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CREATING AN ELECTRONIC MAGAZINE IN WORDPRESS FOR PROMOTING THE PRACTICAL TRAINING OF STUDENTS¹

Dimitrios Liarokapis, Vasilios Papigiotis, Eleftherios Stergiou, Christos Gogos

Technological Educational Institute of Epirus e-mail: dili@teiep.gr Greece

Abstract: The report presents ideas and experiences in creating an electronic magazine for exposing knowledge and skills acquired during the practical training of students. We present the rational on relying on a Content Management System such as WordPress to set up a dynamic site where students can create articles with topics related to their practical training that would appear in public after a review process that would include their work and college supervisors. The benefits of such an endeavour could be multifold; students will be improving their writing and reporting skills, instructors will be gaining insights on the activities students are facing when entering the marketplace and employers will be gaining visibility in college settings that could help them attract prospective employees or establish synergies with the technological institutions.

Key words: e-learning, electronic magazine, students' practical training, internship.

1. INTRODUCTION

The technological educational sector of higher education in Greece has instituted the practical training of students as a formal requirement for study completion². Our students are expected to work as trainees for a period of six months at a position related to their field of studies. During this period, students report their daily activities to their employment and academic supervisors, who are responsible to verify that the activities are coherent with expected learning objectives.

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¹ This is an extended abstract version.

² https://atlas.grnet.gr/ is the website of the Centralized Internship Support System in Greece.

We have observed that all this information accumulated over the years although it could be used for qualifying the practical training completion, it remains underutilized. The *Practice Book* the students prepare containing mainly their daily entries, even though it can play an important role to help them remain focused and feel accountable for their time it would be hardly read by anyone else not formally connected. Its quality and utility could be compromised because students tend to repeat entries in different days or they do not include the right level of detail.

An idea to help increase the merit of the practical training process would be the option or the requirement to have students identify some cases that were involved during their training and write some technical reports about them in a way that could help others learn something or acquire a skill. These could be hosted on an electronic magazine available and hopefully useful to a larger audience. We list some benefits for all parties involved in this process.

1.1. Benefits for Students

Younger students will be able to see examples of activities they might face during their practical training ahead of time. They can increase their understanding about problems and issues. They will be motivated to study or research a particular area in order to increase their chances for working for a particular sector. During their practical training, they will have the chance and the motive to improve their technical writing, as they will have the opportunity to report based on real experiences

1.2. Benefits for Instructors

Instructors will have a pool of case studies they could use for their teaching activities. They will have a window open to current practices or technologies applied in the market place that would consider when upgrading their courses or introducing new ones.

1.3. Benefits for Employers

Employers will utilize and contribute to a body of technical knowledge related to recent problems and interests. They could benefit from learning of best practices applied elsewhere. Even though there is a concern that such a venue might appear a threat to revealing trade secrets or other sensitive information, it generally accepted that many successful companies and corporations have adopted an open culture in sharing information. They can become more visible and cultivate synergies with the educational sector.

2. CHOOSING WORDPRESS

WordPress is an open source software that started as a blogging system but it evolved to be the most popular content management system leaving behind other popular systems such as Joomla or Drupal³. Many individuals and small or large organizations rely on this platform to set up their web presence or their intranet communication. For example, www.wired.com an electronic technology magazine, which has received National Magazine Awards for General Excellence and Design in the US has migrated to WordPress since 2015 [1].

Regardless the potential success of our endeavor, we also wanted to experiment with WordPress as a development platform in order to evaluate whether we should develop and offer related courses on content management systems. Based on evidence from past practical training of students, many are getting involved in assisting their employers with such systems. An introductory course would familiarize them with the installation, structure, parameterization and extension of such tools and could help them become more productive enabling them to demonstrate a greater initiative⁴.

3. DESIGNING A WORKFLOW

Even though WordPress has become very popular for its relative ease in creating simple web sites, it cannot readily accommodate dynamic web pages that would require a special workflow like the one we envisioned. In such cases, there is a need to research for a free or paid plugin, a module that can extend the basic functionality in a relatively seamless way, or even develop a new one [2]. In our case, we wanted to satisfy specific requirements they were not readily supported by a basic installation. A sample is outlined in Table 1.

Table 1.

	High Level Requirement		
1	Students will submit their articles for review by two parties (their employment and academic supervisors).		
2	Supervisors should be authorized to approve only student work they supervise.		
3	There should be a way to direct the students to following a set of customizable guidelines.		
4	Both supervisors would need to approve the article; the academic supervisor will have the authority to publish it.		
5	There should be an easy way for the supervisors to provide feedback and return the article for improvement, for example by simply selecting from a list of violated guidelines or by pressing corresponding buttons. We had considered guidelines mentioned in [3]		

³ https://w3techs.com/technologies/overview/content_management/all

⁴ We have observed in several cases that initiative demonstration is ranked lower compared to other metrics in employer evaluations of practical trainings.

The current working prototype of the magazine [4], utilizes several WordPress plugins that satisfy our requirements at a certain degree. This is actually one of the main challenges in trying to build a web site with existing components and without developing tailored code. There are thousands of available plugins to choose from and there is not always possible to match the exact needed functionality. Sometimes you need to adjust the needs and requirements to the functionality provided. Table 2 provides the most important plugins that are currently chosen.

Table 2.

	Plugin Name	Purpose
1	Adminize	Provides the ability to hide functionality from certain user roles
2	Akismet	Filters comments that are detected as spam. Modifications can be traced in comment history. This plugin is included in a basic WordPress installation.
3	Co-Author Plus	Supports the ability multiple authors. Provides an alternative to approximate the current requirement of having two levels of approval (employment supervisor & academic supervisor).
4	Pre-Publish Post Checklist	Supports a checklist of guidelines that should be followed. Student needs to check all items before submission. Supervisors can uncheck the ones they do not meet and return article to student.
5	Simple Post-Notes	Helps students and supervisors share review notes about the article.
6	User Role Editor	Provides the ability to create user roles with specific privileges.

4. CONCLUSION

In this work, we have investigated the utilization of a content management system such as WordPress, for creating an electronic magazine for promoting the practical training of students. Even though it is not trivial to create such a site, it is possible to exploit free plugins in order to create a functional site without the necessity of programming. Someone will need to be inventive enough to match or adjust existing plugin functionality to a set of requirements.

A working prototype has been created that will help us shape our needs and specify further improvements⁵. We understood that it is very important to host the site constructed on a hosted service very early in the process instead of developing it in on a personal computer, because it gives the chance to collect feedback early. In our case, it can also play the role of an experimental platform to be used in developing educational material in the subject of content management systems.

⁵ Currently could be accessed at: www.gradsatwork.eu

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