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# STUDENT-BUILT WEBSITES: RAISING THE BAR ON ENGAGEMENT AND COURSE CONTENT MASTERY



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## **Student-Built Websites: Raising the Bar on Engagement and Course Content Mastery**

### **Synopsis:**

This presentation demonstrates the promotion of efficacy in student mastery of course content and increased engagement through assignments for creation of either individual or group websites on facets of course constructs. Comparison is provided between student website construction and some more traditional modalities of content mastery such as research papers and written assessments.

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### Abstract

A goal of education is to prepare students with knowledge and skills to engage and work in the world in which they live – which now is to a great degree, the world of cyberspace. People communicate, shop, learn, and work in this new frontier. Course work that integrates student assignments with this realm of life can help students to be better prepared for effective professional service after their degree completion program. Traditional assessment of student mastery of content in higher education has included examinations, scholarly papers, application projects, and topical presentations such as Power Point or Prezi. These have all been rather limited to dimensions in delivery of information and in student intelligence activity. In several courses, students were asked to construct a website to deliver information that would represent both mastery of course content, multi-dimensional delivery and intelligence activity, and opportunity for service learning and contribution to the field of study. These assignments included both individual and group work. This paper shares background factors of consideration and lessons learned from these assignments. Resources, tips, and examples of student-constructed sites are also provided.

Efficacy of individual education includes capacity to both internalize knowledge of learning and to externalize application of learning. Theories of intelligence activity vary in number of dimensions. A comprehensive theory is that of Howard Gardner which includes the eight types of intelligence activity of Verbal, Mathematical, Spatial, Bodily-Kinesthetic, Musical, Interpersonal, Intrapersonal, and Naturalist (Santrock, 2017). Another theory that Santrock (2017) also notes is the Triarchic Theory of Intelligence by Robert Sternberg which includes Analytical Intelligence, Creative Intelligence, and Practical Intelligence. Both of these theories present relevance to the work described in this paper as they provide multiple modes through which students at all education levels can engage in learning.

Learning and living in the world of cyberspace has expanded award of value beyond the written word of scholarly papers and examinations and the oral word of presentations. Value now also includes modes of student engagement and performance that reflect operation in cyberspace (Kyoko, Troncale, Trucks, Calhoun, & Alvidrez, 2017). Value has also increased for application of learning beyond the benefit of learning for personal enrichment only. Brooks and Schramm (2007) conducted a study in which they found that combining traditional university mission goals of research, education, and service into integrated activities within courses offered substantial benefit to all stakeholders – faculty, students, and the community served.

### **Course Content Mastery**

Traditional assessment of student mastery of course content has centered on the limited dimensionality of examinations, scholarly papers, application projects, and topical presentations such as Power Point or Prezi. Harsh and Young (2015) noted the need for teachers at all levels of education to vary learning environments to meet needs of diverse learners. Learning environments have been tailored to meet needs of non-traditional learners which might include less reliance on technology. Learning environments have also been tailored to meet the technology-rich needs of traditional or younger generation learners. Harsh and Young noted that facilitation of deeper learning involved the

*cognitive domain* with emphasis on thinking, reasoning, and problem solving; the *intra-personal domain* with emphasis on self-management; and the *inter-personal domain* with emphasis on expression of self to others, appropriate interpretation and response with information received, and collaboration. (p. 8).

Doughney (2000) noted that employers continue to desire generic skills and capacities of graduates, regardless of generational membership. Examples given were capacities and skills for communication, interpersonal relationships, efficacy in culturally diverse environments, literacy, and critical problem-solving and reflection (p. 60). The need for these was confirmed by Doughney by analysis of employment locations of graduates. A key in student preparation was to fit the graduate for lifelong learning so as to continue to add value both to self and the employment.

### **Student Engagement**

As noted previously, learning preferences and styles have tended to change as generations changed, with increasing indication of preference for engagement, either with multi-dimensional content or with other learners. Speizo, Baker, and Boland (2005) examined methods with which to increase student engagement in the classroom and in the civic realm of communities. A key modality in their study was inclusion of Service Learning.

Service Learning involves application of student learning activities and objectives in a course to a real-world issue in which the student can volunteer and then reflect on correlation of this work with course constructs and possible future work in the issue by the student. Felton and Clayton (2011) described service learning as a process designed to “include critical reflection and assessment processes .. to produce and document meaningful learning and service outcomes” (p. 76). Felton and Clayton indicated that assignments that included service learning also promoted learning goals and provided opportunity for students to collaborate with stakeholders. Collaboration with stakeholders as a student also provides valuable networking for potential employment in the field of study.

As online learning has grown, the challenge to foster student engagement has also grown. Keengwe and Schnellert (2012) found that this modality of education involved theoretical constructs of student interactivity, social context, and technology. Campus-based courses also involve these constructs as more use of technology is integrated here also. An example is the use

of learning platforms (ie Blackboard or Canvas) for common material such as syllabi or use of online discussion forums when an instructor needs an off-campus class activity. Bliss and Lawrence (2009) encouraged the use of group activities to increase peer interaction and facilitate development of socially-constructed knowledge. Wang (2007) noted the pedagogical benefit of collaborative student work where learners benefit from socially completed tasks that would be more challenging to complete alone. Completion of these tasks are enhanced through collaboration with the knowledge, expertise, and experience of multiple peers.

### **Individual or Group Work**

The literature as well as study results support benefit and challenge with both individual and group work. Literature also indicates that individual performance and performance rating can be confounded by rating within the group where comparison may exist to performance of other group members. Campus-based courses facilitate much usage of student collaboration as class time can be designated for group work. However, online learning presents more challenge with this.

Glazer, Breslin, and Wanstreet (2013) noted that a natural geographic distance of online learners from each other presented greater student focus on individual needs than needs for collaboration with peers. This also reflects the perception on online learners that learning with be an asynchronous endeavor, which again is best accomplished solo. Koehler and Mishra (2—5\_examined student perceptions of learning environments and course design with online courses and found that online learners had strong expectations to work on their own, with considerable frustration about what, when, and how group assignments are accomplished.

Koh and Hill (2009) further described challenges that can occur with group work. These challenges can be present in both campus-based and online course modalities. Some of the challenges were lack of connection, communication difficulties among group members, differences in commitment and skills for a project, and difficulty with scheduling of synchronous

group work. Keengwe and Schnellert (2012) affirmed the scheduling of group work to be the biggest challenge. Bliss and Lawrence (2009) indicated an additional challenge of non-participating members which could place additional burden on participating group members.

Yammarino, Dubinski, and Hartley (1987) discussed potential rater bias on individual performance within the context of a group. These authors noted that much influence existed through organizations' priority for team versus individual effort as well as rater intentional effort to rate individuals without influence of group context. The study in this paper includes examination of student work in both individual context and group context

### **Method of Study**

Two courses in the programs of Community and School Counseling were selected for student projects with construction of a website as a major end-of-course project to assess overall course master. During the school years, 2016-2017 and 2017-2018, students in the course Professional Orientation were assigned an individual project to develop a website that showcased information attained on professionalism and ethics. 180 students completed this as an individual project and 16 students completed this as a group project. During the school year 2016-2018, students in the course Lifespan Development and Learning were assigned an individual project to develop a website to inform members of a certain lifespan stage about an issue relevant to that stage. 220 students completed this as an individual assignment. During the school year 2017-2018, students in the course Lifespan Development and Learning were assigned two group projects – one on a lifespan development challenge of Trauma, Exceptional Abilities, or Addictions and one on an area of lifespan development of resilience – Individual, Couple, Cultural, Family, or Community. A total of 40 students completed these two group assignments which yielded 80 assignment completions of website building. In both courses, the website

content was related to course objectives and applicable accreditation content requirements.

Students were instructed to use Weebly, Wix or another site builder with approval from the instructor as their website building modality. Weebly and Wix are free, user friendly, and could be easily accessed by others such as the professor.

In both courses, assignment parameters for grading included:

- a. A name and site link that reflects the assigned course focus.
- b. Content of the site – The site should have
  - i. a clear description on the home page that includes a description of the issue.
  - ii. at least five resources that the viewer can click on and access
  - iii. Contact information for the individual or group members. Students used their university email address.
  - iv. Comments from professional reviewers as invited by each individual or group member. This provided capacity for service learning.

Students were given the option of content from documents such as articles, videos, other sites, a blog, etc. The focus of the content had to inform helping professionals (such as counselors or social workers) and educators of the importance of the current state of the website focus issue with students and clients and resources for helping with this issue. The assignments integrated attainment of user feedback by students from colleagues in the profession.

Challenges per the literature were managed as indicated in table 1.

**Table 1: Management of Challenges**

<b>Challenge</b>	<b>Individual or Group</b>	<b>Management of Challenge</b>
Lack of connection or communication.	Group	Groups were established in the Blackboard course shell with requirement to show evidence of communication through a discussion forum.



Student commitment	Both	Group student contributions had to be identified on website content and in forum participation. Individual commitment was evidenced by content quantity and quality of site.
Student skills	Both	Student contribution to site for both individual and group sites evidenced student skills with technology and course mastery.
Scheduling for work	Group	Groups had responsibility of self-management through use of Blackboard tools such as a discussion forum, emails, and phone calls among group members. Most of this was done asynchronously.
Non-Participation	Both	Students had responsibility to participate in order to receive grade points. Level of participation correlated with level of grade points.

### Results and Discussion

Construction of websites by students in both individual and group assignments produced more diversity of evidence of course content mastery and greater collaboration of application with the practice of the profession outside the course. This was seen through website content of article links, Power Point and Prezi presentations by students and from additional resources, Youtube videos by students and from additional resources, links to other website resources or written material, and student generated blogs. Site review by colleagues and in some cases K12 students provided a sense of usefulness for the profession and provided opportunity for service learning by course students. As with other service learning endeavors, course students concluded these projects with written reflection on what they had learned about self, the issue, and what needs continued to exist about the issue. These projects provided greater spectrum of content versus the more uni-dimensionality of examinations, research papers, or slide presentations. The websites provided for integration and access of multiple resources in a single space.

Over the use of these assignments in multiple course sections, there was emergence of resources and tips that could be valuable to educators. These are outlined at Appendix A. As with student work in any course, there were some sites that were of higher quality than others. Appendix B has a representative list of website links for some of the more excellent examples.

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### **Appendix A: Educator Resources and Tips**

1. Group Assignment: Provide opportunity for students to sign up for a focus of interest with topic options, number of students who can choose this topic either individually or in a group, and deadline for sign-up. Indicate that students who do not sign-up by the deadline will be assigned by the instructor. A good tool for this is Sign-Up Genius: [www.signupgenius.com](http://www.signupgenius.com)
2. Monitoring Student Engagement in Groups: Set up a Discussion Forum for each group and require students to communicate with each other in this modality – connect participation grade points to this.
3. Fairness in Award of Student Credit in Groups: Have students identify each part of a website that he or she contributed, such as “Provided by student name.” When colleague reviewer comments are provided, such as on the site, have students get colleagues to indicate in the review comment who had asked them to review the site. Allow site construction to count for a student in equal value to posting a resource on the site or constructing a drop-down page/section.
4. Website building resources: Wix - [www.wix.com](http://www.wix.com) and Weebly – [www.weebly.com](http://www.weebly.com) can be used for free, are user friendly in construction, and can be designated as easily assessable to others such as the instructor and colleague reviewers. There are some site resources that require additional steps for access such as use of a password. Avoid use of these by designating which resources students must use in building their sites.
5. Interactivity of sites: Have students insure that all resources posted on the site are accessible through a click or double-click. Have students set resource access via link versus a copy and paste of a resource onto the website. Also, note to students that the site must be accessible to

the instructor for grading purposes so that students can have someone access the site before submission of the site link for grading.

6. Maintenance of student privacy: Have students indicate site builder contact information via university email versus personal email with indication that the site was constructed for a course project.

**Appendix B; Representative Student Websites**

- Addictions Challenges Across the Lifespan:  
<https://addictionschallengeacrossthelifespan.weebly.com/>
- Challenges with Exceptional Abilities Across the Lifespan  
<https://exceptionalabilities.weebly.com/>
- Community  
<https://communityresilienceuwa.weebly.com/>
- Couple Resilience  
<https://couplesresilience.weebly.com/>
- Cultural  
<http://culturalresilienceandlifespans.weebly.com/>
- Diversity  
<https://sites.google.com/site/counselingdiversity/home>
- Family  
<https://resilienceacrosslifespans.weebly.com>
- General Role of a School Counselor  
<https://morgankylee12.wixsite.com/chattingcounselor>
- Individual Resilience  
<https://buildyourresiliencenow.weebly.com/>
- Professionalism, Ethics, and Social Learning as a School Counselor  
<https://sites.google.com/a/hover.k12.al.us/professionalism-ethics-and-social-learning-experience-as-a-counselor/>
- Trauma  
<https://traumaandthelifestages.weebly.com/>