E-PORTFOLIO IN STUDY INFORMATICS

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Abstract. The rapid breakthroughs in new information and communication technologies will further change the way knowledge is developed, acquired and delivered. One of the effective technologies is e – portofolio. A new point of view of applied e – portofolio in forming competences of using the computer has described. A new definition for e – portofolio has proposed. In developing of theoretical part has been applying the following principles of elaboration: *the continuity, the personalization, the signification, the clarity and the monitoring.* E – portofolio consists from 2 parts: theoretical part as e-manual and practical that has been elaborating by students. The obtained results are analyzed.

Key words: e-portofolio, individual study, collaborative learning, peer evaluation, Internet.

1. INTRODUCTION

- 1.1 Notion of e portofolio has been known since 1990. In literature there are many definitions:
- Collection of works related the effort, progress and results of student in one or same domains;
- A personal collection of information that has described and documented the results and knowledge of students;
- Collection of works design for realization the concrete objectives;
- A tool for assessment own knowledge and competences of student.
- 1.2 In our point of view e portofolio is a collection of chapters, which has included the progress of student in forming competences.
- 1.3 For argumentation of this definition the technology of e-portofolio in study informatics has elaborated. In such context e-portofolio included 2 parts:
- Theoretical, presented to student in form of e-manual,
- Practical, completed by student individually and related his/her own progress.

2. THEORETICAL PART OF E-PORTOFOLIO

- 2.1 E portofolio is a collection of 9 chapters, 7 of each representing the progress of student in forming competences in study Windows, Microsoft Word, Microsoft Excel, Microsoft Access, Microsoft Power Point and Internet. Chapter 8 is a individual work in study viruses and antiviruses through Internet and chapter 9 is a assessment of student progress.
- 2.2 In elaboration of theoretical part has used the following principles: *the continuity, the personalization, the signification, the clarity and the monitoring.*
- 2.3 The following structure of e-portofolio has proposed, where C chapter:

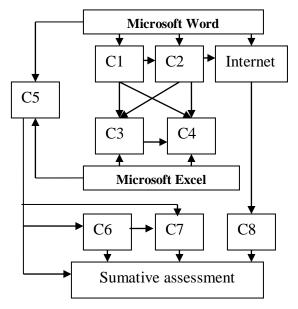


Fig.1 The structure of e - portofolio

- C1 Windows and Microsoft Word;
- C2 elaboration a document in Word;
- C3 Microsoft Excel
- C4 diagrams in Microsoft Excel
- C5 graphics in Microsoft Word
- C6 Microsoft Power Point
- C7 Microsoft Access
- C8 individual work
- C9 summative assessment
- 2.4 The following didactical methods: collaborative learning, peer evaluation and case study has used. The students have been used only one base notion and this information has been completed through the student progress.
- 2.5 As can been seen the Internet is first used after second chapter and many times the students will receive the tasks, included the application of Internet or e-mail.
- 2.6 The following conceptual scheme has been proposed:

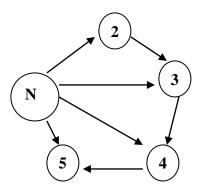


Fig. 2 The conceptual scheme

N – base notion;

- 2 base notion is completed in Microsoft Excel;
- 3 base notion is completed in Microsoft Power Point;
- 4 base notion is completed in Microsoft Access;
- 5 base notion is completed in Microsoft Access;
- 6 base notion is completed in Internet;

3. PRACTICAL PART OF E-PORTOFOLIO

- 3.1 3.1 Practical part of e portofolio. It is consisted by 9 modules. Each chapter has included 10 practical tasks.
- 3.2 To complete the practical part the student must read the theoretical material and complete the corresponded task.
- 3.3 To motivate the students has proposed many tasks, for examples:
- These is my CV, please sent me yours;
- Complete the table with your and yours' classmates marks at the beginning and after the first session;
- I cannot find what is the new in Microsoft Excel. Please help me!
- Make your first presentation!
- 3.4 At the lesson of informatics students learn how to elaborate his/her e-mail box and then they will use e-mail to send the elaborated files (or chapters) for peer evaluation.

4. RESULTS AND DISCUSSION

- 4.1 The results of used e –portofolio in forming the competences in study informatics has analyzed by Microsoft Excel. In experiment have been included 22 students.
- 4.2 Analyzing the results, has observed a difference between students and marks.

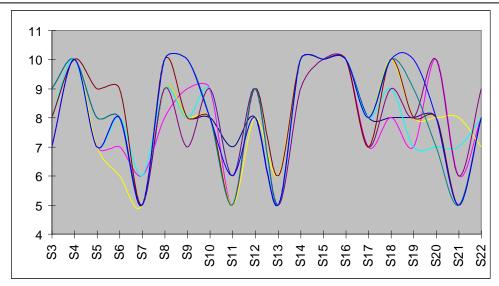


Fig.3 The dependence between marks and chapters

The obtained results has shown that majority of tasks has completed with marks 7 and above. Same pupils learn slowly and can not complete all 10 proposed tasks for each chapter.

4.3 The future work is to determine the relation between time and learning style.

5. CONCLUSIONS

- 5.1 In this paper we address the technology of e-portofolio in study informatics, proposing a methodology that instead of forcing the concept mapping in instructional design to define the relation between notions as a big interdependence between them.
- 5.2 The competence can be formed in practical application of theoretical study.

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