TOOLS AND APPLICATIONS FOR TRAINING OF TEACHERS - A REPORT OF INNOVATIVE TRAINING PLAN EXPERIENCE - PIC - NUTEAD / UEPG

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Abstract

Resources and technologies are available and freely disclosed for use in the preparation of courses, virtual environments and platforms in their own development activities that can be applied in personal and professional life of people interested in innovating and expanding ways of presenting content. This work has the objective to show the possibilities of using tools and applications that have been explored and / or implemented to train teachers in courses offered in Innovative Extension Course Training Plan - PIC editions 2013 and 2014, offered by the Center for Technology Open and Distance Education at the State University of Ponta Grossa. The target audience were University professors and acting in high school and fundamental of state and municipal public networks. The subjects were taught via virtual learning environment - Moodle platform. The results show the efficiency of the application of resources used and the benefits of applicability in educational practice.

Keywords: capacity building; technologies; education; learning.

1 - Introduction

Know that digital technology resources have evolved in recent years, most are available and are disclosed freely. And among these various resources available, have that can be used for application in the preparation of courses, as well as virtual environments and platforms in their own development activities that can be applied in personal and / or professional life of people interested in innovation and expand their practices in different areas. In this bias, this paper reports the experience of offering a training course for teachers, entitled Innovative Plan _ PIC Training, in which it uses and indications of various digital and free technology resources that were addressed and / or applied in the disciplines offered.

Through virtual learning environment - Moodle disciplines occurred in the second half of 2013 and the first and second halves of 2014 respectively disciplines of 10 hours and 30 hours.

Therefore, applications catchy titles identified and defined, resources, tools and software for the proposals of the activities of those subjects listed in Table 2. The productions of the participants in the completed tasks showed that they had opportunities for improvement of their knowledge and promoted interaction and exchange of experiences and beyond the products or applied resources and developed by them.

2 - Objetctives

2.1 - General Objective

Show tools possible uses and applications that have been explored and / or implemented in the Training Course - PIC and its relevance in the educational context.

2 .2 - Specific objectives

a) Present technological resources for process activities proposals supported by digital tools;

b) Producing educational resources developed by technological applications;

c) provide opportunities for educational creations and proposals for use in classroom courses and distance.

3 - Theoretical review

When submitting a proposal for a training course for teachers and innovation the main objective is to offer the use of mechanisms that may add knowledge and application possibility in the practice of personal and professional life of the participants.

In Innovative Training Plan, aimed at the segment of teachers, the claim was to plan and work the educational context indicated and practice using applications, software and free socializing technological tools in the current education scenario advocating what is defended by Karlins (2013), Kenski (2013), Khan (2013), Moran (2013), Piva Junior (2013), Ricardo (2013), Silva (2012) and Silva and Spanholz (2014).

The main proposal was to implement possible changes integrating educational content and actions showing teachers new ways and forms of learning and teaching, also defended by Tori (2010) when dealing with distance education without emphasizing interactive technologies to reduce the distances in teaching and learning.

Khan (2013) takes a different pace in learning which highlights in his thoughts, words related to education portable, flexible and to encourage personal initiative and individual responsibility to restore the learning process, generating motivation, enthusiasm and own pace for the reinvention of school.

It is observed that the availability of applications grows gradually bringing innovations and possibilities to boost the production and design of the materials produced by teachers motivating the learning process and monitoring the evolution and profile of students of the digital native generation. Muller and Oliveira (2013) highlight several multimedia features that can be applied in education indicating applicability that expand the possibilities of expression and teach and produce knowledge.

Moran (. 2013, p 33) emphasizes that "the ideal is that these web 2.0 technologies - free, collaborative and easy, are part of the educational project of the institution [...]. And yet complements Tori (2010, p.217):

> web 2.0 applications have been spreading very quickly, creating a new culture. Students are already taking advantage of this technology daily. Although not for the potential it offers for use in educational activities, [...] would reach the classroom anyway, brought by the own digital native students.

In Table 1, identifies features that allow you to build content and propose activities with the use of the same promoting differentiated results, after the contents have not changed, what evolved was the media disseminate information and create more productive methodologies.

Resources/ Access	Proposal
https://accounts.google.com/signup	Owning an e-mail for communication in the virtual world; have an email account from Google - Gmail to facilitate interactivity in the use of several free tools.
(http://hotpot.uvic.ca/index. php#downloads)	Explore the HotPotatoes tool - questionnaires, cross-words among others.
http://farma.educational.mat.br	Explore a math teaching tool.
http://prezi.com	Create a presentation with Prezi tool Knowing interactive tools, fascinating views with elegant styles from an editor
http://puzzlemaker.discoveryeducation .com/WordSearchSetupForm.asp	Explore utility to elaborate crossword
http://www.myheitage.com.br	Create a family tree.
Recursos Microsoft Office – Publisher	Explore the Publisher features, Excel, PowerPoint and Movie Maker
www.blogger.com www.edublogs.org www.wordpress.com	Create a blog
www.facebook.com	Create a Facebook account.
www.google.com.br	Create a shared document; Create a presentation; Create a form / questionnaire
www.issuu.com	Convert files in pdf format to flash format and share them.
www.mindomo.com	Create a conceptual map.
www.stripgenerator.com www.pixton.com	Create comics (comic strips)
www.vokicom	Create an Avatar

Table 1 - Compilation of some examples of features / applications / software
available for investment in the development of educational content
Data source: Muller and Oliveira (2013) and other sites.

According to Silva and Spanholz (2014, p.75) "[...] The process of teaching and learning can vary in accordance with the desired objectives, the status of proposed learning, the subject to be studied [...] should draw up a teaching materials [...] is hypertext, interdisciplinary and cross the different realities and needs. "

Starting from the various possibilities of the Innovative Plan disciplines Training - PIC were planned and contemplated activities that promoted great interaction among participants challenging them to innovate, complement and add knowledge in their teaching practices as generations of students as and stresses Tori (2010) are coming to school without doubts and fears about the use of information and communication technologies.

Training - PIC were planned and contemplated activities that promoted great interaction among participants challenging them to innovate, complement and add knowledge in their teaching practices as generations of students, as well emphasizes Tori (2010) are coming to undoubtedly schools and fears about the use of information and communication technologies.

Fava (2013, p. 69) underscores the growing expression of participatory culture of "Education 3.0" where "increasingly passive and traditional media will be replaced by participatory and interactive media" reinforcing the idea that technology does not change whatWe learn but how we learn.

Kenski (2013) reports the search for teachers to keep up with innovations and learn more and reflects on the time and duties of teachers and ownership of the "technological age", as well as the need for updating and continuing education.

Ricardo (2013) reinforces that the technologies with its interactive interfaces, leverage the joint participation of students and teachers to build learning content.

The global perspectives that technology is becoming more accessible and functional and with ever more evolved devices with new data types is faced with overcoming barriers and benefits seeking targeted initiatives and programs for education and it advocates the importance of continuing education.

4 - Methodological procedures

In addition to bibliographic studies, we had the planning of each discipline aiming at contemplating the other in a sequence to take the effectiveness of such activities offered. The offering was made through a virtual learning environment - Moodle platform offering various disciplines in the years 2013 - focusing on innovative learning, and in 2014 - with a focus on Digital Management and Intervention in School.

The course had as target teachers active in the university, high school and elementary of state and municipal public networks. Aimed at a comprehensive technological participation, mixing motivating environments and local content using free digital resources and online. Because of its success had continuity in 2015 with his third bid still in progress.

The subjects were defined with catchy titles, shown in Table 2, and the program sought to contemplate applying different tools that have been complementing along the offerings to a previous activity.

5 - Results

The result of the survey and the resources identified a list of options and choices that made up the content developed and applied in the disciplines.

It is observed then that the options that Web 2.0 offers proposes a culture of participation where the subject can use, create and re-create and share content, meeting the perspectives highlighted by Moran (2013).

The practical activities developed during the disciplines awaken in the participants the prospect of a personal learning environment where it creates an activity or an educational object with use of a multimedia resource, many of them presented by Muller and Oliveira (2013).

The following Table 2 gives an overview of courses, resources and expected results.

Disciplines	Tool / application / software	Objectives	Results
Innovative learning with media	Google Drive/Docs	Elaborating a text by Google Drive	An elaborate text with several features to streamline the content presented.
	Paint	Selection and extraction of images to apply animations in the presentation	Practice capture and use image preparation resources to insert in the text.
	Gimp	Working with images and pictures clippings to enter the texts	Practice capture and use resources to build joint pictures, change images, add other image contrast working resources, alignment and proximity.
	Blogger	Building a blog for inserting text and images produced	Apply in blog facilitators resources information posted, but makes the blog interactive and attractive.
Educational management with media	IHMC Cmaps Tools	Creating concept maps	Organizing information and research on structure of concept maps and / or diagrams.
	Google Drive	Develop a form / questionnaire	Apply the forms assembly feature / questionnaires
	Facebook	Creating a group for discussions	Use the social network group on matters of interest and present discussions and news
	Paint	Diagramming images	Explore ways to diagram images for use in texts, presentations and other places.
	Software Jing	Creating videos	Explore videos of elaborate features
	Youtube	Posting Videos	Use the channel to publicize produced videos
	Photo Story	Creation stories	Create stories with photos
Use free resources and integrating applications in education	Google Drive – Docs	Building a shared text	Elaborate creative writing and a shared way
	Pixton	Creating cartoons and comics	Produce comics to insert text or blog.
	Blogger	Entering production in blog - adding gadgets	Improve the blog presentation with insertion gadgets.
	Audacity	Sound recording production for blog post	Write messages and post on the blog
	Voki	Production avatars	Create an avatar and post on the blog

Table 2 - Applications used in courses offered in Innovative Plan PIC Training - 2013/2014
Font: virtual learning environment Tutorials - Moodle platform Nutead / UEPG - PIC 2013/2014

Disciplines	Tool / application / software	Objectives	Results
Digital Intervention in School	Powerpoint	Mounting the presentation and video recording	Develop presentations and insert voice in the presentation
	Youtube	Video publishing	Use the channel to publicize produced videos
	Paint	Image Editing	Explore ways to diagram images for use in texts, presentations and other places.
	Inkscape	Preparation of drawings bi and three-dimensional (2D and 3D)	Preparation of a poster or brochure disclosure with Inkscape features
	Audacity	Using the voice recording feature	Creating a Podcast
	Blogger	Recording features to create the blog	Elaborate blog with different and creative resources.
Search on Open Educational Resources - REAS	Padlet	Establishment of a panel to threads of activities links	Available digital panel to work posting made in subject / course.
	Google +	Creating a webquest	Propose and create a webquest with educational purpose
Elaborating a course in distance education: from concept to planning	Powerpoint	Construction slides	Develop a sequence of presentation on a topic of class.
	Google drive	Issues of creation on the topic	Put together a questionnaire on the subject of class.
	Google search	Image search and websites on the subject	Find links and capture images on the subject of class for use in powerpoint presentation.
Presentation tools	Powerpoint	Preparation of a presentation	Learn how to use the major features available through software.
	Prezi	Preparation of a presentation	Learn how to use the major features available through software.

Table 2 - Applications used in courses offered in Innovative Plan PIC Training - 2013/2014
Font: virtual learning environment Tutorials - Moodle platform Nutead / UEPG - PIC 2013/2014

The results of the activities undertaken have shown commitment and dedication of the participants, facing the challenge of exploiting resources they did not know or had not yet used in educational proposals.

The testimonies of graduates revealed that it is possible to streamline and modernize the forms and media content creation and proposals for papers and assessments, as advocates Khan (2013), motivating students who are already acclimatised to the use of technological resources in their daily lives which also build content and contribute to the exchange of learning between teacher and student empower the construction of knowledge that become increasingly collective.

6 - Conclusions and Recommendations

Based on discoursed throughout the text, means of practical importance as the aforementioned way. For as we have shown we can prove, through creative tasks that teachers even with little skill in handling computers and programs can target different teaching strategies, using their professional experience.

It was observed that the educational success depends largely on the relationship with students' interests and as advocates Moran (2013), approaching the theory of practice and the experience of theoretical reflection.

Many participants were able to go beyond the proposed activity at your own pace or learning style identifying different concepts to measure the importance of pedagogical actions in a creative and shared technology environment.

It observed that capacity developing initiatives are needed to monitor the progress of education, to work the skills and expertise and seek to adapt to prevailing and constantly changing scenarios.

It became apparent in the discussion presented so far the relevance of the use of digital technologies in the educational context and the need for initiatives that address the target audience as quoted in the text. Soon, aims to continue the project to increasingly expand the disciplines and identify new

applications to be explored so that more and more can be proposed dynamic and motivating activities for teaching and learning.

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