Engaging College Students on Collaborative Projects with People with Cognitive Disabilities through e-Portfolios

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Abstract

College students can be advocates for people with disabilities. Collaboration on community projects in a school of computer science and information systems can be desirable for people with disabilities and students. The authors analyze the collaborative impacts from courses in Web Design for Non-Profit Organizations with moderately impaired but nimble people with cognitive disabilities. The authors find course features of e-Portfolios facilitating the engagement and the advocacy of the students for mentored people with disabilities. The findings can help instructors in information systems in cultivating e-Portfolios on course projects of students with those with disabilities.

Keywords: community engagement, digital portfolios, disabilities, e-Portfolios, information systems curricular, non-profit organizations, people with disabilities.

1. BACKGROUND

Digital portfolios or e-Portfolios are an amassment or "a collection of artifacts [containing] demonstrations [or examples] [from course projects] of individual [students of a university] (Lorenzo & Ittleson, 2005). e-Portfolios document evidence of the experiences of individual students (Garrison & Ring, 2013). Evidence of experiences can be documented in blogs, critiques and journals and in presentations and projects of information systems students, especially in interactions with others on new In fact, inclusion of e-Portfolio systems is increasing due to collaborative community technologies of the Web, which is highlighted in the literature (Amaya, Agudo, Sanchez, Rico & Hernandez-Linares, 2013). Importantly, millennial students in schools of information systems are increasingly involved with e-Portfolio projects, such as public service (Yancey, 2009). e-Portfolios can chronicle diverse experiences and document outcomes and reflections of the students (Light, Chen & Ittelson, 2012, pp.46,78). Literature considers e-Portfolios as essential for the increased learning of students of a university (Eynon & Gambino, 2017).

e-Portfolios are common in higher education (Dahlstrom, 2015). For example, half of private and public institutions in the country engage e-Portfolios for students (Clark & Eynon, 2009).

systems, due to the sociality of Web 2.0 tools (Exter, Rowe, Boyd & Lloyd, 2012). e-Portfolios as facilities are favored increasingly for housing the learning reflections of students of a university (Miller & Morgaine, 2009, p.2).

Essentially e-Portfolios can document the experiences of students and enable evaluations of their experiences. Features of blogs, critiques and journals and of presentations and project results can document learning from reflections of the students. Literature considers e-Portfolio functionality as helpful in increasing the learning outcomes from course projects of students (Laird, Shoup & Kuh, 2005). Given impacts of the learning on students indicated in the literature, a paper on projects in a school of computer science and information systems, involving more reflections and rich sources than on other projects, can be beneficial in learning more of the power of e-Portfolio systems in regards to community projects (Reynolds & Patton, 2014). Therefore, this paper is on community diversity projects of public service, involving the openness of students in partnership with a marginalized population of society: people with cognitive disabilities (Eynon & Gambino, 2017, p.42; Milsom, 2017).

2. INTRODUCTION TO PAPER

The courses consist of Web Design for Non-Profit Organizations projects, in the Seidenberg School of Computer Science and Information Systems of Pace University, engaging students in collaboratively designing Web sites for and with persons with cognitive disabilities. In engaging face-to-face with moderately impaired persons with disabilities on the projects, the students learn the needs of this population for entrepreneurial Web sites (Accardo & Whitman, 2011; Davis, 2015). The engagements are formed as individualized mentorships or partnerships of the persons with disabilities and the students on cooperative-learning production teams and are fruitful as the persons with disabilities are already nimble in co-creating Web sites with the students with non-programming simple Web template tools, such as www.wix.com (Salisbury, Gallucci, Palombaro & Peck, 1995; Eynon & Gambino, 2017, p.69). Experiences from the partnerships are denoted in documentation in blogs, critiques and journals of e-Portfolios by the students (Light, Chen & Ittelson, 2012, pp.87-88). The impacts of engagement and advocacy in learning about a misperceived neglected population of society are the desired learning outcomes of the course projects (Horowitz, Rawe & Whittaker, 2017; Wehmeyer, 2013).

The courses covered in the paper consisted of 4 with 98 students, 50 students (26 and 24) in the spring 2017 semester and 48 students (23 and 25) in the fall 2017 semester, engaging with equivalent numbers of persons with disabilities from local non-profit organizations in developing personalized Web sites. Few of the students engaged individually with persons with disabilities, and few of the persons with disabilities ever engaged one-on-one with students without disabilities, until all of them joined the projects of the semesters, which was learned at the beginning of the semesters from non-profit organizational and school surveys. Most of the students were experienced in skills on the Web, a foundation for interfacing with the persons with disabilities, which was a goal more important than mere Web design (McNeil, 2012). They were not experienced with the Mahara 17.04 e-Portfolio system in the Seidenberg School, in its customized features of blogs for documenting engagement progress after each class, a context of critiques for documenting impressions of societal stories after each class and essay journals for documenting partnership reflections at mid-semester and at end of the semester – requirements of pure writing - and displays of project Web sites (Hand, Kent & Bell, 2012; Adams, Blumenfeld, Castaneda, Hackman, Peters & Zuniga, 2000). Most of the undergraduate students were fulfilling the projects merely as a requirement of outreach services in the university. The courses were 3 hours 1 day a week for 14 semester weeks, with gala presentations of the Web sites in the school on the 14th week.

The benefits of documentation in the e-Portfolios of the experiences with the persons with disabilities may not be evident however in facilitating learning outcomes. The features of the e-Portfolios may not be facilitating engagement and advocacy of the students with the persons with disabilities, as learning outcomes of the projects. The meaningfulness of the projects in the semesters, beyond showcases of Web sites, may not be in the increased recognition of the responsibility of service to those with developmental and intellectual disabilities (Prentice & Garcia, 2000). The recognition of service, through the setting of technology in schools of information systems for those with disabilities, is nevertheless noted in the literature (Hoxmeier & Lenk, 2003). The paper attempts to evaluate the facilitating impacts or non-impacts of the e-Portfolios on increased or non-increased engagement and advocacy outcomes of the services of the students for those with disabilities.

3. FOCUS OF PAPER

The paper evaluates the e-Portfolios as to facilitating features of the Mahara 17.04 e-

Portfolio system, in impacting or not impacting the perceptions of the students as to the people with disabilities. The functionality of the system may be an important ingredient in the learning outcomes of the students (i.e. in learning the potential of the people with disabilities and in learning the potential of technology to help the people with disabilities to express themselves), as they record reflections on their service to the people with disabilities (Morreale, Van Zile-Tamsen, Emerson & Herzog, 2017). To evaluate the reflections of the students, the paper is focused on the following:

Engagement
Importance – e-Portfolio features facilitating or not facilitating learning of the students of the potential of those with disabilities, on the projects in Web Design for Non-Profit Organizations; and
Satisfaction – e-Portfolio features facilitating or not facilitating performance satisfaction of the students of those with disabilities, on the projects.

Advocacy
Self-Efficacy – e-Portfolio features facilitating or not facilitating a foundation of learning of the students to be advocates of those with disabilities in society; and
Sociality – e-Portfolio features facilitating or not facilitating a motivation of the students in Web Design for Non-Profit Organizations to be involved in passionate proactive service with those with disabilities in society.

These measurements of reflections in the e-Portfolio system were methods in previous progressing studies by the authors of students in the Seidenberg School of Computer Science and Information Systems (Lawler, 2013; Lawler, Iturralde, Goldstein & Joseph, 2015).
The paper is attempting to learn from the documentation sections of the students if the e-Portfolio system is facilitating the civic learning outcomes of the projects of the students. There are few papers focused on e-Portfolios facilitating or not facilitating justice for the rights of those with disabilities to be helped by the technology of the Web (Braddock, Hoehl, Tanis, Ablowitz & Haffer, 2013, p.95; Richards-Schuster, Ruffolo, Nicoll, Distelrath & Galura, 2014), which will be a contribution of this paper.

4. METHODOLOGY OF PAPER

The methodology of the paper evaluated the courses of Web Design for Non-Profit Organizations (4) in the Seidenberg School of Computer Science and Information Systems of Pace University.

The experiences of the students (n=98 [n=26 and 24 in spring 2017 and n=23 and 25]) in fall 2017) on the partnered projects (i.e. www.wix.com) with the persons with disabilities were evaluated from the blogs (14 entries per student), critiques (14 entries per student) and journals (2 entries of multiple pages per student) recorded in the e-Portfolio system and were summarized by the first author, at the end of the semesters. The experiences of the students (n=50 and 48) with generic persons with disabilities were also evaluated in an instrument of survey from the beginning of the spring and fall 2017 semesters for comparison, at the end of the semesters. The documentation of the experiences of the students (n=98), from interactions on the projects with those moderately impaired with disabilities as recorded in the e-Portfolio system, was individually interpreted in engagement – *importance* and *satisfaction* and in advocacy – *self-efficacy* and *satisfaction* by the first author, with aide assistance, on a high (5) to low (1) impact or zero scaling, from content measurement principles and standards of content validity (Neuendorf, 2017) of key phrasing and key wording and was independently re-interpreted collectively by the second author of the paper, at the end of the semesters. The experiences of a focus group (Krueger & Casey, 2009) of a random sample of the students (n=18 [n=8 in spring and 10 in fall 2017]) was interpreted by both authors, as a final measurement of the paper.

The methodology of the paper was similar to the previous studies by the authors of students in the Seidenberg School (Lawler, 2013 & Lawler, Iturralde, Goldstein & Joseph, 2015).

The interpretation of statistics (Frankfort-Nachmias & Leon-Guerrero, 2015) was performed by the second author, from Microsoft EXCEL 2010 and IBM SPSS Statistics 24, for presentation in the next section of the study.

5. ANALYSIS OF DATA AND DISCUSSION OF RESULTS

The e-Portfolios in Web Design for Non-Profit Organizations are found to be facilitating the engagement (means=4.33/5.00) and the advocacy (2.98/5.00) of the students for people with cognitive disabilities. Favorable features of reflections in the customized but regimented sections of the system (Swan & Hicks, 2007) are helping in engagement – *importance* (4.19/5.00)

and *satisfaction* (4.48 /5.00) and in advocacy – *self-efficacy* (3.21/5.00) and *sociality* (2.76/5.00) of the students, from their information systems projects with the people with disabilities, as indicated in Table 1 of the Appendix. The findings are especially important, as most of the students (96 /98 or 97%) had not met moderately impaired but nimble people with disabilities previously, and most of them (77/98 or 78%) had not had mechanisms in the school for recording personal perspectives or reflections on projects of technology, and notably not for this new population.

e-Portfolio Blogs – Reflections on Engagement or Project Progress

The blogs of the students, in which they are recording experiences in reflections on their engagement or project progress after each class in the semesters, are indicating engagement (4.19/5.00) - in *importance* (3.92/5.00) and *satisfaction* (4.47/5.00) and advocacy (2.89/ 5.00) - in *self-efficacy* (3.01 /5.00) and *sociality* (2.77 /5.00) for the people with disabilities, in Table 2. The students are recording generally favorable relationships with their partnered persons with disabilities. The progression of the projects and the relationships is noted in the reflections of the students.

e-Portfolio Critiques – Reflections on Generic Societal Stories

The critique entries of the students, in the school of computer science and information systems, in which they are recording experiences in reflections on generic societal stories of those with disabilities after each class, are indicating engagement (4.28/5.00) – in *importance* (4.20 /5.00) and *satisfaction* (4.36 /5.00) and advocacy (2.88/5.00) - in *self-efficacy* (3.05/5.00) and *sociality* (2.70/5.00) for those with disabilities, in Table 3.

e-Portfolio Journals – Reflections on Partnered Relationships and Project Results

The essay journal pages of the students, in which they are recording experiences in reflections on their partnered relationships and project results, at mid-semesters and at the end of the semesters, are indicating engagement (4.53/5.00) – *importance* (4.45/5.00) and *satisfaction* (4.60/5.00) and advocacy (3.18/5.00) - in *self-efficacy* (3.56/5.00) and *sociality* (2.80/5.00) for those with disabilities, in Table 4.

Beyond the blog entries and the critique entries, the essay journals with multiple pages were of the highest insight from the reflections at mid-semesters and at the end of the semesters. The journals required of the students more reflective thinking and were of most value.

e-Portfolio Blogs, Critiques and Journals

Most of the students are collectively reporting increased *importance* (4.19/5.00) in the "brain diversity" potential (Wille & Sajous-Brady, 2018) of those moderately impaired but nimble persons with disabilities, to be further proficient with information systems tools, and they are collectively reporting increased pride in *satisfaction* (4.48/5.00) in the semesters with them. They are "pausing to reflect" (Miller & Morgaine, 2009, p.6) in the e-Portfolio mechanism on their personal results (Strang, 2015) of servicing those with disabilities with the design methodologies and the technologies of the Web, and they are sharing their "success of their teaching" (Buyarski, Aaron, Hansen, Hollingsworth, Johnson, Kahn & Powell, 2015) with students on the other teams. At the same time, the entrepreneurial persons with developmental and intellectual disabilities are indicating pride in satisfaction and in success with their new Web sites, their partnered students and themselves, which may prompt them to pursue further support with the technology of the Web at the university (Ferrette, 2018).

Summary

The findings from the e-Portfolio blogs, critiques and journals are collectively indicating engagement (4.33/5.00) as higher than advocacy (2.98 /5.00) as the learning outcomes of the projects of the students, facilitated by the implementation of the e-Portfolio instructional pedagogy in the sections of the system (Tang & Austin, 2009). The engagement finding may be from excitement of the immediate project results of Web sites; and the advocacy finding may be from impressions of project relationships to be hopefully later nourished from the overall results of the semesters (Flavell, 1979). The foundation however for public service to marginalized populations of society, such as those with disabilities, is latent in the reflections of the students.

The findings from the semesters of spring 2017 to fall 2017 are indicating nevertheless engagement and advocacy progression of the students with those with disabilities.

Other findings from a focus group of a random sample (n=18) of the students are indicating engagement (4.64/5.00) – *importance*

(4.57/5.00) and *satisfaction* (4.70 /5.00 and advocacy (3.53/5.00) – *self-efficacy* (3.70/5.00) and *sociality* (3.35/5.00) results similarly of the other (n=80/98) students, detailed from the sample summary in Table 5.

A random reflection sampling of statements of the students in Web Design for Non-Profit Organizations is in Table 6.

In summary, the e-Portfolios are an evidently facilitating system, for the favorable recording and sharing of the reflections and the solutions of the neuro-typical students on information systems projects with neglected neuro-atypical people with disabilities, with whom they would normally not be in any relationships in semesters in a university.

(e-Portfolio statistics, including correlations and frequencies in Tables 7-8, are in the Appendix of the study.)

6. IMPLICATIONS OF STUDY

The features of the e-Portfolios are facilitating the engagement and advocacy experiences of the students. The evidence of learning outcomes are in the reflections of the information systems students, as reported on the e-Portfolios. From blogs to journals, the e-Portfolios are easily guiding the learning of the students as they are recording reflections on the people with disabilities. The e-Portfolios are essentially the learning spaces identified with the students (Grush, 2016). The implication for instructors in information systems is that e-Portfolios may be helpful in improving learning outcomes of students on projects of service.

The features of the e-Portfolios are facilitating interactions with other students. The blogs, critiques and journals, as open to other students on the system, are illuminating interrelationships with frequently perplexing but human people with disabilities to millennial students initially involved with this population (Landis, Scott & Kahn, 2015). The implication for instructors is that e-Portfolios may be helpful in increasing learning outcomes from the social spaces of the students.

The e-Portfolios are helping in the learning of people different than the students: people with cognitive disabilities. The projects are involving the students with moderately impaired people with disabilities, a population they had not met previously, on projects of technology. These projects are importantly involving the students in progressive reflections (Reynard, 2009) on the service to those with disabilities –reflections on "something … students [will not] forget" (Mummalaneni, 2014), as they might forget on other projects of technology. The e-Portfolios are the mechanisms for presentations and for reflections on the project results of the students (Holland, 2015). This implication may be helpful for instructors in information systems in initiating learning outcomes represented in e-Portfolios not only by project results but also by the reflections of the students.

The e-Portfolios may be further helpful on other outreach projects of service. Information systems students impacted positively by the projects with the people with developmental and intellectual disabilities may be motivated to be on other projects of the Web with other neglected populations of society, or even with students with disabilities already in the university, on which they may be recording reflections in e-Portfolios or in other forums of service, such as wikis (National Council of Teachers of English, 2015; Plownan, 2007). This implication may be helpful to instructors integrating e-Portfolios more on other projects of public service involving technologies.

Lastly, the benefits of the e-Portfolios were not only for the students but also for the persons with disabilities partnered with them. The non-profit organizational staff indicated that the persons with disabilities learned the potential of socialization with those without disabilities, an implication in lessening frequent isolation of this group (Boucher, 2017; Mazurek, 2014). They learned the potential of the Web with the results of the Web sites for themselves. Though the students learned moreover the potential of the Web for those with disabilities, they learned importantly the meaningfulness of the rights of those with disabilities, as noted in the e-Portfolio reflections, to the technologies of the Web, which if spread by the students helps others of those with disabilities (Hoy, 2018; Braddock, Hoehl, Tanis, Ablowitz & Haffer, 2013, p. 98). This implication is important to instructors in information systems in integrating pedagogy involving reflections of students, and not limiting the pedagogy to mere project results, through systems such as e-Portfolios.

7. IMITATIONS AND OPPORTUNITIES IN RESEARCH

The paper is a descriptive study of students at one university. The perceptions of the students in their reflections may be inflated by mere pleasure in the project results of the technology. The

persons with disabilities in mentorships or partnerships with the students were with developmental and intellectual disabilities, not other disabilities, and they were moderately impaired in disorders not high or low on the spectrum. These limitations may have impacted project relationships and technologies. The results may not be generalized immediately without caution.

The paper may nevertheless be helpful to instructors in information systems in integrating e-Portfolio interdisciplinary projects of service. The potential of nimble persons with disabilities to be on projects, such as Web Design for Non-Profit Organizations, justify a productive role for them (Fitch, Peet, Glover & Tolman, 2008). The e-Portfolio reflections are promising for future public service of information systems students with those with disabilities. In a future study, there may be less laborious but more mining of the reflections of the students with sentiment software tools (Liu, 2012). In short, the results of this paper recommend further study with the e-Portfolio system.

8. CONCLUSION

This paper encourages e-Portfolios on course projects of service in schools of computer science and information systems.

e-Portfolios are facilitating the learning of net generation students of the potential of people with cognitive disabilities to be proficient with technology. Favorable impacts are found in the e-Portfolios in increased engagement and increased advocacy for the people with disabilities, from the narrative reflections of the students. Features of the e-Portfolios are essentially found to be especially helpful in learning outcomes on the projects of service of the neuro-typical students. Functionality furnished mechanisms for more recording of reflections on results of service and more sharing of success than other systems. Students in Web Design for Non-Profit Organizations were often from a personal perspective recording reflections and solutions in their e-Portfolios on moderately impaired neuro-atypical people with disabilities, with whom they were partnering in the semesters, the writing of which is not often the results on other course projects in schools of information systems. This was important in the learning outcomes of the students, in the remembrance in their e-Portfolios of their services to people with disabilities through the technology of the Web.

Therefore, this paper will be inspirational to instructors involving students on reflections and solutions of technologies with neglected but nimble populations of society, and their integration of e-Portfolios will promote the public service of schools of computer science and information systems.

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APPENDICES

Table 1: e-Portfolio Engagement and Advocacy Perceptions* – Consolidated Findings from Blogs, Critiques and Journals of Information Systems Students - Spring 2017 – Fall 2017

	MEAN	STANDARD DEVIATION
ENGAGEMENT	4.33	1.03
Importance	4.19	1.12
Satisfaction	4.48	0.90
ADVOCACY	2.98	1.79
Self-Efficacy	3.21	1.70
Sociality	2.76	1.85

*n=98 students (Tables 1- 4 and 6-8)

Table 2: e-Portfolio Engagement and Advocacy Perceptions – Findings from Blogs (on Engagement or Project Progress with Persons with Disabilities) of Information Systems Students – Spring 2017 – Fall 2017

	MEAN	STANDARD DEVIATION
ENGAGEMENT	4.19	1.22
Importance	3.92	1.37
Satisfaction	4.47	0.98
ADVOCACY	2.89	1.83
Self-Efficacy	3.01	1.80
Sociality	2.77	1.85

Table 3: e-Portfolio Engagement and Advocacy Perceptions – Findings from Critiques (on Generic Societal Stories of Persons with Disabilities) of Information Systems Students – Spring 2017 – Fall 2017

	MEAN	STANDARD DEVIATION
ENGAGEMENT	4.28	1.00
Importance	4.20	1.04
Satisfaction	4.36	0.96
ADVOCACY	2.88	1.85
Self-Efficacy	3.05	1.82
Sociality	2.70	1.87

Table 4: e-Portfolio Engagement and Advocacy Perceptions – Findings from Essay Journals (on Partnered Relationships and Project Results with Persons with Disabilities) of Information Systems Students – Spring 2017 – Fall 2017

	MEAN	STANDARD DEVIATION
ENGAGEMENT	4.53	0.80
Importance	4.45	0.84
Satisfaction	4.60	0.76
ADVOCACY	3.18	1.67
Self-Efficacy	3.56	1.41
Sociality	2.80	1.83

Table 5: e-Portfolio Engagement and Advocacy Perceptions – Findings from Focus Group** **of Information Systems Students - Spring 2017 – Fall 2017**

	BLOGS		CRITIQUES		JOURNALS	
	MEAN	STANDARD DEVIATION	MEAN	STANDARD DEVIATION	MEAN	STANDARD DEVIATION
ENGAGEMENT	4.25	0.97	4.78	0.59	4.89	0.40
Importance	4.11	1.02	4.72	0.67	4.89	0.32
Satisfaction	4.39	0.92	4.83	0.51	4.89	0.47
ADVOCACY	3.81	1.35	3.42	1.79	3.36	1.84
Self – Efficacy	4.06	1.00	3.61	1.61	3.44	1.82
Sociality	3.56	1.62	3.22	1.99	3.28	1.90

**n=18 students

Table 6: Random Sampling of Semester Statements of Information Systems Students - Spring 2017 – Fall 2017

Spring 2017

Before the course, I did not consider people with disabilities at all … course was a great experience for me.

… Did a Web site closely with a person with disabilities … learned people with disabilities are humans … learned of the discrimination … learned how to fight for them … proud to say this was one of the most informative and interesting courses I have ever taken [in the university].

Eye-opening experience … never guessed I would be helping a person with disabilities … improved my interpersonal skills … inspired me to look into what it is like living with intellectual disabilities … reflecting and writing were new to me.

… learned not to be closed-minded … but open to people with disabilities … open to situations … students learned a lot with them … I am a better person from the project with them.

… learned more about life and about people than from any of the courses in the school … more observant [of people with disabilities] … more passionate about them … will stay with me forever … who would have thought [Web Design for Non-Profit Organizations] would impact me so positively?

Fall 2017

… learned that there are no differences … between people with or without disabilities … people with disabilities should be introduced to technologies … experience was great … not easy or hard but rewarding … something you do not often see [in the school].

… never interacted with a person with intellectual disabilities … for such an extended period … greatest takeaway was how to interact with others … knowledge of the disability movement … through the readings.

… learning outcome not what I expected in the school … learned my own problems are insignificant … I want to be involved more on projects like this.

I cannot describe it – You have to experience it … You cannot get this feeling in any other courses [in the university] in my opinion … would not have imagined not taking this … would not have imagined writing about this every week.

… a unique experience I will not forget … helped me grow as a person.

Table 7: Non-Paramertic Kendall's tau-b Correlations of Study

	ENGAGEMENT		ADVOCACY	
MEASUREMENTS (VARIABLES)	IMPORTANCE RATINGS	SATISFACTION RATINGS	SELF- EFFICACY RATINGS	
SATISFACTION RATINGS	0.603*			
SELF- EFFICACY RATINGS	0.478*	0.478*		
SOCIALITY RATINGS	0.383*	0.370*	0.723*	

*Correlation is significant at the 0.01 level (2-tailed).

Table 8: Frequency Distributions of Study

	ENGAGEMENT		ADVOCACY	
MEASUREMENTS	IMPORTANCE	SATISFACTION	SELF-EFFICACY	SOCIALITY
5 - Very High Impact	169 (57%)	206 (70%)	97 (32%)	80 (27%)
4 - High Impact	42 (14%)	28 (9%)	25 (8%)	7 (2%)
3 - Intermediate Impact	68 (23%)	54 (18%)	112 (38%)	122 (41%)
2 - Low Impact	4 (2%)	2 (1%)	8 (4%)	2 (2%)
1 – Very Low Impact	7 (2%)	2 (1%)	6 (3%)	12 (4%)
0 – No Impact or Blank	4 (2%)	2 (1%)	46 (15%)	71 (24%)
	294	294	294	294

Note: 294=98 (Students) x 3 (Blogs, Critiques and Journals) for Distribution Purposes