

## Development of Integrated Portal (IP) as an E-Tool for the Enhancement of Job Marketability

Salako Taofiqat Adebosola<sup>1</sup>

Khairi Abdul Rahim<sup>2</sup>

Shaharudin Ismail<sup>3</sup>

ZulHilmi Bin Abdullah<sup>4</sup>

### Abstract

---

*This paper analyses the need to develop an Integrated Portal (IP) to facilitate job marketability and lists its components. The IP will be in form of a website which allows known stakeholders to make use of it. The stakeholders are identified in this paper and the features of the Integrated Portal are also briefly explained. It also goes further to explain the benefits and some basic requirements needed for the IP. The e-portfolio is used as the main system while other small systems are linked to it.*

---

**Key Words:** Job Marketability, Integrated Portal

### 1.0 Introduction

The Integrated Portal is a framework that is proposed to facilitate job marketability among users. This is because, in recent times, there are a lot of problems associated with getting employments after they finish school or vocational training. This is due to the fact that most employers demand for employees that have better employability skills than those most potential employees offer right now. The Integrated Portal will consist of the main system and other systems or parts linked to it. The linking or integration of more than one system to other systems is as a result of what is known in Information Technology as System Integration. System integration can be defined as the combination of different software components into one unit. It can also be defined as when different subsystems combine to form products or when various components combine to form subsystems.

The proposed Integrated Portal will be made up of four systems in which the main system will be the Electronic Portfolio which is also known as E-portfolio. The E-portfolio is an archive of one's accomplishment which one can still go back to when he or she wants or which can be used to showcase one's work to prospective employers. It also requires a combination of multimedia technologies such as audio recordings, database, spreadsheet, video and others. It is also a way of showcasing student achievement through class assignments, community service, and occupational experience. The E-portfolio is also known by different names which are: Digital portfolios, multimedia portfolios, e-folios and web folios. This is because it will be in the form of a website. The IP is primarily proposed to support job marketability of graduate students and others and to bring them in contact with prospective employees and make it easier for all stakeholders' interaction. This paper will propose an IP that will facilitate in the marketability of the graduate students and other potential employees. It will also comprise of different systems which are assigned to different stakeholders in the Integrated Portal.

---

<sup>1</sup>Salako Taofiqat Adebosola, University Sains Islam Malaysia, 71800, Negeri Sembilan, Nilai, Malaysia

The stakeholders, components and the basic requirements for the IP will be identified in this paper. Finally, some of the features of the IP will be highlighted.

### 1.1 Research Questions

An attempt was made to answer the following research questions:

- What is the Integrated Portal?
- What is IP compared to EP?
- How is IP different from EP?
- What are the features of IP?
- Who are the people to use IP?

Of what importance is IP to enhancement of job marketability?

### 1.2 Objectives of the Study

- To make known what the Integrated Portal is
- To identify the stakeholders, components and basic requirements needed for the IP
- To discuss the importance of IP to the enhancement of job marketability
- To highlight features of IP

## 2.0 E-Portfolio

Ritzpaugh and Singh (2006) utilized the terminology E-portfolio in their study and defined it broadly as “A collection of authentic and diverse evidence from a larger archive representing what a person or organizations has learned over time on which the person or organization has reflected, and designed for presentation to one or more audiences for a particular rhetorical purposes” (p. 152). This means e-portfolio is the compilation of documents like audio, video and so on that an individual has learnt over a period of time and which is to be used for a particular purpose. The purpose of an e-portfolio should be clear and precise so as to know the kind of tools to be made use of. Love, McKean and Gathercoal (2004) described Web folios (a type of digital portfolio) as “the most significant effect on education since the introduction of formal schooling” (p. 24). There are different types of E-portfolios some of which are the student e-portfolios, teaching e-portfolios, institutional e-portfolios, and so on but all these e-portfolios fall under three main categories which are: Developmental e-portfolios, Reflective e-portfolios and lastly Representative e-portfolios.

Developmental e-portfolios contains the record of information an owner has done over a period of time which may be as a result of what he or she has learnt. Reflective e-portfolio is an e-portfolio which contains an owner’s personal reflection on his content and its result on the owner’s development while the Representational e-portfolio showcases the owner’s successes and achievements in relation to a specific work or developmental goals. The Representational e-portfolio is sometimes called Career e-portfolio when it is to be used for job search. All these e-portfolios can be mixed together in order to create an e-portfolio for a specific purpose

### 2.1 Concept of E-Portfolios

According to Fugate, Kinicki and Ashford (2004), they defined graduate employability as the relationship between industry demands for a particular labour and what the individual has to offer. This is because the past demands from industries then is different from what the present industry is asking for. As a result, there is need for students to be familiar with this in order to help them be able to get jobs. They also need to find more resources which can help them to increase their marketability. E-portfolio is one of the latest tools designed in order to showcase skills and talents possessed by an individual. The use of digital or electronic portfolio is increasing and catching the eye of the academia and world at large. The concept of e-portfolios is not new but making use of it for online job recruitment and so on opens up a new set of ideas.

For example, Batson (2002) described the development of electronic portfolios as the biggest thing in technology innovation on campus. The increasing use of computers in the classroom has added a new twist to developing portfolios in a new format that combines technology media and printed documents. Moreover, the advancement of computer applications (including media-generated applications) and the ease at which these applications can be transferred among platforms simplified employing technology in the development of portfolios. Worthington (2000) noted that “technology has facilitated the easy capture, storage, display and retrieval of any/all information and materials to be included and he also noted that technology has enabled the portfolio to be cross-platform, accessible via Mac or Windows or other Internet environments through the use of a browser” (p.244).

Powell and Jankovich (1998) also stated that portfolios should be targeted to meet employers’ needs and designed with employers’ view in mind. In making an electronic portfolio marketable, there are some things that should be present in it. Examples are the curriculum vitae or resume, student accomplishments and also different projects that have been worked on throughout their university days. Certain multimedia products such as flash, animation and other media must also be included. Lesson plans, case studies and artistic performances should also be made available in the electronic portfolio. The range of benefits can vary and it is dependent on the complexity of the portfolio and the extensive tools included in it. Nevertheless, writers in this field agree that developing a portfolio digitally brings advantages and has certain uses. Ritzhaupt and Singh (2006) were more elaborate in describing the potential benefits from developing electronic portfolios. They looked at electronic portfolios from the viewpoint of the student as well as the institution and identified benefits and uses from four perspectives: Industry participation, Student Development, Faculty Development and Administration. Educators and Writers agree that portfolios in general and electronic portfolios in particular can be used as a marketing tool for the students when they seek employment and/or when they apply for admission to graduate programs or transfer to other institutions. It also prepares the student for possible questions and answers during interviews (Batson, 2002).

Webb (2011) also conducted a research to discuss the advantages of e-portfolios as hiring tools. Half of the students from his survey said the employers did not ask to see the portfolios but that they were the ones who initiated it into their discussion. Also, even though most of the employers said the use of e-portfolio was a good thing for them, none of them mentioned that its accessibility was easier for them than the manual method. Besides, some employers also said there were some relevant documents that they would have liked to be present in the portfolios but which are not. Previous studies have also shown that there were a lot of differences in the requirements asked for by the employers and the products the universities are giving out. This in turn affects the students negatively in that the employers will not employ them since they do not meet their requirements. This could have been avoided if both the universities and the employers had worked hand in hand in order to help the students attain the best of their abilities in order for them to get all the necessary skills needed for the different workplaces they were going into. This would have also increased the students’ marketability because prospective employers would already be aware of them and their capabilities and would already know if they were suitable for their workplace or if they need to brush up their skills. Pandian (2010) and her team conducted a study on employability needs and university curriculum in Malaysia and they also found out that the major reason why there is limited job opportunities for graduate was as a result of lack of soft skills in graduates which assuming the school had been aware of it, they would have been able to help the students out.

In summary, we can say electronic portfolio provides better ways of getting information to help employers decide whether to interview applicants with ease. The electronic portfolio helps to increase the employers’ perception of the applicant thereby helping to reduce diversity within an organization which affects organizational viability but this can be achieved only if the employers know the usefulness of the electronic portfolio. Most student e-portfolios created by Universities do not really meet the need of the employers which makes it hard for them to use.

Also, the e-portfolios created are mostly learning-based. Even though they are also being used to market students' achievement, which is not really the purpose of the e-portfolio.

## 2.2 Students and Employability

Pavlin (2010) stressed that "the concept of employability should always be defined as a multidimensional concept explained on the individual level as one's capabilities of retaining a self-rewarding job, in employers' organizations as human resource requirements for fulfilling operational tasks and on the societal level as a system facilitator between (higher) education, the labour market and civil lives" (p. 4). Other researchers like Gehris and Fundaburk (2007) concluded from their research that most employers do not encourage e-portfolio use for seeking employment and a little number of job seekers actually submits their e-portfolios. The minority that agreed to its use decided that they prefer to have it online than in CDs and DVDs. They also recommended that schools should encourage students to create e-portfolios and employers should be enlightened on the advantages of the e-portfolio. One other problem that seems to keep occurring over time is the lack of general competencies (Quek, 2005; Juhdi, Yunus & Abu Samah, 2006; Khir, 2006; Malhi, 2009; Pandian, 2010).

Most employers keep complaining that university graduates lack some very important skills needed in the workplace e.g. creativity skills, communication skills, problem solving skills and so on. Even though this has been happen for a long time, it seems there has not been any solution found to it. This might probably be due to the fact that all the parties affected cannot find a way of helping each other out. Researchers like Gurcharan Singh and Garib Singh 2008; Agus, Awang, Yussof and Mohamed Makhbul 2011 examined the gap between perceived important skills by Malaysian employers and that of graduates' performance and they found out that there was low level of satisfaction i.e. the employers were not satisfied with the graduates' performance. It was also revealed that the employers did not think the graduates had obtained the amount of skills the students themselves thought they had acquired which can also lead to the low level of satisfaction the employers had.

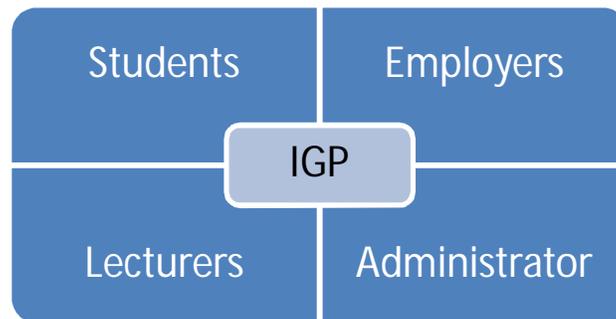
Other reasons why graduate students have trouble getting jobs might also be due to the fact that the demands of the employers keep changing as the world progresses and technology improves which also affects graduates looking for job. This might be because he does not try to update himself on what the latest demands are or he does not even try to find out. This problem could easily be solved by keeping information on how well and how far one is going according to one's endeavors. What better way to do this than to have a system in which the employers could easily know and keep regular updates on what is going on in their prospective employee to be life and know how far he or she is progressing. It might bring more interest for them to know someone is really trying hard to make a great person out of oneself. With the recent rate of unemployment in countries, it has been found out that graduates are one of the groups which have the most difficulties in finding employment which might be as a result of the fact that graduates do not possess the needed skills, abilities and qualities required and expected by employers. Past research done by Pritchett and Filmer(1999)also proved that due to the problem of educational institutions having difficulty following changes in the labour market affect graduates negatively and so that institutions should try to properly develops their graduates' competences for the labour market. It can be deduced from the previous sentence who the labour market refer to which is the employers. This further shows the importance of having a very good relationship between the schools and the employers. Also, Spitzer (2005) also implied that companies are often wary of the education and training graduates have since it is generally known that majority of them do not acquire the necessary skills, training and knowledge they are supposed to have.

According to Smith et al (2009), Watts (2008) was cited to have said that "Sustainability is arguably even more important than directionality because, without it, employability tends to be narrowly defined as 'work readiness. Watt also commented that formulation of career development and work integrated learning rest on the notions of graduate employability, employability skills, graduate attributes and so on (2008).

Archer & Davison (2008) implied that there was need to improve the links between universities and employers in order to improve graduates' employability. Nowadays, as the categories of employments rise and go down, so do the employers keep bringing out surveys on the lists of desirable characters they want in employees planning to work for them (Beckett, Hager and Holland 2002). This means that for graduates to become more marketable and employable, they have to have some idea about what the employers want. Since they are still a little bit far from prospective employers, the task goes to the University to find out what are the requirements being looked for by the employers and how they can help their students reach some or most of these requirements. From the literatures reviewed, it can be deduced that there needs to be constant contact, sharing and connection between the Universities, Students, Lecturers and Employers because this will strengthen, boost and improve the qualities of graduates being produced from the respective universities and would have prepared them well for their prospective workplaces. There is also need to facilitate students' marketability and help to encourage the use of their e-portfolios.

### 2.3 Stakeholders of the IP

A stakeholder in this respect refers to the owner and user of the Integrated Portal. The stakeholders for the IP were identified as four who are: The students, the lecturers, the employers and the administrator. This is shown in the diagram below:



### 2.4 Requirements for the IP

Owing to the fact that graduate student marketability is what needs to be improved, there is need for the communication between all stakeholders to be clear and precise.

#### CMS

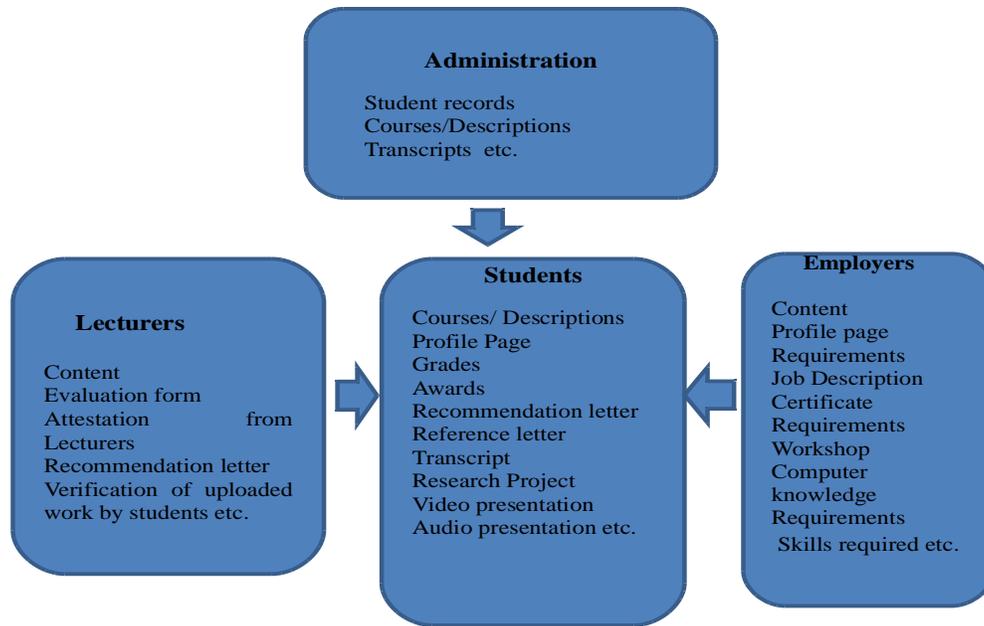
The IP should also support and allow content management because there is need for data and information to be stored and retrieved. In fact, it can be concluded that the IP should be based on a Content Management System e.g. Drupal or Joomla.

#### Data and Security

Security is a very important aspect of the IP. This is because vital and personal information are being shared between stakeholders. In order to avoid hacking of essential information, the issue of security is to be treated. This is one of the reasons why a CMS system like Drupal is proposed to be used for IP because it is known to be one of the most secured CMS around.

### 2.5 Components of the IP

The IP will include the following components in each stakeholder's system.



## 2.6 Integrated Portal Creation Process

There are different processes that make up the IP creation process. This will be based on the some of the following activities which are:

- Building of e-portfolio by the students
- Verification and authentication of information uploaded by administrative
- Evaluation of students' uploaded content by lecturers
- Employment requirement skills to be provided by employers
- Advices and ratings to be provided by all stakeholders on students e-portfolios and so on.

## 2.7 Features of the IP

### Archiving

Important data and information provided by all stakeholders can be kept and retrieved for future use on it. Data that are not needed again can also be easily deleted but this depends on the level of permission that is granted to each user.

### Activity Management

The IP will support activity management. Whatever activity that takes place will be noted and made known.

### Chat

All users will be able to chat with themselves and if possible make use of video and audio chat in order to give room for more interactivity.

### Comment

Stakeholders making use of the system can check and comment on things that interest them. Advices and suggestions can also be shared through it.

### Context

Supports accessing information about what activity a user is currently engaging in, such as the module or activity that a student is accessing within the system.

**E-portfolio**

Students are also allowed to create their e-portfolios which they can use to showcase their artifacts and the lecturers and employers can also give their advice or opinion on it. Examples of this can be audio or video presentations, essays and projects etc. done by the students which their lecturers has commented on or graded. Other information that prospective employers need like references, recommendation letters, written communication samples and so on would be found there.

**Group**

All users will be given the ability to join any group they want but only some of the stakeholder will be allowed to create groups.

**Inbox**

This gives room for user to user messaging. One user can also use it to send a particular message to specific or different users at a time. It also allows broadcasting of messages to people in a group too.

**Logging**

The system will also provide logging and log out services for registered users.

**Profile Page**

This is where information such as names, contact information, demographics, user relationships and other useful information can be found. Each profile page will be according to user's role during registration. This is because of different stakeholders making use of the IP hence different profile pages.

**Rating**

This can be used to rate contents uploaded on the IP. How good you think the content is in order to help the owner realize whether it is good, excellent or bad.

**Role**

Consist of the management of the role types available. These roles are divided into three which are employers, students and lecturers. Whichever roles users support determines the access they will have to information on the Integrated Portal. The administrative has the role of the admin for the IP.

**Rules**

Supports access to, creation, and management of rules and policies, such as may be used within access management or workflow processing. Rules may be machine readable or human readable.

**Search**

IP will also allow users to search and retrieve information such as assignments, video and audio presentations and word documents and so on easily without giving them stress.

**User Preferences**

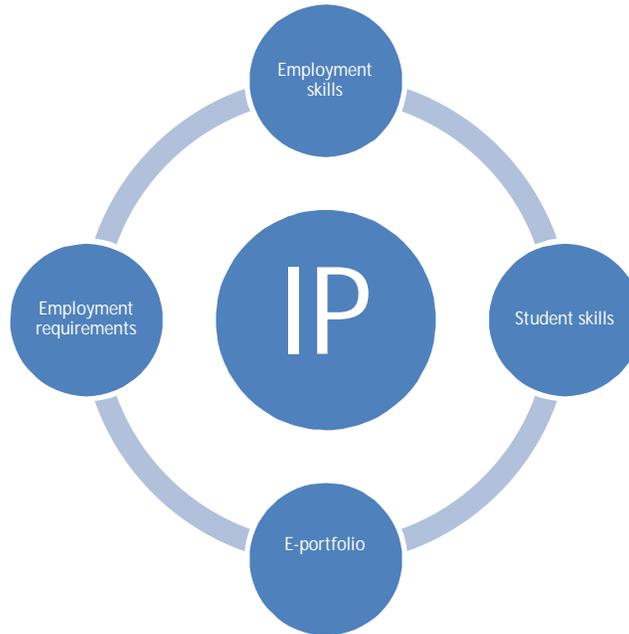
Users can select some preferences they like in the site or change their private or security settings to what they want.

**User Relationships**

Users can create the kind of relationship they want with other users like friends, lecturers, mentors and so on.

### 3.0 Conclusion

If the Integrated Portal is used as it should be, it is believed that the students' skills will be improved and their employability skills will also be improved through their interaction with prospective employers. They will also be made aware of some general employment requirements and other specific requirements being asked for in this modern age by employers. Finally, the students' e-portfolios will be built according to what employers generally demand and employers will be able to make use of e-portfolios during their recruitment process. This is explained by the diagram below.



## References

- Agus, A., Awang, A. H., Yussof, I., & Mohamed Makhbul, Z. K. (2011). The gap analysis of graduate employees' work skills in Malaysia.
- Archer, W. & Davison, J. 2008. Graduate employability: the view of employers. London, The Council for Industry and Higher Education (CIHE).
- Batson, T. (2002, December) Electronic portfolio boom: What's it all about? *Syllabus*, 16, 5. Retrieved November 2013 from <http://www.syllabus.com/article.asp?id=6984>
- Beckett, D., Hager, P. and Holland, S. (2002). Enhancing The Learning and Employability of Graduates: The Role of Generic Skills
- Gehris, D. O. & Fundaburk, A. (2008). "Employers support of the use of e-portfolios by job applicants", *AMCIS 2008 Proceedings*, 1-10.
- Gurcharan Singh, G. K., and Garib Singh, S. K. (2008). Malaysian graduates' employability skills. *UNITAR E-Journal*, 4 (1), 14-44.
- Fugate, M., Kinicki, A.J., & Ashforth, B.E. (2004). Employability: A psycho-social construct, its dimensions, and applications. *Journal of Vocational Behavior*, 65: 14-38.
- Juhdi, N., Yunus, S., & Abu Samah, A. J. (2006). *A survey of students' employability skills: a case of UNITAR*. Paper presented at the Third National Human Resource Management Conference, Langkawi, 26 – 28.
- Khair, K. (2006). *Training employable graduates: Innovation in training methodology*. Paper presented at National Conference on Continuing Technical Education & Training 2006, Challenges in Technical Education and Training; Enhancing Employability among Graduates 28-29, July 2006, The Katerina Hotel, Batu Pahat Johor.
- Love, D., McKean, G., & Gathercoal, P. (2004). Portfolio to Web folios and beyond: Levels of maturation. *EDUCAUSE Quarterly*, 2, 24-37.
- Malhi, R. S. (2009). The hard truth about graduate employability and soft skills. *ADEPT: Higher Education Leadership Research Bulletin*, 3, 45 – 56.
- Pandian, A. (Ed.) (2010). University curriculum and employability needs. *Higher Education Research Monograph* (14/2010). Penang: National Higher Education Research Institute.
- Pavlin, S. (2010). Higher education and employability issues. DECOWE Working Paper Series.
- Powell and Jankovich (1998). "Student portfolios: A tool to enhance the traditional job search". *Business Communication Quarterly*, Vol. 61, No. 4:72-84.
- Pritchett L. and Filmer D. (1999). What Education on Production Functions Really Show: a Positive Theory of Education Expenditures. *Economics of Education Review*. Iss.18, pp.223.
- Quek, A.H. (2005). Learning for the Workplace: A Case Study in Graduate Employees' Generic Competencies, *Journal of Workplace Learning*, Vol. 17, No. 4, pp. 231-242.
- Ritzhaupt, A. D., & Singh, O. (2006). Student perspectives of ePortfolios in computing education. Retrieved September 2013 from ACM Digital Library <http://acm.org/dl>
- Smith M., Brooks S., Lichtenberg A., McIlveen P., Torjul P. and Tyler M. (2009). Career Development Learning: Maximizing the contribution of work-integrated learning to the student experience, Final Project Report.
- Spitzer, D.R. (2005). Learning Effectiveness Measurement, *Advances in Developing Human Resources*, Vol. 7, Iss.1, pp.55-70.
- Watts, A. G. (2008). *Career development learning and work-integrated learning: A conceptual perspective from the UK*. Paper presented at the National Symposium on Career Development Learning: Maximizing the Contribution of Work-integrated Learning (WIL) to the Student Experience, Melbourne.
- Webb, J. A. (2011). Career College Students' Perceptions of Portfolios and Their Influence in the Hiring Process, *Master of Education Thesis, Paper 37*. Retrieved November 2013 from [http://digitalcommons.cedarville.edu/education\\_theses/37](http://digitalcommons.cedarville.edu/education_theses/37)
- Worthington, P. (2000). Technology support for authentic assessment in the new millennia: A Case study on implementing digital portfolios.