



Student Attitudes Towards the use of e-Portfolios: Experiences from The University of the South Pacific

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Abstract

Electronic portfolio (e-Portfolio) offers multiple benefits in both formal and non-formal learning environments. It has gained major traction in higher education and increasingly being used to support learning and teaching processes. The University of the South Pacific (USP) adopted Mahara as its e-Portfolio system in 2010 and it was piloted on a first year generic undergraduate course, UU100, in Semester 2, 2010, where the major assessment component of the course included the creation and development of student e-Portfolios throughout the semester. A study was carried out at the end of the semester to evaluate the use of e-Portfolios by the UU100 students. This paper reports on the findings from the evaluation of student attitudes towards e-Portfolios in the pilot phase, in particular, student attitudes towards using e-Portfolios as a learning tool and for assessment purposes. The findings suggest that majority of the students viewed e-Portfolios as a very useful learning tool (78%), and consider it to be an important assessment component in a course (72%). The paper concludes by recommending areas for further investigation and improvement.

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Introduction

In today's digital age, educators around the globe are demanding for more reflective practices and social learning in education. Higher education institutions have over the last decade gravitated to the technological learning tool, e-Portfolios, to facilitate these practices. e-Portfolios have become an important e-learning tool because of their potential to support more student-centred learning, reflective practices and personalised forms of learning. The University of the South Pacific (USP) is no different and in its effort to enhance learning and teaching, USP has adopted Mahara as its e-Portfolio system in 2010. It was piloted on a first year generic undergraduate course, UU100, in Semester 2, 2010. In addition, the use of e-Portfolios was seen as dovetailing with the University's efforts in developing its graduate profile and attributes as well as to sustain the newly setup USP Alumni Association. The specific purpose of the pilot was to explore the value of e-Portfolios, measure the attitude of students towards e-Portfolios and to document issues in implementation to inform the roll out process across the institution.

A survey was carried out at the end of the semester to evaluate the use of e-Portfolios by the UU100 students. This paper will report on the findings from the evaluation of student attitudes towards e-Portfolios in the pilot phase. In particular, it will report on the methodologies and results of the evaluation of student attitudes towards using e-Portfolios as a learning tool and for assessment purposes. The paper concludes by recommending areas for further investigation and improvement.

Literature review

While there are numerous definitions of e-Portfolios, it is imperative that an e-Portfolio is best defined by its purpose. Barrett (2007) expressed that research and literature regarding e-Portfolios in education is complicating because of the fact that there are many purposes of e-Portfolios such as, e-Portfolios that centers on learning, assessment, employment, marketing, and showcasing best work. Recently there seems to be a general consensus of three major types of e-Portfolio. Maher and Gerbic (2009) identified three different types of portfolio: a learning portfolio, a showcase portfolio, and an assessment portfolio. Brown et al (2007) provides a more general purpose definition of e-Portfolios from an educational perspective, expressing that an e-Portfolio is essentially an online collection of reflections and digital artifacts that students can use to demonstrate their development over time to various audiences. However, it is important to note that e-Portfolios are both "a technology and a pedagogy" (Gerbic et al, 2009), and "a product and the process" (Barrett, 2005; JISC, 2008).



Research has shown that, e-Portfolios promote reflections (Batson & Chen, 2008; Stefani et al, 2007) and social activities (Gerbic & Maher, 2008; Zeichner & Wray, 2001) in learning and teaching. In higher education the use of e-Portfolios has been discussed as an aid to career development (Greenberg, 2004; Heath, 2002), a way to enhance both formal and non-formal learning experiences (Beetham, 2005; Funk, 2004; Wolf & Dietz, 1998), and a way to assess student learning and curricular assessment (Ramey & Hay, 2003; Ring & Foti, 2003). The creation and management of the e-Portfolio itself is an active learning process. According to Lorenzo and Ittelson (2005a) students creating an e-Portfolio are involved in: strategic planning; the acquisition and analysis of information; processing and connection making; synthesis as they bring ideas and artifacts together, as well as designing the look and layout of their portfolio; and evaluation and self reflection. Further, they explain that the skills required and processes applied in the creation of e-Portfolios help students learn, understand, and implement information literacy (Lorenzo & Ittelson, 2005b).

Beresford and Cobham (2011) in a recent study at the University of Lincoln in England found that students perceived the use of e-Portfolios to showcase learning and achievement, helped them to focus on themselves and their work. Davis et al (2009) noted a similar result in a study at the Dundee Medical School in Scotland. They found that students perceived that the e-Portfolio process supported their learning and heightened their understanding of the learning outcomes. Moreover, Ahn (2004) explained that by using e-Portfolios, students have the chance to reflect upon their learning and faculty (lecturers and tutors) has the opportunity to provide detailed feedback on students' work. Lynch and Purnawarman (2004) highlights that the most important aspect of e-Portfolios is the demonstration of critical thinking through reflective writing about artifact construction, selection, and revision. While it is quite clear that ePortoflios has several learning benefits, Souto and Sousa (2008) in a research study concluded that e-Portfolios benefits learning most effectively when it is integrated into the learning and teaching approaches such as being part of the overall course assessment, rather than as discrete entities.

In terms of assessment, e-Portfolios provide students with authentic, reflective, interactive and individual features, and all of these attributes have advantages over examinations and computer-assisted, multiple choice forms of assessment (Chang, 2001). Chang (2001) further suggested that portfolio assessment has the potential to create many tasks, such as monitoring the learning process, self-inspecting the advantages and disadvantages and improving development, thereby facilitating overall benefits in learning. The capabilities of e-Portfolios to engage students in deep learning serve as a meaningful way and provide a method of learning outcomes assessment and curriculum evaluation (Buzetto-More, 2010). Indeed, there are some consensus among researchers that use of portfolio assessment elevates student learning (Barrett, 2000; Dennis et al, 2006).

The literature discussed above illustrates myriad benefits of using e-Portfolios in student learning processes and as well as learning outcomes assessment. Despite these benefits, there are still limited number of studies which really measures student attitudes and experiences in using e-Portfolios (Buzetto-More, 2010; Gerbic, Lewis & Northover, 2009; Lin, 2007; Lopez-Fernandez & Rodriguez-Illera, 2009; Wetzel & Strudler, 2006). This study at USP utilised the educational benefits of e-Portfolios, as discussed in the literature above, in a course with a large class size and measures the student attitudes and experiences towards e-Portfolios especially for learning and assessment purposes.

Background

The University of the South Pacific

The University of the South Pacific (USP) was established in 1969 initially in face to face mode, is now a multi-mode institution (print-based distance education started in 1971 and online in 2000). USP is the only regional university of its type in the world. It serves twelve independent island nations of the South Pacific (Cook Is., Fiji, Kiribati, Marshall Is., Nauru, Niue, Solomon Is., Tokelau, Tonga, Tuvalu, Vanuatu and Samoa) with 14 regional campuses around the Pacific. The main campus is located in Suva, Fiji. USP is regional in the core components of its organisational structure: financial, physical, academic, and political as the twelve Pacific island nations which are, as proprietors, exercise collective governance (Matthewson, 1994). The USP member island nations are geographically dispersed, culturally, linguistically and economically diverse, spanning across 33 million square kilometres and four time zones. The total population within this area is less than 1.5 million and is situated in countries which "range from



groups of small coral atolls, to one island countries and volcanic groups of islands and within its four major ethnic groups, Melanesian, Micronesian, Polynesian and Indian, there are 265 distinct languages and 60 distinct cultures prevalent" (Matthewson, 1994). Many island communities are rural, remote and sparsely populated with traditional societies blending the indigenous cultural norms with forces of modernisation and development. USP offers approximately 487 courses per semester through various modes, using a range of media such as face-to-face, print materials, learning management systems (Moodle), audio/audiographics and video conferencing, audio/video tapes, CDROMS and DVDs.

The Centre for Flexible and Distance Learning (CFDL) is one of the support sections of the University. CFDL promotes and facilitates excellence in learning and teaching in all delivery modes amongst all University staff and students. It plans, develops, and executes an extensive range of professional learning materials for regional students of the University, and promotes staff development in all areas related to achieving an excellent quality of learning and teaching. CFDL is always viewed by the University's faculty and management as the catalyst for innovative learning technologies, best practices and sound pedagogic learning designs in the USP's learning and teaching processes. Within CFDL, the e-Portfolio Working Group (ePWG) was formed in 2009, tasked to research and test available e-Portfolio applications/systems with the view to selecting and adapting the system most suited to USP's context for implementation; first in its generic, UU100, course before a University wide roll out. After an intensive evaluation, identification and selection process, the Mahara application was selected as USP's e-Portfolio system (Prasad et. al, 2010). The Mahara e-Portfolio system was piloted on USP's UU100 course.

The course – UU100

UU100, titled communication and information literacy, is a generic/compulsory 100-level undergraduate course that covers fundamental concepts of computers and their applications including the use of software for word processing, spreadsheets, presentation and graphics. It also addresses the broader imperative for students to develop the capacity to effectively locate, access, evaluate and use information in different formats. Students develop the learning skills needed for success in their studies and modern workplaces. This course also forms the basis of an overall effort to infuse information literacy throughout the University curriculum. A successful completion of the course prepares students not only for other degree level courses but also enables them to be equipped with the skills needed to do better in research, assignments and projects.

According to the UU100 Course Guide for Semester 2 2010, the course had eleven (11) overall learning outcomes:

1. Use USP's ICT resources both in and outside USP;
2. Assess the features of a computer;
3. Use standard applications (word processing, presentations, and spreadsheets);
4. Recognise the structure of information & how it is produced, organised and disseminated;
5. Locate, communicate, critically evaluate and synthesise information for decision-making to succeed at USP;
6. Navigate and utilise Web based information as an educational resource;
7. Navigate the Library website, use the library catalogue and access the relevant information in a variety of formats;
8. Use the online databases offered by the USP Library;
9. Apply appropriate techniques and methods in defining and formulating a search strategy for research topics;
10. Recognise the ethical and socio-economic issues of information and IT; and
11. Use emerging technologies for self-directed life-long learning.

The course was offered for the first time during Semester 2, 2010. Table 1 shows the components that made up the assessment for UU100. e-Portfolio was piloted at USP on the UU100 course and the students used e-Portfolios as a major assessment component (40%) of their course. Students were required to compile artifacts discussed in the post lab activity for each week. Through the e-Portfolios created, students were to demonstrate mastery of the learning outcomes of the course.



Table 1 UU100 course assessment breakdown

Assessment	Marks
Lab Assessment	30%
Tests/Quizzes + Discussion Forums	10%
Assignments 1 & 2	20%
ePortfolio	40%

Methodology

This study was conducted on the UU100 course during Semester 2, 2010. The UU100 course was used because it was the first course (pilot) in which e-Portfolio was incorporated as an assessment component at USP. During the first few week of the semester, UU100 students were provided with training in the use of e-Portfolios and the way e-Portfolios will be assessed. While there were three main methods of evaluation: (a) self-reporting (through surveys), (b) observation of student work on e-Portfolios, and (c) analysis of student performances and course records (e.g. results of the UU100 e-Portfolio assessment), this paper presents findings from the self-reporting (survey) evaluations only.

The major survey questions were developed by members of USP's e-Portfolio Working Group (ePWG) in consultation with the UU100 teaching staff and the purpose of the survey was to assess student experiences and attitudes towards e-Portfolios in general and specifically towards its use as a learning and assessment tool. The major survey was conducted online using the survey tool, SurveyMonkey (<http://www.surveymonkey.com/>). USP utilised Moodle as its learning management system and a link to the survey was placed on the UU100 course homepage in the last week of Semester 2, 2010. The survey was optional for student to take and they were given 3 weeks to complete the survey.

Survey questions

The survey consisted of 39 statements and questions, 36 of which used Likert scale in order to measure student agreement to statements. The five-point Likert scale consisted of the following components: strongly agree, agree, neither agree nor disagree, disagree and strongly disagree. The survey statements and questions were categorised into the following five (5) categories:

1. **Demographics:** Three (3) questions were asked to determine the campus distribution, gender, previous experience in computing courses and study status of the respondents with a view to observing any relationships these had with students attitudes to e-Portfolios.
2. **Learning factor:** Nine (9) questions were asked in this category to find out student attitude towards using e-Portfolios as a learning tool.
3. **Assessment factor:** Nine (9) questions used in this category were asked to determine student attitudes towards the use of e-Portfolio as an assessment tool.
4. **Visibility factor:** Nine (9) the questions asked in this section of the survey tried to draw out student attitudes to the visibility of certain aspects of e-Portfolios like staff feedback for example. In addition, questions under this category tried to determine student attitudes towards the possibility of using e-Portfolios for entering the workforce.
5. **Support factor:** Nine (9) questions under this category were used to determine student attitudes towards the support that was provided by UU100 teaching and support staff.

Since this paper is reporting on the findings of the student attitudes towards the use of e-Portfolios as a learning tool and for assessment purposes, presented below are the statements that were used under the learning factor (point 2) and assessment factor (point 3) of the survey.



Table 2 Statements used under the learning factor of the UU100 survey

Learning factor	
1	I would use an e-portfolio to help me develop my skills (e.g., word processing)
2	I would use an e-portfolio as a way to monitor my skills as they develop over time
3	I would use an e-portfolio to help me develop my knowledge
4	I would use an e-portfolio as a way to monitor my knowledge as it develops over time
5	I think viewing my peers' e-portfolio would be a valuable learning experience
6	I would use an e-portfolio to guide my skills development
7	I use my e-portfolio to learn my mistakes
8	I plan to continue to enhance my e-portfolio for lifelong learning
9	I would use an e-portfolio to guide my knowledge development

Table 3 Statements used under the assessment factor of the UU100 survey

Assessment factor	
1	I feel that an e-portfolio is a better way for faculty to assess my knowledge than a multiple-choice test
2	I feel comfortable if an e-portfolio is used as part of a course in my program of study
3	I would be comfortable with an e-portfolio used as an assessment tool by faculty for an assignment in a course
4	I feel comfortable with an e-portfolio used as an assessment tool by faculty for part of my grade in course
5	I use the faculty comments about my e-portfolio as constructive criticism
6	I would be comfortable with an e-portfolio used as a graduation requirement to my program of study (e.g., it is required that you develop an e-portfolio to complete your program of study)
7	I feel that an e-portfolio is a better way for faculty to assess my knowledge than as essay test
8	I am comfortable with an e-portfolio used as an assessment tool by faculty in other courses
9	I feel that an e-portfolio is a good way for faculty to assess my knowledge

Results

There were 1815 students enrolled in the UU100 course for Semester 2, 2010. From this number, only 279 students completed the survey successfully. The sample surveyed was very small (approximately 15%), the results, however, mirror the results of an earlier mid-semester survey which was completed by 80% of the UU100 students. The majority of the surveyed students came from USP's main campus in Laucala (86%) with the next biggest concentration of students coming from Vanuatu (5%) and Solomon Islands (3%). Table 4, below shows a breakdown in student respondents by campus. Of the surveyed students, 60% were female and 40% were male. The majority of the respondents (86%) were full time students and the rest (14%) were part-time students.

Table 4 Breakdown of student enrolment and student respondents by campus for the UU100 course in Semester 2, 2010

Campus	Enrolment	Respondents			
		Female	Male	Total (n)	Total (%)
Alafua (Samoa)	23	3	1	4	1%
Emalus (Vanuatu)	74	9	4	13	5%
Kiribati	45	4	1	5	2%
Labasa (Fiji)	19	2	0	2	1%
Laucala (Fiji)	1523	142	99	241	86%
Lautoka (Fiji)	36	3	1	4	1%
Solomon Islands	29	2	6	8	3%
Tonga	57	2	0	2	1%
Marshalls	9	0	0	0	0%
Grand Total	1815	167	112	279	100%
Study Status:					
• Full time		141	100	241	86%
• Part time		26	12	38	14%



* Enrolment figures were obtained from the UU100 Course Coordinator (personal communication, January 18 2011)

e-Portfolios for learning

The majority of surveyed students (70%-80%) saw e-Portfolios as a useful learning tool. About 80% of the students agreed/strongly agreed that they would use an e-Portfolio to help them develop their skills. Approximately 82% of the surveyed students responded that they would use an e-Portfolio as a way to monitor their skills as they develop over time. A majority of students (71%) agreed/strongly agreed that they would use an e-Portfolio to help them develop their knowledge with 18% neither agreeing nor disagreeing.

Table 5 Surveyed student responses to the questions/statements under the learning factor of the UU100 survey

	Question	Likert Scale Ranks				
		Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
1	I would use an e-portfolio to help me develop my skills (e.g., word processing)	79 (28%)	144 (52%)	32 (12%)	9 (3%)	15 (5%)
2	I would use an e-portfolio as a way to monitor my skills as they develop over time	78 (28%)	150 (54%)	28 (10%)	11 (4%)	12 (4%)
3	I would use an e-portfolio to help me develop my knowledge	58 (21%)	140 (50%)	50 (18%)	19 (7%)	12 (4%)
4	I would use an e-portfolio as a way to monitor my knowledge as it develops over time	74 (27%)	157 (56%)	23 (8%)	14 (5%)	11 (4%)
5	I think viewing my peers' e-portfolio would be a valuable learning experience	72 (26%)	152 (54%)	25 (9%)	17 (6%)	13 (5%)
6	I would use an e-portfolio to guide my skills development	79 (28%)	151 (54%)	28 (10%)	10 (4%)	11 (4%)
7	I use my e-portfolio to learn my mistakes	65 (23%)	145 (52%)	45 (16%)	13 (5%)	11 (4%)
8	I plan to continue to enhance my e-portfolio for lifelong learning	79 (28%)	120 (43%)	54 (19%)	13 (5%)	13 (5%)
9	I would use an e-portfolio to guide my knowledge development	76 (27%)	139 (50%)	38 (14%)	15 (5%)	11 (4%)
	Average	73 (26%)	144 (52%)	36 (13%)	13 (5%)	12 (4%)

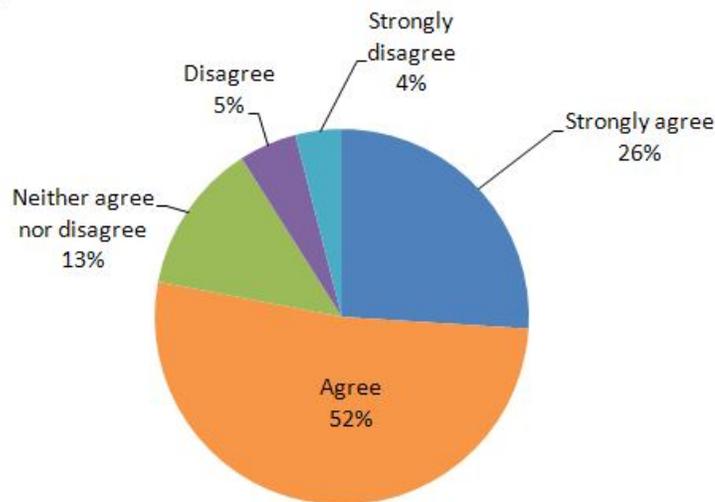


Figure 1 Average student responses to the questions/statements under the learning factor of the UU100 survey



An even bigger number of students (83%) agreed/strongly agreed that they would use an e-Portfolio as a way to monitor not only their skills but their knowledge as it develops over time. About 80% of students thought that viewing their peers' e-Portfolio would be a valuable learning experience, 9% of respondents were neutral and the rest (11%) disagreed. When asked about the use of e-Portfolio to guide their skill development, 82% of students agreed/strongly agreed that they would use an e-Portfolio to guide their skill development. 75% of students responded that they would use their e-Portfolio to learn their mistakes. About 71% responded that they plan to continue to enhance their e-Portfolios for lifelong learning and finally 77% said that they would use an e-portfolio to guide their knowledge development. On average, 78% of the students agreed/strongly agreed with the use of e-Portfolios as a useful learning tool with 13% being neutral and the rest 9% disagreed/strongly disagreed.

e-Portfolios for assessment

Generally, the majority of students not only saw e-Portfolios as a learning tool but was happy to be assessed through e-Portfolios. The majority respondent (73%) felt that an e-Portfolio was a better way for faculty to assess their knowledge than a multiple-choice test. About 15% were neutral about this and 12% disagreed/strongly disagreed with this. About 81% of the students felt comfortable if an e-Portfolio was used as part of a course in their program of study. When asked on whether they would be comfortable with e-Portfolios used as an assessment tool by faculty for an assignment in a course, about 75% agreed/strongly agreed with that, while 12% were neutral and 13% disagreed/strongly disagreed. The majority of respondents (73%) said that they felt comfortable with an e-Portfolio used as an assessment tool by faculty for part of their grade in their course.

Table 6 Surveyed student responses to the questions/statements under the assessment factor of the UU100 survey

	Question	Likert Scale Ranks				
		Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
1	I feel that an e-portfolio is a better way for faculty to assess my knowledge than a multiple-choice test	78 (28%)	126 (45%)	42 (15%)	20 (7%)	13 (5%)
2	I feel comfortable if an e-portfolio is used as part of a course in my program of study	65 (23%)	135 (48%)	38 (14%)	28 (10%)	13 (5%)
3	I would be comfortable with an e-portfolio used as an assessment tool by faculty for an assignment in a course	75 (27%)	134 (48%)	34 (12%)	23 (8%)	13 (5%)
4	I feel comfortable with an e-portfolio used as an assessment tool by faculty for part of my grade in course	69 (25%)	135 (48%)	40 (14%)	25 (9%)	10 (4%)
5	I use the faculty comments about my e-portfolio as constructive criticism	56 (20%)	144 (52%)	51 (18%)	18 (6%)	10 (4%)
6	I would be comfortable with an e-portfolio used as a graduation requirement to my program of study (e.g., it is required that you develop an e-portfolio to complete your program of study)	46 (17%)	111 (40%)	57 (20%)	42 (15%)	23 (8%)
7	I feel that an e-portfolio is a better way for faculty to assess my knowledge than as essay test	75 (27%)	132 (47%)	41 (15%)	20 (7%)	11 (4%)
8	I am comfortable with an e-portfolio used as an assessment tool by faculty in other courses	61 (22%)	133 (48%)	45 (16%)	26 (9%)	14 (5%)
9	I feel that an e-portfolio is a good way for faculty to assess my knowledge	65 (23%)	144 (52%)	42 (15%)	17 (6%)	11 (4%)
	Average	66 (24%)	133 (48%)	43 (15%)	24 (9%)	13 (5%)

A total of 72% respondents indicated that they would use the faculty comments about their e-Portfolio as constructive criticism while 18% of them were neutral about this with the rest (10%) disagreeing. 57% of students responded that they would be comfortable with an e-Portfolio being used as a graduation/completion requirement to their program of study. A total of 23% of respondents disagreed



with the use of the e-portfolio tool in this way. When asked if the use of e-Portfolio was a better way for faculty to assess their knowledge than an essay test, 84% of students agreed/strongly agreed to that, 15% of them were neutral on this issue while 11% disagreed that e-Portfolios were better than essay tests. About 70% of respondents indicated that they would be comfortable with an e-Portfolio used as an assessment tool by faculty in other courses. Lastly, the majority of respondents (75%) generally felt that an e-Portfolio was a good way for faculty to assess their knowledge. On average, 72% of the students agreed/strongly agreed with the use of e-Portfolios as an assessment component in a course, with 15% being neutral and the rest 14% disagreed/strongly disagreed.

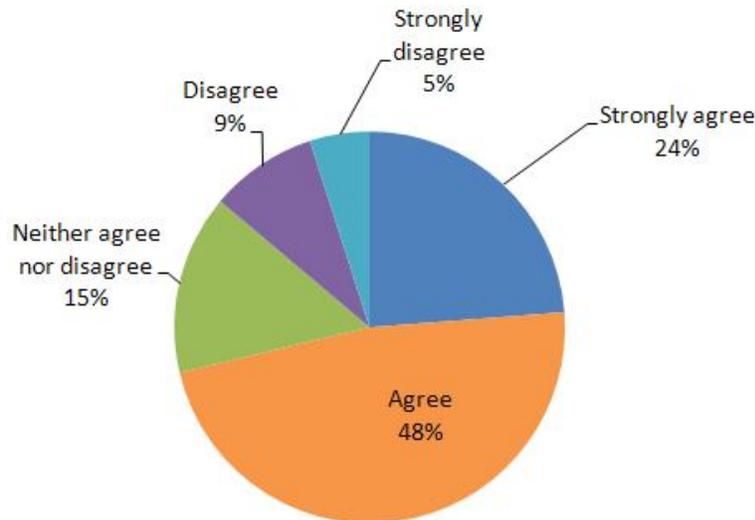


Figure 2 Average student responses to the questions/statements under the assessment factor of the UU100 survey

Another set of data which provided insights into the use of e-Portfolios as an assessment item was the UU100 Assessment Report. According to the report:

From a total of 1815 enrolled students, 1597 (about 88%) submitted their e-Portfolio for assessment marking. The overall pass rate in the e-Portfolio assessment was 83% with an average mark of 26.7 out of a total of 40. Those students who failed the e-Portfolio assessment, mostly were absent from classes and did not regularly update their weekly post lab activity.

The Table 7 summarises the overall student performance in the e-Portfolio assessment across the USP campuses (Sharma, 2010, p. 1)

Table 7 Summary of the overall student performance in the e-Portfolio assessment across the campuses

Campus	Alafua	Kiribati	Labasa	Laucala	Lautoka	Marshalls	Solomons	Tonga	Vanuatu	Overall
Highest Score	36.3	36.3	39.0	39.5	38.3	31.4	39.0	35.3	39.5	39.5
Lowest Score	8.8	3.0	-	-	0.5	0.3	23.6	0.8	2.3	0.0
Mean	26.4	27.0	30.8	26.6	25.5	17.5	34.1	25.4	29.6	26.7
No. Submitted	20	35	17	1363	31	7	21	53	50	1597
% Pass	90.0%	94.3%	82.4%	82.0%	83.9%	57.1%	100.0%	86.8%	88.0%	83.0%



Future research

As mentioned earlier in the paper, the sample population was very small in the final survey (approximately 15% of the class size). Future research should include a bigger sample size and a major survey of this nature should run at an earlier date in the semester. Moreover, perhaps, another reason for a very low response rate to the survey was due to externality of the survey i.e. the survey was hosted and conducted using the online survey tool, Survey Monkey (<http://www.surveymonkey.com/>). Hence, future surveys if possible, should be hosted within USP's Moodle learning management system so that students don't get overwhelmed with different technologies and applications.

The surveys and results also indicated that there have been some students (approximately 12%) who have fallen through the cracks and probably have not learned enough or have not been supported enough to be able to enjoy the use of e-Portfolios. The UU100 Assessment Report notes that those students who failed the e-Portfolio assessment, were mostly absent from classes and did not regularly update their weekly post lab activity (Sharma, 2010). In addition, a number of other factors could have resulted in this such as the teething issues of a brand new e-Portfolio system; new untested training materials; inadequate support and resources for at risk students; and brand new course with huge enrolments to name a few. A similar experience was also encountered by Tosh, Light, Fleming and Haywood (2005) in their study of 544 undergraduate students from two different universities who were using e-Portfolios for the very first time. They highlighted that students faced difficulties in understanding the technology, required a lot more time, insufficient support and heavy assessment workload. Further research need to address these issues in respect to the use of e-Portfolios and should be aimed at ascertaining and finding solutions to the root causes of the poor student performances and attitudes in the use of e-Portfolios.

Conclusion

This paper presented the results of a survey that evaluated student attitudes towards e-Portfolios, especially for its use as a learning tool and for assessment purposes. According to the results, most students (78%) saw e-Portfolios as a useful learning tool. Approximately 82% of them viewed an e-Portfolio as a way to guide and monitor their skills and knowledge development, while 71% of them saw it as an aid in the enhancement of their lifelong learning. In addition, majority of the students (70%-75%) of the students were happy to be assessed in a course through e-Portfolios, found it to be a better way for faculty to assess their knowledge and indicated that they would be comfortable with e-Portfolio used as an assessment tool by faculty in other courses. With these findings we can conclude that students had positive attitudes towards the use of e-Portfolios. However, as mentioned earlier, future research in this area should include a bigger sample size to consolidate and affirm the results from this study. A similar survey will be carried out in Semester 1 and 2 of 2011 on the UU100 course.

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