Promoting Professional Development in Open and Distance Learning Settings: Developing Communities of Instructional Practice

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Abstract: The increasing emphasis on Higher Education standards has created a shift in the mode Universities deliver professional development. Universities have answered the call of professional development by redesigning curricula and structuring tutors' training programs. Open and Distance Learning Standards in Higher Education promote educational content reusability and modularity so as to adapt in various subject domains. Communities of Practice (CoPs) have constantly posed challenges to Higher Education Institutions (HEI), in particular those engaged in open and distance learning. These communities develop their practice through problem solving, requesting information, seeking experience, coordination and synergy, discussing developments, documenting project mapping knowledge and identifying gaps. This paper presents design framework, methodological aspects and preliminary data analysis of research conducted in (3) Thematic Units of Hellenic Open University with the volunteer participation of (9) Tutors, in forming Communities of Instructional Design in Open and Distance Learning settings.

Keywords: Professional Development, Communities of Practice, Instructional Design, Open and Distance Learning.

1. Introduction

Professional Development is the strategy academic organizations use to ensure that educators continue to strengthen their practice during their career: the most effective professional development stages in Higher Education engage teams of tutors who focus on the needs of their students. Professional development's instructional capacity is: a) ongoing, b) embedded within context specific needs of a particular setting, c) aligned with reform initiatives, d) grounded in a collaborative, inquiry based approach to learning (Peeraer & Van Petegem, 2012). New learning outcomes such as the development of creativity and innovation have become major driving forces and educators are required to facilitate these. Under this scope, Communities of Practice are generally accepted as a significant tool in achieving these qualities. Reforming teaching requires steady work of tutors and professional developers who are focused on visions and issues not just policies: this new way of thinking about professional development requires *tutors to try out, discuss, think about and hone new practices by taking new roles, creating new structures, working on new tasks and creating a culture of inquiry.* Communities of Practice are in the centre of this widening innovation movement. The future belongs to organizations that learn to unleash the creative powers of self –organizing project communities, knowledge networks, open source teams and other new ways of work and learning based on associations of people who are passionate about what they do together. This paper's structure proceeds as follows: section 2 presents the state- of- the- art as well as key features of Communities of Practice. Section 3 presents the design framework and structure of the developed Communities of Instructional practice highlighting methodological aspects. Section 4 presents the implementation framework of the designed communities as well as analysis of data collected. Section 5 presents implications of the research and future directions whereas section 6 concludes the paper.

2. Background

2. 1 Communities of Practice: state of the art

Communities of Practice (CoPs) are "groups of people informally bound together by shared expertise and passion for a joint enterprise" (Wenger et al, 2002). The term "community of practice" highlights the social nature of learning as it is situated within collaborative working environments: these social

systems arise naturally and are informally bound by the work that people engage in together and they are self organized while membership is based on participation rather than official status (Wenger, 2001). Organizations that recognize knowledge as a key asset are assisted by communities of practice to: exchange and interpret information even across organizational boundaries; retain knowledge in ways that formal systems cannot offer; nurture competencies to keep the organization at the cutting edge by valuing collaborative inquiry and thinking to the future; provide an identity of its members based on what matters to them (Wenger, 2001).

Authentic, ordinary practices of a community require a great deal of interdependence. This implies that "learning cannot be fully internalized as knowledge structures nor fully externalized as instrumental artifacts or overarching activity structures" (Wenger et al, 2002): understanding and experience are highly connected while participation is based on renegotiation of meaning in the world. Furthermore, participation and reification are important aspects of CoPs: products that can be reified include abstractions, tools, symbols, stories and / or terms that are central to the practice, while processes that can be reified include making, designing, representing, naming, encoding, describing, perceiving, interpreting, using, reusing, decoding, recasting. Educational CoPs should incorporate: a) orientation, identity formation as an expanding image of the world, b) reflection, identity formation as self consciousness, c) exploration, identity formation as creation. Under this scope professional development of Higher Education practitioners, should focus on teaching as an "intellectual activity" where teachers "play a role in the creation and use of knowledge" when undertaking widely different roles in varying contexts. Within a framework of "new academic professionalism" for Higher Education more innovative ways of encouraging participation in the development of professional practice need to be explored in terms of practices and values where academics have to explain and justify in thoughtful and productive ways, why they do what they do rather than just articulate what and how they do what they do. Higher Education institutions can be visualized organizationally as "networks of networks" (Buckley & Jakovljevic, 2012) or constellations of communities of practice where academics interact continuously within the close confines of their particular discipline domains and learning communities. Maintaining or creating healthy communities of practice is a main function of educational development within departmental discipline based contexts involving educational developers in "working horizontally" across disciplinary communities to "make connections and spread ideas and practices" fostering innovations in learning and teaching practice (Blackwell and Blackmore, 2003). Bouchamma and Michaud (2011) propose a guided approach by following these principles: socioconstructivism as the learning theory, reflective practice and metacognition to guide this reflection, and accompanying leadership in a form of the process that supports change. Buckley & Jakovljevic (2012) highlight effective agile methods and strategies (e.g adaptive innovation agile strategies, communication skills, entrepreneurial initiatives, agile planning, discipline of dialogues, mapping, telling and predicting).

2.2 Structuring CoPs through artefact mediation

Knowledge management creates the "organizational conditions" in which individuals are stimulated to assimilate, create, transfer, share, capitalize, apply knowledge coherently with organization's aims. As Wenger, Mc Dermott and Snyder state (2002) fundamental aspects of Communities of Practice are the area of interest, the learning social factory, the shared repertory of competencies and common resources such as routines, documents, styles, tools, legends, symbols, language. These characteristics are presented diagrammatically in the following figure:

Figure 1: CoPs characteristics according to Wenger, Mc Dermott & Snyder (2002)

Community of Practice is a different point of view in an organization which stresses how people are involved in learning dynamics more than which units they belong to or the projects they work on. Members working in interdisciplinary teams can apply their knowledge to the real problems of the community, and bring back to the community new experience learned, staying together with experts of different subject. Although CoPs continually evolve it is possible to observe five stages of development in the sense of loose networks which gradually coalesce into a community: *potential, coalescing, maturing, stewardship and transformation* (Wenger et al, 2002). Most of the studies in CoPs are in a pre-paradigmatic phase, so limitations of existing theory regard the fact that models developed are mostly interpretive and derived from sporadic evidences (Bouchamma &Michaud, 2011; Blackwell &Blackmore, 2003). An effective approach to community facilitation involves creating a predictable "rhythm" whereas a "sense of place" is created in the minds of community members through an integrated, thoughtful combination of face to face meetings, live on line events, and collaboration over time within a persistent Web environment. Almost every community evolves along a life cycle with distinct goals, member characteristics and needs as well as purposes. Successful and sustainable communities have focused, well defined purposes that are directly tied to the sponsoring organization's mission. The following figure presents categorization of CoPs' purposes into four areas of activity:

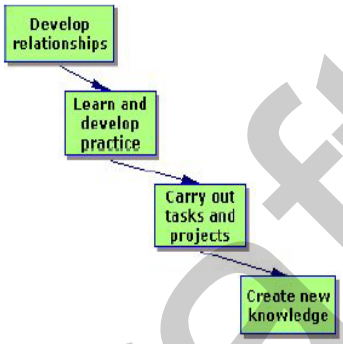

Figure 2: CoPs 'purposes categorization in activity schema

Practitioners are interested in aspects of situations that are directly relevant to their goals and objectives and help them understand problematic aspects of the design situation. Especially interesting is learning in professional contexts because it is predominantly informal and may represent a metacognitive process about educational practice and activities (Bouchamma & Michaud, 2012). Understanding the coordination among individuals and artifacts (how individuals align and interact within a distributed process) in a system or a community is a very important process in situated cognition (Wenger et al, 2002). Rather than acquiring concepts as abstract, self contained entities, the idea is to acquire useful knowledge through understanding of how knowledge is used by a group of practitioners or members of a community. *Artifacts* (Fischer, 2011) in various formats used in professional communities embody meaning in their design, content and modes of use. This meaning originates in the goals, theories, history, assumptions, tacit understandings, practices and technologies of the artifact's design community. End user communities activate an understanding of the artifact's meaning with their own community practices and cultural-historical contexts: under this scope, semantic and computational artifacts should not be designed as isolated applications but as integral components of activity systems that support learning in collaborative knowledge building. Knowledge organization structures are dependent upon domain-analytical processes for determining ontological perspectives. The ontological imperatives of groups of people laboring in common sometimes clash: these clash points, terms that are used in both domains but understood differently in each, are called *boundary objects (BOs)* (Fischer, 2011). These, have been proposed as an important means of translating such multiple, overlapping but divergent representations in ways that they accommodate both diversity and synergy because they inhabit several intersecting social worlds and satisfy the information requirements of each of them. In the context of professional learning communities educators engage in activity design, interact and use educational resources, use, reflect and collaborate on using conceptual toolsets. Under this scope factors that form the springboard of professional communities have been a) work with innovative thinking by using innovative design approaches and products, b) co-learning through engagement in problem solving and complex tasks, c) developing relationships of belonging in working networks.

3. Designing and Structuring Instructional Communities of Practice

3.1 The educational context

Hellenic Open University (HOU) (http://www.eap.gr) is the only public Hellenic higher education institution that offers programs of study using Open and Distance Learning methodologies. The Educational Content Methodology and Technology Lab (http://www.eeyem.eap.gr) is an independent HOU unit that develops digital educational content, applies educational methodologies and promotes the use of ICT tools in educational practice such as Learning Management Systems and Teleconferencing tools. Contact Sessions and assignments are the corner-stone of the HOU teaching method: tutors encourage face-to-face and internet communication, meetings and study groups between students, where they can exchange ideas. The teacher's role in ODL involves facilitation and moderation (EQF, 2008). Tutors also forward any student related matters to the Module Coordinator. HOU Tutors in a Thematic Unit and the Module Coordinator are the core participants of the Module Academic Staff: they familiarise students with the processes and procedures relevant to distance learning, provide advice, support and academic guidance to students through their studies, help them understand the content and the methodology of the course, check that students have received all course materials, inform students of regular and alternative materials, and finally play an important role in further processing HOU educational material and producing new chunks of educational material through instructional design practices by the use of Open and Distance Learning standards and the design of Learning Outcomes.

3.2 Instructional Design in Open and Distance Learning settings

Open and Distance Learning is characterized by its philosophy, which diminishes boundaries and the use of technology in specific formats. As there is not just one method of ODL a variety of courses are described as "distance learning" courses. As a result of the implicit hierarchy in distance education method of offering the courses through an array of media to students, tutors are not properly equipped to function as course authors. Often the lecturers' and tutors' roles are little understood by university managers or educational authorities. The challenge is both to adjust to on line delivery, incorporate technology into more "traditional" forms of study, by experimenting and setting personal teaching and learning goals so as to achieve personally designed Learning Outcomes and use accordingly suitable Learning Objects. As Learning Outcomes are the actual result of learning and course designs set out the tutor's intentions for learning: in the Outcome Based Learning approach tutors through instructional techniques define intended learning outcomes, design or choose appropriate learning activities, engage students in the activities through the teaching process, assess students' learning, evaluate how well did they meet the primary learning intentions and award grades accordingly (EQF, 2008).

Design theories emphasize prescriptions for accomplishing a given end: the principles and instructional methods for creating learning communities support the direction of the current status of adult learning theory and the new paradigm of new instructional design theories (Schneider &Stern, 2010). Instructional design theories and models make use of externalizations and semantic representation tools so as to capture personal meaning and collaboratively construct hierarchies of subject domains. ADDIE is the most popular instructional design model based on the systematic approach of the Analysis, Design, Development, Implementation and Evaluation phase, used extensively to develop educational material for several purposes especially when content reusability is involved in distance learning settings (Koper, 2006). The value of the workflow model such as ADDIE is that it provides a project management framework, used in this case to develop instructional material guides for HOU Tutors. An important outcome of shared understanding in COPs is the incremental creation of externalizations to capture and articulate the task at hand (Fischer, 2011). Externalizations enhance mutual understanding and intelligibility by serving as a resource for assessing the relevance of information within the context of collaboration. Ontologies form conceptualizations of a subject domain, reflecting structure and hierarchy to concepts used in subject domains, in the sense of providing reflective artifact affordances: there are specifications of a conceptualization, defining concepts and relationships in a network of knowledge attributes (Ferrara et al, 2011).

3.3 Representations and CoPs design situation

Boundary objects (Fischer, 2011) as objects which communicate and coordinate the perspectives of various constituencies can serve two major purposes: a) they can serve as objects to support the interaction and the collaboration among different communities of practice, b) they can serve the interaction between the users and (computational environments). Much human creativity arises from activities that take place in a social context in which interaction with other people and the artifacts that embody group knowledge are important contributors to the process. We have provided a situation open-ended and complex so as users to encounter break downs: breakdowns offer unique opportunities for reflection and learning: tutors acted as designers allowing themselves to create shared understanding ,contextualize information to the task at hand, and create ontologies as boundary objects in collaborative design activities. Open ended and multidisciplinary design problems require a different paradigm of education and learning skills, including self directed learning, active collaboration and consideration of multiple perspectives. The actual process of participatory design with instructional designers and tutors grounds the artifact design in the culture of the potential user communities. Most importantly community discourse processes in a collaborative construction framework helps groups of users to reactivate and interpret the meaning of artifacts in their own terms and from their own perspectives. Tutors of (3) Thematic Units of Hellenic Open University have been asked to: a) critique on the educational material they used (printed and software) for constructing ontologies, b) report on problems the coped with during the design process, c) modes of delivering training program regarding the ontologies' design. The artifacts produced have been ontologies, as forms of representing and capturing tutors' understanding in their subject domain.

4. Implementation: Structuring and piloting Instructional Communities of Practice

4.1 Phases of structuring CoPs

The management and academics face challenges that must be met in order to develop a full functional network of CoPs. The management challenge is firstly to:

- focus on topics important to the academic community
- find experienced moderators for the academic community
- ensure that academics have time and are encouraged to participate
- build on the core values of the university

The academic challenge needs to:

- get thought academic leaders involved
- build personal relationships among academic community members
- develop an active and passionate core group
- create forums for thinking together and sharing information (Buckley & Giannakopoulos, 2012)

A deep conceptual understanding of subject content is a crucial part in the effectiveness of teaching as shallow understanding of subject content tends to result in a style of teaching that over delivers on facts and rules, but fails to ensure that students develop and evolve key ideas needed. Experienced tutors do not have many formal opportunities to discuss and share their pedagogical content knowledge (PDK, Shulman, 2012) with fellow tutors: consequently this very valuable form of professional knowledge tends to be hidden and largely unknown. Factors critical for the success of the Communities of Practice as a small project that energises a core group and an infrastructure to support collaboration and coordination are:

- Skilful and reputable coordinator
- Involvement of experts
- Address details of practice
- Right rhythm and mix of activities

The structuring of CoPs implies six phases: developing a theoretical framework for communities of practice, exploring preliminary attitudes toward communities of practice, forming pilot communities of practice, evaluating pilot communities of practice groups, implementing action research to pilot communities of practice, apply the community of practice model to other groups. This paper briefly presents findings and basic characteristics of developing a theoretical framework, exploring tutors' attitudes, and forming pilot communities of instructional design.

4.2 Methodology, Research Questions and Data Collection

Best practices were chosen from already formed communities of Hellenic Open University in (3) Thematic Units. Data were collected in order to acquire the greater number of information about the single communities and the external organisational context. In particular data was gathered from the following sources:

- Documentation about the organization
- Semi structured interviews to key informant people (ie members of top management) of the organisation to collect data about the organisation, its strategy, the knowledge management strategies defined
- Semi structured interviews to community coordinators and members, to understand the story of the community, the domain, the kind of knowledge shared and the members' characteristics
- Community's output documentation to better understand the kind of knowledge and the domain complexity

The basic research questions have aimed at capturing experience reflection and attitudes of (9) Tutors already involved in quasi constructed Communities of Instructional Design in: a) educational material used (structure, format, content), b) problems/drawbacks in their experience as instructional designers, c) desired modes of delivering the instructional design training program.. There has been an aim: a) to explore the field of structuring instructional design communities of practice so as to achieve benefit for the organisation, b) capture the basic processes of already formed communities.
Production of educational material in HOU is subjected to ISO 2008 procedures with predefined technological and pedagogical specifications .Tutors have been asked to filter HOU educational material used by (a) setting basic learning goal, (b) providing specific learning outcomes that fulfill this goal, (c) designing semantic representation of the educational content used in a form of an ontology. The (3) Communities of Instructional Design comprised by (3) up to (4) HOU tutors as members while the Course Coordinator supervising and being in charge of the whole process. The following table presents brief description of the HOU Thematic Units that participated:

Table 1: HOU Thematic Units

Hellenic Open University Thematic Units		
Level	**Thematic Unit**	**Subjects**
PGCE	PLI20: "Discrete Mathematics & Mathematical Logic"	#1Mathematics #2Graph Theory #3Mathematical Logic
PGCE	PLI10: "Introduction to Informatics"	#1Introduction to Computer Science #2Programming Techniques #3Data Structures #4Programming Languages
PGCE	DEO25: "Accounting"	#Introduction to Accounting #2Financial Accounting #3Greek General Chart of Accounts #4Computerised Accounting #5Introduction to Cost Accounting

Action research in education involves participants in a form of disciplined self- inquiry that is collaborative and designed to enable them to understand and reform educational practice (Engstrom et al, 2002).Practical action research (Ado, 2013) as a methodology comprises a general spiral of generic steps that lead the researcher pursue solutions to identified problems in collaboration with other participants. For the purpose of the specific research an action research schema has been used so as to identify which aspects of the training process actually worked and which could be further elaborated or enhanced. In the early development stages qualitative research has been selected so as to reveal narrations and tutors' attitudes/ beliefs regarding the already conducted process. Semi structured interview has been designed and conducted so as to: a) understand the respondents' point of view in detail, b) create a positive rapport between the interviewer (instructional designer) and the interviewees (HOU tutors), c) support high validity through detailed and structured conversation, d) discuss complex issues regarding the design process and participation in the Communities of Instructional Practice.

4.3 Findings and Discussion

The interview data have been transcribed, organized and coded. Conceptualizations of basic topics involved appeared, while themes have been identified regarding the educational material used and emerging training issues. Field notes have been also used so as to provide a basic orientation in qualitative data analysis processing. On a first basis *inductive coding style* (Cain & Harris, 2010), iterative analysis derived through collected data has been selected commonly referred to also as *grounded analysis* (Ado, 2013). This iterative process implies developing grounded codes in the sense of symbols applied to text sections in order to easily categorize it. The developed grounded codes are related to research questions, themes and concepts involved: emerging descriptive themes are further broken down to sub categories, relationships and cause and effect liaisons. The following figure presents basic concepts involved:

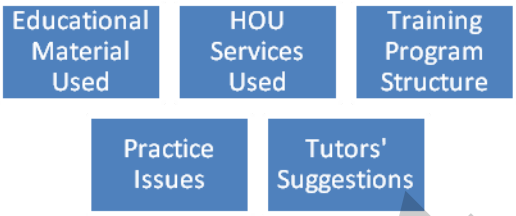

Figure 3: Basic concepts involved in interview analysis coding

The duration of each interview has been between 40 up to 60 min and there were all conducted during April 2014. The HOU participated voluntarily in the Communities of Instructional Design and have been provided with printed material designed through the ADDIE methodology covering (3) phases: the description of the educational problem, the design or content representation and the definition of Learning Outcomes. The following figure presents schematically the training process supported by the Communities of Instructional Design structure:

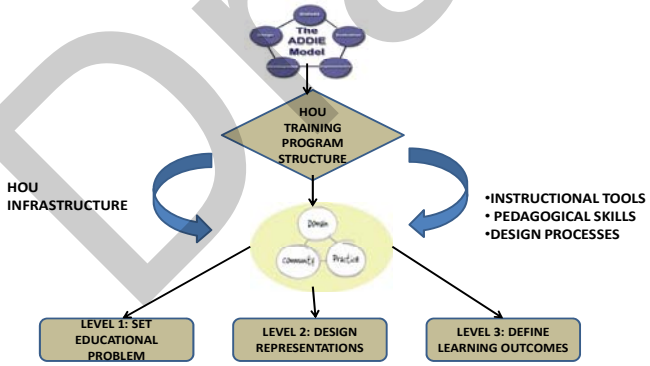

Figure 4: The structure of HOU training process in Instructional Design Communities

HOU Tutors reported on the problems they faced during the design process, the drawbacks of completing the process, issues that have been important to them such as time duration and need for clarity in the guiding process. The (9) HOU Tutors who voluntarily formed preliminary Communities of Instructional Design have been experts in their fields (professors and associate professors), originating from prestigious Greek Higher Education Institutions, providing their teaching diversity in the whole process. The (3) Communities of Instructional Design have been different in two aspects: a) the level of acquaintance and use of technological tools, b) the level of members' cooperation and personal acquaintance. More specifically the Tutors of TU PLI20 and PLI10 had a strong confidence as a community and as ICT tools users, as in both cases the tutors have cooperating the HOU distance education courses more than 10 years. Tutors in TU DEO25 have formed a new community

whereas they had not cooperated before nor they had developed a strong working network in the sense of personally knowing each other before their contribution to the communities.
Interview data revealed Tutors' attitudes and preferences on the educational content designed and used with the specific criteria of structure, clarity, accuracy, effectiveness in instruction. Table 2 presents indicative data from the interview data analysis:

Table 2: Preliminary data analysis of interview questions regarding the educational material used for training HOU Tutors

Data of Interview Questions on Educational Material Used		
	Topic	Data snippet and Respondent
QUESTION #1	Effectiveness of Printed Educational Material Used	"quite guiding" (T1) "quite helpful" (T2) "the process has been time consuming, in circles" (T3) "easy to use" (T4) "sufficient educational material "(T5)
QUESTION #2	Level of Updating Printed Educational Material	"all guides were updated" (T1) "updated and quite helpful" (T2) " examples are important" (T3) "quite updated" (T4) "updated" (T5)
QUESTION #3	Structure and Organisation of Educational Material	"more concepts of subject domain added" (T1) "rigid language" (T2) "set clear outcomes from the beginning of guides" (T3) "quite satisfactory" (T4) "good but more examples are needed" (T5)

HOU Tutors found the guides provided by the E-Co-Me T Lab research team quite helpful though they reported that there have been times that they thought they were going in circles, not in a justifying way. These guides actually prompted the HOU Tutors to set the educational problem, design content representation of the educational content they processed, define Learning Outcomes in their TU. The use of educational material has been updated and quite satisfactory to them, whereas they commented positively on the easiness in use. However, regarding the structure and organisation of the educational material used they pinpointed weaknesses such as the strict language of the guides developed, the lack of having a clear picture of the process and final product from the beginning as well as using furthet examples so as to have a confident outlook on the final product requested from them. The latter has been quite an obstacle in comprehending the sequence of the whole process though they managed to design the final products required from each phase (I. set educational problem, II.produce design representation of educational content used and III.define learning outcomes).
Another group of interview questions focused on the preferences of HOU Tutors in the future design of an extensive training program, scaffolding in the design process of new educational material by the fulfilment of the (3) phases already mentioned earlier. It was important to capture their attitudes and preferences on the traning program in the early development stage so as to: a) carefully adjust content and structure of the training program according to their needs, b) iteratively design and develop cycles of training delivery, c) clarify basic and subsidiary goals of the training program in the design process and accordingly develop the training material. Table 3 presents HOU tutors' preferences on the Training Course Design:

Table 3: Preliminary data analysis on HOU Tutors' preferences in future Training Course Design

Data of Interview Questions in future Training Course Design		
	Topic	Data Snippet and Respondent

QUESTION #5	Formats for Delivering the Training Program	"mostly Powerpoint and screencasts"(T1) "just printed material" (T2) "printed material" (T3) "pdf format for guides" (T4) "just printed material" (T5)
QUESTION #6	Focus Areas of In Depth Education	"ask students about these" (T1) "in the pedagogical aspect of the design" (T2) "on merging the tutors' content representations" (T3) "provide a clear picture " (T4) "clear guidelines to use verbs in LOs" (T5)
QUESTION #7	Tutors' suggestions on Training Program	"save time and labour" (T1) "save time" (T2) "provide a holistic picture" (T3) "save time" (T4) "save time and more examples" (T5)

Regarding the preferable formats for developing educational material the HOU Tutors commented favourably on the use of printed material, even if they originated from Thematic Units with a strongly technological background such as PLI20 and PLI10. They justified their preference on the fact that this type of material (pdf format) is easy to use, accessible anytime and more amiable to further processing according to personal reading and learning strategies. The data collection and analysis phase is still in process.

5. Evaluation: Implications, limitations and directions for future research

Team- based work organizations are an effective response to the pressures of increasingly competitive environments. In Communities of Practice (CoPs) groups of people share a passion for something that they know how to do and who interact regularly to learn to do it better. The conducted research (still in process) captured HOU' Tutors reflective experience on educational design process and their attitudes on the design of an extended training instructional program on developing new educational material based on ODL standards methodology. Design structures and generic patterns regarding the design process have been revealed whereas problems that Tutors faced have been highlighted. Based on the extended analysis of the qualitative data still collected an extended survey is designed so as to capture significant elements of the a) design process reflection, b) important skills to be developed during the training process, c) multidisciplinary guidelines for developing educational material based on Open and Distance Learning methodology, by the use of Learning Outcomes. Building collaborative and collegial communities of tutors provide the autonomy and the motivation to make better curricular and pedagogical decisions for students' interests: the basic aim has been to form an effective instruction framework for Hellenic Open University (HOU) Tutors based on data collected in (3) Thematic Units (TU).

6. Conclusion

An upcoming shift in the teaching and learning sphere towards online, Open Reusable Resources, accessed and exploited by teachers and learners alike to enhance the e-learning experience, emphasizes issues of learning design and educational content reusability. Establishing modes of collaborative participatory design which promote reflective practice seems to be the key factor to improve Higher Education and making effective use of Open Distance Learning Standards. Support of Tutors in the process of effectively chunking and using in a multimodal way educational content is a demanding task, requiring for careful analysis of the learning process and aspects of the learning context and media applied. There is a need to decompose complex tasks in learning hierarchies, to provide analysis of concepts and procedures of subject matter curricula in terms of information structures and gave rise to new approaches to pedagogy. The basic characteristics, methodology and preliminary findings of Instructional Communities of Practice have been presented. However, important issues have arisen: the need for students' participation in the Communities of Instructional Design as final end users of the whole design process, and design structures' establishment for that purpose, the need to further elaborate training structures and training patterns so as to enhance multidisciplinary professional learning. There has to be a shift from processes and procedures to a

new vision which promotes a learning paradigm that encourages social negotiation of meaning and reflective practice to produce new chunks of educational material based on Outcome Based Learning, actively involving and further motivating experts to engage and contribute to the instructional design process. For these purposes an “umbrella” HOU framework which promotes policy changes so as to adjust to the new vision is important, while the methodological framework for building communities of instructional design through semantic mediation has to be further and in detail elaborated and expanded to cater for multidisciplinary professional learning. The assessment process is currently under development whereas expansion of the schemas and processes presented in this paper is scheduled in more Thematic Units of Hellenic Open University. Tutors’ involvement in purposeful reflection stimulated their interest in seeking out and trying out new pedagogical strategies, providing insight in new educational practice through better understanding and chunking of educational content used. Future work involves further working on structures and tools in the context of instructional communities, further revealing processes, types of products and Learning Objects used in a multidisciplinary mode as well as generating a plan for filtering educational content in HOU Courses including issues of time management (on line –off line process) and learning activity structures. Future goal is to further develop material that actually supports and guides Tutors who participate in HOU‘s communities of Instructional Practice incorporating Learning Object formats and Learning Outcomes taxonomies.

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