TEACHERS' CPD PROGRAMME IN FOSTERING COMPETENCES – COMMUNITIES OF PRACTICE SUPPORT MECHANISMS

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Abstract

The key competence acquisition by every young person is one of the long term objectives of the updated strategic framework for European cooperation. Most of the EU Member States are formulating and at least beginning to implement policies that move their school systems from being predominantly input led and subject-oriented towards curricula which include competences, cross-curricular activities, active and individual learning, as well as a focus on learning outcomes. The enhancement of transversal key competences of students can take place through building teachers capacity for competence oriented education. This paper presents the outcomes from the needs analysis survey on key competence acquisition in Greece, as well as the design and localisation of the Training Framework and environment based on the collected responses and the specifications set from the Greek Curriculum, the community support mechanisms that have been developed, as well as the impact of these mechanisms based on indicators and survey results from users.

Introduction

Key competence acquisition (KCA) is one of the long term objectives of the updated strategic framework for European cooperation (Official Journal of the European Union, 2009). The concept of key competence originated with the adoption of the Lisbon Strategy in 2000 and it resulted in the European Reference Framework (European Commission, 2006). Key competences in the EU framework are those that 'all individuals need for personal fulfilment and development, active citizenship, social inclusion and employment'. The Framework identifies and defines eight (8) key competences among which the five (5) are considered transversal. Most of the EU Member States are beginning to implement policies that move their school systems from being predominantly subject-oriented towards curricula which include competences, active and individual learning, as well as a focus on learning outcomes. One such example is Greece, where in the school year 2011-2012, pilot curricula for competence driven education have been introduced. In Austria however, the promotion of holistic teaching methods has been supported at policy level for several years. In other countries (e.g. France, Netherlands) innovative policies are already embedded in national strategy documents and in some cases these have already led to major structural changes, such as the introduction of new qualifications frameworks or the reform of the curriculum around

the Key Competences (European Commission, 2009a). In general, there are a variety of different models of competences in European countries (European Commission/EACEA/Eurydice, 2012). Yet, these developments do not necessarily result in significant, widespread changes in practice – that is, in how schools actually organise and provide learning experiences for pupils. The difficulty is in all cases translating these policies into practice. In this paper we present the current state of Competence-Based Learning (CBL) policy and practice in Greece, the results from the needs analysis study, the design and localisation of the Training Framework and Environment based on the collected responses and the specifications set from the Greek Curriculum, the user/community support services that have been developed, as well as indicators from the user exploitation of these services and feedback collected by users with the use of online questionnaires and interviews.

Background

According with TALIS Report 2013 (OECD, 2014) the types of professional development activities undertaken in the 12 months prior to the survey in descending order are: courses/workshops with a percentage of 71%, the second highest rate is education conferences (44%) and the third highest rate surprisingly enough is through participation in a network of teachers formed specifically for the professional development of teachers with a percentage of 37%. These data demonstrate the potential of innovative professional development methods (e.g. participation to teachers' networks) that safeguard the sustainability of the introduction of innovative approaches to school and need to be considered in the design of CPD Programmes for teachers. The term "community of practice" is of relatively recent coinage, even though the phenomenon it refers to is age-old. The concept has turned out to provide a useful perspective on knowing and learning. A growing number of people and organizations in various sectors are now focusing on communities of practice as a key to improving their performance. "Community of Practice" (CoP) is a social networking term developed by Wenger to describe groups that form among peers for sharing knowledge and information about their professional interests and activities (Wenger, 1998). The first applications of communities of practice have been in teacher training and in providing isolated administrators with access to colleagues. Whilst there is a wealth of literature in exploring the conceptual and theoretical issues related to CoPs, empirical studies have only just started to emerge that show how CoPs can work and be sustained in the educational community (Kirschner & Lai, 2007). Below follows a short description of two current initiatives active in the field of teachers' professional development under which the specific research has been undertaken.

Current initiatives

In line with the EU objectives the improvement and quality of teacher education can have a positive impact on the development of students' competences (Official Journal of the European Union, 2007). In order to achieve this, a pilot teachers training methodology has been developed on the didactics and e-assessment of key transversal competences following a holistic view of students learning, going beyond subject boundaries and finding application in a wide spectrum of curriculum subjects. The TRANSIt approach contributes to the

development of creativity, intercultural and multilingual competences, social development, and "learning to learn" competences. TRANSIt aims to contribute towards the improvement of the quality of competence education by improving teachers' awareness and professional skills regarding the didactics and e-assessment of the key competences with the use of ePortfolios, and supporting them to bring European and national policies into practice. The overall approach is based on the methodological principles of participatory design with the user groups in the development of the training framework. To this end, stakeholders' needs analysis was performed in order to identify the obstacles in the process of introducing innovative approaches in teaching practice and to identify enablers that will effectively support such interventions. With an aim to foster innovation in the classroom Open Discovery Space (ODS) project tries to engage teachers, parents, content designers, policy makers in numerous meaningful online communities of peers who create, share, discuss and rate resources, ideas and experiences. Furthermore, a crucial development would be to bring the ODS Communities of Practice to the next level: to the formation of the Virtual Schools on different thematic areas and strong networks of practitioners and teachers-as-content-designers, working in similar fields. Below we will present the synergies between the two initiatives towards the delivery and creation of a community around CBL.

Current state of Competence-Based Learning in Greece

CBL activities are defined in the present study as educational activities aimed to students' KCA. The method by which competences have been introduced in the education system varies among countries. Some have introduced these approaches through adaptations of the curriculum, whilst others have done it through legislative change (Gordon et al. 2009). LimeSurvey was used for the online Greek questionnaire aimed at identifying the profiles of the possible participants in TRANSIt training activities, the current implementation of CBL, as well as participants training needs. In the survey 648 responses were collected. The survey is analytically presented in Riviou and Sotiriou (2013).

TRANSIt Framework

The *TRANSIt Teacher Competency Framework* defines the criteria from which it will be possible for a teacher to determine how competent they are in didactics and e-assessment of transversal key competences (using rubrics). A competence framework is a model that broadly defines the blueprint for 'excellent' performance within an organisation or sector. The frameworks that influenced its design were the UNESCO ICT Competency Framework for Teachers (United Nations, 2011) and the Western Australia Teacher Competency Framework (Western Australia Department of Education, 2009). Based on the needs analysis survey the Training Framework[1] has been designed in a modular format, so that it could be localised. Teachers taking the course or course modules will be handled as learners participating in authentic learning activities; also creating and using e-Portfolios as part of their learning process. In order for assessment to be authentic, the proposed approach is the use of ePortfolio combined with rubrics, in two levels, in teachers' training/competence

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[1] http://transit.cti.gr/moodle/

development, as well as for the classroom practice (e.g. as students' projects in Upper Secondary School according with National Curriculum). The approach towards supporting teachers in designing learning scenarios is to provide exemplar templates or descriptions which can be shared, re-used and adapted to different contexts. Below follows the description of the didactic approaches, as well as the main templates suggested to be used by members of the online community in order to share their resources.

Didactic approaches promoting competence based learning

According with the literature among the didactic approaches that promote competence acquisition is: project based learning, the storyline approach, guided discovery, action learning, Problem based learning, Co-operative learning and Inquiry learning. A review by the EPPI-Centre at the Institute of Education, University of London (2005), found that and collaborative professional development was linked with a positive impact upon teachers' repertoire of teaching and learning strategies, their ability to match these to their students' needs, their self-esteem and confidence, and their commitment to continuing learning and development. They also found evidence that such professional development was linked with a positive impact upon student learning processes, motivation and outcomes. On the other hand, recent studies highlight the value – in terms of professional development – of engaging teachers as learning designers (Sagi & Kali, 2014; Voogt et al., 2012). To this end, in order to support the design and sharing of user generated scenarios, suggested *templates* describing pedagogical approaches promoting KCA, as well as specific cross-curricular competence based scenarios and lesson plans have been developed as demonstrators and a source of inspiration for teachers.

Supporting the professional development community on the thematic area of CBL

The key to effective professional development is finding a way to organise qualified teachers, so they can collaborate with their colleagues. Collaboration and exchange of practices needs to be encouraged through training. The specific Parent Community is a Professional Development and Innovation Seeking one. Multilingual sub-communities have been created for users support (EL, NL, ES, FR). Moreover, with an aim to support the engagement of teachers as learning designers a series of online, as well as offline events have been delivered along with support via resources provision. A short description follows as well as the dates of events delivery, since these events have a great impact on the community. The dates that these newsletters have been circulated are: 17/6/2014, 6/8/2014, 4/9/2014 & 19/11/2014. On the latter date an invitation from the Institute of Pedagogy has been circulated to schools to participate in the ODS implementation activities.

Resourcing the community: Development of online resources

Templates developed describing the CBL approaches have been populated with resources leading to the production of learning scenarios and lesson plans; such example of learning scenario is the "3D printing of a minoic vase"[2]. These scenarios have been available online in the community as demonstrators and best practices for the training events, and with an aim to motivate users to contribute their own scenarios, resources and experiences.

Events as community support mechanisms (face to face & online ones)

In the case of Greece at the time of writing the following programme has been designed and delivered: provision of the online pilot course, as well as face to face training workshops that took place in Athens, Patras and Crete in 24/06/2014, 01 & 03/07/2014 and 19/09/2014. Participants in every case were given instructions on the TRANSIt Greek Community[3] in order to register for the events. Registrations from interested users to participate has been huge (fifteen fold the number of participants that could be facilitated), but since only a limited number of participants could be facilitated in the workshops due to space restrictions, after their implementation all presentations and activities have been uploaded on the community so that all members could have access to these materials. A series of webinars has been delivered in Greek. More specifically: "Evaluation and ICT integration in project based learning[4], held on 23.6.2014; "I will facilitate a project this year, what do I need to know about it?"[5], held on 15.9.2014; "Authentic evaluation: Use of ePortfolio tools in projects"[6], held on 23.10.2014. Guidelines for the conduction of the webinars have been announced on the Greek Community on ODS Portal. The recording of the Webinars were available after the conduction as videos on YouTube and the links have been announced on the Community. The webinar recordings have in some cases around 1,600 views demonstrating the value of sharing events in the context of an online community.

Indicators

In the following section indicators about the TRANSIt Greek Community currently having 724 members (February 2015) are presented with use of the ODS Analytics tool. The progress in registrations of new members took place highly connected with the top-down professional development activities and events.

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[2] http://portal.opendiscoveryspace.eu/el/scenarios-view/FWq$2F$$2F$g3aA1Ep5NAYqEPUfw$3D$$3D$
[3] http://portal.opendiscoveryspace.eu/community/katartisi-ekpaideytikon-stin-ekpaideysi-gia-anaptyxi-ikanotiton-184334
[4] https://www.youtube.com/watch?v=cqzesbcq4f8
[5] https://www.youtube.com/watch?v=LGD_AtBXnxM
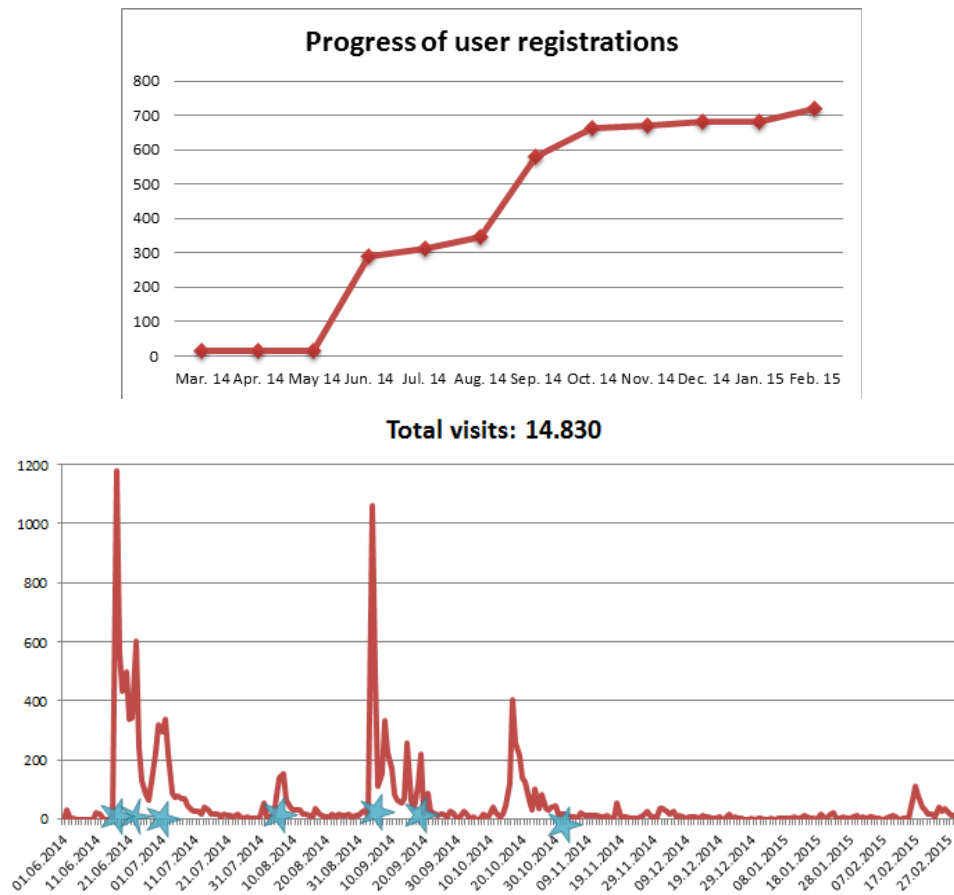[6] https://www.youtube.com/watch?v=UhfJAyOx7Xc

Figure 1. Progress in registration of new users in TRANSIt Community (left) – Total visits of TRANSIt Community (right)

The Greek community on the theme of CBL is a public one, allowing access to its resources to all ODS members. There are about 15,000 page views over the period June 2014 – February 2015. As it is clearly evident there is a considerable increase in interest in the Community, as the number of page visits demonstrates, especially on the dates that community support events took place such as circulation of the aforementioned newsletters and workshops (marked with stars).
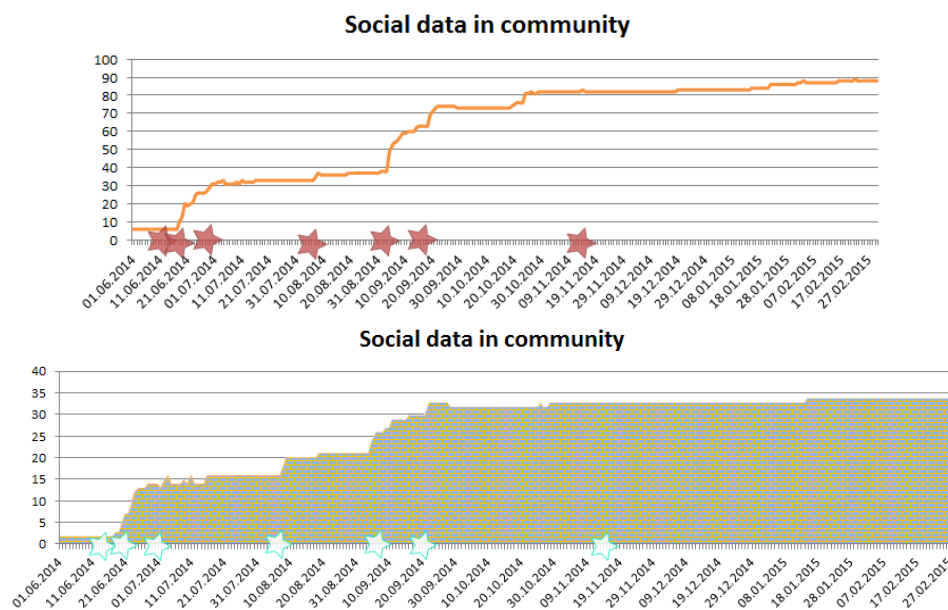
Figure 2. a. Social data in Greek TRANSIt Community (left) – b. Social data on the resources of the Community (e.g. tags, bookmarks, comments) (right)

Figure 2 presents the use of Social Data (Comments, Bookmarks, Followed Users, Followed, Shares & Followers) in the community, as well as the social tagging of the educational resources. Again it is evident that there is a considerable online activity around the dates that the aforementioned events took place.
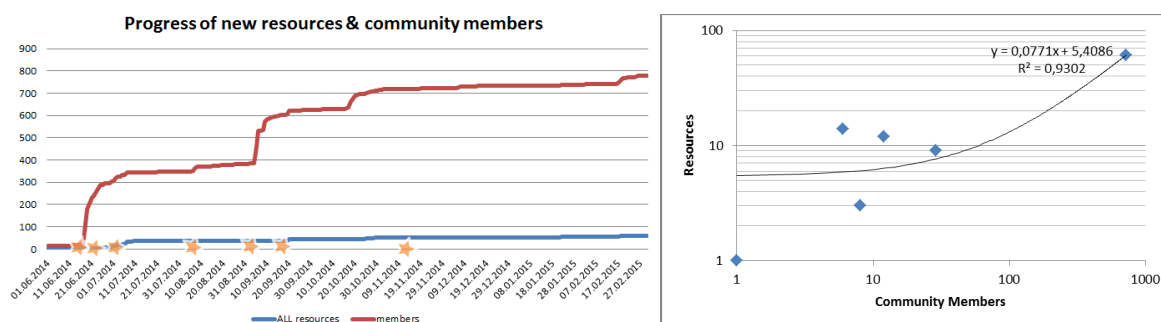

Figure 3. a. Progress in new resources and community members (left) – b. Percentage of users that contribute resources on Portal (right)

In Figure 3 the TRANSIt Community members' progress vs. new resources progression is depicted. These findings are aligned with White (2012) that most of website users (as high as 80%) who log onto a site are "lurkers" – they will take an occasional look at a website but will not participate in it; the participants, also called "posters" or "contributors" are in the minority. As depicted in Figure 3.b almost one in ten users create and contribute resources on the portal. One of the challenges is therefore fostering such a culture to participants in sharing their educational resources and deploying the proper tools in order to engage them. In Figure 4 the TRANSIt Community members' contributions on ODS portal is presented; thus their engagement. As we can notice there is considerable difference between contributions in general (activity in the communities) vs. the creation of new resources. Participants are quite hesitant in sharing their educational resources; therefore such culture needs to be promoted.

From the number of users, 90% are considered as "old" users, more than 3 months and contributors are all old users (not new-comers in the portal). Moreover, most of the contributors feel that are competent having self-assessed their competences on Level 3; they feel confident about their competences based on the UNESCO ICT Competence framework (Figure 4.b).
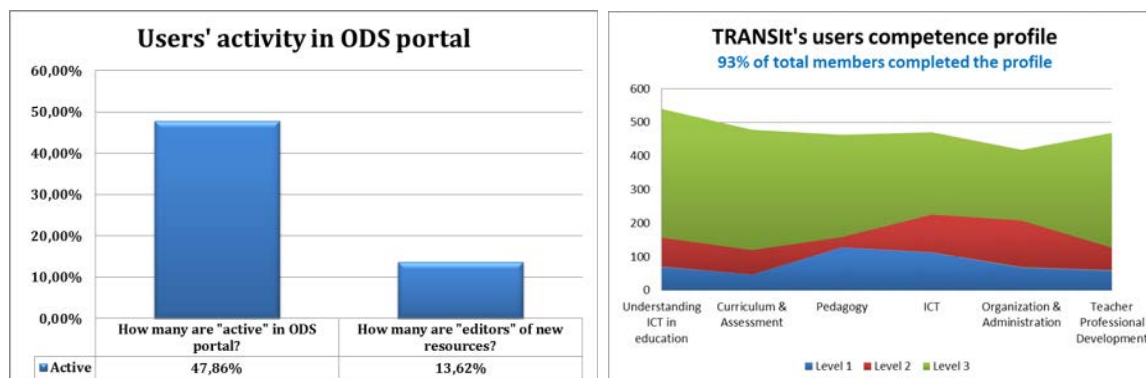

Figure 4. a. Contributions per registered user (left) – b. Members' competence profile (6 themes, 3 levels)

Evaluation Results from users

Organisational aspects such as the venue, the programme and the materials of the training activities/events, as well as the actual training content have been assessed by community members. The main areas covered were awareness, didactics, and assessment of Transversal Key Competences, as well as the impact of the pilot training activities. The assessment tools used were a user satisfaction questionnaire and an interview guide. The online questionnaire was filled in by 318 participants and 13 interviews have been conducted. Participants graded their satisfaction around the community support events regarding organisational aspects, actual content, tutors feedback (webinar, as well as the face to face workshops) on a five- point Likert scale. The average rating regarding the overall assessment of all events is 4.3 in the scale of 5 that is a rather satisfactory result. Interviews conducted allowed gaining deeper knowledge on specific aspects of CBL, as well as a way to record the impact of the training events.

Conclusion and recommendations

In general, the EU is prioritising the improvement of the quality of teacher education so as to have a direct effect upon levels of students' acquisition of competences. Therefore, the professional development of teachers and their training is a key requirement for the way forward (European Commission, 2010). Our needs analysis confirms that, given the limitations imposed by the official curriculum in Greece, teachers are generally motivated to make a paradigm shift towards CBL. The profile of the participants demonstrates that there is a strong interest especially by secondary education teachers to get trained and exchange practices within peer networks and communities of practice. This is aligned with the literature findings that the situation is even worse for teachers of secondary education since their training has not prepared them for the most part for holistic methods and cross-curricular

teaching, although primary teachers may have more expertise in CBL approaches (European Commission, 2009a). The preference of teachers and head teachers to learn primarily from demonstration of tools and instruments, practical assignments and examples of good practices, demonstrates the need of stakeholders to undertake hands-on training, and that teachers need support in their everyday practice. TRANSIt training framework and environment designed has been presented. TRANSIt training content includes specific examples/good practices and tries to address the training needs with an emphasis on assessment methods and tools, also by taking into consideration European reports (Redecker, 2013), as well as the national context requirements set by the Greek Curriculum. The key to effective professional development is finding a way to organise qualified teachers, so they can collaborate with colleagues. Collaboration and exchange of practices needs to be encouraged through training, let alone since participants refer to the benefits of collaboration with colleagues. Events such as contests and webinars and wide dissemination of such activities have proven to be a valuable tool for the support and population of these communities. Time is needed so that a new user proceeds from the basis of consuming content to the process of contributing. The feedback we got though from the interviews conducted so far is that teachers would be eager to contribute their resources on the portal. As shown by contributions per user, participants are quite hesitant; therefore such a culture needs to be fostered. Further work remains further support and monitoring of the community under study in order to increase its users' engagement and the creation of long-lasting Virtual Schools on the theme of competence development. The possible ineffectiveness of top-down approaches in providing support and training for teachers makes the support and role of online communities such the ones presented in the current study even more crucial.

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Acknowledgement