

E-Orientation for Clinton Community College
IDT Thesis Project
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Introduction

Clinton Community College has faced with continued declining enrollments for the last five years, resulting in the College's active pursuit of proven student retention mechanisms to assist with enrollment stabilization. The College has decided to create an online orientation module in Moodle to improve the "new student experience" and support a smooth onboarding process that effectively provides students with information critical to their success as well as aids in their ability to better navigate the college experience. In addition, the college seeks to encourage student self-awareness, learning skills and familiarity with the online learning platform. These intentionally designed interactions delivered via an E-orientation model that employs scholarly proven information design, constructivist and social constructivist theories will ensure the College's new E-Orientation will foster student success and retention.

Literature Review

Designing an effective Community College E-Orientation
in a Learning Management System

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Abstract

Higher education as a sector is suffering from declining enrollment nationwide. Community colleges are no exception and are in even greater despair due to cuts in state funding, increased pressure to compete all while producing strong outcomes (Smith, 2018). For this reason, community colleges must seek out creative ways to attract and retain students. To better meet the needs of incoming students and increasing pressure of accountability, community colleges are relying on online learning management systems (LMSs) to create flexibility, interactivity and performance tracking for continuous improvement. New student electronic orientations (NSEOs) have been identified as a gatekeeper experience by institutions, providing imperative information to students, outlining expectations, reducing onboarding hurdles and ultimately retaining students by increasing their likelihood of success. This literature review will extrapolate issues community colleges are currently facing, analyze theory driven best practice in interface and presentation design, review prescribed assessment methodologies for student retention, as well as, identify gaps in scholarly research that should be further pursued.

Designing an effective Community College E-Orientation in a Learning Management System

Introduction

The climate of higher education is rapidly changing, technology is on the rise and declining enrollments are putting financial pressure on institutions. Community colleges struggle to keep pace with their highly diverse and underprepared population which in turn exponentially benefits from an informative, holistic onboarding experience in order to succeed. To proliferate student success and mission fulfillment institutions have turned their focus to student retention in hopes of surviving the current climate and maintaining more stable enrollment.

These struggles are not isolated to the United States, in fact Australia and New Zealand's Student Services Association (ANZSSA), have published guidelines for effective practice in orientation and transition. Per Jim Elliott and Michelle Orr of ANZSSA, programs like New Student E-Orientation (NSEO's) must be viewed as part of the student development process (2014). Included in their standards Elliott and Orr state that institutions should articulate long-term objectives centered on student development, academic achievement, and student retention and resistance, as well as, short-term objectives nurturing the value of new students, self-efficacy as a vital contributor to student success, the delivery of a meaningful experience, effectively delivering information and making connections (2014).

Recent advancements in technology enable facilitators of NSEO's to incorporate a blend of mediums, such as video, text and animation, into a collaborative learning platform that offers the necessary structure for both content and a wide-area network accommodating asynchronous and synchronous communication (Reid-Martinez & Grooms, 2018). Reid-Martinez and Grooms urge academic counterparts to not allow technology to drive the process, but pedagogy, to ensure

student learning (2018). The constructivist method is a leading learning pedagogy within online learning because it stresses that student learners are active participants who incorporate a broader global context and community pursuit (Reid-Martinez & Grooms, 2018). NSEO's offer a cost effective, timely, pedagogy driven, interactive and flexible solution to fulfill these objectives (Reid-Martinez & Grooms, 2018).

Community College Awareness's

Community colleges experienced peak enrollment in 2010 because of the recession and high unemployment of 10 percent, now unemployment hovers around 4 percent (Green, 2018). In *Have You Been Oriented? An Analysis of New Student Orientation and E-Oriented Programs at U.S. Community Colleges*, Michael Chan, Assistant Professor at the Borough of Manhattan Community College, confirms that increasing competition, tuition rates and accountability requirements, coupled with decreasing retention and graduation rates are currently plaguing community colleges (2017). Smith's summation confirms that after 2025 the U.S. will lose approximately a half million high school graduates nationwide due to the 2008 recession (2008). To compound the issue New England is reeling from an ongoing 10 percent decline in high school graduates from 2013-2013 (Smith, 2018). Additionally, the EAB, a higher education best practice firm, also notes declining high school enrollment as well as fewer adult learners as pinching enrollment from community colleges (Green, 2018).

In addition, studies have identified approximately 98% of public two-year colleges incoming freshman require at least one remedial course (Chan, 2017). Additionally, freshman persistence is often negatively affected by a student's ability to cope with scholarly pressure and a new social structure (Chan, 2017). In *Developing and Implementing a Mandatory Online*

Student Orientation, Kona Renee Jones, of Richland Community College, cites issues centering on time management, study skills and understanding available student services and how to access them as reason for her institution mandating online orientation (2013). Moon-Huem Cho, of Kent State University-Stark conducted a developmental study of an online student orientation to confirm best practice in NSEO design and built on Jones' assessment by offering that psychological factors, including motivation and proper self-efficacy lead to greater student satisfaction (2012).

Financial concerns have recently been exacerbated by the recent federal income change to qualify for Pell Grant monies which will hit community colleges particularly hard because of their typical student population (Smith, 2018). In addition to enrollment and funding challenges, community colleges coast to coast are facing significant backlash from accrediting agencies concerned about rising costs, value of product and quality of the student experience (Chan, 2017).

Wendy Robichaud of Oxford Hills Technical School adds that 78% of chief academic officers understand that online learning is an essential focus of any institution's strategic plan because community college populations house higher proportions of non-traditional students (2016). Per Robichaud, non-traditional students are older, first-generation, part time or minority and usually have full-time employment families and extenuating commitments (2016). Factors relating to student withdrawals are related to either the student, course or programming, or environmental factors (Robichaud, 2016). These factors vary by student and are related to the student's background, grade point average, academic experiences, skill and study habits (Robichaud, 2016). Robichaud explains, "a comprehensive, mandatory guide tailored to the individual college, which is accessed by all students before beginning...is an asset and a viable

way to increase retention and success” (2016). Lastly, Schell and Janicki of the University of North Carolina, highlight that as a result of the current landscape of technologies on the market students consume everything from their education to music on an “any time/any place” basis (2013). An expectation that higher education has struggled to accommodate in many instances.

NSEO as a Solution

EAB also confirmed that 56% of community college students are lost during the onboarding process (Smith, 2018). As a result, community colleges must incorporate inexpensive, flexible options to combat budget constraints, staffing shortages, a highly diverse student population and rising demands of student outcomes from the public and private sectors (Chan, 2017). After performing a study of approximately 5,000 new university students, Marie-Jo Wilson and Vandana Minhas-Taneja of the University of Auckland, confirmed that the institution’s retention effort of transitioning to an NSEO excelled at being on time, within budget and produced positive feedback from students and staff (2016). Also noting, an 88% participation rate of new students, which exceed their goal (Wilson, M. & Minhas-Taneja, V., 2016). According to Chan, 96 percent of all U.S. colleges and universities offer an orientation to new students as part of the onboarding process (2017). In addition, previous research has confirmed that the first month of college enrollment because it is the timeframe when most students decide to leave school (Chan, 2017).

NSEO’s offer community colleges a way to incorporate the current advancements and enrollment trend of online learning and technology (Chan, 2017). Robichaud expands on this and identifies academic and social *integration variables* as key to persistence and experience, noting that a student is more likely to persist when they are more integrated into the higher

education experience (2016). Highlighting that 75% of dropout reasoning can be thwarted by understanding these challenges and providing intentionally infused supports for success (Robichaud, 2016). NSEO's offer a "first step" opportunity to combine information, training, advising and comradery (Robichaud, 2016). Cho agrees that NSEO's are a realistic and effective solution for overcoming retention barriers because a students' inability to actively engage in an online learning system leads to feelings of isolation and loneliness; thusly, negatively affecting academic and coping skills (2012).

Though there are limited empirical studies available on the direct effectiveness of NSEO delivery as this time, Ibrahim Alnawas of the University of Petra, argues that institutions must adopt a student-oriented (SO) approach that is better measured formatively, not reflectively (2015). Alnawas also acknowledges the changing education market and believes that becoming student oriented will deliver growth, improve the institution's public profile and reputation, create customer loyalty and improve services (2015). To become a successful SO institution, they must view the educational experience from the student's perspective, cyclically assess student perceptions, provide students a quality education ensuring success in the employment marketplace, and address needs of all stakeholders to create cohesion (Alnawas, 2015). Alnawas also argues that private market techniques do not work in education because they create barriers that inevitably taking away from teaching time (2015). Suggesting success is found when students' and academics' merge expectations from the beginning a process aided by developing an effective student orientation (Alnawas, 2015).

NSEO Benefits

According to Chan, Wilson and Minhas-Taneja, NSEO's are an excellent prompt for faculty, staff and campus administrators to collaborate on a student-centered program fostering a teamwork approach among colleagues (2017, 2016). In addition, NSO programs create a sense of comradery for the new students, improving their experience and offering a sense of belonging (Chan, 2017). NSO and NSEO programs help facilitate the transitioning process for the student, also aiding academic social and physical space integration (Chan, 2017). Explaining further that this prolific incorporation is widely used retention and performance improvement tool (Chan, 2017). All benefits confirmed by Wilson and Minhas-Taneja's study, noting that results from post-implementation surveys indicated that students who engage in the NSEO felt they had a smoother transition (2016).

Jones explains that employing an NSEO proved to improve "soft skill" barriers, such as time management and technological skills both of which if not properly navigated leads students to dropping out (2013). Jones results confirmed the findings of other studies, citing 90% of students perceived the orientation as better preparing them for interacting with the LMS and that their equipment was ready for use (2013). In fact, 87% felt the orientation helped them better understanding the scholarly expectations and an astonishing 93% were highly confident they could effectively navigate the LMS for their coursework (Jones, 2013). As a result, retention jumped 9% in the first years and subsequently held between 80 and 84 percent three years later (Jones, 2013). Jones and Robichaud equivocate this to the NSEO's affordance for hands on practice with relevant technology, thusly minimizing or completely removing barriers while concurrently removing stress on the student's behalf (2013, 2016).

Elliott and Orr agree and commented specifically on the NSEO's ability to foster student engagement and comradery through activities that build social connections, create a welcoming atmosphere and highlighting campus connections for the student (2014). In addition, Alnawas exposed that NSO's and NSEO's have a direct impact on the student's satisfaction level, proving the institution is informed of student requirements, willing to facilitate understanding and concerned about how well they are meeting the student bodies needs (2015). Lastly, Alnawas' study confirms that the construct of student engagement aligns with constructivist assumption that the way a person engages their educational processes impacts learning and that this engagement is "a mutual proposition" (2015). Reid-Martinez and Grooms argue that constructivism's collaborative development of knowledge by its very nature better accommodates a more diverse group of learners and their contexts (2018).

NSEO Pitfalls

Because of community college open enrollment policies institutions must be prepared to meet the needs of an exceptional diverse student population that can often include non-traditional age students. According to Chan, NSEO's need to successfully foster understanding no matter the student's level of tech-savviness, account for student who may not have been taking courses recently and strive to be American with Disabilities Act (ADA) compliant (2017). NSEO design must remain diligent to ensure information is presented for all not just traditional age student (Chan, 2017). Chan's study also produced understanding that many of the selected institutions did not properly prioritize College Essentials, instructions on how to navigate the online environment and other technology the student would encounter (2017). Jones' study additionally confirms issues faced because some students did not have the proper technology available or set-

up correctly to access the information online reflective of a lack of student training and institutional failure (2013).

Wilson and Minhas-Taneja cautioned being mindful of length because, if excessive, it decreases attendance, observing too much information, duplication of material and lack of available online information as other pitfalls to be aware of (2016). Chan confirms their sentiment, citing the greatest challenge presented when developing an NSEO is incorporating all pertinent information without overburdening the student (Chan, 2017). Reid-Martinez and Grooms also warned that because of the ubiquitous nature of mobile technologies, not only is amount of content to be appropriate, but it is best-practice to consider the 24/7 social demand to ensure faculty, staff and students do not become overwhelmed (2018).

Reid-Martinez and Grooms also acknowledge the technological “moving target” faced by developers due to the vivacious onset of advancements in recent years (2018). Rigid navigation and an overwhelming, incohesive presentation of information must also be avoided (Chan, 2017). In order to be proactive in governing such issues assessment and feedback gathering should be timely and appropriate. For example, Cho acknowledged study fallibility because it lacked systematic evaluation by direct and indirect participants and thusly was not as proactively attentive to the learner needs (2012).

NSEO Content

Chan cited study of 1,400 Canadian students that identified the following factors as the most valuable in them achieving their goals: orientation, persistence, time management and organization (2017). Chan compiled a proven list of NSEO program goals which center on improving preparedness and ease of transition into elevated academic rigor, helping students

better navigate college life, encourage learning skills self-awareness, and intentionally familiarizing students with the online learning platform (2017). Chan identified the most frequent information offered throughout segments of the orientation pertained to Programs, Enrollment, Registration, and Financial Aid, followed by Student Resources and Services, Quizzes, Conclusions and Next Steps (2017). Chan confirmed that most orientations required id, there was highly varied NSEO lengths (30 minutes up to four hours), and 50% of the institutions included an assessment to within the material (2017). Chan also offers that the average segment was just under 6 minutes and average overall length was approximately 54 minutes (2017).

Wilson and Minhas-Taneja confirmed Chan's conclusion that ADA compliance is paramount, but noted that student services should be heavily emphasized, including counseling, emergency financial assistance, sports and activities, societies and clubs to help students maximize their non-academic affairs on campus (2016). Of note, Wilson and Minhas-Taneja found interactive maps to assist students in exploring the campus at their leisure and to their specific needs was one of the greatest successes of their NSEO (2016). Also finding success in grouping cohort-specific information together for student ease, creating a way to "drip" students' additional information throughout their student life cycle and utilizing student voices to provide information (Wilson and Minhas-Taneja, 2016). Robichaud, as well as, Elliott and Orr, confirm Chan, Wilson and Minhas-Taneja's findings, but noted specifically that support services IT Service Desk and Library must also be included (2016).

Elliott and Orr also heavily second Wilson and Minhas-Taneja's conclusion that NSEO design should ensure that information is cohesive and relevant to the immediate needs of the student but be available after orientation for student inquiry and reflection (2014). During post

study feedback collection Cho's survey results also confirmed that students enjoy flexible and interactive content format, such as video, pictures and animation (2012).

Interface Design

Chan asserted key design features include navigation buttons (menu, forward, back, play pause, volume, etc.), a progress bar, hover box capabilities, language options, ADA compliance, assessment and quizzes, multimedia components, LMS training, and a cohesive presentation style to other student interfaces (2017). Wilson and Minhas-Taneja noted an increasing expectation from students that information is accessed in a self-directed manner, citing that flexibility and autonomy are especially helpful to non-traditional student populations (2016). Cho seconds Wilson and Minhas-Taneja belief, citing that instructional designers do not use analysis, design, development and evaluation linearly, preferring to use each phase dynamically while considering factors like learning contexts, time, resources and student needs to develop instructional material (2012). Jones, contrarily, designed a linear presentation with ten self-paced modules each with interactivity and learner assessment (2013).

Almost 90% of NSEO's incorporate video and audio clips, as well as, picture and text accompanied by narration (Chan, 2017). Wilson and Minhas-Taneja, confirmed videos, games and quizzes are all well-received by students, but cautions though gamification increases the chances of repeat visits, it has not been proven to enhance student learning, so all mediums in balance is a better approach (2016). Chan advised minimizing links within the NSEO to only vitality needed resources because students become easily overwhelmed and lost if link are not used with discretion (2017).

Theoretical Understandings of Design

Valora Hodges, a Boise State University-EdTech contributor, acknowledged that learning theories cannot be contextualized with a setting that supports such learning (n.d.). LMS technology affords the structure to create and maintain networks of knowledge through an open-source environment (Reid-Martinez and Grooms, 2018). In EdTech's *Emerging Theories and online Learning Environments for Adults*, Debbie Wicks acknowledged the emergence of constructivist theory in online education but cautioned that designers need to pay specific attention to the needs of adult learners, as well as, the requirement of self-regulation within the environment to ensure learner success (n.d.). Wicks postulated that a student must have the opportunity to set goals, develop a plan of action and complete all necessary steps to think critically when solving a problem so the interface and content must account for those practices (n.d.). In addition, Wicks outlined known barriers to constructivist learning in an online environment for adult learners as isolation from peers and the instructor, instructor inability to understand individually unique circumstances and manage the highly varied needs effectively, instructor not precluded the learners ability to learn through their own experiences, extensive time requirements for evaluation of online activities, and overcoming newness with the technology itself (n.d.). Lastly, Wicks suggests whenever possible make interactions and goals real-world tangible for adult learner as it aids in transference and recall (n.d.).

EdTech contributors, Kristina Ford and Leslie Lott, argue that traditional age students are often more technologically-savvy than the institution itself confirming the struggle for institutions to simultaneously overcome adult learner hurdles, while keeping the traditional age student engaged (n.d.). Ford and Lott cite this as a predominate reason for constructivist theories dominance because it seeks to understand how learning occurs, yielding fruitful understanding to

instructors and designers on how to overcome the highly varied needs of such a diverse population (n.d.). Maryellen Allen, a Distance Learning Librarian at University of Alabama Libraries, confirms the assertion that a constructivist approach is the natural fit of an online environment (2008). Allen held that knowledge is fashioned through interaction and experience with any given object or process (2008). Focusing on the quality of knowledge and structuring the design of the information to assure learning goals are achieved narrows the concentration for designers (Reid-Martinez & Grooms, 2018). Schell and Janicki assert similar benefits of the LMS environment, arguing that online environments support cohesive interaction among stakeholders (2013). Hodges added that e-learning brings together individuals into a single community that transcends space and time to engage them in purposeful learning (n.d.).

Reid-Martinez and Grooms also convey that designers are best to prioritize the roles of visual literacy, bridging questioning and kinesthetic activities in applying Bloom's taxonomy for constructivist learning (2018). Through the *Learner Interaction Model*, it is well understood that interaction occurs perpetually between learners and content, instructors, and peers and harnessing the power of these interactions while simultaneously incorporating adaptive learning technologies allows greater collective learning and problem solving, thusly self-efficacy (Reid-Martinez and Grooms, 2018). The goal of the designer should be to create the best structures within the content to capitalize on these interactions and collaborations (Reid-Martinez and Grooms, 2018).

Allen distinguished that constructivist theory in higher education has shifted from pedagogical to andragogical with the onset of online learning (2008). Offering further justification to the theory's employment when developing material for adult and other non-traditional student subsets. Allen further asserts that the constructivist theory perpetuates critical

thinking and information literacy supporting student self-efficacy directly (2008). Allen argued that the constructivist approach creates life-long learners who can conceptualize, analyze, synthesize, evaluate and apply learned information to everyday problems (2008). Schell and Janicki cited that the constructivism enables the process of determine the correct answer for oneself, requiring learner to innately reflect on the information, deduce properly and respond accordingly all of which reaffirm the learning process (2013). Because learners assimilate and transfer knowledge through mental models the process emphasizes construction of knowledge making problem solving and recall easier in domains of increased conceptual complexity (Schell & Janicki, 2013). This is particularly critical at the college level because it is reflective of real-world employment beyond college where students will be tasked with propelling their own careers by being able to problem-solve and think critically (Schell & Janicki, 2013). The cooperative nature of the online environment enhances student-to-student communication and understanding as well innately building a sense of comradery (Schell & Janicki, 2013). Schell and Janicki also highlight that of the eliciting response and offering appropriate and timely feedback are the two events most connected to student success (2013).

Hodges, Ford and Lott all reflected on L.S. Vygotsky's Zone of Proximal Development (ZPD) theory which strives to build a bridge between the space of what a learner already knows and what knowledge exists beyond that understanding (n.d). ZPD theory assists in obtaining finite objectives to "help close the gap." Additionally, Sociocultural Constructivism identifies that through social interaction knowledge is acquired and new understanding obtained and perpetuated via a community of learns and authentic applicable tasks (Hodges, n.d.). The LMS environment facilitates the development of a diverse, participatory community bringing together limitless perspectives contributing to continuous learner growth (Hodges, n.d.). In addition,

Hodges commended the LMS's multimedia capabilities and asserted that by employing the Cognitive Theory of Multimedia Learning, designers can understand the fact that individuals process information from any given format differently, structure a healthy blend of multimedia formats and affirm that the selection is the right kind of medium for a given outcome improves learning (2013). Also remaining aware of newer theories, such as Sociocultural Constructivism and the Cognitive Theory of Multimedia Learning allows designers to guarantee the technology is learner-centered and is adjusted to fit their needs, as well as, that the structure of the NSEO fosters the necessary interaction to actively shape the learning environment and exploit the diversity of the learner community (Hodges, n.d.).

Implementation

Because orientation is a collaborative, campus-wide event, Wilson and Minhas-Taneja, utilized guidance from *Learning Reconsidered: A Campus-Wide Focus on the Student Experience* (2016). This well-known student affairs literature suggests starting small, identify champions who will support the transition, expect and strive manage conflict effectively and to evaluate outcomes *Learning Reconsidered*, also expounds that cross-disciplinary feedback is essential to ensure a wide breadth of campus information (Wilson & Minhas-Taneja, 2016). Elliott and Orr offer that a single designate office should be primarily responsible for implementation and upkeep of NSEO's, but that the NSEO administrative leader must work heavily with other campus stakeholder group to ensure information is kept accurate and appropriate (2014). For example, Jones utilized the ADDIE (Analysis, Design, Development, Implement, & Evaluate) instructional design model as it produced key findings that identified inefficiencies of the in-person delivery format (2013). Finally, Cho contributed that properly

conducting assessment prior to development, listening to stakeholder thoughts and the producing high-quality content all meaningfully effect the success of the process (2012).

Assessment

Wilson and Minhas-Taneja suggests that project leaders collect data throughout the process, developing a proper use case that includes a financial analysis, and to identify key student data markers to track institutional student retention benefits (2016). Suggested elements such as the number of times a student logs in, amount of time spent in the orientation, demographic information, what types of information is primarily accessed aid in informing improvements to the NSEO (Wilson & Minhas-Taneja, 2016). Wilson and Minhas-Taneja study confirmed findings of earlier scholarly works, citing full participation in online activities a strong indicator of buy-in and commitment (2016).

Jones employed the ADDIE process not only in development, but also bi-annually, in order to ensure the effectiveness of the E-Orientaion (2013). A concept affirmed by Elliott and Orr, who contextualize that students can provide influential and timely feedback for improvement (2014). A key element also confirmed by Alnawas, citing that it is imperative that student assessment be both vertical (senior leadership down) and horizontal (intrafunctional across each service area) in nature, requirements are clear to students, as well as, results properly prioritized and employed as part of the improvement process (2015).

Conclusion

Higher education is struggling to keep pace with the realities of today's changing technological infrastructure, demand for immediately results and serving a highly diversified student population. Declining enrollments, increased accreditation demands for outcomes and the unbelievable pace of technological change has left most institutions reeling. The effects of which are especially felt in the community college sector who serve higher levels of non-traditional students and faced continuous public funding cuts. To improve retention of students', researchers and institutions have identified NSEO's as an immediate cost-effective, flexible solution. The emergence of LMS platforms and online learning has presented an opportunity to engage technology in new ways and successful employment of the constructivist theory principles are now understood to support student learning and self-efficacy producing stronger student outcomes. Thusly, enabling institutions to meet the demands and expectation of student populations, improve retention and ensure learners are adequately prepared for the real-world post-graduation.

Further empirical research is needed that properly assesses effective media incorporation, interface design and the constructivist approach specifically in the context of an NSEO. Continued research will allow institutions, instructors and designers continue to adapt in ways that enhance the student experience and self-efficacy.

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Project Design, Methodology, Implementation & Planning

As previously stated, the E-Orientation will be created as a lesson in Moodle. Moodle is an excellent solution because it allows for the creation of a flexible course with built-in data tracking elements that will allow the College to evaluate the project's performance. Moodle is also easily updated and a previously onboarded software solution for the College. Because Moodle is the institutions online learning platform for all online and flex class formats, the student base will gain exponential value is becoming familiar with the platform, as well as, feel less intimidated if considering an online class format. Moodle also allows for the incorporation of multimedia components to be embedded in the platform for an interactive user experience and thorough assessment of student efficacy. Because orientation is a mechanism for delivering a wide range of information to new student many college offices will be contributing content in the form of video snippets, but will also be providing supplemental forms, links and scenario information to ensure the E-Orientation is holistic, thorough and primarily considerate of the student needs. A preliminary content outline is provided here but may be synthesized or require additions as time and needs necessitate.

Description/Goal

Problem Statement

Community colleges nationwide are experiencing declining enrollment and CCC is no exception, so reducing/removing onboarding obstacles is key to stabilizing enrollment. E-Orientation as a solution E-Orientation is simply the delivery of new student orientation online, orientation provides valuable information to improve new-student success in college. E-Orientation creates the flexibility for new students to access the orientation at their convenience, reduces the time burden on faculty and administration and allows he college to build in

interactive portions to confirm understanding. CCC currently employs the Moodle Learning Management System (LMS) for delivery of online education; therefore, intentional student interaction only helps familiarity and in turn reduces hesitation when considering enrolling in online learning.

Players

Developers

- Counseling & Advisement Office
- Instructional Designer (with IT Support as needed)
- Office of Institutional Research & Planning
- Admissions Office (Must be able to inform students)

Video Presenters

- Introduction/Welcome from the President
- Introduction to the Moodle Platform (Includes IT information)
- Interactive Campus Map (Software TBD)
- Academic Programming
- Counseling & Advisement
- Athletics
- Bursar
- Campus Life
- Career Services
- Center for Community Workforce Development
- Financial Aid
- Registrar
- Tutoring Center

- Library
- Student Resources (personal counseling, emergency financial assistance, activities, societies, clubs, community partners)

End Users

- New CCC Students

Preconditions

Developers

- Finalize E-Orientation module.
- Build E-Orientation module in the LMS.
- Develop student and admission staff training.
- CCC must maintain active Moodle License.
- Admissions staff/Instructional Designer develop new protocols to properly activate all new students in Moodle accompanied by interface training.
- Counseling & Advisement will maintain up-to-date on student disclosure requirements, such as Title IX, to ensure CCC is exceeding legal and industry standards.
- Office of Institutional Research will coordinate with affiliated campus offices to develop assessment metrics to evaluate E-Orientation performance by administration upon launch.

Video Presenters

- Coordinate and complete filming their respective video with Counseling & Advisement staff.

Implementation Responsibilities

The Student Affairs professionals are the campus champions of this project as they are primarily responsible for orientation, advising and other student services. I, as the Office of Institutional Research and Planning, am responsible for researching documented interface design and pedagogy backed best practices, developing and compiling assessment, ensuring legal compliance and working as the primary developer to build the interactive E-Orientation in the Moodle platform.

Counseling & Advisement

- In cooperation with Institutional Research, review feedback from the on-campus orientation to ensure student feedback drives the design process.
- Bring forward all current materials utilized in on-campus orientation for adaptation into the E-Orientation format.
- Film and edit each video presentation in cooperation with Institutional Research.
- Contribute to information and content design best practice.

Office of Institutional Research and Planning

- Provide foundational research for the development of E-Orientation in a community college setting.
- In cooperation with Counseling & Advisement project lead, review feedback from the on-campus orientation to ensure student feedback drives the design process.
- In cooperation with Instructional Design, assess elements in Moodle and provide feedback on information and interface design best practice.
- Develop assessment cycle of the project for valuable feedback.
- Follow CCC IRB approval requirements as needed.
- Serve as primary project lead and liaison between all stakeholders.

Instruction Designer

- Support construction of modules in Moodle.
- Contribute to information design best practice.
- Develop brief, but clear, “E-Orientation in Moodle” instructions for students.

Admissions Office

- Proliferate E-Orientation instructions and information to new students via the website, phone and in person.

Video Presenters

- Complete a brief survey requesting them to provide required informational content, necessary student tools (such as forms) and what the *most common questions they receive are*. This critical feedback will then be employed in interface and student efficacy assessment.
- Develop 2-3 minute video script; incorporating elements as requested by Counseling & Advisement staff.

New Students

- Complete E-Orientation as requested by CCC.
- Provide feedback to the Office of Institutional Research & Planning as requested.

Success Scenario

Developers

- Will create an interactive E-Orientation presentation no longer than an hour for new students.
- Will ensure all compliance and legal obligations are met.
- Will utilize best practice in design to ensure student's understanding.
- Will assess, evaluate and improve the E-Orientation presentation for improved student success.
- CCC will successfully use technology to create flexibility and fun orientation experience and reduce roadblocks in the new student orientation process.

Video Presenters

- Will only be required to create one informative video, rather than attend on-campus orientation.
- Have an accessible/interactive tool students can refer to at their convenience, reducing workload.
- Will have an easily updated platform if information changes.

New Students

- Will properly activate their Moodle Account.
- Will become knowledgeable about the campus, campus policies and what their rights are.
- Will have an improved orientation experience, reducing obstacles to their onboarding.
- Will be required to become familiar with the online learning platform, reducing hesitation in enrolling online.
- Will be encouraged and able to provide feedback to CCC for continuous improvement.

Potential Issues with Suggested Resolutions

Potential Issue 1: Length/Time Management

Suggested Solution: To improve student engagement, Video Presenters should target their information to what is pertinent to a new student, then offer thorough contact directions to a student may engage them as needed. Developers must also be intentional with the information understanding activities, making them fun, brief and target only the most valuable information as to not overwhelm.

Potential Issue 2: Problematic Protocols and Technology Issues

Suggested Solution: Developers and CCC office must ensure student do not have technological issues when attempting to complete the orientation. Collaborative protocols must be developed to include all technological requirements as set forth by the Instructional Designer who serves as the Moodle Administrator.

Project Critical Dependencies

Remain focused on primary objective goal of smooth new student experience throughout development. E-Orientation is only as successful as its ease for the student, as a team CCC, must collaborate with all stakeholders to ensure the student experience is free of frustration.

Including:

- Maintaining a safe and stable technological platform.
- Using Information Design Best Practices for ease of navigation and understanding.
- Provide clear training to staff and students.

Compliance and Regulatory Obligations

As a public institution, eligible for Title IV funding, CCC must ensure it meets/exceeds all federal and state requirements pertaining to a student's Right-to-Know and that all new students are provided accurate and timely information.

Interface Design

The interface will utilize the global navigation of all college classes in order to foster cohesion in student interaction with the interface. ADA compliance is included within the Moodle platform allowing the College to easily fulfill the best practice and legal requirements. Clinton CC Active Directory Federation Services (ADFS) single-user sign-on in Moodle allows the institution to be confident that in fact it is the incoming student completing the orientation.

User autonomy elements to be displayed in Moodle:

- Clinton CC Moodle Global Navigation Bar
- Navigation Buttons (menu, forward, back, play, pause, volume and zoom)
- Progress Bar
- Flexible Course Content Navigation
- Content Specific Side-bar Navigation with supplemental links, forms and campus contact information

Student Efficacy Assessment

As confirmed by the literature review, e-orientations allow for employment of theory driven design and assessment. The e-orientation design will utilize constructivist, Bloom's taxonomy and social constructivist (as appropriate) theories to ensure information is presented and assessed in a way that propagates student efficacy and self-awareness. In fact, Moodle

provides a *Moodle Tool Guide for Teachers* that offers designers a reflection of which informational and assessment tools provided within the platform are best suited for ease of use, information transfer, learning assessment, communication and interaction, collaboration and applying Bloom's taxonomy for educational learning. This guide will serve as a valuable resource throughout the project.

Student efficacy assessment will be a blend of the traditional assessment tools, such as matching content to titles and multiple choice, but also employ scenario-based problem-solving allowing students to demonstrate high-order problem solving skills that are more reflective of situation's they may face as a new college student. Visual literacy, bridging questions and kinesthetic activities will be utilized to support constructivist learning as well. The goal of the design will be to identify what a student already knows and what they need to know to be successful as a conduit to what additional information should be provided. Then require them to employ their new found understanding and deductive reasoning to successfully recall information and problem solve.

In addition to content efficacy, it will be imperative that Clinton assesses the e-orientation interactive metrics to track how students are interacting with the content and to identify areas that require improvement. Institutional Research will identify Key Performance Indicators (KPIs) that will help the College understand patterns in student interactivity with the e-orientation module. Because this module is intended to remain referenceable for students at any point after they are onboarded time in the module will not be tracked. Below are a few examples of the valuable metrics the Moodle interface already tracks.

E-Orientation Moodle Tracking Metrics:

- Roster of Students
- # Attempts
- Completion Progress
- Assessment Performance
- Moodle Lesson has single click tracking ability, so after construction available information will be assessed, and appropriate metrics added.

Lastly, the College will employ the ADDIE model as an annual assessment model to ensure cyclical assessment of the e-orientation's performance and applicability of content. The model will Analyze, Design, Develop, Implement and Evaluate the content, metrics trends from Moodle, student evaluation form feedback and student retentions trends to ensure the e-orientation remains of the highest quality and beneficial to students.

Project Timeline

January 2019

- Student Affairs & Institutional Research synthesize feedback from student orientation surveys
- Developers responsible for various information create the content
- Weekly meetings with project developers to finalize multimedia content
- Identify interactive map software

February 2019

- Weekly meetings with project developers to finalize multimedia content
- Review and update onboarding protocols for new students

- All material to be developed is due to the team by end of February

March 2019

- Weekly meetings with project developers to finalize content organization in the interface
- Build the lesson and student efficacy assessment in Moodle

April 2019

- Load previously selected staff to beta test the e-orientation
- Finalize and document project assessment metrics
- Develop student survey assessing the e-orientation and their experience
- Continue weekly project meetings as needed

May 2019

- Load subset for Fall 2018 new students into Moodle

Proposed Project Evaluation Plan

This thesis project will be evaluated against this thesis proposal as it highlights the necessary project goals, markers, metrics, content requirements and timeline required to make this project a success. A written reflection as well as an interactive presentation of the e-orientation are the anticipated deliverables of this thesis project.

Project Evaluation and Reflection

The goal of this thesis project was achieved with the successful development of an NSEO for Clinton Community College (CCC) over the Spring 2019 term. The only known delay was the development of the video content, which has not yet been finalized, the impact will likely result in the proposed May deadline for the beta group being delayed until June 2019.

Nonetheless, as identified in the *Designing an effective Community College E-Orientation in a Learning Management System* literature review, the NSEO was successfully designed to foster active participation, comprehension, recollection and critical problem-solving skills to reduce onboarding barriers and properly infuse expectations for new students. Understanding that student issues primarily center on information efficacy and technological barriers, as well as, the mounting impact of online learning guided the project's interface, content and assessment design throughout.

Employed Literature Review Key Findings

The literature review process allowed highly beneficial feedback and guidance in the areas of design, content, pedagogy, anticipated outcomes and assessment. Noting key elements of how to employ the NSEO as part of the student development process by focusing on pedagogy, instead of the technology, while remaining focused on a student-oriented approach. Concepts which were imperative to building sufficient student informational efficacy and enabling students' ability to critically problem solve to successfully navigate college life. Chan specifically noted that "freshman persistence is often negatively affected by a student's ability to cope with scholarly pressure and a new social structure" (Aubrey, 2018).

Many of the scholarly researchers confirmed Chan's conclusion, noting that a comprehensive guide tailored specifically to an institution and accessible to all new students with identifiable academic and social integration variables is a viable way to successfully increase retention and student success (Aubrey, 2018). The NSEO development process requires intense collaboration between faculty, staff and administration (Aubrey, 2018). As a result, in addition to periodic meetings over several months, a brief questionnaire was sent out to all identified campus stakeholders, an example of which can be found in Appendix A. The questionnaire was intentionally designed to draw out the most immediately pertinent student information.

The project developers also employed these literature review findings (Aubrey, 2018):

- Be aware of and strive to overcome the challenge faced when balancing needed content without overwhelming the student.
- Community college students require the incorporation of campus support mechanisms; e.g. emergency monetary assistance, sports & activities, clubs, ADA compliance.
- NSEOs encourage learning skills and self-awareness reducing student barriers.
- LMS based NSEOs intentionally familiarize students with the online learning platform.
- LMS based NSEOs allow for pedagogy and cyclical learning assessment to be incorporated, tracked and improved upon.
- Best practice in interface design is critical for ease of use, information retention and application.

Content Structure

Due to consistent research findings regarding length, the entire eOrientation experience is expected to take between about an hour to an hour and fifteen minutes with assessment in order to avoid being overly burdensome to new students. With mixed formats of content some content will not take long to ingest, any videos will be a maximum of two-three minutes long and be offered from a student voice perspective. A full information content outline is provided here:

CCC eOrientation Content Outline

- I. Welcome and General Information
 - a. Welcome
 - b. Campus Leadership
 - c. Academic Affairs
 - d. Academic Programs
 - e. Campus Map
 - f. Clinton Online
 - g. Bookstore
- II. Student Affairs
 - a. Students Affairs
 - b. Counseling & Advisement
 - c. Career Services
- III. Student Services: How can we help?
 - a. Financial Aid
 - b. Registrar
 - c. Bursar
 - d. Community & Workforce Development
- IV. Library & Academic Support
 - a. Library
 - b. Accommodative Services
 - c. Tutoring Center
- V. Student Life & Activities
 - a. Student Life
 - b. Athletics
 - c. Societies & Clubs
- VI. Student Portal, Handbook & Conduct
 - a. Student “Need-to-know” Information
 - b. Title IX

Constructivist Pedagogy & Interface Design

Collaborative on-campus champion meetings coupled with the thoroughness of the eOrientation questionnaire allowed the developers opportunities to successfully target crucial institutional information which was then used to develop video scripts, bulleted content, links and forms provided and assessment questions. The project's content was constructivist theory based and relies on high levels of end-user interactivity and multimedia content to keep the students engaged in the material and an active participant in the experience. The interface employs best practices in global and end-user navigation, font, color to remain fully ADA compliant. In fact, the eOrientation has been reviewed formally by the institution's Instructional Designer as evidenced in Appendix C.

The global navigation top header remains consistent and available throughout the eOrientation and provides links to pertinent information about the interface, including other online student supports (e.g. Library, online courses) and technical support for the platform and school interfaces. The *eOrientation Table of Contents* is a left-side navigation block that is permanently accessible which fills the ovals with green when information has been viewed so students can ensure they have viewed all available material. Which was an unforeseen challenge that had to be overcome because the eOrientation was not created as a "lesson" which is the only way a progress bar is available in Moodle. Progress is also shown on the homepage by the check boxes as well but does not remain easily viewed once in the content. Lastly, the calendar block remains available for students on their Moodle homepage for ease of reference.

As is best practice in web design, the Clinton Community College logo returns students to the Clinton Online Homepage. In addition, a sans-serif font is used with consistent sizing of headers and subsequent content appropriately, as well as, a clean and easily consumed

blue/gray/white color scheme that is consistent with all other Moodle coursework institution-wide. Reinforcing the Clinton Online brand and for ease of viewing, use, assimilation and adjustment of students understanding. Links are colored is the standard bright blue, and the cursor becomes available when hovering to indicate a link to the students. Other hover capabilities area also incorporated with descriptions available on all communication methods along with the employment of well-known icons.

The module content is laid out consistently in a tabs format. The tabs view aids the audience's ability to see available content and which tab of content they are currently viewing in yellow. The *eOrientation Table of Contents* remains visible on the left side of the screen and below the content is additional module navigation tools that allow the audience to move through the content with ease and flexibility. On the right side of the screen are affiliated Clinton.edu website links to content within the module, specifically allowing for further assimilation of the content as the audience moves through it and access to the full web content. The choice was made not to embed weblinks, thought the LMS has the capability, due to over activity of links. As is best practice, the bulleted listing allows the ADA reader to pick and read the list appropriately as needed for visual disabilities.

In addition, videos were consciously uploaded to YouTube and then embedded in the content because the data is managed offsite and will prevent the campus IT infrastructure from becoming "bogged down" if too many people are attempting to view the video simultaneously. Moodle is also intuitive to YouTube providing typical video presenter controls to the audience and the incorporation of closed captioning and transcripts for ADA compliance. A bulleted list of "need-to-know" content was used in each content page with other forms and/or links that the questionnaire feedback provided. Again, the intent is to offer the audience clear, immediately

useful information, but not overwhelm with the full website content. If they desire more information, they may visit the full website links on the right navigation block.

Because the eOrientation is intended to “drip students” information as needed, the decision was made to place a “self-enroll” button on the global navigation bar so that all students can simply click and enable the orientation content. The eOrientation content remains available if the individual has Active Directory Federation Services (ADFS) single user sign-on with Clinton. This experience thusly is available to all faculty, staff and students for improved campus efficacy. Additionally, an active ADFS log-in also ensures security of the content and validity that the individual is who they claim to be.

Lastly, both in the center of the screen on the eOrientation homepage and in the global top block of the table of contents is the availability to provide feedback, ask questions and have access point with a student affairs liaison.

Rate the CCC eOrientation Experience is a Likert scale assessment where the students can rate the experience and data can be collected on the perceived success of the experience. This also has the dash gray indicator box and oval in the table of contents that visually indicates to the student that this is something “to complete” because they will innately understand this eventually as they will see these check boxes appear and the green ovals in the table of contents fill in as they complete the eOrientation and is one successful example of employing constructivism’s assimilation and accommodation (changing their understanding of the information).

E-Orientation Feedback allows the audience to provide text input regarding the eOrientation itself. The results will be restricted to the student affairs administration who oversees the eOrientation and IR for further review and improvement of the eOrientation.

Additional Questions is a forum activity that enables participants to have asynchronous discussions i.e. discussions that take place over an extended period of time. This forum allows the institution to edit and structure the forum to be proactive in providing missing or additional information and employs the audience as co-creators of additional content over time (Moodle Guide, n.d).

Per Moodle's training module, forums have many uses; including a social space for students to get to know each other, continuing online an issue raised previously in a face-to-face session and a help center where faculty, staff and students can give advice (Moodle Guide, n.d). Participants can subscribe to a forum to receive notifications of new forum posts, which is how the student affairs liaison will be easily able to monitor and address concerns (Moodle Guide, n.d). This global participation mechanism is the closest to the highest order in bloom's taxonomy "create" that we could achieve as the eOrientation is meant mainly to infer information to the audience for later use. The forum does allow an avenue for students to become co-creators of the future experience.

Student and Project Assessment

In addition to the constructivist theory, Bloom's Taxonomy was structured in via quiz assessments to ensure students demonstrate information efficacy and critical problem-solving skills. By employing proper pedagogy and having the student demonstrate that they can remember, understand, apply, analyze and evaluate the information, the College can ensure the potential barriers are reduce and retention improved. Quizzes were incorporated sporadically to engage the student and assess their understanding of the content. Per the *Moodle Tool Guide for Teachers* (Appendix B), quizzes allow for the fulfillment of Bloom's Taxonomy. The assessment is not intended to be ridiculously taxing, but rather provide affirmation of previously provided information. Students can "jump to" content as they wish and are not required during the intermittent quizzes to get a perfect score. However, if the student receives a 100% on the quiz the green oval and check back on the homepage will mark completion status appropriately.

Notably, the high priority given to proper pedagogy application and assessment affords the markers to ensure end-users are improving their understanding of the campus and college life.

Attempting to capitalize on every interaction, each wrong answer will provide redirection back to the correct answer in a clever and engaging way. Again, the goal is to ensure campus efficacy not to make them feel penalized. Matching style questions were also incorporated as they build on the assimilation and adjustment of thought in constructivist pedagogy, as well as, requiring the audience to satisfy the “Analyze” requirements of Bloom’s Taxonomy. Lastly, at the conclusion of the content, one random “real-life” scenario will be drawn out of a bank of questions. This type of assessment requires the audience to show proficiency by appropriately placing the correct office or other information into the scenario, building on previous information and make them evaluate and apply the information, if successful the end-user is demonstrating the critical problem-solving skills needed to be successful on campus and as student. The final content assessment is the only assessment with requirement of 100%, if the student completes this single question correctly, they receive the “Well done! Congratulations on successfully completing the eOrientation” to ensure they understand that they have completed the experience.

As mentioned in the proposal and thesis presentation, Moodle has single click tracking ability, drill-down data metrics are available down to the question or student so module, content inference and interactivity can all be collected. Through these mechanisms the College will be able to create a baseline and further track audience performance during the eOrientation, preemptively identify problem areas in the content, structure and flow of the experience for continuous improvement. The Moodle LMS also allows generation of aggregated reports for ease of at-a-glance assessment such as overall successful completion of the experience. In the future, all assessment tools and reports will be monitored and reviewed by the campus Student

Affairs liaison, IR and the Instructional Designer. However, if any given campus office desires to also be involved in a review of their content, we welcome the collaboration.

Upon full implementation, the College has agreed to employ the ADDIE model as an annual assessment model to ensure cyclical assessment of the e-orientation's performance and applicability of content. The model will Analyze, Design, Develop, Implement and Evaluate the content, metric trends from Moodle, student evaluation feedback and prescribed project metrics to ensure the e-orientation remains of the highest quality and beneficial to students.

Anticipated Findings

As a retention solution, the successful development and implementation of the CCC online new student orientation will allow audience members immediate access to pertinent campus information. In turn, this experience will ease the new student onboarding experience and foster continued student support. In addition, due to the increasing role of online education services in higher education, the project has specifically targeted audience familiarity with the Moodle LMS. Constructivism and bloom's taxonomy pedagogies having been infused into content and assessment design will lead to:

- ✓ Improved student efficacy (data tracked through assessment)
- ✓ Improved student access to student services (data via e-orientation feedback & additional question forum)
- ✓ Improved student retention (collected annually, e.g. IPEDS)
- ✓ Improved enrollment in online courses (collected via institutional data)

Lessons Learned

An LMS based NSEO offers institutions a cost-effective, pedagogy driven, data-backed solution to reduce new student barriers and improve their onboarding experience. As stated previously, the literature review process was a vital component in identifying best-practice in design and pedagogy, but also in building the understanding necessary to develop a healthy NSEO. While there is acknowledgement that more formal studies are required to understand the tangible impact of an NSEO on a student's subsequent success and experience in college, previous research efforts proved to be invaluable in this development process. The challenges faced in balancing the amount of required content and required completion time cannot be understated. Therefore, the effective use of the questionnaire to target said information was invaluable. Interface design best practices are imperative for student engagement, ease of use and to support recollection of the material.

The Moodle LMS proved to be an invaluable asset in the construction of this eOrientation because of its own end-user supported design, known pedagogical strengths and data collection points. The "drag and drop" graphical user interface, pre-programmed information architectures, and student level data points make an LMS the most employable option for an institution looking to benefit from a product that is already in place. This was only enhanced by activated content colors changes, navigation tools and a cohesive global navigation that passively infuses the *Clinton Online* brand.

Project management is challenging and the decision to move to student-oriented (voice) videos has likely delay the earlier proposed project calendar. However, it is pleasing that others in the organization see the benefits to ensuring the experience is what a student would prefer rather than their perception. Champions of this project were critical to the development thus far,

providing critical feedback and enhancement suggestions over the last several months and will continue to garner support of faculty, staff and administration who have been somewhat “removed” from the eOrientation project. Despite the project development pitfalls, this successful development of the CCC eOrientation is critical to moving the institution in a “technological friendly” direction ensuring all stakeholder’s continued success.

Project Evaluation and Reflection References

Aubrey, J. (December 2018). *Designing an effective Community College E-Orientation in a Learning Management System Literature Review.*

Moodle Guide. (n.d.) Retrieved from the Clinton Moodle Training Site on March 16, 2019.

Moodle Tool Guide for Teachers. (May 2010). Retrieved from the Clinton Moodle Training Site on April 04, 2019.

Appendix A

E-Orientation Content Questionnaire – Tutoring Center

Questionnaire Objective:

To collect the most immediately relevant information from your area for new students. The answers can also be used to help the script of the video snippet from your department, as well as, help project leaders build informational content and develop scenario-based assessment of student efficacy within the module.

1. Why should students visit the Tutoring Center?

The Tutoring Center is a place where students can receive personalized academic assistance to increase their chances of success in their courses. It is a warm and welcoming place where students can feel safe and comfortable asking questions.

2. What services and programs do you provide on campus?

Our tutoring services include academic support in all levels of Mathematics, Writing, English Literature, Reading, Biology, Environmental Science, Chemistry, Foundational Science Skills, Computer support, and Accounting. We also provide feedback on assignments, test taking and note taking strategies, reinforcement of classroom instruction, and referrals to appropriate software, videos, worksheets and handouts.

The STEM Coordinator and the Reading/Writing Coordinator also collaborate with academic departments to offer students free Math, Science, Reading and Writing workshops. During these workshops, students can get a refresher of some essential skills and practice them with a professional in the field.

3. What information from your department is critical for student success?

Location: 2nd Floor Learning Commons (217M Tutoring Lab & 214M Writing Center)
Tutoring Center Schedule and Workshop Schedule

4. What are the three most common questions you receive in your office?

Do I need to make an appointment to see a tutor? *No, all tutoring is walk-in. First come, first serve! Just let a tutor know you are looking for help and you will be helped shortly.*

What are the hours of the Tutoring Center? *The Tutoring Center opens every day at 8am and closes at 4:30pm, with the exception of a few days that have extended hours until 5 or 6pm.*

Can I go to the Tutoring Center to do work without meeting with a tutor?

Absolutely! The Tutoring Center has plenty of spaces available for students to work on computers and at tables. It also has 3 quiet study rooms for students looking for areas to do their work without interruptions.

5. What forms and links do you believe are the most valuable for students?

All information related to the Tutoring Center can be found on the website.

www.clinton.edu/tutoringcenter

Appendix B

Moodle Tool Guide for Teachers

What do you want to achieve (purpose)?

↓

How easy can this be set up by you?

	Information Transfer Is it a tool for disseminating information from you to your students?	Assess learning Does this tool allow you to assess your students' learning?	Communication & interaction Can it be used for communication & interaction among participants (you & your students)?	Co-create content Can you & your students collaborate & create content together?	Bloom's Does what thinking order? *Remember *Understand *Apply *Analyze *Evaluate *Create
Add Resource Upload a file (Word Document/ PowerPoint)	Easy. Use an email attachment. But can your site stand on its own?	No. Only teachers can upload files to course site. So definitely a push-tool.	Maybe. Use to give task. Collect student files through Forum or Assignment.	Maybe. Use to give task. Collect student files through Forum or Assignment.	None. This is not a learning activity. Not information transfer.
Add Resource Link to a web page	Easy. Find the web address (aka url - the bit that starts with http://), copy it, paste it.	Very easy way of leading students to information. Can link directly to database articles.	Not directly. Option is to link to external student e-journals or blogs.	Maybe. You can link to external collaborative sites e.g. Google Docs, wikis or blogs.	6/6 Can do all of the above, depending on where you link to.
News Forum Use to send out course announcements	Easy. It's a standard forum, already set up in your course.	Yes. Include course updates, encouragement, timely links, etc.	No. The News Forum is limited. Students cannot post new topics.	Limited because students cannot start new topics. You set up another Forum.	2/6 Not strictly learning activity. Not readiness for next class? R & U
Discussion Forum Use for many types of learning activities *	Easy. Forum has usable default settings. It's name & description is enough.	Works resources as links of files, high message volume but of varying info.	Forum is versatile & allows this, e.g. through a formative assessment activity.	No. Students can communicate with you & peers. Instead as a class or in groups.	5/6 Understand, Apply, Analyze, Evaluate, Create
Wiki Use for many types of learning activities	Tricky. Decide on individual & group settings. Use some tricks. Get some training.	No. Use an alternative site. Allow editing only by teachers or by any participant.	Wiki is versatile & allows this, e.g. through a formative assessment activity.	No. Students can collaborate & write together.	5/6 Understand, Apply, Analyze, Evaluate, Create
Glossary Use for learning activities that gather resources or present info	Default settings are good. Try to set it so the author's name is shown.	Use glossary to define terms or present info. Better set, let the students add to it.	Glossary is versatile & allows this, but you need to design the right learning activity.	Only original author can edit an entry. Class can correct content, resources, etc.	5/6 Understand, Apply, Analyze, Evaluate, Create
Quiz Use to assess learning, formative or summative.	Tricky & takes time. Set up quiz, then questions. Consider your categories.	The quiz is aimed at assessment, not as distribution channel. Tip: use as self-test.	Quiz can be timed & secure. Has essay, mc, true/false, matching, & other questions.	No. Tip: Use forums instead.	6/6 Can test all 6 but this requires you to be creative in your assessment.
Lesson Use for presenting branched info or testing	It can be tricky to set up. Make sure you plan the lesson first. Watch the effort.	Great for presenting information in a branched, guided way.	Yes. Allows grading. Use as branched quiz, scenario, case study, role play.	No. This is an individual activity, not a group activity.	6/6 Can test all 6 but this requires you to be creative in your assessment.
Assignment Use to collect, assess & provide feedback on assignments	Easy. Choose from 4 types. Both online & offline assignments are possible.	No. The assignment tool is not a distribution channel.	Yes. Set due dates & maximum grades. Collect assignments and provide feedback.	No. Only allows very limited interaction between teacher & students.	6/6 Indirectly depends on your assessment design.
Database Allow students to collect, share & search created artifacts	Tricky to set up. Know what you want before you build. Get some training.	Can be used for teacher to present info. Best better to allow students add to it.	Database is versatile & allows this, but you need to design the right learning activity.	Not suited for discussions. Students can read other entries & comment on data.	5/6 Understand, Apply, Analyze, Evaluate, Create
Great fit	<p>How to use this guide</p> <p>Are you a teacher new to Moodle? Use this guide to pick the right tool for the job.</p> <p>*Know which tool you want to use? Follow its row across to see its strengths & weaknesses.</p> <p>*Know what you want to achieve? Pick a column and follow it to see which tool will help you do it.</p>		<p>*Be creative with Discussion Forums</p> <p>It doesn't always have to be an in-depth class discussion. Other activity ideas: class debate, team discussions, report weekly project findings, web quests, role play & feedback, gather resources & reviews, assessment support, helpline, NZ's Gift Talent (use the rating), rotated student-led discussions, weekly magazine,...</p>		<p>Need more Moodle help?</p> <ul style="list-style-type: none"> *Moodle community at www.moodle.org *Download Using Moodle book (it's free!) *@basic's 2 Minute Moodles videos *@moodleman blog: www.moodleman.com *Go meet your friendly e-learning, flexible learning or educational technology team. Buy them a coffee!

Arvee Selzinger (@cutupjames / www.cats-pjames.net) - May 2010

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Moodle Quiz Tool Guide Zoomed In

<p>Quiz</p> <p>Use to assess learning, formative or summative.</p>	<p>Tricky & takes time. Set up quiz, then questions. Consider your categories.</p>	<p>The quiz is aimed at assessment, not as distribution channel. Tip: use as self-test.</p>	<p>Quiz can be timed & secure. Has essay, mc, true/false, matching, & other questions.</p>	<p>No. Tip: Use forums instead.</p>	<p>No. Tip: Use forums or wikis instead.</p>	<p>6/6 Can test all 6 but this requires you to be creative in your assessment.</p>
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Appendix C

Clinton Online OSCQR Rubric: Accessibility (Student eOrientation - Aubrey)

Accessibility Standard		Sufficiently Present	Minor 1/2 hour or less	Moderate 1/2-2 hours	Major 2+ hours	Not Applicable	NEED IDEAS?
4/3/2019 review date - reviewer Karen Case, PhD							
1. Courses should follow a simple and consistent design.							
a	Related content should be organized together.	X					
b	A consistent layout should be established (consistent color scheme, same icon layout, and self-evident titles)	X					
2. Courses should be designed for ease of use.							
a	The homepage should be simple and uncluttered.	X					Clinton Online ADA Compliance Training #1 - Introduction
b	Icons should be arranged in a logical order.	X					
c	Both Icons and text should be used for homepage links.	X					
d	Text should be used as the primary method for delivering information (images and color are secondary)	X					
e	Icons, folders, links, lessons, quizzes, tests, and assignments should have <i>unique and descriptive</i> titles.	X					
3. The course menu should be organized and up-to-date.							
a	If available, a search tool should be located at the top of the course menu.					X	The college is looking into this feature
4. Overview information about the layout and functionality of the course should be available.							
a	The Course Information documents should describe the overall layout of the course, the types of content available, and the tools that will be used.					X	
b	An accessibility statement should be present.	X					
c	The course should provide contact information for disability services and invite suggestions on how to increase accessibility.	X					This information is in a tab on top horizontal Moodle navigation bar called CCC Policies.
5. The color scheme for the course should be simple and carefully chosen.							
a	Color alone should not be used to convey important information or meaning.	X					Clinton Online ADA Compliance Training #2 - Images, Text and Color
b	Text, graphics, and images should be understandable when viewed without color.	X					

6. Text content should ensure readability.

a	There should be high contrast between text and the page background.	X					
b	A sans-serif font with a standard size of 12 pt should be used.	X					
c	Lists should be true bulleted or numbered, rather than created by indenting or using tabs.	X					
d	Use true Tables to display data, rather than creating columns with the tab key.	X					
e	There should be ample white space around and between blocks of text.	X					
f	Large blocks of information should be divided into manageable sections.	X					Moodle Books are a great way to divide content into manageable chunks for students.
g	Semantic document structure should be maintained (headings instead of bold or larger font, table descriptions, emphasis instead of italics, strong instead of bold)	X					
h	Text content should be available in more than one format. HTML is the most accessible format and should be considered the preferred document type. (i.e., Word and PDF, or Word and HTML)	X					If you create a Moodle Page in your course, that is HTML format (read by a browser).
i	Hyperlink text must be descriptive and concise including where link is going. Avoid using phrases with directions such as: "click here" or "email me".	X					example: Clinton Community College Academic Calendar

7. A text equivalent for every non-text element should be provided.

a	Images should have alternate text or descriptions conveying the context or meaning.	X					Image <alt> text decision matrix
b	Audio should have a printable text transcript in an accessible document.	X					Clinton Online ADA Compliance Training #3 - Audio and Video
c	Video files with audio should have synchronized captions, a video description, and a text transcript.	X					Video Captioning Decision Tree
d	Use animation and motion only when needed; if you use it an alternative method of content presentaion will be needed.	X					
e	Audio-narrated PowerPoint presentations should have text transcripts and slide descriptions.					X	

8. PowerPoint presentations should be accessible to all learners.

a	A standard layout and slide title should be use on each slide.					X	
b	Text boxes should not be used.					X	
c	The Notes section should be used to provide long descriptions of images.					X	
d	Slides should have simple, non-automatic transitions.					X	
e	Any embedded video should be captioned and not cause flickering.					X	
f	Presentations should not be "Saved As Web Page".					X	

