

Enhancing Blended Learning – Developing a Community Based Methopedia

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Abstract: This paper will present some theoretical, methodological and technical discussions of the community based Methopedia wiki, which is under development, and will launch in its first incarnation September 2008. Methopedia is one activity within the EU-funded multilateral ICT project “Community of Integrated Blended Learning in Europe” (COMBLE), which is composed of partners from business, university and education. Methopedia is envisioned to be a community based wiki-system, combined with social networking features, where trainers and teachers from various sectors (vocational training, enterprises, universities, and public bodies) can consult, discuss, describe and share blended learning methods and methodologies. The aim of the COMBLE project and Methopedia is to contribute to leveraging the quality of education and training in Europe by engaging practitioners and researchers in developing, sharing and promoting innovative blended learning concepts and methods. To enable practitioners to share methods and learning designs an important task is to construct a shared, flexible pedagogical model/template for describing these. The model, which we outline in this paper, through discussing and synthesising literature within the field of learning design, needs to be further developed through theoretical and conceptual discussions. However, based on existing research, we argue that it is necessary that the model is developed through engaging the partner-network of trainers from business and education, and position them as co-creators of models and frameworks. We conclude the paper by discussing and outlining requirements and functionalities, some of which follow from the discussion of learning designs and blended learning, while others are related to the technical and socio-technical aspects of Methopedia.

Keywords: Sharing Best Practices, Blended Learning Methods, Community Based Wiki, Learning Designs, Learning Activities, Methopedia

1 Introduction

The paper will present theoretical, methodological and technical discussions of the process related to developing the community based Methopedia wiki. We initially present the broader scope of the COMBLE project, where after we outline different interpretations of Blended Learning, as these have an impact on both the design and content of Methopedia. The content of Methopedia, which we in broad refer to as methods and methodologies, will encompass various tools, models, courses and concepts that address a broad audience of educators, administrators and managers. An important part of Methopedia is to enable a community of various stakeholders to consult, discuss, create and share blended learning methods and best practices. By creating and sharing ‘methods’ we are particularly referring to the sharing and creation of more concrete designs, wherefore we draw on research and experiences within the area of ‘learning designs’ and ‘learning activities’. In relation to this, we argue that an important task is to construct shared, flexible pedagogical templates for describing these, which takes into account that they can be described at various level of scale. In the paper we discuss and synthesise existing literature within the area of learning design to identify ways of proceeding with the development of Methopedia and the creation of a flexible framework for sharing learning designs. On basis of this, we present a broad descriptive model

and argue that a more elaborate framework for learning designs/activities needs to be developed through further theoretical and conceptual work, but more importantly through involving the practitioners in the design process and in co-creating the descriptive framework. On basis of some of these insights we conclude the paper by discussing and outlining some of the requirements and functionalities which also relate more broadly to the technical and social aspects of Methopedia.

2 The COMBLE project:

The overall objective for the COMBLE project funded by the EACEA Lifelong Learning ICT Programme is to improve the quality of Blended Learning in higher, continuing and business education by providing administrators, instructors and learners with knowledge, training, and consulting in regards to technical, pedagogical, organisational, and personal factors which may have an impact on the success of blended learning solutions. By including application partners from different areas of education, practical considerations arising in different contexts are being explicitly considered. The project is conducted by German, Danish, Polish and Estonian partners, taking responsibility for the following main objectives:

- *To assist administrators/managers in determining what is needed to implement successful learning outcomes in blended learning scenarios.*
- *To create a living community of Blended Learning Experts and instructors/trainers to share knowledge and experience regarding the implementation and evaluation of blended learning methodologies.*
- *To improve educators/trainers' ICT competencies to facilitate and design for interactive and collaborative learning.*
- *To empower learners for using blended learning by providing them with a standardized baseline knowledge of blended learning tools, methods, and skills.*

This can be visualized as below (for more information we refer to: <http://www.combleworkspace.org/>)

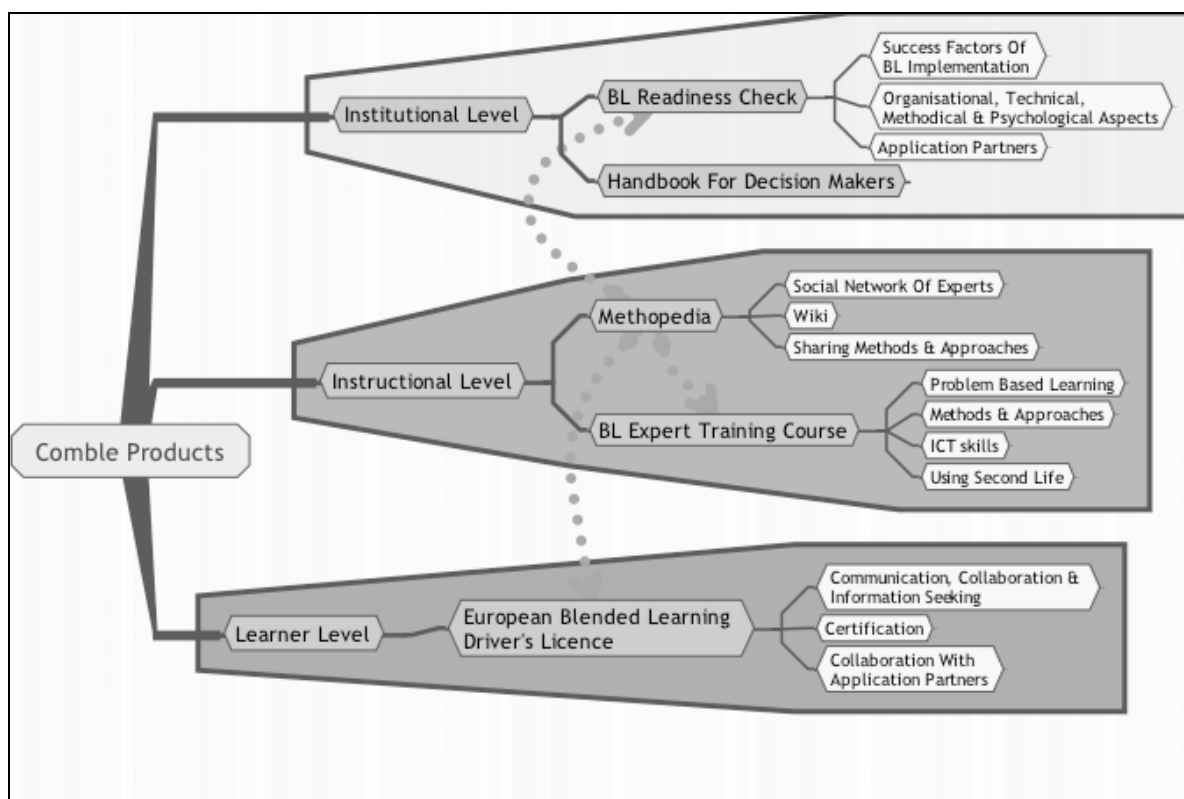


Figure 1: Visual overview of the COMBLE -Project

In this article we focus on the development of Methopedia, as a means to consult and share blended learning designs and methods. Blended learning is not a uniform, homogenous theory or framework, as we shall discuss in the following section, but the particular focus on blended learning has an impact on

both the design and the content of Methopedia. This we return to after having outlined some of the interpretations and approaches within the landscape of blended learning.

3 What do we mean by blended learning

The term blended learning refers to diverse aspects of learning and teaching and there is no exclusive definition or approach related to the term. (Whitelock & Jelfs 2003) opened a special issue of the journal of educational media on blended learning by introducing three definitions of the term:

- the integrated combination of traditional learning with web-based online approaches;
- the combination of media and tools employed in an e-learning environment;
- the combination of a number of pedagogical approaches, irrespective of learning technology use;

Of these, the first is considered to be the most common interpretation (Oliver & Trigwell 2005; Singh 2003). (Bersin 2004) uses the term blended learning as traditional instructor-led training being supplemented with different forms of e-learning; whereas in (Thorne 2003) blended learning is also defined as the mix of traditional forms of classroom training and one-to-one coaching with e.g. multimedia technology, virtual classrooms, electronic communication, online text animation and video-streaming.

The second definition is also widespread, although sometimes advocated in a more general form as concerning models that combine various delivery modes, rather than privileging e-learning. (Taradi et al. 2005) introduce blended learning as one of three educational options in higher education: (Web)-based learning (WBL), problem-based learning (PBL) and collaborative learning. They further give a definition of blended learning as a blended course combining traditional face-to-face and WBL approaches in an educational environment that is not specific in regards to time and place. Yet another approach is presented by (Kerres & De Witt 2003) who discuss blended learning as a mix of different pedagogical methods and delivery formats. Their argumentation, however, is based on the assumption that these two are independent of each other. (Gynther 2005) finds that the term blended learning does not only regard the blend between technological and traditional classroom teaching, but also concerns considerations on the relations and interdependencies between what to learn, the pedagogical methods, technology used and the different forms of knowledge that are the result of the process. Thus, blended learning is not a learning paradigm or learning theory by itself, but rather multiple ways of approaching pedagogical design.

While some studies indicate that blended learning can be an effective tool in public and corporate educational settings (NETg 2003), experience has also shown that blended learning solutions often do not live up to the potential or fail to produce the intended results because administrators, instructors and learners are lacking the relevant technical, methodological or organisational knowledge and experience. At the pedagogical level, educators and trainers coming from a traditional teaching background often find it difficult to integrate ICT and expand their methodological repertoire to meaningfully combine different pedagogical methods and learning activities in face-to-face settings with e-learning or self-paced learning. This suggests that there is a need for educators to consult, share and discuss various concrete designs or 'best practices' within blended learning. These are the intentions of Methopedia and in the following we discuss and elaborate what we mean by methods, learning design and best practices.

4 What do we mean by methods and sharing 'best practices'?

In this section we situate what we mean by 'methods' and sharing of 'best practices' within broader theoretical and methodological discussions. We locate this discussion within the field of 'learning design', which is an area of research that has gained increased attention. Due to the strong relations to e-learning or online learning, in some articulations of this field, we need to consider, how existing methodologies and standards fit within the field of blended learning, as discussed in the previous section.

Stated very broadly the area of 'learning design' is concerned with enabling educators to create, design and share pedagogically sound, high-quality 'learning designs' or effective practices. One common notion within this area is the importance of learners' activity or learning activities, as summed up by (Britain 2004):

- *The first general idea behind learning design is that people learn better when actively involved in doing something (i.e. are engaged in a learning activity).*

- *The second idea is that learning activities may be sequenced or otherwise structured carefully and deliberately in a learning workflow to promote more effective learning.*
- *The third idea is that it would be useful to be able to record 'learning designs' for sharing and re-use in the future. (Britain 2004, p. 2)*

First of all this signals a move away from an exclusive focus on delivering (digital) packaged content to students. Within learning design the idea is instead to understand content as part of a flow of learning activities that students engage actively with. Furthermore, that this flow can be represented and shared in various ways – ranging from textual descriptions to being embedded in software systems and packages which can represent and run pre-designed sequences of activities. The ladders are the intentions behind standards and software systems such as LAMS (Learning Activity Management System) and IMS-LD.

Another point of learning designs is to make teachers more reflective about their teaching practice and how to design for effective learning by providing them with 'frameworks' for how to create and describe learning designs. This also encompasses providing teachers with theoretically informed models of 'best practice learning designs' to promote better fits between 'theory' and 'practice'. The latter in particular by making more explicit the relations between pedagogical approaches and different kinds of learning designs/learning activities. For instance, researchers from Open University in UK have worked for some time on developing software (Compendium LD) which aims at making the design process and decisions more visually oriented and provide designers with pedagogical scaffolds during the design process (Conole et al. 2008). Although, there is no generally agreed upon definition of what constitutes a 'learning design' or a 'learning activity', there seems to be a general understanding that a learning design has a certain learning objective, has a sequential structure or flow, consists of multiple learning activities and that there are a number of resources and/or learning supports related to the design or the activities. Thus, the relations between learning designs and learning activities can be thought of as expressible in terms of nested hierarchies, where a learning design consist of several learning activities. Learning activities can also encompass multiple smaller learning activities, which in the IMS-LD specification are referred to as an activity structure.

In a methodology developed in the project 'learning designs' commissioned by Australian Universities Teaching Committee, an intended learning outcome is realized through sequences consisting of learning activities, learning supports and learning resources (Oliver 2001). Here the sequence is mapped in a diagram and the three components visually marked as squares, circles and triangles (for examples of this we refer to: <http://www.learningdesigns.uow.edu.au/> and to <http://www.learningdesigns.uow.edu.au/project/index.htm#publications> for a number of publications that were an outcome of the project). This work seems to have been carried forward and developed into a 'technology-supported learning database' (<http://aragorn.scca.ecu.edu.au/tsldb/>) where there is less focus on the visual representation of the sequential structure, but a generic template for describing learning designs activity in a more textual format (e.g. hardware used, description of activity, teacher role, assessment). These designs are grouped into various overarching categories called forms (action learning, interactive learning, problem based learning) and area (communication, creative arts, business)

In a similar vein, (Conole & Fill 2005) has described learning activities as related to a *context* (e.g. aims, learning outcomes, skills, subject), some *tasks* (e.g. techniques, resources, tools) and a certain *learning and teaching approach* (associative, cognitive or situative). The relations between particular types of activities and pedagogical approaches are interesting as pedagogical approaches are made an explicit part of the description or methodology. This is also reflected in the examples of learning designs, which can be found from the web-addresses above, where the learning designs are categorised according to different 'forms'. In contrast, the IMS-LD specification and LAMS do not encompass a particular pedagogy or learning theoretical focus. We do not, however, envision LAMS or IMS-LD to be the main way of sharing and collaborating around learning designs. There are already existing sites where IMS-LD and LAMS designs can be shared, and we find it problematic relying too much on these standards in relation to 'blended learning' designs. Although they, to a certain degree, can be employed and used as a blended resource we do not find it feasible that the 'blended learning designs' have to be encapsulated in or dependent on particular software packages/environments. By this we do not completely dismiss these as something that could be shared in Methopedia, but we do not want Methopedia too tightly coupled with

or dependent on these.

As can be read from the above there are many ways of mapping relations between learning designs, learning activities, learning theory/pedagogical approaches and the particular contexts they are enacted in (more detailed mappings can be found in (Conole et al. 2004; Fowler & Mayes 2005)). However, for a simple, and yet relatively broad way of understanding and visualising these relations, we have found inspiration in a model by (Berge 2006), to which we have added alternative descriptions (the grey column).

Table 1: Model adapted from (Berge 2006)

Pedagogy, Learning Theory, (learning designs)	Pedagogical Approach			
Course templates, descriptions, sequences of activities, learning designs	Course Design			
Activity structures, activities, mini-activities	Course design components			
Materials and resources	Own Material	External material	Repurposed external material	Reification of practice

The model was originally devised to describe different layers of reuse of learning resources coupled with different standards. For instance the SCORM-standard provides a strong platform for supporting reuse of materials, whereas IMS-LD and LAMS are better suited to represent ‘course design components’ and ‘course designs’. Interestingly, the fourth level ‘Pedagogical approach’ is according to (Berge 2006) beyond the level of standardisation; rather reuse at this level is supported by the body of pedagogical literature where some is of a general, theoretical nature and others more prescriptive in how certain theories can be applied in actual pedagogical practice. We use the model as a relatively simple and crude way to distinguish between different levels of a learning design and to query into the relations between these levels.

Thus, Table 1 could serve as a tool to map and “order” the different ‘solutions’ and approaches to learning design and activities (e.g. how many levels do a particular approach address). It could lead to discussions of what levels would be relevant for Methopedia to include, but also lead to questions of the relations between the different levels. By this we mean relations between a particular ‘learning activity’ and a particular approach, for as we have already mentioned there seem to be some differences in how an activity is understood (or that they can be understood at many different levels simultaneously). Some learning activities seem to be thought of as course design components, which are not necessarily connected to a certain course design or pedagogical approach, but can be implemented and utilised in a number of different ‘learning designs’. A ‘web hunt’ or a ‘brain storming’ activity might be used both within a communications and science course to fulfil different needs: “define a term” or “serve as a background to identify a problem to work with in more depth” (such ‘generic’ activities are what (Conole et al. 2004) refer to as mini-learning activities). This raises questions of how to describe and categorise the individual levels, but also how to describe or implement possible relations between the levels if one wants to create and share ‘learning designs’ as flows inspired by a particular pedagogical approach; or as blends between different approaches, as suggested in the previous sections.

This suggests that one viable way of proceeding with Methopedia would be to delve into more theoretical and conceptual work to discuss, synthesise and propose a conceptual derivate or ‘pick and mix’ between all the different ‘solutions’. However, an equally important outcome of the work within the field of learning design, suggests that it is essential to actively engage the practitioners one is trying to address with the ‘solution’ (Knight & Roberts 2007). A study by (de Freitas et al. 2008) concludes that it can be very problematic to develop an overarching, elaborate framework or model and then expect it to be something that practitioners will immediately recognise the value of and subsequently start to use; rather it is important to realise the practitioners’ needs to reinterpret and adapt such models, thus becoming co-

producers of the models. This may in turn lead to non-standardised models or models which are not universal, but meaningful to different communities. They further analyse how various types of educational practitioners interpreted and adapted the presented framework differently and in accordance with their particular perspectives and needs. These insights suggest that the design of Methopedia and the development of a pedagogical and theoretical framework for sharing methods i.e. learning designs, activities and best practices need to be rooted in empirical work and engagement with practitioners.

In the COMBLE- project, we will we employ a dialogue design-approach (Nielsen, Dirckinck-Holmfeld & Danielsen 2003), which means involving the application partners from industry and education in order to:

- Refine, negotiate and co-develop existing frameworks and approaches in collaboration with the partners/practitioners in accordance with their needs and inputs
- Identify the learning activities and resources, which are already in-use and co-developing ways of describing these.

The process will be realised through design-workshops, but also by using Methopedia itself as an active, partly self-organising social community/network to continuously involve and collaborate with the partners and other practitioners.

The approach of co-developing Methopedia by involving and engaging partners and practitioners also have impact on the technological functionality and development of Methopedia, which we shall describe in the following section, which concludes the paper. Here we describe some technological aspects, which are not directly related to the pedagogical or theoretical reflections described in this section, but are, nevertheless necessary to take into account from a technical point of view.

5 Technical aspects and the process of choosing a wiki and its functionality

Learning technologies developed in recent years have a creative potential for improving quality of learning. However, this potential will only unfold if institutions implement suitable methodologies and learning cultures, and if instructors become able to integrate active learning by choosing fitting activities. As earlier mentioned, and as also effects of assessments like Pisa show, learning institutions and educators want to benefit from the different learning cultures existing in Europe (Geller et al. 2007). To develop the Methopedia community for blended learning discussions and to share knowledge, methods and designs we wish to provide a wiki, as well as a connected social network. From the technical point of view the main product of the COMBLE project is therefore the development of Methopedia.

To choose a suitable technology, we created a requirement profile by searching for similar projects and also by evaluating different wiki engines. There are already many resources about e-learning and blended learning on the Internet and we have already mentioned some of the interesting collections of activities (e.g. <http://www.learn-line.nrw.de/angebote/methodensammlung/liste.php>). In order to gain an overview of some of the existing solutions, find inspiration and elicit some preliminary requirement we have also viewed and evaluated a number of other sites e.g.:

- <http://www.uni-duesseldorf.de/ttt/?id=91&kat=b15>
- http://lehrerfortbildung-bw.de/kompetenzen/projektkompetenz/methoden_a_z/

Our aim in this paper is not to go deeper into comparative analysis of the sites, but rather to provide a broader picture of our evaluations. Our general impression was that many of the collections were quite static, without possibilities to rate, discuss, change or add new activities. From the outset we wanted Methopedia to be an active community/network for sharing and creating; something which is also very important to engage partners and other practitioners in the process of developing a framework for shareable learning designs. Therefore, we have created the following tentative requirement list, which we expand on in the following sections:

Table 2: Tentative list of requirements

Need to have	Nice to have
<p>General:</p> <ul style="list-style-type: none"> - Open Source - Big Developer Community - Languages Interfaces <p>Wiki techniques:</p> <ul style="list-style-type: none"> - XML-Interface (for export) - ACL-Rights-Management - Visually Customisable - Spam protection - Social support (connecting social software) <p>User functionality:</p> <ul style="list-style-type: none"> - WYSIWYG - Template support (Templates for: Approaches, Methods, Course designs) - Page History - Conflict resolution - Embedded multimedia - Possibility to comment/rate resources - Social bookmarking - Discussions 	<ul style="list-style-type: none"> - Top contributors - Top topics - New at Wiki - Visual overview (like concept map or mind maps) - Top rated" box

First of all, we are aware that the audience is broad and that there will be different needs from users of Methopedia. Therefore, the technological solution should be easily customisable. In order to identify the appropriate wiki we used “wiki matrix” (<http://www.wikimatrix.org/>) for a pre-evaluation. Based on our list we found that the best tool for our requirements is the MoinMoin wiki (<http://moinmoin.wikiwikiweb.de>). Though, the comparison between the well known MediaWiki (used for Wikipedia.org) and MoinMoin (<http://www.wikimatrix.org/compare/MediaWiki+MoinMoin>) shows many similarities the following aspects were our main reasons for choosing MoinMoin,

5.1 Security

The security of a wiki is a fundamental question and a well-chosen technology can minimize the risks. Python (<http://www.python.org>), which is the base for MoinMoin, is a good example of a language with low risks. For a wiki the main issues are spam protection and also rights management. The latter is also important if there is a need to work with different user groups, with varying needs in terms of descriptive model of shareable designs. MoinMoin has solutions for these problem areas, through its strong integration of ACM rights management and flexible template systems.

5.2 Modularity

Strengths of the MoinMoin wiki are the modularity and the plug-in system. Currently supported plug-in types are:

- Themes (python code for the dynamic content, CSS and images for the static parts)
- Macros (taking few parameters to generate content output)
- Parsers (taking few parameters and some lines of text to generate content output)
- Formatters (support new content output formats)
- Actions (generating a complete output page)
- Xmlrpc functions (remote procedure call server functions)

The modularity and customisability will make it easier to address varying user needs, but also the customisability and plug-in structure ensure that the user groups can be involved in the continuous design of the wiki and in particular the shareable, descriptive templates for learning designs and activities.

5.3 Social aspects of Methopedia

Apart from the technical requirements there are a number of socio-technical requirements that need to be addressed in order to create, sustain and nurture a living community. Although, we are aware that social interaction does not emerge automatically by providing people with certain functionalities, we focus, in this paper, on outlining some envisioned functionalities of Methopedia, rather than discussing in depth the 'social drivers' that need to be in place for a community to flourish. However, we feel that it is important to note that the scale and type of community might influence the social drivers needed. These might be different depending on the shape of the community, but also dependent on the maturity and aim. To expand a bit on this we draw on (Dron & Anderson 2007) who outline three different levels of social aggregations which are useful heuristics for thinking about differently scaled social constellations. The authors differ between: a group, a network and a collective. The *group* is a social constellation with conscious membership-structures and awareness of other members; often they are formed around a particular task and will last only for a certain period of time, such as a project group, team or the like. *Networks*, in contrast, are formed around more vaguely defined overlapping interest e.g. people having an interest in a particular game, hobby, sport etc. Such online networks are well known from e.g. usenet or other site-based interest groups (Baym 2007) where membership is more fleeting and the degree or intensity of participation from individual members may vary much. As (Baym 2007) describes these kind of interest-networks are taking new shapes and distribute their participation across many different sites (blog-rings, social networking sites and so on). The final level of social aggregation is the *collective* which is actually an outcome of the combined actions of distributed individuals being largely unaware of each other. The authors mention recommendation-systems, social news filtering (e.g. digg.com) and tag-clouds as the outcome of collectives. The collective then, is not a social constellation with a sense of membership, but rather a 'wisdom of the crowd' phenomenon. Whereas groups are often structured and designed the latter two social constellations are more emergent phenomena. This is important in relation to the 'social drivers' for participation. There is relatively well founded knowledge and experiences with supporting and nurturing 'groups' and collaboration in smaller work teams or online classes (e.g. (Salmon 2000, 2002; Stahl 2006) and the research fields of Computer Supported Collaborative Learning (CSCL) and Computer Supported Cooperative Work (CSCW)). Furthermore, one can find excellent literature on supporting and nurturing and supporting communities of practice (Wenger 1998; Wenger, McDermott & Snyder 2002). This concept resembles to some degree what (Dron & Anderson 2007) term the network, but still a network seems also to be a more fleeting, porous constellation with looser and weaker ties between participants than a community of practice (Jones, Ferreday & Hodgson 2008; Ryberg & Larsen 2008). According to (Wenger 1998) communities of practice are characterised by: a joint enterprise, mutual engagement and a shared repertoire, whereas the idea of a network is characterised by weaker common or shared motives: "*Network members share a marginal sense of commitment to each other, but are typically induced to contribute to the network as a means to increase their personal reputation and to collectively create a resource that has greater value than individual or group contribution and perspective (Zarb, 2006). Reward mechanisms for contribution to networks include peer review/ranking and other forms of both formal and informal contribution recognition.*" (Dron & Anderson 2007, p. 2461). In this sense the social drivers may differ and change depending on the social architecture and composition of the participants. Also the drivers may vary for different user groups within the Methopedia-context. Some of these issues are reflected in our preliminary ideas for functionalities and tools of Methopedia.

5.4 Some envisioned functionalities of Methopedia

In identifying potential functionalities we have found inspiration in a number of social networking sites and community sites (e.g., MySpace, Facebook, Xing, Ning, Elgg.org and others), which we have synthesised into a provisional model for socio-technical requirements for Methopedia and discuss further below:

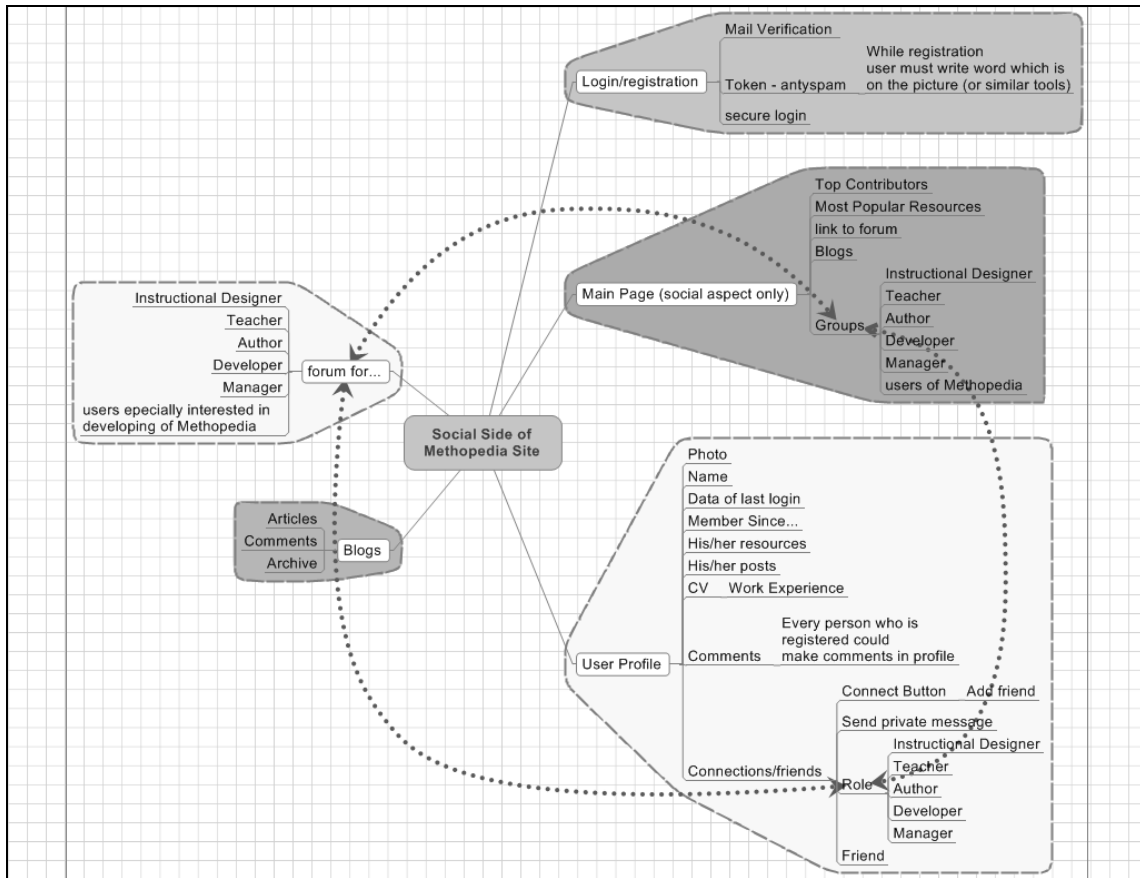


Figure 2: Provisional model and mind-map of the social aspects of Methopedia

The main page of Methopedia could present information about latest comments to users' profiles, top contributors, most popular resources and links to interesting forum discussions and blog posts. Furthermore, when users log-in they should be able to see their connections and recent posts.

Because of the social dimensions of Methopedia it is important that people can feel as part of a community, as well as having the opportunity to create a professional and personal presence in the system. In this sense we aim at supporting varying motives for participation, as described in the previous section. Therefore, Methopedia should enable people to create their own profile with possibilities for uploading a picture and short information about themselves. Likewise, it should be possible to incorporate a small CV (information about current position, experience and skills). This is also valuable information for other participants in order to judge whether a person's learning designs would fit into one's own context. In the profile of each registered person there would be information about connections to other profiles, as to make visible the participants' social/professional interest networks. Furthermore, it might be useful to have different user-roles (e.g. teacher, instructional designer, author, developer or manager) to filter and suggest relevant content to different user-groups. Users of Methopedia should be able to maintain a blog (or import an existing one), as to share their ideas and thoughts, to which other users can comment. Furthermore, forums should be created to initiate and sustain discussions on shared problems and common topics.

6 Concluding remarks

Based on a review and synthesis of some of the existing literature within the field of 'learning design' we have presented a very general and broad model (Table 1); and we have suggested that this can serve as a heuristic tool for the project's continued work on discussing and mapping other approaches and frameworks within the research field of learning design. Thus, it can be used for continued methodological, conceptual and theoretical work on creating an overarching, general descriptive model for sharing learning designs. However, based on existing research, we have equally argued that it is

necessary that such models are developed through engaging the partner-network of trainers from business and education, and to position them as co-creators of models and frameworks. Therefore, Methopedia should be designed as a social space for such a development through facilitating and nurturing a lively community. In relation to this, we have argued that 'communities' can take different shapes and form around varying motives; furthermore, that these different constellations have different 'social drivers' for participation, which might change over time as the composition and scale of the community changes.

One general concern in relation to Methopedia is the size. The dream is always to create something big and connect as many as possible. However, in order to integrate the users as producers of Methopedia and adapt across business, education and academia, we will initiate the development with our application partners. The idea of starting in smaller groups is supported by a study of William Erbe, as discussed by (Cavanagh 2007), who found that the key factor affecting information diffusion was the level of intimacy within a group. According to Erbe's study (Erbe 1962) information diffusion occurs better in environments where there are a large number of medium-sized groups who meet regularly over a sustained period, as it is in such environments that members may allow new information to be obtained (Cavanagh 2007 p, 112). Erbe's study supports the idea of initially creating a middle-sized community around Methopedia as a starting point. By keeping it small we can maintain the level of intimacy between the participants and make Methopedia useful to the core participants. Methopedia can then subsequently become a node in a larger network or learning design community.

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