Fostering Students' Personal Development in e-Learning Environments through Designing an e-Progress File System

Morteza Rezaei-Zadeh, John O'Reilly, Brendan Cleary, Michael Hogan, Mohsen Ansari, and Eamonn Murphy

Abstract—This paper addresses the importance of Personal Development of students in virtual learning environments and suggests a system which can be embedded in the e-learning platforms for tracking and fostering their personal capabilities. This tracking system tries to monitor and document students' progress in the different aspects related to their studies, research, personal development progress, etc., helping them extend their learning beyond the disciplinary focus and engage them in acquiring some essential competencies they will need in their professional and personal life. To do so, a storyboard has been drawn based on the current literature as well as experiences of some experts including students, entrepreneurs and academics represented through some focus groups. Our primary focus is on allocating some technical capabilities in an e-learning platform based on the personal pedagogical experiences of participants, enabling both students and tutors to use them for their personal development planning. Before drawing the storyboard five descriptive components named Functional Specifications (FS) have been written based on the participants' experiences, trying for defining different aspects of the storyboard. Descriptions and examples are given of some different approaches that are being used to support this storyboard. While the paper is written from an e-learning perspective, the issues and processes raised are applicable to any higher education system that seeks to value and reward personal development.

 ${\it Index\ Terms} \hbox{--} \hbox{Personal development, e-learning, storyboard, progress file.}$

I. INTRODUCTION

There are a great variety of definitions of Personal Development Planning (PDP) and implementation within the higher education sector. The Quality Assurance Agency (QAA) in the UK defines PDP as: "a structured and supported process undertaken by a learner to reflect upon their own learning, performance and/or achievement and to plan for their personal, educational and career development. It is an inclusive process, open to all learners, in all HE

Manuscript received December 14, 2012; revised February 16, 2013.

Morteza Rezaei-Zadeh and John O'Reilly are with University of Limerick, Ireland (e-mail: Morteza.RezaeiZadeh@ul.ie, John.OReilly@ul.ie).

Brendan Cleary is with University of Victoria, Canada (e-mail: bcleary@uvic.ca).

Michael Hogan is with National University of Ireland (NUIG), Galway, Ireland (e-mail: michael.hogan@nuigalway.ie).

Mohsen Ansari is with Faculty of Entrepreneurship, University of Tehran, Iran(e-mail: ansarim@ut.ac.ir).

Eamonn Murphy is with Enterprise Research Centre, University of Limerick, Ireland (e-mail: Eamonn.Murphy@ul.ie).

provision settings, and at all levels" [1]. PDP has become part of the mainstream higher education institutional agenda. This coming together of progressive pedagogical ideas with a major policy focus on the development of human capital changes the context within which pedagogical experimentation takes place [2].

Given that the importance of addressing personal development issues by universities in general, e-learning environment are an important part of the solution. Moreover, there is some evidence confirming the special role of Information Technology (IT) in promoting people's personal development by allowing individual, organization, nation and society the processing of a growing volume of data in an increasingly lower time and in an open space [3]. More specifically, Kuh & Hu (2001) confirmed that computers and IT use is positively related to college student learning and personal development [4].

A major concern of this paper is how higher education generally and e-learning settings specially can be set up, preparing students not only for their specific academic fields rather for the complex world have surrounded them [5], [6]. Barnett claims that higher education is faced with preparing students for a super-complex world and individuals have to take responsibility for continually reconstituting themselves throughout their lifespan, which requires a range of attributes such as flexibility, adaptability and self-reliance [6]. As one of the other benefits of PDP, Monks et al. (2006) mentioned that PDP process can result in increasing employability with the identification of explicit transferable skills. However, institutions vary considerably in the extent to which career development is included in the PDP process [7].

We need to think about the curriculum if we want to promote students' personal development through their studies at universities. Jackson and Ward (2004) identified represented 5 different curriculum-assessment environments that universities apply for addressing their students' personal as well as professional plans. These five approaches are: The "additional" or "hidden" curriculum, An "explicit" curriculum, A curriculum based on a "model of learning", An "institutional" and finally A "personal" curriculum for a trans-disciplinary world. It seems that each of these curriculum approaches can be effectively used for delivering a part of Personal Development Plans, as we used some of them in representing our storyboard in this paper [8]. To do so, it was already reminded by Entwistl (1979) that no single approach of student learning should be allowed to become so dominant that other ways of understanding are overlooked or ignored [9].

DOI: 10.7763/IJEEEE.2013.V3.196

This study as a part of a bigger research project presents one of the designed approaches for helping both students and tutors to monitor and plan for their personal development in universities. What is the Progress File and what is its relationship with Personal development? East (2005) believes that progress file, which is owned by the learner, is one of the most important mechanisms for PDP. It involves putting together evidence showing how the student has identified their learning needs, along with an audit of their learning skills and, over the period of study, the ways that they have developed and enhanced these skills [10].

Using Personal Files as a mean of personal development is almost a recent tradition in the universities. One of the recommendations of the Dearing review of Higher Education (National Committee of Inquiry into Higher Education [NCIHE], 1997) was as follows:

We recommend that institutions of higher education, over the medium term, develop a Progress File. The File should consist of two elements:

A transcript recording student achievement which should follow a common format devised by institutions collectively through their representative bodies;

A means by which students can monitor, build and reflect upon their personal development [11].

Progress File has been used as one of the key tools in the process of Personal Development during the last decade. Some universities empirically implemented some versions of Progress Files in their systems and published their experience with them; such as: Sheffield Hallam University [12], University of Luton [13] and University of London [14]. Haigh (2008) reviewed the published literature between 2000 to 2007 and studied three cases describing experiences of implementing progress files in a higher education institution. He concluded that while Progress Files have numerous advantages for students such as: self-regulated learning, focused and effective tutorials, increasing employability, developing the autonomy of learners, etc.; the successful implementing of these files

need some pre-requirements, e.g.: The full engaging of Academic Staff in the process, providing sufficient PD resources, etc. [15].

This paper provides insights into designing an effective e-Progress File for embedding in the e-learning platforms which are used in universities.

II. METHODOLOGY

As a qualitative research methodology, 3 separate focus groups with the active participation of 6 academics, 12 master students and 5 entrepreneurs as the experts and endusers of our aimed e-learning platform were conducted in University of Tehran, Iran. Participants in each focus group were required to generate some solutions only based on their personal experiences with regard to this question: How to assure that an e-learning system provides sufficient support for students' personal development through an effective e-Progress Profile? Each participant raised a solution based on his/her experience in his/her educational life and described the different dimensions of that solution. This was an open discussion and other members of the focus group participated in the discussion and expressed their ideas regardless of rightness or wrongness of the answer. All of these generated solutions were gathered, classified and used to construct Functional Specification (FS) and finally schematic storyboard. FS includes: Educating (How we can promote and implement PT in our e-learning platform?), Motivating (How users should be encouraged to use PT?), Monitoring (How users' actions related to PT should be monitored?) and Assessing (How users' actions in PT should be assessed?).

In addition, a literature review was conducted in terms of the following keywords: "Progress File", "e-learning", "University". Some online databases e.g. Google Scholarship, Sage, Springer and Willey have been used in this process. Accordingly, for drawing the final storyboard the below process has been followed:

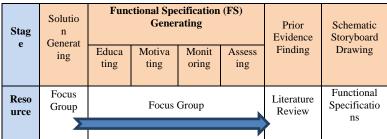


Fig. 1. Different stages and process of this study.

As it can be seen in Fig. 1, this process has been followed from the left to right. Firstly, following the three focus groups, the solutions for well implementing PT in an elearning setting were generated. Then, using the recorded discussions of members of the groups, FS were written and then supports from the empirical studies were identified. The FS tries to transfer the generated solution from the theoretical to practical domain. Finally, using the functional specification, Schematic Storyboard has been drawn (Appendix 1).

III. FINDINGS

Four components of FS related to the Progress File (PF) were written here by reviewing participants' experiences have been generated through the focus groups. These components of the FS were used to draw a storyboard (Appendix 1) for the well implementing of PF in e-learning settings of higher education.

The main role of this PF is importing, integrating and

representing each user's progress during his/her studies/teaching as well as personal development and outcomes at this platform. To do so, students as well as tutors' gained score in each module as well as their score and achievements in their Reward system¹, Interaction score, Personal development programmes, and research and practical outcomes e.g. papers, books, Business Plans, Launched Business, etc. will be transferred and shown in this file. This transferring is done in two ways. While most of users' data including their modules scores, rewards, interaction score and personal development activities will automatically be exported to their PF, some of those details e.g. their research and practical outcomes will be manually transferred. Users can see their position amongst their other peers in each of those sections as well. Also they can write a journal as a self-reporting system about their progresses (achievements), weaknesses, strengths, opportunities and treats.

Regarding the motivating, all the sections of this profile excluding "Journal" will be automatically and gradually imported to the PF from other sections of the platform. So, there is no any action required by users to insert these details to their PF. Users should be eager to see their integrated progress in the different areas and their position amongst their peers. More importantly and based on the experience, if users know that their progress in different areas is visible by other users, they are more motivated to get a better achievement; so, each user's PF sections except the journal are visible for all users. This fact would be a motivational factor for users to complete their research and practical outcomes, helping themselves to make a better representation from themselves. Furthermore, some components of this page affect the users' Reward System, so, users need to complete them for a better score in the Reward System as well.

As it has been mentioned, all users including students and tutors have been assigned to this e-learning platform can see and monitor each other's PF. The only component of these profiles which is exception of seeing by others is "Journal". Also, Administrators can randomly monitor users' manually submitted information in "Research and Practical Outcomes", assuring that those details have been correctly submitted. Tutors and Personal Tutors (PTs) also will be able to see their students' PF. Also, PTs' reports will be a component of students' PF. For facilitating the use of the designed Progress File, the output and reports can be seen as the Progress Curves. These curves show the students and tutors' process of progress during the time in each specific item.

With regard to the assessing details have been submitted in these profiles, most of those details have already been assessed and integrated to the users' Reward System or Assessment Scheme. Only two last components of the PF including "Research and Practical Outcomes" as well as "Journal" were not already addressed by the prior assessing systems; so, these details which will be manually submitted in the Progress Files by the users themselves will be gradually and automatically assessed, weighted and

exported to their Reward System as well.

IV. DISCUSSION

The storyboard has been suggested in the above for enabling e-learning students to track and plan for fostering their Personal Development has been supported by some scholars in this area.

Jackson and Ward (2004) proposed PF for students' monitoring and achieving their personal goals and plans. They mentioned that implicit in the conception of the progress file is the notion that, while universities and colleges can take primary responsibility for the assessment and representation of disciplinary learning and achievement, learners themselves must take primary responsibility for evidencing and representing their learning and achievement in, and for, the trans-disciplinary world [8].

While East (2005) identifies the main practical problems of using PF in the process of PDP (e.g. lack of agreement on the skills that higher education students are expected to acquire), he also point out that Effective implementation of progress files is seen as enhancing the learning experience of students [10].

Such as any other process, especially in the educational settings, IT has a significant impact for improving the capabilities of PFs. Croot and Gedye (2006) point out some advantages of electronic based progress files, including: letting students to practice IT skills, enabling students to use the broad range of useful resources and tools, keeping records and files regardless of their required space, capability to share students' information with designated people (e.g. tutors), having discussion forums, Containing some advanced tools CV builders, and enabling students to upload information at any time and format [16].

Accordingly, some scholars have already tried to implement IT in the aim of enhancing PF performance. Longman et al. (2009) embedded a specific tool in Moodle as one of the open-source e-learning platforms for students' target setting and tracking their progress through their studies in this platform. In this case, while many students were challenged by the demand of reflecting on their own learning and achievements and few were able to plan effectively for their personal, educational and career development, the value and viability of such tools in PDP has successfully been demonstrated [17].

V. CONCLUSION

This study aims to identify and design the main aspects in respect of successfully implementing a system of Progress File in an e-learning platform. As East (2005) mentioned, one of the major obstacles of implementing personal profiles in universities is related to the reluctance of academic staff and students to operate it. They think this is an additional burden on them [10]. For resolving this barrier in our designed system, almost all of the calculations and importing-exporting data will be automatically done. In fact, this Progress File is completely integrated to the other processes of teaching-learning platforms and most of the required data will be transferred to the students as well as tutors' Progress Files; so, there is no any considerable need for manual data entry to the system by its users. Same to the

¹ Reward System is one of the other capabilities of our designed e-learning platform that calculate the final and total score of each user according to the different educational, research and administrational criteria. Then, some rewards will be allocated to the users who have gained certain amount of scores

experience of University of Glamorgan [10] and consistent with the suggestions of Brennan and Shah (2003) [18], this Progress File has been designed to be comprehensively integrated to the students' Personal Tutorship system. This integration helps tutors and students to keep an eye of the students' Progress File and modify/complete it wherever is necessary.

While there is empirical evidence that students are willing to use Progress Files in the process of their studies [14], Haigh (2008) mentioned that for providing a successful PF system, academic staff has to be fully engaged in the process [15]. This claim has been approved by other scholars as well. Tariq and Cochrane (2003) point out that while external pressures to explicitly develop students' key skills within higher education are intense, institutions need to reflect more on the implications of any policies and strategies for implementation they impose upon their staff [19]. The current designed Progress File provides this engagement in three ways as following: integrating Progress files into the Personal Tutorship system, Sharing students' progress files with their tutors, and providing the Progress Files for tutors as well. The latter one means that having Progress Files is not dedicated and restricted to students only and tutors also have their Progress Files in the system.

In another study, Brennan and Shah (2003) point out some disadvantages of implementing PF and PDP in the universities. It seems that "impact of these files on the workload of staff" and "Problems of storage of the records in the paper form" as two major concerns of that study have been addressed in this e-Progress File system [18]. This e-Progress File resolved the two barriers above by the automatic transferring data from other integrated software which have been used in the other parts of the university.

Since Progress Files are not be cheap to develop [14], another benefit of designing this e-Progress File is it can decrease the cost of providing this service for universities. This cost-effective system should be more reasonable than the paper-based systems since it provides the required data and information by integrating to other software and applications which are working in the university.

While evidence that progress files can help to bring adequate advantages is so far lacking [14], but it seems that using PF and consequently Personal Development programmes promotes the identity of "autonomous/self-directed/flexible lifelong learners" [20], support a metacognitive approach to learning [8], provides an effective deep learning in the universities and increases students' achievements and interests outside the formal curriculum [16]. Thus, this e-Personal File can be conceptualised as one of the technologies which can be used for encouraging students and academic staff to identify and properly respond their specific needs in their professional as well as personal life.

One of the limitations of this system is related to the staff's competencies for doing their expected role in the system. Clegg and Bradley (2006, b) provide an evidence, showing that some staff feel that they do not have the skills to support reflection and that they also question its usefulness among groups of students who are not predisposed to engage [21].

RESOURCES

- [1] Qaa. [Online]. Available: http://www.qaa.ac.uk/
- [2] S. Clegg, "Critical readings: progress files and the production of the autonomous learner," *Teaching in Higher Education*, vol. 9, no. 3, pp. 287-299, 2004.
- [3] M. M. Daniel and M. Valerica, "It&C and the Personal Development," Annals of the University of Oradea, Economic Science Series, pp. 807-813, 2011.
- [4] G. D. Kuh and S. Hu, "The Relationships Between Computer and Information Technology Use, Selected Learning and Personal Development Outcomes, and Other College Experiences," *Journal of College Student Development*, vol. 42, no. 3, pp. 217-232, 2001.
- [5] R. Barnett, "Super-complexity and the curriculum," *Studies in Higher Education*, vol. 25, no. 3, pp. 255–265, 2000.
- [6] R. Barnett, Realizing the university in an age of super-complexity, Buckingham: SRHE and Open University Press, 2000.
- [7] K. Monks, E. Conway, N. Dhuigneain, and Muireann, "Integrating personal development and career planning: The outcomes for first yearundergraduate learning," *Active Learning in Higher Education*, vol. 7, pp. 73–86, 2006.
- [8] N. Jackson and R. Ward, "A fresh perspective on progress files—a way of representing complex learning and achievement in higher education," Assessment & Evaluation in Higher Education, vol. 29, no. 4, pp. 423-449, 2004.
- [9] N. Entwistle, "Personal Development and Academic Learning: A Review and a Postscript," *Higher Education*, vol. 8, no. 4, pp. 487-490, 1979.
- [10] R. East, "A progress report on progress files: The experience of one higher education institution," *Learning in higher education*, vol. 6, no. 2, pp. 160–171, 2005.
- [11] National Committee of Enquiry into Higher Education [NCEHE], "Higher Education in the Learning Society: Report of the National Committee," The Dearing Report, Middlesex: HMSO, 1997.
- [12] R. Bingham, "Implementing Progress Files: Sheffield Hallam's Experience of the Staff Development Issues," in *Proc. A presentation at the SEDA Conference on Implementing Progress Files: Challenges and Solutions across the Sector*, 2002.
- [13] C. Collins, "Performance-based item analysis for profiling skills and competencies for progress files," in *Proc. the 7th CAA Conference*, Loughborough: Loughborough University, 2003.
- [14] F. Fry, E. Davenport, and P. Theresa, "Developing Progress Files: A case study," *Teaching in Higher Education*, vol. 7, no. 1, pp. 97-111, 2002
- [15] J. Haigh, "Integrating progress files into the academic process A review of case studies," *Learning in Higher Education*, vol. 9, no. 1, pp. 57–71, 2008.
- [16] D. Croot and S. Gedye, "Getting the Most out of Progress Files and Personal Development Planning," *Journal of Geography in Higher Education*, vol. 30, no. 1, pp. 173-179, 2006.
- [17] D. Longman, L. Jones, B. Kurzik, and K. Green, "Developing teachers of tomorrow: Embedding knowledge audits in personal development planning," *Newport CELT Journal*, vol. 2, pp. 63-68, 2009.
- [18] J. Brennan and T. Shah, Report on the implementation of progress files. Centre for Higher Education Research and Information, Keynes, UK: Milton, 2003.
- [19] V. N. Tariq and A. C. Cochrane, "Reflections on key skills: implementing change in a traditional university," *J. Education Policy*, vol. 18, no. 5, pp. 481–498, 2003.
- [20] S. Clegg and S. Bradley, "Models of Personal Development Planning: Practice and Processes," *British Educational Research Journal*, vol. 32, no. 1, pp. 57-76, 2006.
- [21] S. Clegg and S. Bradley, "The Implementation of Progress Files in Higher Education: Reflection as National Policy," *Higher Education*, vol. 51, no. 4, pp. 465-486, 2006.



Morteza Rezaei-Zadeh is presently a PhD researcher in the University of Limerick, Ireland in the field of elearning and entrepreneurship. He has an ongoing interest in research and praxis in developing e-learning systems and has previously published and given papers on various aspects of e-learning, on pedagogical, technical and entrepreneurial dimensions. Currently, he tries to develop a specific e-learning platform based on

the cultivating students' life-long learning and entrepreneurial competencies through designing a hidden curriculum and embedding some new technical capabilities in Moodle as one of the famous open-source elearning platforms. He designed 27 different pedagogical modifications for improving e-learning platforms' capabilities and effectiveness.

