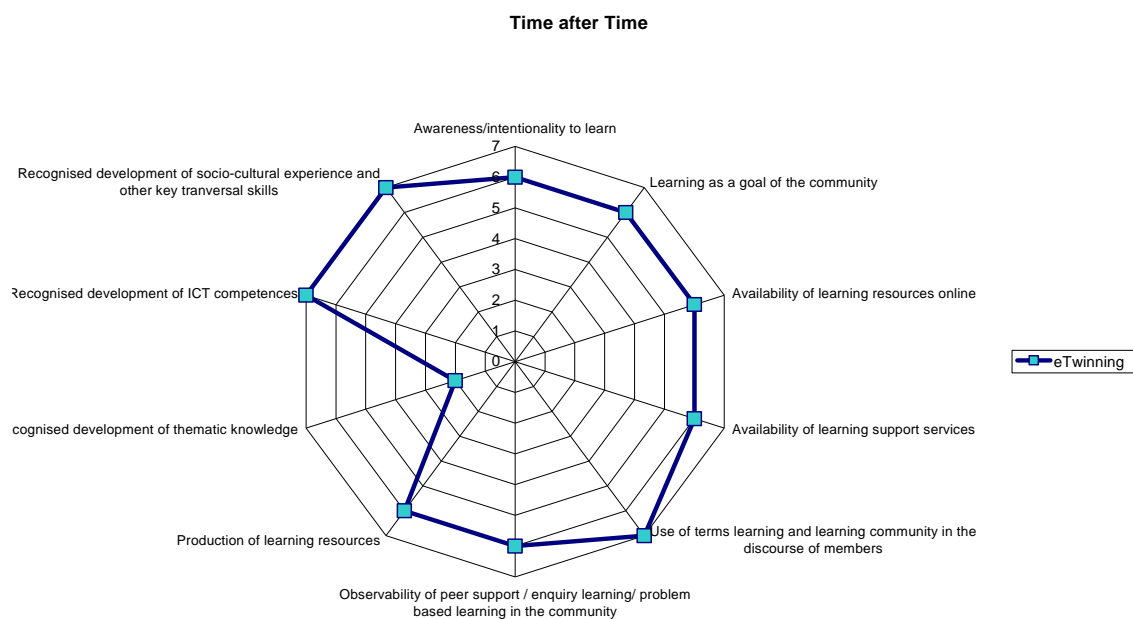
TappedIn



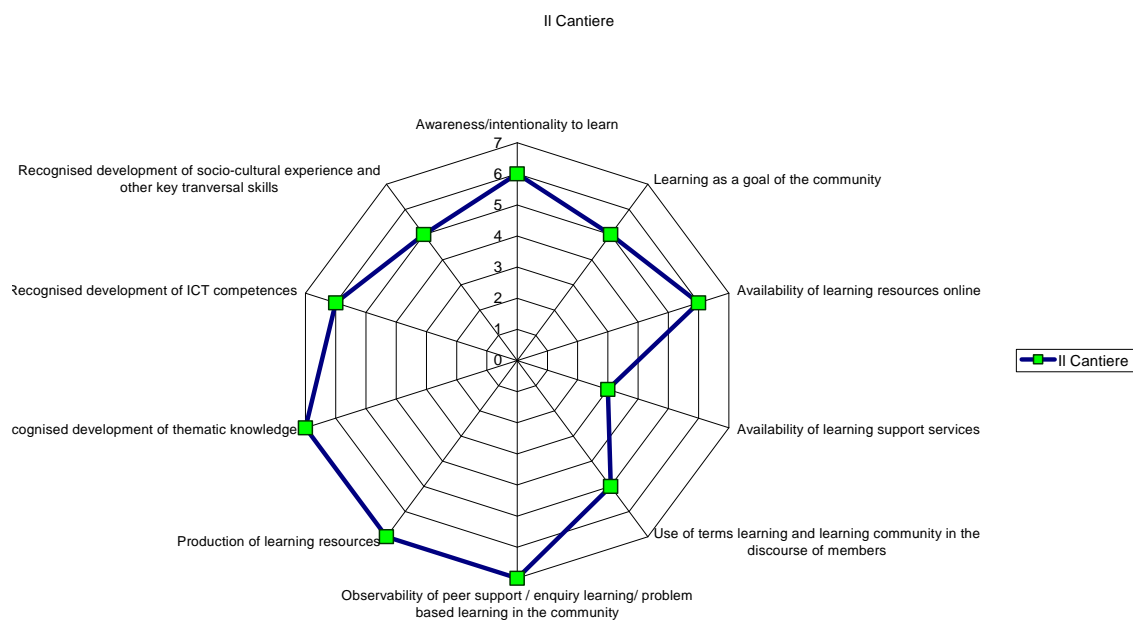
RezEd



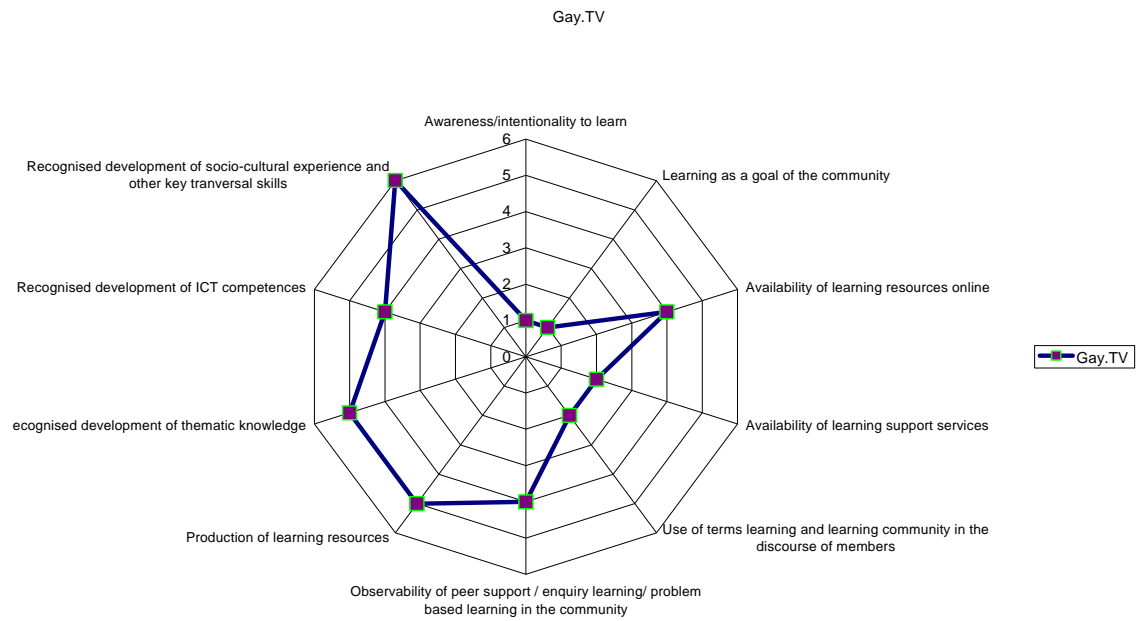
Time after Time



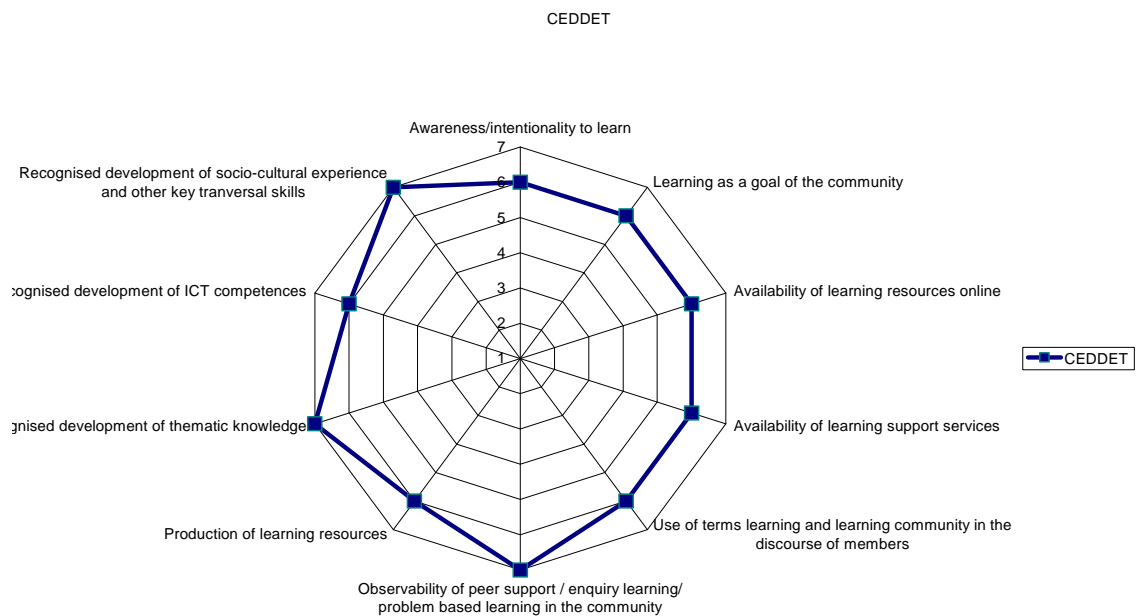
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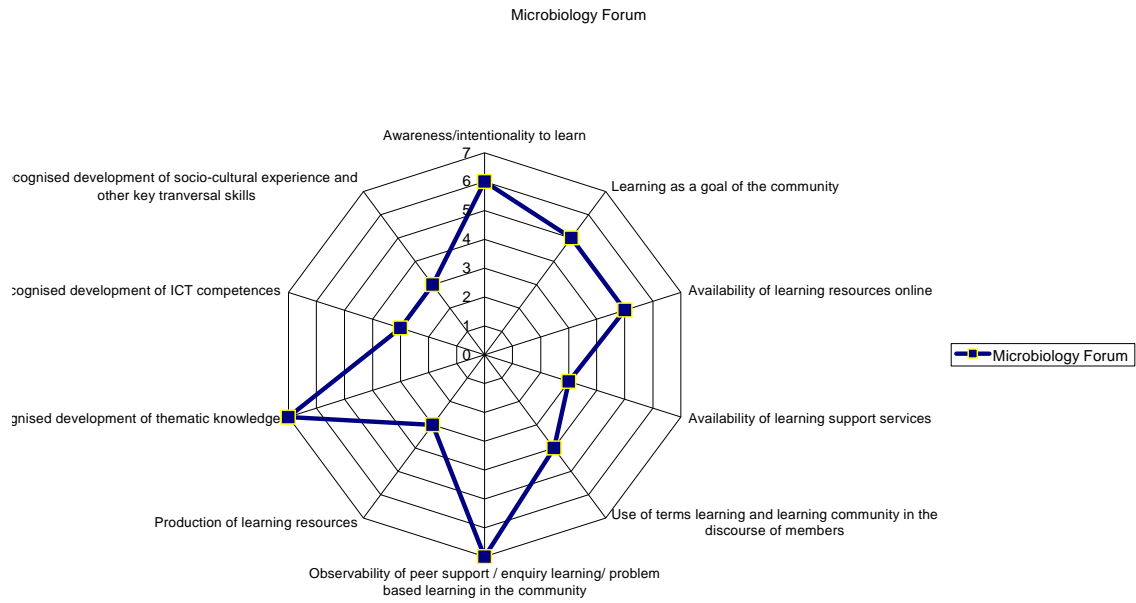
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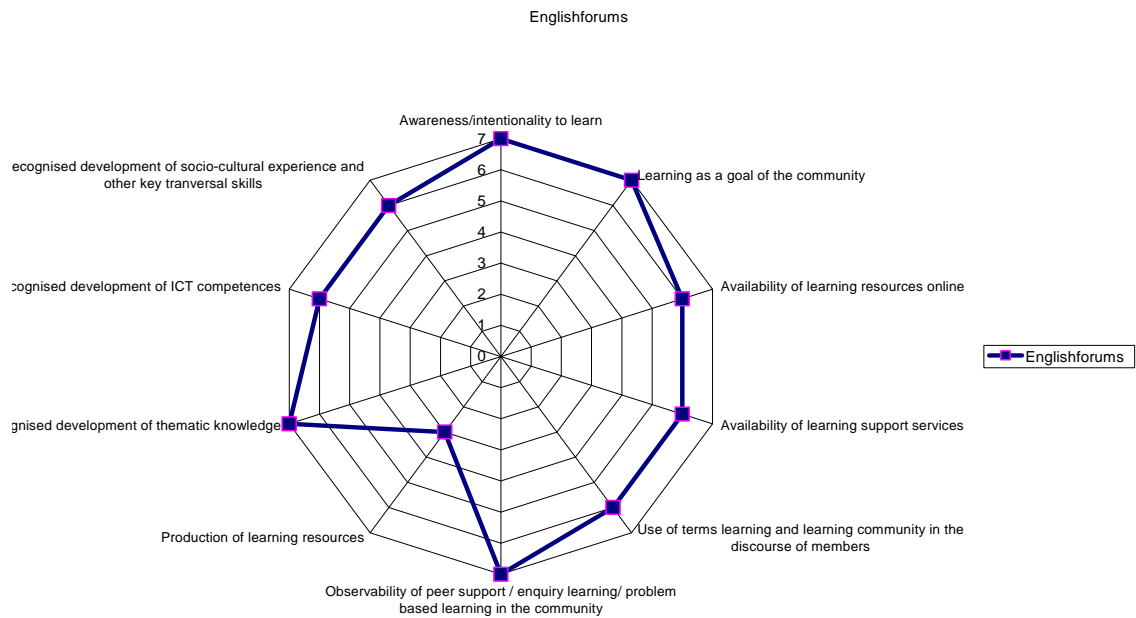
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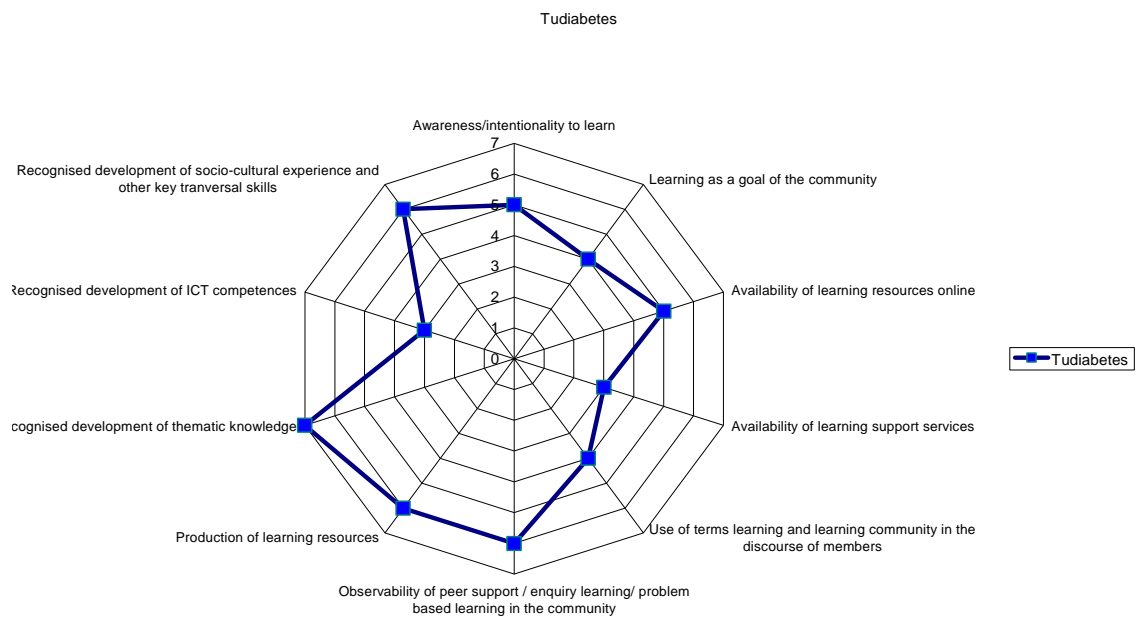
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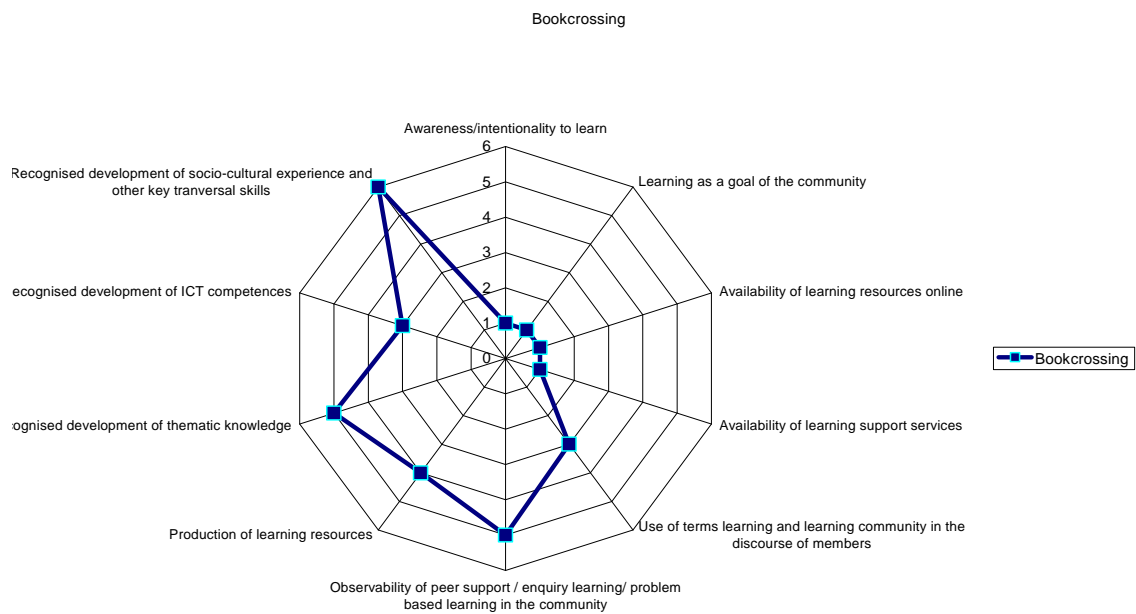
English forum



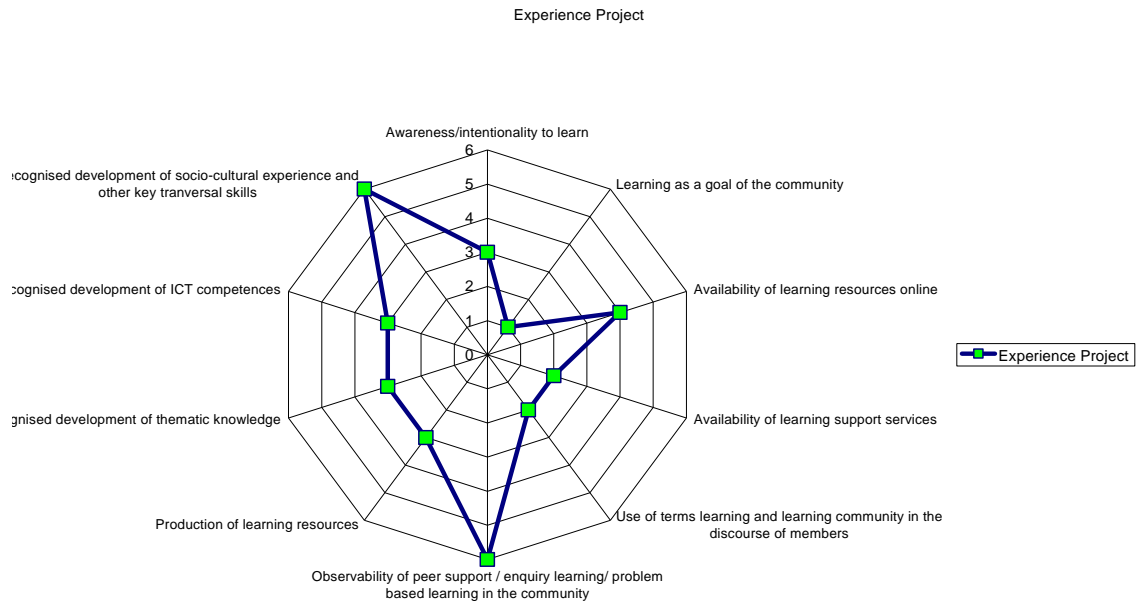
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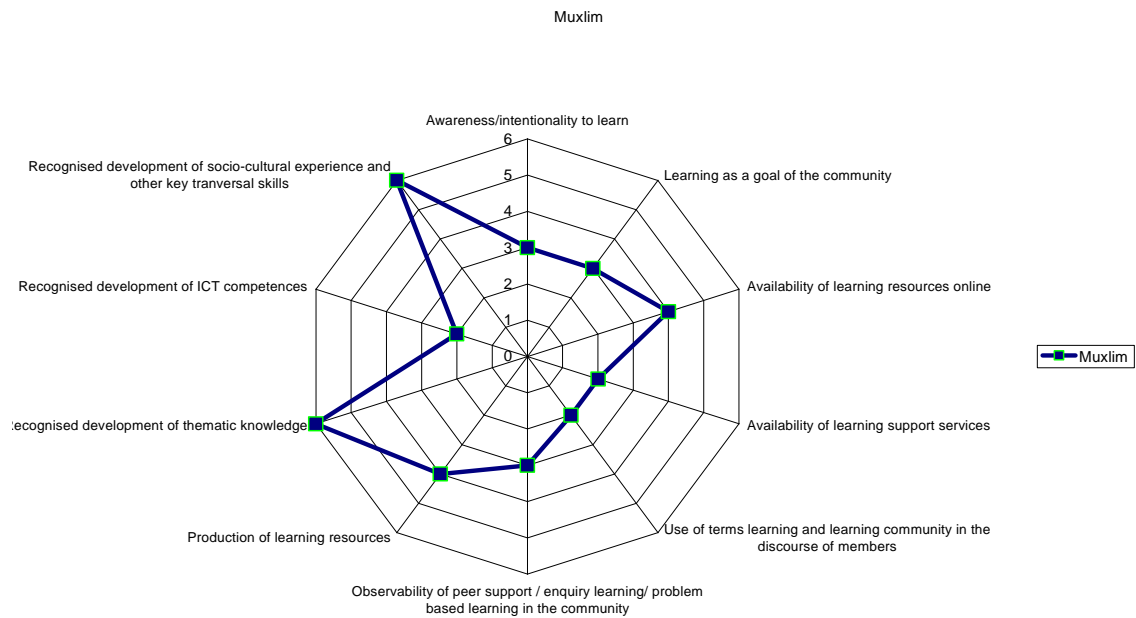
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Title: Pedagogical Innovation in New Learning Communities: An In-depth Study of Twelve Online Learning Communities

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Abstract

The main aim of this study is to collect evidence on the learning innovation emerging in online communities and to draw conclusions on the lessons learnt and on emerging models and features that could eventually be transferred to education and training systems to support lifelong learning, innovation and change in Europe.

The results presented are based on an in-depth analysis of the pedagogical and organisational innovation observed in twelve online communities belonging to one (or more) of the following categories of community: organisation-driven; production-driven; topic-driven; and socially-driven.

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