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An Exploration of Impacts of a Culturally Relevant Online Orientation Course for Indigenous American Students at a Tribal College

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by
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Abstract

An Exploration of Impacts of a Culturally Relevant Online Orientation Course for Indigenous Students at a Tribal College. Melanie F. Wilson, 2016: Applied Dissertation, Nova Southeastern University, Abraham S. Fischler College of Education. Keywords: indigenous populations, American Indians, culturally relevant education, American Indian education

The problem addressed was the low level of technology skills and access to technology among Native American students entering tribal colleges. The purpose of the quantitative study was to examine the impact of the culturally relevant Jenzabar Online Orientation Course on tribal college students' preparedness for participation in online courses and use of the learning management system (LMS). Impact of the orientation course as well as the impact of the 7 Anishinaabe cultural values incorporated into the course were examined. Data were collected by administering a survey. Participants for the study were 45 freshmen and transfer students at the target tribal college who completed the 2016-2017 Jenzabar Online Orientation Course.

A descriptive analysis of the data revealed that the Jenzabar Online Orientation Course positively impacted students' preparedness for participation in online coursework and had an overall positive impact on students' understanding of the seven Anishinaabe values. The inclusion of the 7 Anishinaabe values in the Jenzabar Online Orientation Course had a moderate to high impact on students' behaviors while using the LMS for online coursework and related activities.

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Chapter 1: Introduction

Statement of the Problem

The number of online courses and the number of faculty teaching online at tribal colleges has steadily increased over the last decade, as noted by the American Indian Higher Education Consortium (AIHEC, 2012). Although there has been an increase in technology accessibility for Native Americans, Native-specific design elements in media are important for affecting Indigenous youth, even tech-savvy ones (Rushing & Stephens, 2011). Culturally relevant pedagogy can provide motivation for Native American students to achieve (Collins, 2013a). Kelso (2011) reported that online orientation-course completion leads to success in the online environment. In Kelso's study, 80% of participants agreed that online students should be offered a preassessment course, and 55% felt that an online orientation course should be required. Ninety percent of the students in another study (Jones, 2013) found the online orientation course they completed helped to prepare them for online coursework.

The study examined a culturally relevant online orientation course at a tribal college. The college's learning management system (LMS) is called Jenzabar eRacer and is used by students to access course material, communicate with instructors and classmates, participate in online activities, check grades, monitor their attendance records, register for classes, and print scheduling transcripts.

The topic. The topic is a culturally relevant online orientation course called Mazinaabikiwebinigan Nandagikendan ("s/he seeks to learn the computer") or the Jenzabar Online Orientation Course. This study aimed to determine the course's effectiveness in preparing Native American tribal-college students for online, hybrid, and web-enhanced classes. The study examined the impact of the culturally relevant aspects

of the online orientation course on student behaviors while using the LMS at the subject college and the understanding of the seven Anishinaabe values upon which the school was founded. *Anishinaabe* is the term that three tribes—Ojibwe, Odawa, and Algonquin—use to refer to themselves (Edmunds, Hoxie, & Salisbury, 2006).

The Jenzabar Online Orientation Course is a required short course for all incoming freshmen at the target tribal college. It covers the use of the LMS and connects required activities with the seven Anishinaabe values of respect, humility, honesty, truth, wisdom, courage, and love. At the heart of Anishinaabe philosophy is a commitment to live harmoniously with all of creation, including other humans, animals, and nature. The seven values and corresponding recommended behaviors guide individuals in their adherence to Anishinaabe philosophy. In the orientation course, these behaviors connect to specific tasks and tools in the LMS in an effort to align traditional beliefs and values with modern educational technology. This idea is supported by contemporary Indigenous educational theory (Cajete, 2010).

The research problem. The problem addressed by this research was the low level of technology skills and access to technology among Native American students entering tribal colleges. In a 2009 study, Fire found the low level of technology skills and lack of preparation for distance learning to be a hindrance for tribal college students. According to Jaggars (2011), "technological infrastructure may pose a significant barrier to low-income students" (p. 28). The problem of a low level of technology skills among Native American students and the fact that many are from low-income families was substantiated by the AIHEC. AIHEC (2012) found a long-documented problem of lack of technological infrastructure on Native American reservations. Native American college students attending tribal colleges tend to be first-generation attendees and low income

(His Horse Is Thunder, 2012).

Fire (2009) pointed out that even though younger generations of students learn some technology skills at school, many do not have access to technology at home. Native students who did not have computers in the home may find it difficult to master technological skills (His Horse Is Thunder, Anderson, & Miller, 2013). This problem can affect students' ability to succeed in online and hybrid classes. Demirbilek (2014) found in his study of so-called digital natives that family income level showed a correlation with everyday use of digital technologies among college students. Not only did Digital Propensity Index scores increase for students as family income level increased, scores also increased as the number of computers in the home increased. This index is a measurement of the digital communication technologies a person uses regularly (Demirbilek, 2014).

Furthermore, the average age of a tribal college student is 30 (National Endowment for Financial Education, 2015). According to the 2007 Tribal Colleges and Universities (TCUs) Report, the majority of incoming freshmen (60%) were 16 to 24 years old (AIHEC & Systemic Research [SR], 2009). At the time of this study, only 44% were 16-24 years of age; the majority of students were 25 to 49, and 8% were over the age of 50 (AIHEC, 2014b). Older students who were not coming to college directly from high school may have had a lapse in technology exposure and experience some fear about using computers (Fire, 2009).

Before creation of the online orientation course (the focus of this study), a technology survey of students was conducted. The United States has 85% Internet penetration, one of the highest rates in the world, with 90% of Internet users connecting at home (Lebo, 2013). Yet, only 53% of the group of students surveyed at the target

college reported having a home Internet connection (Wilson, 2012). This closely reflected the results of De Mars' (2010) study of residents of the Dakotas, Montana, and Minnesota reservations in which only 49% of participants had Internet access at home. According to *The World Internet Project's fifth International Report* (Lebo, 2013), 54% of U.S. households have smartphones, which are increasingly used for Internet services, compared to only 26% of the school's students (Wilson, 2012). Even more worrisome, 3% of students had no technology at home at all, not even a telephone. Thirty-four percent said they would have to come to school to use the computer lab if they were required to access coursework online (Wilson, 2012).

Background and justification. Integration of technology has been an area of particular focus among tribal colleges (Higher Learning Commission, 2013). Many of the students who make up tribal college populations were educated on reservations (AIHEC, 2012). Principals in primary and secondary schools serving Native American students face a number of challenges with regard to technology, including poverty, lack of technical training and support personnel, and isolation on reservations (Richardson & McLeod, 2011). Most Native American students attend public schools, but nearly a third of these children are in schools categorized as high poverty; only 6% of White students attend high-poverty public schools (Ross et al., 2012).

Lack of achievement in technology can be partially attributed to a low level of educational success overall (James, 2006). According to The Education Trust (2013), former gains in Native student achievement at the elementary and middle school levels were lost between 2005 and 2011, further widening the gap between them and White students. At Comanche Nation College (CNC), staff found that software use was difficult for learners who tested below the ninth-grade level (His Horse Is Thunder et al., 2013).

Native Americans are less likely to go to college (DeVoe, Darling-Churchill, & Snyder, 2008), and when they do, lack of educational attainment persists into postsecondary institutions (Hunt & Harrington, 2010). Not having computer access at home contributed to the low computer-literacy levels of some students at CNC (His Horse Is Thunder et al., 2013). This is not surprising considering that more than a quarter of Native Americans on reservations live below the poverty line (Higher Learning Commission, 2013). Most tribal governments decline their right to levy taxes because of poverty on the reservations (His Horse Is Thunder, 2012). Kaifi, Mujtaba, and Williams (2009) found that Native students in their study were less likely than nearly all other races to have a computer at home; correspondingly, they were less proficient in the use of computers.

In an effort to assist Native American students unaccustomed to using computers on a regular basis, colleges have implemented various programs and teaching modalities. Washington Online, which offers online courses through a consortium of community colleges in Washington, offered extra credit assignments designed to improve students' use and understanding of the LMS (Hai-Jew, 2008). Fire (2009) reported on the positive effects of using Native ways of knowing in online classes with Native American students. Woodke (2006) distilled a list of best practices for teaching Native students online, including "using strategies that promote Native American perspectives, cultural values, and ethnicity" (p. 4).

Culturally relevant curricula have improved chances for academic and life success for Native American students. Cote-Meek, Dokis-Ranney, Lavallee, and Wemigwans (2012) reported on the positive outcomes of such a program on self-esteem and knowledge and understanding of self with regard to culture and tradition. Castagno and Brayboy (2008) reviewed the extensive literature on this topic over 3 decades, concluding

that the benefits of "culturally responsive pedagogy for Indigenous students" (p. 981) is self-evident.

Deficiencies in the evidence. Although research has been conducted on culturally relevant material and Indigenous American students' performance in the online classroom at both mainstream institutions and tribal colleges, no studies could be found that focused on the effect of a culturally relevant online orientation course on students' use of an LMS. Newell and Adesope (2011) looked at the perceived benefits for and barriers to online higher education for Indigenous Americans. They focused on technological aspects and culturally relevant course design. Vogel and Rude (2010) found that when culturally relevant material was included in an online program for Indigenous American educational leader preparation, students participated more fully and experienced higher quality learning. Washington Online redesigned online courses to target the cultural needs of Indigenous American students (Hai-Jew, 2008). None of these looked specifically at culturally relevant online orientation courses for Indigenous students.

A Google Scholar search of the term *online orientation course* returned 66 results from 2011 to 2015. Adding the term *Native American* produced one conference proceeding and one dissertation, the contents of which were irrelevant to the area of study. Substituting the term *American Indian* for *Native American* produced one dissertation that did not specifically consider the Native American experience but used the term in discussing demographics. Using the term *Indigenous* also produced one dissertation that was not relevant to the experience of Indigenous people. Adding the term *culturally relevant* to the term *online orientation course* reduced the number of results from 66 to 0.

Setting. This study took place at a tribal college in the northern United States where approximately 90% of students are Indigenous. The school is relatively new to hybrid and online education. Indigenous American students at the college are typical of other tribal college students in that they tend to be nontraditional students; they are not typical of most college freshmen (18 years of age and just graduating from high school). They live off campus, work, have families and children to take care of, may hold a General Education Diploma (GED), are first-generation students, and tend to be older (Pontes & Pontes, 2012). They are members of a group of high school students nationwide for whom the dropout rate tops 50% (Faircloth & Tippeconnic, 2010). As Director of Assessment at the college, the researcher had access to students for data collection.

Audience. The study produced information about the impact of a culturally relevant online orientation course for Indigenous American students. Developers and instructors of online courses and online orientations, especially those at tribal colleges or working with Indigenous American students, will likely benefit from the findings of this study. Audience groups for the information produced by the study could include administrators, faculty, and staff at Indigenous-serving institutions. All of these groups could use the information produced by this study to help improve the academic success of Indigenous Americans and other students.

Definition of Terms

Anishinaabe is the term that three tribes—Ojibwe, Odawa, and Algonquin—use to refer to themselves (Edmunds et al., 2006).

Culturally relevant refers to the inclusion of material in a course that is relevant to the cultural background of the target students—in this case, the seven Anishinaabe values

of respect, humility, honesty, truth, wisdom, courage, and love.

Hybrid classes feature approximately 30-79% online technology (Allen & Seaman, 2013), such as coursework, using the LMS, email, SKYPE, and other Internet communication tools.

Jenzabar eRacer is the brand of LMS used at the subject tribal college.

An *LMS* consists of software, often accessible through the Internet, used to facilitate teaching and learning.

Mazinaabikiwebinigan Nandagikendan, also called the Jenzabar Online Orientation Course, is an Ojibwe phrase that means "s/he seeks to learn the computer."

Online classes are those featuring 80-100% online coursework (Allen & Seaman, 2013), use of the LMS, email, SKYPE, and other Internet communication tools.

Web-enhanced classes feature approximately 1-29% web-based resources (Allen & Seaman, 2013), such as online coursework, use of the LMS, email, SKYPE, and other Internet communication tools.

Purpose of the Study

The purpose of the study was to examine the impact of the Jenzabar Online Orientation Course on tribal college students' preparedness for participation in online courses and use of the LMS. The examination included the overall impact of the orientation course as well as the impact of the culturally relevant component of the seven Anishinaabe cultural values incorporated into the course. Data for achieving the study's purpose were collected by administering a survey. Participants for the study were freshmen and transfer students at the target tribal college who completed the Jenzabar Online Orientation Course.

Chapter 2: Literature Review

This review of literature begins by introducing the theoretical framework outlining the social/psychological context that Indigenous American students face and within which the study resided. The level of technology skills of Indigenous American students in tribal colleges influences their ability to take part in online classes and, therefore, is discussed as a topic in the literature review. The benefit of online orientation courses is covered, and a brief history of TCUs and attempts at technology integration and distance education are discussed. Also presented is research on Indigenous students in online programs offering evidence supporting culturally responsive pedagogy for Indigenous American students that translates to the need for Indigenous-specific design elements in educational technology. The Jenzabar Online Orientation Course, which includes the seven Anishinaabe values, is an example of such culturally relevant media. This course represented the independent variable for the study and a topic discussed in this chapter.

Theoretical Framework

In a 1970 groundbreaking work, Baratz and Baratz put forth cultural mismatch theory based on the radical concept that a clash of cultures between home and school inhibits learning. The researchers claimed that the then-accepted social pathology model in which deviations from the social norm are considered pathological, or sick, is flawed and leads to institutional racism. Martinez (2014 noted, “Insisting that the culture of school is more important than the culture of students’ homes is a form of cultural imperialism” (p. 199). Although the work was based on social-science research with African Americans, the idea that comparing any minority cultural group to an ideal standard against which all achievement should be measured was determined to be

inherently racist (Baratz & Baratz, 1970). Thus, measuring their educational progress against standard measures based on White middle-class America denies that people from different cultures can be equal yet different (Baratz & Baratz, 1970).

This led to decades of cultural difference literature on Indigenous American students (among others) explaining how culturally responsive schooling (CRS) could alleviate their educational achievement deficits by focusing on tribal languages, culture, and heritage (Castagno & Brayboy, 2008). Yet, Castagno and Brayboy (2008) argued, even with 40 years of research on CRS, a key missing element in the discussions was racism in schools. CRS, also known as CRP, or culturally relevant pedagogy, emphasizes the significance of culture in education, but "it does not focus on race and racism as they relate to the sociohistorical pattern of schooling in the U.S." (Brown-Jeffy & Cooper, 2011, p. 66).

The idea that racism is endemic in education, so much so that it is virtually invisible to most people, is at the core of what is now called critical race theory (CRT, Bartlett & Brayboy, 2005; Ladson-Billings & Tate, 1995). CRT grew out of "critical legal studies" in the 1970s and is based on the premise that in the United States, race plays an ongoing role in inequity, and these inequities are written into the laws such that White individuals continue to benefit unequally by its protections (Monaghan, 1993). Monaghan (1993) described the "majoritarian mindset—the bundle of presuppositions, received wisdoms, and shared cultural understandings persons in the dominant group bring to discussions of race" (p. A7). Ladson-Billings and Tate (1995) called for the formal adoption of CRT by educational scholars "as an analytic tool for understanding school inequity" (p. 48). A key component of CRP should be that, in the vein of CRT, it celebrates the stories and experiences of marginalized groups and their epistemologies

(Brown-Jeffy & Cooper, 2011).

Brayboy (2005) later used what he called Tribal CRT to explain the unique difficulties that Indigenous Americans typically face in educational institutions:

> The goal, sometimes explicit, sometimes implicit, of interactions between the dominant U.S. society and Native Americans has been to change ("colonize" or "civilize") us to be more like those who hold power in the dominant society. . . . Native Americans' status as legal/political groups has been called into question with the goal of simply making them a "racial" group. . . . The colonization has been so complete that even many Native Americans fail to recognize that we are taking up colonialist ideas when we fail to express ourselves in ways that may challenge dominant society's ideas about who and what we are supposed to be, how we are supposed to behave, and what we are supposed to be within the larger population. (p. 430)

Eurocentric epistemologies inaccurately show students of color to be deficient (Brayboy, Castagno, & Maughan, 2007). Castagno and Brayboy (2008) noted that discussion of Indigenous epistemologies is largely absent in the literature on CRS. They suggested that this is a central shortcoming of the work in this area and key to successfully putting the concepts into practice.

Cajete (2010) called for a "contemporary epistemology for Native American education" (p. 1126) to meet today's educational challenges, including the central precept that connectedness between individual people and their communities is critical. Achievement of personal transformation through education is in part by "learning the 'art' of relationship in a particular environmental context" (p. 1129).

The Jenzabar Online Orientation Course was designed with Cajete's (2010)

philosophy in mind—that use of the LMS requires the adoption of a new communication relationship in a technological environment. While the environment is modern and new, the development of relational skills within that environment is similar to learning to navigate any new educational setting. To be successful, it requires a connection with the material and the outcomes that is deeper than simply learning to use the tools. Redefining the learning task to align with familiar linguistic and cultural orientations gives students a fresh perspective on modern technology skills in relation to their need for culturally relevant education. It also prompts educators to rethink the task of learning these contemporary skills so they are viewed with the inherent meaning and importance with which all learning should be regarded.

Brown-Jeffy and Cooper (2011) created a conceptual framework of teaching behaviors for CRP, including five main themes with specific corresponding concepts: "identity and achievement, equity and excellence, developmental appropriateness, teaching the whole child, student teacher relationships" (p. 72). The Jenzabar Online Orientation Course follows these themes (See figure).

Level of Technology Skills and Access

In 2004, Bissell discussed how the lack of technology tools and skills on reservations puts Indigenous people at a disadvantage. Morris and Meinrath (2009) cited the lack of telecommunications data on reservations that has hindered the expansion of Internet services on tribal lands. Although the digital divide still exists, the work toward building tribal sovereignty and economic independence has led to the development of broadband access on some reservations (Kemper, 2013). As one of the recommendations of the National Broadband Plan published by the Federal Communications Commission in 2010, the Office of Native Affairs and Policy was created (Federal Communications

Commission, 2014).

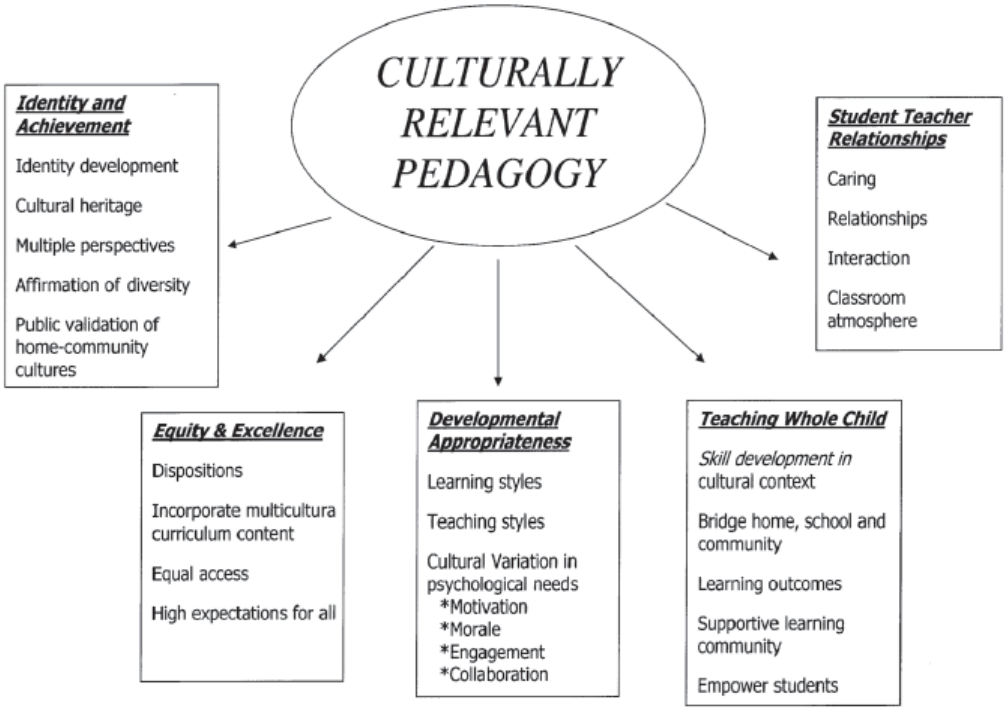

Figure. Five themes of culturally relevant pedagogy. Reprinted from "Toward a Conceptual Framework of Culturally Relevant Pedagogy: An Overview of the Conceptual and Theoretical Literature," by S. Brown-Jeffy and J. E. Cooper, 2011, *Teacher Education Quarterly*, *38*, p. 72. Copyright 2011 by Teacher Education Quarterly. Reprinted with permission.

Although the level of technology on Indian reservations in terms of the number of computers in homes and access to the Internet has increased significantly over the last decade as it has across the nation, Indigenous Americans' access to digital technology in rural areas still lags behind the rest of the United States (De Mars, 2010). According to the Office of Native Affairs and Policy, although 65% of Americans have access to broadband Internet, only 5-10% of people on reservations benefit from this essential service (Federal Communications Commission, 2014).

In their study of the digital divide, Ritzhaupt, Liu, Dawson, and Barron (2013) examined various factors, including socioeconomic status, and the connection of high school students' literacy with information and communication technology. The results of

their study confirmed that the digital divide does still exist between wealthy White and poor minority families, at least for the nearly 6,000 students they assessed. The authors attributed this to low-income families having less access to technology and Internet in the home. It is the responsibility of each tribal government to build and maintain the infrastructure on their lands, but the various demands for their limited funds means that some needs do not get met (His Horse Is Thunder, 2012). This situation is not inviting for investors from the private sector. Furthermore, His Horse Is Thunder (2012) emphasized complicated "government structures and policies may discourage industry and private infrastructure investment" (p. 20).

This limited access to technology extends from the home to schools, where technology leadership and teacher training are lacking. Providing the technology tools to historically underprepared schools without providing training often leads to underutilization of these resources (Richardson & McLeod, 2011), so even though students may go to a school where there are computers, Internet access may be inadequate and use of computers for teaching and learning may be limited.

There is an incomplete characterization, according to Koutropoulos (2011), of the so-called *digital natives* (also known as the Net generation and millennials), which includes that they are highly skilled at using digital technologies. This group of people was ages 18-32 in 2015 (Mander, 2014). Koutropoulos provided evidence that there are variables affecting the level to which young people develop skills with digital tools, such as the where they live and their socioeconomic status.

Miller (2014) stated that young people in their teens and early 20s might be "savvy" in the use of Facebook and social media but not necessarily skillful in using the learning tools needed to perform in online classes. Ratliff (2009) agreed that using

computers for educational purposes is not what technology suffused young people of today are accustomed to doing. As with any new use of technology, students need training to use an LMS (Miller, 2014). Koutropoulos (2011) pointed out the need to consider "how well those skills and behaviors transfer over into educational domains" (p. 529). According to Simonson, Smaldino, Albright, and Zvacek (2012), "Some students may have experience with Web-based searching, but little with an actual complete course offered in the Web environment" (p. 167). Jaggars (2011) recommended allowing only those students to register for online classes who have adequate technology skills and access to a computer and the Internet at home.

Mander (2014) reported the Global Web Index Audience Report showed that 88% of millennials have Facebook accounts and 72% use YouTube. Students at the subject college are less social-media savvy than others in their age group. An earlier cited technology survey at the subject college found that although the school's students were well acquainted with Facebook (76%) and YouTube (66%), only 5% had ever used a message board, 13% had read or written blogs, and only 24% had ever chatted (Wilson, 2012), three technology tools frequently used in the online classroom (Revere & Kovach, 2011).

Compounding this problem is the high dropout rate of Indigenous American students, which ensures the use of technology for academic activities will drop considerably after a student is no longer attending classes. Ideas for decreasing the dropout rate from high school often include that the infrastructure, resources, and staff are available to carry out these measures, but Indigenous students often attend schools where these are not present (Adelman, Taylor, & Nelson, 2013).

Integration of technology has been an area of particular focus among tribal

colleges (Higher Learning Commission, 2013). Leaders in Indigenous higher education noted that managing the growth and ensuing challenges of changing technology is one of their key concerns for the future, especially as online education grows (Pember, 2012). Muilenburg and Berge (2005) identified technical issues as well as access to and cost of technology as some of the least significant barriers to online learning in general. For Indigenous students living on reservations, however, these can be significant barriers (Brescia & Daily, 2007). Varma (2009) examined the economic, social, and cultural factors influencing Indigenous American students' success in higher education, especially fields such as computer science. Based on interviews with 50 Indigenous American computer-science students, Varma identified "lack of computer resources at home or on reservations [and] shortage of qualified teachers" (p. 138) as two key economic challenges. The author also discussed social factors limiting the orientation to computer sciences, such as lack of role models and limited experience with computers in general combined with a feeling among some students of a strong cultural conflict between traditional values and customs and technological principles and thinking. Furthermore, these factors inhibited the creation of a computer culture during their elementary and secondary education experiences in low-income reservation schools, partly because of the lack of qualified teachers (Varma, 2009). Richardson and McLeod (2011) echoed the last finding in particular.

Infrastructure on reservations must keep up with the growing online education options offered by tribal colleges, and the TCUs themselves need continual development of technical support services (Al-Asfour & Bryant, 2011; Fire, 2009). Fire (2009) advised Indigenous people to design online learning that honors Native ways of knowing so that students are prepared to meet the challenges of educational technology created by those

outside their culture.

Online Orientation Courses

This study examined the impact of the Jenzabar Online Orientation Course on tribal college students with a low level of technology skills and limited use of the school's LMS. Therefore, the topic of online orientation courses is presented. Completion of an online orientation course has been beneficial for students who are new to the online environment (Hai-Jew, 2008; Jones, 2013; McClure, 2011; Stewart, Goodson, Miertschin, Norwood, & Ezell, 2013). Al-Asfour (2012) and Shah, Goode, West, and Clark (2014) showed that online offerings allow nontraditional Indigenous students to pursue higher education. However, although many adult learners, especially nontraditional students returning to school after a long break, find online services and learning helpful, they may need an introduction to navigating the world of online education in the form of an orientation course (Chaloux, 2004). Al-Asfour determined that one of the best practices of online education at tribal colleges is requiring students to take a technology course that includes use of the course management system.

Students do not automatically know that online learning is significantly different from learning in a face-to-face classroom, nor do they understand how their own efforts will affect their experience (Cho, Shen, & Laffey, 2010). When faced with a paradigm shift for which they may be unprepared, students may not feel a sense of social presence and community. Cho et al. (2010) recommended that students be encouraged to monitor their own discussion postings in comparison to other students' and complete reflective and self-evaluative activities.

The secondary students in Kaler's (2012) study completed Montana Digital Academy's "Online Course Readiness Assessment" (p. 65). It is a self-evaluation matrix

designed for students to analyze together with educational advisors and considers the following areas in which a student needs to be strong and self-motivated in order to function independently in the online environment: technology skill, work and study habits, learning style, time management, interest/motivation, and reading/writing skills (Montana Digital Academy, 2015). Gaytan (2015) stated it is important for students "to be aware of the importance of self-discipline and time-management skills to their success in online courses" (p. 63). Some students may give up when they fall behind because of procrastination (Al-Asfour, 2012). However, although online instructors in this study rated students' self-discipline as the top factor affecting retention, students believed increasing the amount of instruction was most important (Gaytan, 2015). Both results pointed to the need for an online orientation course or training module.

Lee and Choi (2011) performed a review of empirical studies covering the span of 10 years to identify and categorize the factors attributing to students dropping out of online courses. Face-to-face tutorials and web-based preparation courses significantly increased persistence. Jones (2013) also reported an increase in student retention in online and hybrid courses in a community college where there is implementation of a mandatory online orientation course. Although a face-to-face orientation was also offered and found to be adequate, many online students could not attend. In addition to practical lessons, such as navigation within the LMS, information about online student services was included (Jones, 2013).

Jaggars (2011) recommended giving students incentives to take a course to improve computer literacy prior to taking online courses. Miller (2014) stated technology skills should to be taught in the online environment in a way that does not slow down those students who are already fluent in using computers or navigating the system. One

way to do this is to create a targeted module focused on the technology within the online course where students can spend as much or as little time as they need to master the use of required learning tools. Regardless of the format of the orientation, students should be required to show mastery of the technology skills they have learned (Miller, 2014). Jones (2013) reported on an online orientation course with a cumulative final exam requiring a score of 80% or higher to pass but that allows unlimited attempts. Kelso (2011) recommended a pre- and postassessment for online students as well as a comprehensive orientation.

Milheim (2012) focused on how to improve the online experience for students by using Maslow's hierarchy of needs. Milheim explained how an online orientation course could alleviate students' anxiety caused by unfamiliarity with the LMS. The basic need for safety can be met by providing an orientation course to prepare students for online communication (such as how to post a message on a discussion board), familiarize them with the format of the online course, eliminate uncertainty about assignments and grading, as well as explain what is expected of an online student.

Carruth, Broussard, Waldmeier, Gaulthier, and Mixon (2010) recommended that an online orientation course should require students to complete activities similar to those they will be required to do in the class. They studied graduate nursing students who lacked computer literacy and were not prepared for online course delivery and found this method of simulation to be highly effective in mitigating students' negative feelings about the virtual classroom environment and giving them experience with practical skills needed for successful completion of online courses. Furthermore, an online orientation course can alleviate the technical difficulties that students face when getting their home computer systems set up for online learning (Jones, 2013).

Cho (2012) acknowledged the success of online orientation courses in preparing students for e-learning but pointed out a shortcoming in the literature about how these courses should be structured and taught. They usually have less of a focus on student learning than on teaching students how to deal with the technology.

A trend toward making online orientation courses mandatory was evidenced in the literature. Jones (2013) reported moving from an optional to a mandatory orientation for first-time hybrid and online students, leading to an increase in student retention and a decrease in students' reliance on the help desk. Stewart et al. (2013) discussed the benefits of a mandatory online orientation for all students new to the university in addition to course-specific, instructor-designed orientations within each online course. Gaytan (2015) recommended a required orientation that would assess students' preparedness for online learning. Although Wozniak, Pizzica, and Mahony (2012) did not recommend a mandatory program, their study highlighted the importance of engaging students early in their online education, showing students would then use these resources intermittently as needed.

Not all online orientation courses for online work are online. Ali and Leeds (2009) found a significantly higher retention rate for students who attended the face-to-face orientation session. This is largely because of, they believed, enhanced learner-to-learner and learner-to-instructor relationships, making students less likely to withdraw from online courses. Although Ali and Leeds' orientation session was only 1 hour, and Gilmore and Lyons (2012) reported on an 8-hour, face-to-face orientation for online nursing students. Attrition went down from one in five students to less than 1% after implementation of this longer orientation over the previous 4-hour orientation, which had fewer computer skills and online course activities. These authors agreed with Ali and

Leeds that the orientation enhanced relationships among students and faculty.

Tribal Colleges and Universities (TCUs)

TCUs are unique in many ways, not the least of which is that they "were founded by Indian people for Indian people" (Guillory, 2013, p. 97). Shotton, Lowe, and Waterman (2013) defined *TCUs* as postsecondary educational institutions chartered by tribal governments. Under federal law, a TCU is "an institution that qualifies for funding under the Tribally Controlled College or University Assistance Act of 1978" (Higher Learning Commission, 2013, p. 4). Today, there are 37 TCUs, and some of these are located in seven of the top 10 most impoverished counties in the United States, providing access to higher education for the majority of Indian country with over 600 undergraduate and graduate degrees (AIHEC, 2014b). Collectively, these 37 public colleges and universities compose the AIHEC (2014b), whose vision is creating "Strong Sovereign Nations Through Excellence in Tribal Higher Education" (para. 1). A 2012 report showed that enrollment at TCUs had grown by 11% from the 2003-2004 school year to 2009-2010 (AIHEC, 2012). TCUs receive accreditation through various independent, regional accreditation agencies and adhere to the same standards as all institutions of higher education in the United States (AIHEC, 2014b). In fact, in the interests of accountability, AIHEC, together with the Lumina Foundation for Education, developed an additional measurement system—AIHEC AIMS (American Indian Measures for Success)—composed of nearly 120 qualitative and quantitative indicators that are collected annually (AIHEC, 2014a, 2014b).

History. The first TCU, Navajo Community College, was established in 1968 with the goal of redressing the disappointing efforts of the American education system to meet the needs of Indigenous people (AIHEC, 2014b; Martinez, 2014). The goal of tribal

colleges is to diminish the gap in higher education attainment for Indigenous Americans by helping students overcome geographic and socioeconomic difficulties and educational deficits in culturally supportive environments (AIHEC, 2014a). In 1978, federal funding became available under the Controlled Community College Assistance Act, which was later amended in 2008 and is now known as the Tribal College Act (His Horse is Thunder et al., 2013). The federal Educational Equity in Land-Grant Status Act, enacted in 1994, officially designated tribal colleges as land-grant institutions (Higher Learning Commission, 2013; His Horse Is Thunder, 2012). Located mostly on federal trust territories, these schools receive little or no funding from their local governments but have a special financial-support relationship with the federal government derived from treaty obligations and the pursuant federal trust responsibility (His Horse Is Thunder, 2012).

Over the last 45 years, TCUs have grown to serve students from more than 250 federally recognized tribes (AIHEC, 2014b). Although 93% of Indigenous students in the United States attend public schools during their elementary and secondary school years (The Education Trust, 2013), many Indigenous students choose tribal colleges once they have a choice.

Mission. The AIHEC, an organization representing 37 tribal colleges and universities, has as its primary goal the preservation of Indigenous nations and promotion of their tribal identities, Indigenous languages, and unique values through culturally sensitive practices and curricula infused with tribal significance (AIHEC, 2012). TCUs embody an educational system that honors Native "ways of knowing, traditional knowledge, and spirituality" (AIHEC, 2014b, para. 1). This reflects the mission statements of many tribal colleges, which include historical, cultural, sociopolitical

elements. The mission of college that was the subject of this study is to "provide quality higher education grounded in Anishinaabe values." TCUs have a strong focus on retention and generate keen loyalty among their students, who are supported with programs designed to encourage resilience and enhance the community's overall well-being (AIHEC, 2012). AIHEC acts as a collective voice for the TCUs, providing leadership and influencing public policy through advocacy, research, and initiatives to strengthen and promote Indigenous American cultures and languages (AIHEC, 2012). TCUs offer degrees (associate, baccalaureate, and master's) and certificates in more than 600 majors combined (AIHEC, 2014b).

Indigenous Americans have the lowest level of bachelor's and master's degree attainment of any racial or ethnic group in the United States (Snyder & Dillow, 2013). Yet, according to leading authorities (AIHEC, The Institute for Higher Education Policy, & Sallie Mae Education Institute 2000), 1 year after graduation from a tribal college, 91% are working, continuing their education, or both. One retention strategy that TCUs use to help students endure and be successful is to acknowledge and support their tribal identities (HCM Strategists, 2010). Tribal colleges support the core values of tribal sovereignty derived from Indigenous American history, culture, language, and land, acknowledging that each person is connected to community and tribe (Woodke, 2006). Tribal colleges also acknowledge the importance of family and community (Woodke, 2006) and integrate culture into the curriculum (AIHEC, 2000; AIHEC & SR, 2009). Retention is higher at TCUs for Indigenous students (Brescia & Daily, 2007).

Educational difficulties start long before the postsecondary level for Indigenous students, who drop out of high school at a rate nearly three times that of White students (Stillwell & Sable, 2013). Those who persist to high school graduation represent 69.1%

of Indigenous students compared to the average graduation rate of 78.2% across the United States with 83% for White students (Stillwell & Sable, 2013). Although four out of five of Asian and White American high school graduates go on to college after high school, only about half of Indigenous students do; of these, 43% will not complete a degree (Ross et al., 2012). Only about 13% of Indigenous young adults have a bachelor's degree (Ross et al., 2012).

According to the latest demographic statistics published by the AIHEC (2012), tribal college students range in age from 16 to over 50. Nearly three fourths of graduates earn degrees, while just over one fourth earn certificates and four fifths receive federal financial aid. Many Indigenous American students have significant hurdles to overcome in their quest for success in higher education: high levels of poverty and the corresponding lack of resources for childcare, transportation, and housing (AIHEC, 2012; His Horse Is Thunder, 2012). Between 70% and 80% of tribal college students are eligible for maximum Pell grant benefits (AIHEC, 2014a, 2015) and are living below the federal poverty line of $14,000 per year (AIHEC, 2014a). Yet, Indigenous students receive less financial aid overall than any other group (Ross et al., 2012). According to a U.S. Census Bureau report (Macartney, Bishaw, & Fontenot, 2013), Indigenous people experience the overall highest rates of poverty of all population groups at 27%, more than twice the rate of Whites. In some states, this number jumps to 30% or more (Macartney et al., 2013).

Tribal college graduates are often older, nontraditional students. In a study by Cunningham and Redd (2000), 69% had at least one dependent child; this number rose to 72% among unmarried female students. Nontraditional students often cannot manage a full-time course load because of family and work commitments (Al-Asfour & Bryant,

2011). In addition, many come to college with a limited understanding of the academic commitment required of them (AIHEC, 2012; His Horse Is Thunder, 2012). The majority require remedial reading (53%), writing (60%), and or math (70%; AIHEC, 2015). It is not uncommon for TCU students (over 70%) to be low-income and first-generation college students (AIHEC, 2014a; Ross et al., 2012). Tribal colleges are open enrollment institutions that help their students to overcome these barriers through dedication and understanding (AIHEC, 2014a, 2015).

There is a documented phenomenon of Indigenous students preferring to remain close to home during and after graduation, which has a precedent in the Native American relocation program of the 1950s and 1960s (His Horse Is Thunder, 2012). Upon completing training programs in large urban areas, participants often chose to return home despite limited economic opportunities (His Horse Is Thunder, 2012). Thus, it is not surprising to learn that giving back to one's community is commonly a high priority among Indigenous students. Minthorn, Wanger, and Shotton (2013) noted in their literature review a recurring theme among Indigenous students of seeking higher education not necessarily for improved job prospects but for the opportunity it would provide the students to give back to their communities and advance tribal missions. This value of reciprocity motivates Indigenous students by allowing them to see the future in a different light (Minthorn et al., 2013; Shotton, Oosahwe, & Cintron, 2007). Various researchers have reported that Indigenous students have in mind a dual goal for education: self-improvement and preparation for giving back to their home communities (Brayboy, 2004, 2005; Chavez, Ke, & Herrera, 2012; Minthorn et al., 2013; Shotton et al., 2007; Waterman, 2007). Chavez et al. (2012) said about the students in their study, "Most related college learning to deeper development as human beings" (p. 3).

Distance Education at Tribal Colleges and Universities (TCUs)

Miller (2014) reported that the major forces pushing educational technology in higher education are economics, student demand, an increased focus on assessment of student learning, ubiquitous technology availability, and instructor desire to improve teaching and learning. Although Al-Asfour (2012) agreed that the most recent generation of technologically savvy students will be attracted to online education, he pointed out a wholly different focus on distance education for tribal colleges that is widely cited as the major force pushing the development of various forms of online classes: the geographical challenges of many potential students living on reservations. Distance learning supports students who live in remote areas of the reservation and or who may lack transportation (AIHEC, 2012). Compounding this problem is those students living in areas that experience extreme winter weather (Al-Asfour, 2012; Al-Asfour & Bryant, 2011). Some tribal colleges offer transportation assistance for this reason (AIHEC, 2012), but there are other factors affecting students' ability to come to classes on-site, such as the need for childcare (AIHEC, 2012; Adelman et al., 2013). Simonson, Smaldino, and Zvacek (2015) noted the contradictory phenomenon of students preferring to learn face-to-face for the social aspects of classroom interaction while simultaneously demanding online coursework to meet their educational needs. The authors cited examples from around the world of students choosing online courses for geographical and access reasons while working part or full time.

The types of educational technology and methods of online delivery of courses at tribal colleges reflect the needs and level of technology in each location. Courses range from mostly asynchronous online classes students take from home or other locations, such as the local library, to satellite, interactive television, or Internet-based classes

telecasted to locations around the reservation or to classrooms at the college itself (AIHEC, 2012; AIHEC & SR, 2009).

At the same time, technology-enhanced recruitment, application, enrollment, and financial aid procedures increasingly allow college personnel to communicate with prospective students (Adelman et al., 2013). This holds true for many tribal colleges (AIHEC & SR, 2009) including the target tribal college.

An increasing number of tribal colleges offer online courses or degrees, often including "one-on-one support services and face-to-face encouragement," atypical of mainstream universities (AIHEC, 2012). From the 2003-2004 school year to 2009-2010, the number of online courses at TCUs increased by 33%, and the number of students taking these courses jumped by 50% (AIHEC, 2012). Indigenous American leaders showed a willingness to pursue digital learning for their peoples early on, which meant that not only students but also instructors would have to adapt to distance learning (Doshier, 2003). As early as 1998, distance-learning curricula were developed and controlled by Indigenous people to reflect the values and respect the traditions of tribal cultures (Sanchez, Stuckey, & Morris, 1998).

The Choctaw Nation initially held a year of free telecourses in the Choctaw language, which later developed into an Internet course led to the inclusion of their language into all of southeastern Oklahoma's public schools and allowed members of remote communities to connect with their culture (Haag & Coston, 2002). Salish Kootenai College developed its online education program as an answer to reaching students on the Flathead Reservation who were unable to travel to school, "the poorest of the poor" (Stein & Jetty, 2002, p. 22). The Crownpoint Institute of Technology created an Alternative Livestock program that included a strong background in math, science, and

theory plus hands-on experiential learning during the first year and provided veterinary technology training through online courses, videos, and radio broadcasts in both Navajo and English during the second year while the students worked in the field (VanAlstine, Ramalho, & Sanchez, 2002).

As of 2011, the Higher Learning Commission had expanded United Tribes Technical College's authorization to provide all their degrees online (Ortega, 2012). Oglala Lakota College has online courses, but only upper-division coursework is offered at a distance (HCM Strategists, 2010). Distance education is important in helping students at Oglala Lakota College who are spread over a large geographic area to complete their degrees on time (HCM Strategists, 2010). Woodke (2006) studied United Tribes Technical College's online program and stated that all online teachers were taught to be aware of "culturally appropriate strategies for teaching" and to "provide a high level of student support in terms of motivation, encouragement and guidance" (p. 10).

Vogel and Rude (2010) reported on a Native American educational leader preparation program using online classes for licensure. Although the required technology was challenging for them, the Indigenous students who took part in the educational leadership and policy master's degree with principal licensure were served by the online program, which allowed them to overcome geographical restrictions to furthering their education (Vogel & Rude, 2010). A special effort was made to include culturally relevant material in the courses and to discuss Indigenous epistemology.

Todacheene (2008) hypothesized that students in distance education programs at TCUs would perceive a low sense of community but the opposite was true: they perceived a high sense of community, perhaps due to the tribal college's focus on the value of community and support from faculty and staff. Indigenous high school students

in online classes in Montana experienced feelings of empowerment (Kaler, 2012).

A number of dissertations studied the topic of Indigenous Americans in online courses as well. Fire (2009) showed that Indigenous American students could feel empowered through online learning with a sensitive, culturally aware instructor. Kaler (2012) interviewed a small group of Indigenous high school students who had been successful in mainstream online coursework. Although the content of the courses was not culturally relevant and did not seem to be central to the students' success, Kaler identified that the supportive culture of the reservation schools was central to Indigenous student success overall. Kicking Woman (2011) found that Indigenous students at tribal colleges where they learn within their own culture compared to mainstream colleges were more likely to report their distance learning experiences were effective. Even at a tribal college, Indigenous students in online classes who were on campus developed a stronger sense of community than those who were taking courses from off campus (Todacheene, 2008). A study at United Tribes Technical College identified which facilitative activities teachers used in discussion rooms and which promoted a positive experience for students (Woodke, 2006). Foremost was the recommendation to practice "teaching from a value-based perspective" (Woodke, 2006, p. 124) that centers on respecting students as individuals and not making assumptions about their racial or tribal identity yet being aware of and understanding common values held by Indigenous people.

Culturally Relevant Pedagogy (CRP)

Teaching about diversity in the American educational system that includes an ever-increasing variety of children from countries around the world speaking their own languages and celebrating their unique cultures is heralded as an important strategy for management of cultural discord in the classroom, but CRP takes multiculturalism a step

further (Brown-Jeffy & Cooper, 2011). CRP calls for educators to exhibit open-mindedness and actively make connections between the students' home lives and cultures and that of the school in order to be successful (Brown-Jeffy & Cooper, 2011).

However, evidence has shown that teachers still tend to shy away from difficult or controversial subjects, leaving the coverage of diversity, especially as it relates to history, somewhat sanitized and incomplete (Abrams, 2015). This superficial coverage of history leaves us open to misunderstanding and perpetuation of hurtful racial incidents (Abrams, 2015). In addition to some of the more painful parts of Indigenous history in this country that are glossed over and not fully acknowledged in the American classroom (Abrams, 2015), Indigenous knowledge and values have been ignored, and Indigenous students have been required to conform to a dominant culture, when what is needed are what Cajete (2010) said are "Indigenous approaches to education" (p. 1127) that combine tribal values with modern educational technology. Approaches that include elements of traditional culture in mainstream education can help Indigenous students (Adelman et al., 2013), but so often these are ignored in the face of standardization legislation (Castagno & Brayboy, 2008). The National Indian Education Association (NIEA, 2008) provided a working definition for "Culturally Based Education . . . more than teaching language and culture as special projects, it is a systematic approach fully incorporating and integrating specific cultural ways of thinking, learning, and problem-solving into educational practice" (p. 1).

The value of culturally relevant curricula and CRP was covered by a comprehensive review of the literature spanning a 30-year period (Castagno & Brayboy, 2008). Unfortunately, the authors argued, despite the tremendous amount of research and attention given to this subject, little has changed in the educational system to make a real

and persistent difference for students (Castagno & Brayboy, 2008). They suggested that this is due to the difficulty of weaving the meaningful recommendations into today's high-stakes educational environment (Castagno & Brayboy, 2008).

A central educational issue for Indigenous American students is the preservation of Native languages (Adelman et al., 2013; NIEA, 2010). Cultural identity is tied inextricably to language (Adelman et al., 2013); however, they make up only 1% of the population in the United States. American Indians, Alaska Natives, and Native Hawaiians account for half of the nation's cultures and languages (NIEA, 2010). In 1990, the Native American Languages Act authorized the use of Indigenous languages for instruction in an effort to ensure their continued survival and to improve Indigenous students' success by increasing knowledge of their unique cultures and histories (NIEA, 2010). This legislation reversed over 200 years of American policy toward Indigenous Americans and ushered in a period of federally supported language restoration, officially recognizing language's role in Indigenous students' educational achievement (Warhol, 2012). It promoted not only Indigenous languages but also cultural curricula in schools (Warhol, 2012).

Galla (2010) showed how technology could be used in efforts to revitalize Indigenous language and culture. The author examined the context of language learning with a wide variety of technologies using the technacy model, which considers five factors—language and culture, social, economic, environment, and technology—in determining the best media to use in a given situation (Galla, 2010). Omaha of Nebraska used technology-based education to support the preservation of their culture and language (Tuttle, 2013). Tuttle (2013) focused on how technology appeals to Indigenous youths and encourages participation in language learning activities and noted the goal is "to

empower tribal sovereignty and self-determination through the re-assertion of tribal identity and Indigenous knowledge" (p. 7). The Menominee Nation in Wisconsin is using digital technology to create audio and video resources for their language (Benton, 2012). Under the goal of preserving digital records of the language for future generations, the College of the Menominee Nation acts as a conservatory of recordings, and these and many other audio-visual resources are used in online language classes (Benton, 2012). Ojibwe language software aimed at families and the online Ojibwe People's Dictionary have supported home-based language studies for the Ojibwe people (Hermes & King, 2013).

The Seven Anishinaabe Values

A focus of this study was the impact of the Jenzabar Online Orientation Course on students' understanding of the seven Anishinaabe values. Another focus was the impact of the Anishinaabe values inclusion in the orientation course on students' behaviors while using the LMS. The seven values, or Seven Grandfather Teachings, upon which the Anishinaabe philosophy of life is based are respect, humility, honesty, truth, wisdom, courage, and love (Verbos & Humphries, 2013). The teachings guide each individual in his or her life studies toward the goal of becoming "a skillful and educated tribal member" (Mann, 2003, p. xvii). The central tenet of these oral teachings based on a sacred narrative of the Potawatomi and Ojibwe peoples and passed down through countless generations is that humans have a responsibility to uphold these values in their dealings with the earth and all living beings (Verbos & Humphries, 2013). The target college holds the following view:

According to the Anishinaabe worldview, humans did not weave the web of life;

> we are merely a strand in it. Whatever we do to the web, we do to ourselves. Therefore, kinship among all of creation, not the mastery of our relatives (other humans, animals, plants, etc.) is vital to harmonious living. To adhere to this philosophy is to be guided by the following values: Inendizowin (Humility), Debwewin (Truth), Zoongide'iwin (Courage), Gwayakwaadiziwin (Honesty), Manaaji'idiwin (Respect), Zaagi'idiwin (Love), Nibwaakaawin (Wisdom).

The focus was on teaching Native traditions and addressing cultural and religious differences with respect and acceptance. Some of the Indigenous students in Kitchen and Hodson's 2013 study were unfamiliar with the seven values and the traditions, having been brought up with religious teachings that might seem contradictory to the Native teachings, yet they expressed appreciation and a desire for more cultural activities in their education. This experience was mirrored in Fire's 2009 study in which the author found that Indigenous students were able "to learn, in a bicultural way, the Western Ways of Knowing without suppressing their own Native Ways of Knowing" (p. 1). This ability to adapt but also to hold tight to traditional culture and languages demonstrates the resilience of Indigenous people who embody these values (Verbos, Gladstone, & Kennedy, 2011).

The seven Anishinaabe values were gifts from spiritual beings known as the Seven Grandfathers; to uphold them in everyday life, humans were meant to view themselves as part of, not higher than, other parts of creation (Verbos & Humphries, 2013). To guide individuals in living the values, teachings demonstrate what the values mean. The target college published the teachings to guide the students, faculty, and staff who are part of their educational community (see Appendix A). According to Verbos and

Humphries (2013),

> *Wisdom* is to be used for the people; it is borne of experience and living the teachings. *Love* is to care for other human beings, including future generations, and to be generous with them. Generosity is an important value that is an outgrowth of love. *Respect* attaches to all things created, including nature, creatures, and people. . . . *Bravery* is to face adversity, act, and persevere through difficulty. *Honesty* means to act in a genuine way without fraud or deception and with good intentions in one's heart. *Humility* is to understand that one is equal to, not greater nor lesser than, everyone else. *Truth* is to have integrity in all things, especially as it relates to oneself and the people (meaning Potawatomi/Ojibwe), and to speak the truth. (p. 3)

Jenzabar Online Orientation Course

The Jenzabar Online Orientation Course is a required short course for all incoming freshmen at the tribal college. The purpose of this course is to familiarize students with the LMS for their classes and to show them how the use of the LMS connects to the seven Anishinaabe values (Wilson, 2014). It was developed in response to students and instructors reluctance to use the LMS. The academic team determined that the school needed to develop a culture of computer use for education. Students and faculty used computers but mainly for email and social media purposes. The course design was around the most commonly used tools in the LMS. Examples of these tools within the LMS include the attendance page, the gradebook, the message board, the coursework interface, and the registration folder, which allows students to print their course schedules and unofficial transcripts. The designer matched each tool with one of

the seven Anishinaabe values and its prescribed behaviors (see Appendix A).

This course was intended for incoming freshmen at the target tribal college located on an Ojibwe reservation in a Midwestern U.S. state. The purpose of this course was to familiarize students with the LMS for their classes and to show them how the use of the LMS connected to the seven Anishinaabe values (Wilson, 2014). Jaggars (2011) recommended incorporating tasks into online activities that guide students through desired actions or behaviors, such as taking advantage of online learning support services. The Jenzabar Online Orientation Course guides students through activities designed to encourage them to communicate with classmates online, register for courses, print out unofficial transcripts, and more. The course was produced to combat the problem of a low level of technology skills, which may have contributed to limited student use of the LMS. The design of this course was also to create a culture of comfort with technology for learning and education management.

The structure of course was around the seven Anishinaabe values by connecting these values and their corresponding recommended behaviors with tools and desired behaviors in the LMS. According to Collins (2013a), efforts in culturally relevant pedagogy should focus not only on motivating students but also on how they can be successful by showing them exactly what they need to do to achieve success. For example, taking tests and quizzes online connects to the value of Courage (Zoogide'iwin), which is embodied by facing difficult situations with bravery. Checking the coursework section of the portal and completing assignments connects with Wisdom (Nibwaakaawin), which is embodied in the following behaviors: reflecting on one's experiences, taking the opportunity to learn from others to acquire knowledge and skills, and working to accomplish one's goals and dreams. Chavez et al. (2012) found that

students preferred online instructional activities that made connections with the subject matter and everyday life.

Collins (2013b) referred to captioning on videos as a best practice for Indigenous students, especially those with learning disabilities. His study showed a correlation between the use of captioning in instructional videos and Indigenous students' exam scores, whether or not they were learning disabled. All the video lessons in the online orientation course were available on YouTube, which offers closed captioning. A downloadable PDF document is also available with the script (see Appendix B) for those who wish to read along or who have trouble viewing the videos on their computers. A checklist guides students through the activities in the course (see Appendix C).

Prior to the introduction of the online orientation course, teacher training on the use of the LMS commenced and requirements were put in place for faculty to begin using specific tools. Instructors were required to input attendance online, submit grades electronically, and upload course syllabi. Over time, faculty members were gradually required to increase their use of certain tools, for example, inputting attendance more frequently and by key deadlines (add/drop dates, etc.). They were also encouraged to utilize each tool's functions more fully and adopt new tools, such as inputting grades to the grade book all semester and using discussions boards for student activities. Many faculty members went on to put coursework online, use the blog and chat functions, and experiment with the tools. Online and hybrid courses were developed. Use of the system was also incorporated into annual evaluations. Once the online orientation course was implemented, faculty who did not move forward with their use of the system as quickly or frequently as others were pressured by students, who soon came to expect up-to-date attendance, quick and accurate online grades, and access to coursework online.

Summary

Early proponents of cultural mismatch theory labeled the practice of measuring minority performance against that of Whites, which was considered the norm, as a racist practice and at the root of institutional racism (Baratz & Baratz, 1970). Culturally responsive schooling grew out of decades of research showing that a focus on tribal languages, culture, and heritage could make a difference for Native American students (Castagno & Brayboy, 2008). Tribal CRT is an offshoot of the original CRT, focusing specifically on Indigenous students and their experience of embedded racism in the American school system (Brayboy, 2005). Although CRS is a start, education for Indigenous students must include Indigenous epistemologies (Cajete, 2010; Castagno & Brayboy, 2008) practicing culturally relevant pedagogy from a critical race perspective (Brown-Jeffy & Cooper, 2011).

The technological situation on many reservations presents a problem for Indigenous students who have the desire to learn coupled with a lack of means (Al-Asfour & Bryant, 2011; Bissell, 2004; Brescia & Daily, 2007; Fire, 2009; Richardson & McLeod, 2011; Ritzhaupt et al., 2013; Varma, 2009). Like many students coming to higher education, they need an introduction to computerized student-management systems, especially if they plan to take online courses (Al-Asfour, 2012). Requiring students to take an online orientation course has been shown to make a significant difference for students in online classes (Carruth et al., 2010; Chaloux, 2004; Cho, 2012; Hai-Jew, 2008; Jones, 2013; Kelso, 2011; Lee & Choi, 2011; McClure, 2011; Milheim, 2012).

TCUs are especially aware of the difficulties facing Indigenous students; they were created to alleviate these problems (AIHEC, 2014a, 2014b; Martinez, 2014). From a

painful history of trauma surrounding forced residential schooling (Dawson, 2012; Evans-Campbell, Walters, Pearson, & Campbell, 2012; Reyhner & Eder, 2015) to overall poor educational outcomes in high school and college (Ross et al., 2012; Stillwell & Sable, 2013) and high levels of poverty (AIHEC, 2012; His Horse Is Thunder, 2012), many Indigenous American students face overwhelming challenges. TCUs help students to overcome these challenges and to preserve Indigenous nations by promoting tribal identities, teaching and using Indigenous languages, and practicing their unique values in a culturally rich environment (AIHEC, 2012).

Distance education has played an important role in the education of Indigenous students from many nations attending TCUs (Al-Asfour, 2012; AIHEC, 2012; Al-Asfour & Bryant, 2011; Doshier, 2003; Haag & Coston, 2002; HCM Strategists, 2010; Ortega, 2012; Sanchez et al., 1998; Stein & Jetty, 2002; Todacheene, 2008; VanAlstine et al., 2002; Woodke, 2006). This is partly because schools are meeting specific needs of Indigenous students for distance education (Adelman et al., 2013; AIHEC, 2012; AIHEC & SR, 2009; Al-Asfour, 2012; Al-Asfour & Bryant, 2011; HCM Strategists, 2010; Stein & Jetty, 2002; Vogel & Rude, 2010) and partly because they offer forms of distanced education that practice the principles of culturally relevant pedagogy (Fire, 2009; Haag & Coston, 2002; Sanchez et al., 1998; Todacheene, 2008; VanAlstine et al., 2002; Vogel & Rude, 2010).

Culturally relevant pedagogy calls for educators to practice not only inclusive techniques but also to conscientiously incorporate and integrate Indigenous ways of thinking, knowing, and problem solving (Brown-Jeffy & Cooper, 2011; Castagno & Brayboy, 2008; NIEA, 2008). The preservation of Native languages is a key part of this effort (Adelman et al., 2013; NIEA, 2010) and has been evident in many tribes' efforts at

revitalizing their cultures and building nationhood (Benton, 2012; Galla, 2010; Hermes & King, 2013; Tuttle, 2013).

Beginning with the seven values upon which the Anishinaabe philosophy of life is based—respect, humility, honesty, truth, wisdom, courage, and love (Verbos & Humphries, 2013)—educators of Indigenous students can weave a curriculum that is culturally relevant. That is how the Jenzabar Online Orientation Course was planned and created.

Research Questions

The following research questions guided the study:

1. What is the impact of the Jenzabar Online Orientation Course on students' preparedness for participation in online coursework?

2. What is the impact of the Jenzabar Online Orientation Course on students' understanding of the seven Anishinaabe values?

3. What is the impact of the Anishinaabe values' inclusion in the orientation course on students' behaviors while using the LMS?

Chapter 3: Methodology

Introduction

The purpose of the study was to examine the impact of the Jenzabar Online Orientation Course on tribal college students' preparedness for participation in online courses and use of the LMS, as well as the impact of the culturally relevant component of the seven Anishinaabe cultural values incorporated into the course. The methodology for this study was quantitative. Collection of quantitative data was by questionnaire. The use of quantitative methodology is appropriate when explanations are needed and or prediction is involved (Creswell, 2008). This study presents information including culturally relevant pedagogy from the literature showing its effect on Indigenous students' success in the classroom. It focuses on the Anishinaabe values and language incorporated into an online orientation course. The questionnaire used determined if the course had an impact on students' preparedness for using the LMS and if it helped them to understand the values in addition to how the values connected to the use of the LMS. The data collected consisted of numerical scores and were analyzed using descriptive statistical procedures.

Participants

The population for the study was first-year students at the target tribal college. The sample was 45 first-year students at the college who completed the Jenzabar Online Orientation Course during the 2016-2017 school year and chose to complete and submit the study's questionnaire. This was a sample of convenience. Convenience sampling may be used, as in this case, when the study is being conducted at the researcher's institution and the sample is selected because of learner participation with a module that is taught multiple times over a period of time, especially when the researcher was involved in the

development of the course (Graham, 2015). Graham (2015) cited three studies that fall under this description that used convenience sampling. Graham and Robison (as cited in Graham, 2015) used convenience sampling because the study was conducted at their own institution. Motteram (as cited in Graham, 2015) used this sampling method for research with a module that was taught multiple times over a period of several years. Dron, Seidel, and Litten (as cited in Graham, 2015) used convenience sampling because they were part of the development of the course being studied.

Although the convenience sampling method could be an indicator of credibility issues, Graham (2015) stated that when the researcher has a personal connection with the course, as with the cases cited by Graham, it is the logical choice of sampling method. It is common for professors at universities to ask students to participate in surveys because they are usually ready and willing participants, and researchers can expect to receive a high number of responses in most cases (Picciano, 2015). Kivunja (2015) stated that convenience sampling provides the researcher easy access to cohorts of students, allowing for such advantages as expedient observation and monitoring and quick data collection.

The participants making up the sample in this study had similar demographic characteristics to the overall population. Approximately 61% of the student population was female (Director of Enrollment Services, personal communication, September 14, 2016). The average age of students at the college was 29. Ninety-one percent of students at the college were American Indian, and they represented at least 25 tribes and bands (groups within the same tribe). Eighty-eight percent of the Indigenous students at the college were from bands of the Minnesota Chippewa (Ojibwe) Tribe (Director of Enrollment Services, personal communication, September 14, 2016).

Instrument

In educational research, the questionnaire is the most frequently used method of collecting data (Radhakrishna, 2007). Questionnaires use a survey design to collect answers to questions from the study's participants, including demographic information about themselves (Creswell, 2008).

In this study, data were collected using the researcher-designed Jenzabar Online Orientation Course Survey (JOOCS; see Appendix D) composed of 12 questions; four demographic questions, four questions pertaining to Research Question 1, two pertaining to Research Question 2, and two pertaining to Research Question 3. The researcher, in the role of Director of Assessment at the college, served as the expert in developing the JOOCS. The four demographic items in the JOOCS were included to assess how closely the study's participants mirrored the overall population of the target college. The remaining survey items collected information from the participants about the impact of the Jenzabar Online Orientation Course on students' preparedness for participation in online coursework, the impact of the course on participants' understanding of the seven Anishinaabe values, and the impact of the Anishinaabe values' inclusion in the orientation course on students' behaviors while using the LMS.

Critical survey evaluation before administration of a survey is considered good practice, because it helps in identification of questions that need to be revised (Fowler, 2013). Careful evaluation of questions reduces errors and improves the quality of data collected (Creswell, 2008; Fowler, 2013). Pilot testing of a survey also improves response rate as it helps to eliminate problematic questions (Fink, 2013). These factors were considered in the development of the JOOCS. The original version of a questionnaire similar to the JOOCS was developed and administered as an optional

course evaluation tool in the spring 2013 semester at the college. Subsequent revised versions of the original questionnaire were utilized for the Jenzabar Online Orientation Course in the fall 2013, spring and fall 2014, and spring and fall 2015 semesters. Two hundred sixty-six students completed the questionnaire after completing the online orientation course from February 2013 to December 2015. During this period, a total of three revisions and six pilot administrations took place. Table 1 shows the process of the survey development.

Table 1

Survey Development Timetable

Year	Semester	Survey revision	Total surveys administered
2013	Spring	--	22
2013	Fall	1	147
2014	Spring	2	37
2014	Fall	--	13
2015	Spring	--	16
2015	Fall	3	31

Note. -- = not applicable.

Prior to implementation of this study and Institutional Review Board review, the formative and summative committees reviewed the JOOCS, which made recommendations for final revisions to the questionnaire prior to administration in the study. Fowler (2013) described the formative committee meetings as consisting of "focus group discussions" (p. 113) in which the group members discussed their perceptions of

what the questionnaire was designed to measure. The committee did this by comparing the questions in the survey to the study's research questions. If the goal of this activity was to reduce the possibility of error in the equation used to show the relationship between the answers collected on a survey and the true score, then it was an exercise in increasing the instrument's validity (Fowler, 2013). Further, when the formative committee met to discuss the survey questions, they considered whether the questions evoked the same responses among people in the same situation (Fowler, 2013), which was an issue of reliability.

When developing a survey on servant leadership, Van Dierendonck and Nuijten (2011) utilized a committee of subject experts to examine the instrument's validity and suggest improvements. The experts removed 20 items and added nine new ones. Magee, Rickards, Byars, and Artino (2013) detailed their process of survey design, including the use of a panel of experts for content validation. The group identified items both to delete and to revise.

Cognitive testing was conducted between the formative and summative committee reviews. Fowler (2013) established that cognitive testing could be in the form of "cognitive laboratory interviews" (p. 114) as a process during which volunteers are observed while they take the survey and employ techniques such as thinking aloud to allow the researcher to identify potential issues in the participants' comprehension of the survey questions. Often, the interviewer-researcher will ask volunteer participants to describe in their own words what a question is asking and to explain their answer choices, which gives insight into the respondents' thought processes (Fowler, 2013).

Magee et al. (2013) conducted cognitive interviews to gain insight into how their survey would be received by members of the target population. The interviewees used the

"think aloud" technique to show their thought process in comprehension of the questions and choice of answers. Tyler et al. (2011) used cognitive-based testing to increase validity and decrease errors in measurement by determining how users understood the survey questions and whether the response choices were adequate. Three basic problems with questions were identified; some questions could not be answered because of (a) lack of respondent knowledge, (b) lack of adequate information provided in the question, or (c) differing interpretation of terms (Tyler et al., 2011).

The final JOOCS was utilized to determine the impact of the Jenzabar Online Orientation Course on students' preparedness for participation in online coursework, the impact of the course on participants' understanding of the seven Anishinaabe values, and the impact of the Anishinaabe values' inclusion in the orientation course on students' behaviors while using the LMS.

Validity is the determination of whether a survey accurately measures what it is meant to measure: the knowledge, attitudes, behavior, and or values of the respondents (Fink, 2013). Issues of reliability are concerned with how consistently an instrument measures the information it is designed to measure (Fink, 2013). The current survey was developed using feedback from the formative committee. The summative committee was a part of the final instrument development in order to help address potential issues related to the validity and reliability of the JOOCS. The formative committee was composed of instructors familiar with the course and the course's content, as well as students who had completed the course during the 2 years prior to this study's implementation. The summative committee was composed of experts in survey design.

Procedures

The researcher secured all necessary permissions and approvals prior to collection

of data for the study. The tribal college Institutional Review Board reviewed and approved the study. In addition, the researcher obtained approval to conduct the study from the Nova Southeastern University Institutional Review Board.

Design. This study used quantitative methodology to show whether the Jenzabar Online Orientation Course influences identified outcomes for participants. These outcomes include students' preparedness for participation in online courses and use of the LMS at a tribal college, their understanding of the seven Anishinaabe values, and the impact of the Anishinaabe values' inclusion in the orientation course on students' behaviors while using the LMS.

The design for this quantitative study was survey using a questionnaire. Fink (2013) supported the use of survey design when the researcher needs to complete program evaluation, especially when the program design was to change participants' knowledge and attitudes. For example, find out if respondents learned what they needed from the program or to hear "directly from people what they believe, know, and think" (p. 24), as was the case with this study. Vogt, Gardner, and Haeffele (2012) noted that surveys are a good choice when the information the researcher wants to collect can be obtained by asking people. The researcher examined the research questions to determine if surveying respondents would gather the required information to answer the questions effectively.

This study's survey design incorporated basic procedural principles related to sampling a population. Survey research includes identifying a population of similar individuals and narrowing out a smaller group from this population from which to gather information, called the "target population" or "sampling frame" (Creswell, 2008, p. 393). The researcher then collects data from the target population using a questionnaire or

interviews, the results of which can be generalized to the population as a whole; this group is the sample (Creswell, 2008).

The researcher endeavored to obtain as high a response rate as possible from the participants because the larger the group, the better the chance the sample will be similar to the target population (Creswell, 2008). Although Creswell (2008) stated it can be difficult to get a list for the target population, in this study the researcher had complete access to the names, contact information, and characteristics for the whole population. Having this level of access can reduce the possibility for error (Creswell, 2008).

If the aim of the researcher is to find out the feelings and beliefs of the participants, survey research is the primary way to do this The JOOCS asked participants about their preparedness for using the Jenzabar LMS and about their understanding of the seven Anishinaabe values. Asking a person to self-report on a survey is also a good way to determine their specific behaviors (Fowler, 2013).

Data collection. The JOOCS questionnaire had been administered previously electronically on an optional basis using SurveyMonkey by providing a link to all students. Students had the option to give their names to be entered into a drawing to encourage their participation. To increase response rate for this study without offering monetary compensation, the administration of the survey was done in the freshman Path to Success class, although it was still filled out electronically. Prior to completing the survey, participants received a consent form in the form of a Participation Letter. The Participation Letter provided information about the purpose of the study, confidentiality, the right to decline to participate, and other key elements pertinent to the study. The Participation Letter stated that by completing and submitting the survey, the participant acknowledged his or her informed consent to participate in the study. SurveyMonkey

allows the collection of respondents' answers without any identifying information. Although SurveyMonkey collects each individual's IP address, this option was disabled before administering the survey. The majority of students completing the JOOC were freshmen taking the mandatory Path to Success college orientation course. Prior to completing the questionnaire, participants received information about the study and provided their informed consent to participate. Participants' data were collected anonymously, and the identity of respondents protected.

Data analysis. The data analysis involved descriptive statistics and calculated the measures of central tendency (mean, mode, median, and standard deviation) from the data collected using the questionnaire. Researchers typically use descriptive statistics (reporting summary data and sometimes cross-tabulating results) to describe and understand the data collected from surveys (Fink, 2013). De Vaus (2014) described survey research as "a structured approach to data collection and analysis that relies on logic of analysis" (p. 7). Careful analysis of survey data using descriptive statistics is essential and adds meaning and depth to the researcher's work (De Vaus, 2014). The questionnaires were administered online using SurveyMonkey, which provides analytical tools such as text analysis and filtering and cross tabbing of answers (SurveyMonkey, 2015). Subsequent data analyses included summary descriptive statistics.

The survey included four demographic questions asking gender, age, ethnicity, and high school graduation/GED. Seven survey questions answered the research questions.

Demographic data analysis. Frequency and percentages were calculated for the demographic data. Demographic data compared the study's sample with the population. This comparison was helpful in knowing how closely the sample's demographic

characteristics mirrored that of the population.

Research Question 1 data analysis. What is the impact of the Jenzabar Online Orientation Course on students' preparedness for participation in online coursework? To answer Research Question 1, the researcher analyzed data from Survey Items 5-8. Mean frequencies and percentages for each of the four items were calculated. The analysis for Item 5 was compared with that of Item 6 to gain an overall measure of the pre- and postcourse impact on students' preparedness for online coursework. In addition, results for Items 7 and 8 were compared to provide a measure of the pre- and postcourse impact on nine specific course-related activities.

Research Question 2 data analysis. What is the impact of the Jenzabar Online Orientation Course on students' understanding of the seven Anishinaabe values? To answer Research Question 2, data from Survey Items 9 and 10 were analyzed and compared to determine participants' level of understanding of the seven Anishinaabe values both before and after completing the course.

Research Question 3 data analysis. What is the impact of the Anishinaabe values' inclusion in the orientation course on students' behaviors while using the LMS? An analysis including frequency and percentage data for Survey Item 11 was conducted to determine the overall impact level of the inclusion of the values in the course. In addition, the level of impact for each of the seven Anishinaabe values on behaviors while using the portal for online coursework and related activities was determined from responses to Item 12.

Chapter 4: Results

The purpose of the study was to examine the impact of the Jenzabar Online Orientation Course on tribal college students' preparedness for participation in online courses and use of the LMS. The JOOCS collected information from the participants about the impact of the Jenzabar Online Orientation Course on their preparedness for participation in online coursework, the impact of the course on their understanding of the seven Anishinaabe values, and the impact of the Anishinaabe values' inclusion in the orientation course on their behaviors while using the LMS. This information answered the study's three research questions. The results of the study produced information about the impact of a culturally relevant online-orientation course for Indigenous American students.

The survey instrument was administered to freshmen taking the mandatory Path to Success college orientation course. The Jenzabar Online Orientation Course is included in the curriculum of the Path to Success course, offered every fall and spring semester. Forty-five of the 88 students who fully completed the Jenzabar Online Orientation Course filled out the survey, a response rate of 51%.

The JOOCS included four demographic questions about gender, age, ethnicity, and high school graduation versus GED, which are included in Table 2. The participants making up the sample in this study had similar demographic characteristics to the overall population with more women than men completing the survey. Approximately 61% of the population of the school were female (Director of Enrollment Services, personal communication, September 14, 2016), while survey respondents were 60% female. The average age of students at the college was 29 (Director of Enrollment Services, personal communication, September 14, 2016). Survey respondents were asked to choose one of

the following categories (see Table 2) for their ages. The responses fell in a roughly bell-shaped curve with the majority of respondents in the 21- to-29-year-old category, which again was similar to the population. Ninety-one percent of students at the college were classified as American Indian. This matched the ethnic demographics of the survey respondents. About 75% had graduated from high school, and 20% had earned a GED. In the overall population of students, 75% had graduated from high school and 25% had earned a GED.

Findings

The findings are based on questionnaire data. The questionnaire for the study was the researcher-developed JOOCS. Descriptive analysis was used to make the calculations necessary to answer the three research questions.

Research Question 1. What is the impact of the Jenzabar Online Orientation Course on students' preparedness for participation in online coursework? The design of the course was to prepare Native American tribal-college students for online, hybrid, and web-enhanced classes and is required for all incoming freshmen at the target tribal college. Four survey questions measured preparedness for using the LMS for participation in online coursework and related activities both before and after completing the course. The finding for Research Question 1 was that the Jenzabar Online Orientation Course positively affected students' preparedness for participation in online coursework. Based on participant responses to Survey Items 5 and 6, data analysis revealed a 22.23% increase in the percentage of students who felt *prepared* or *very prepared* for participation in online coursework.

The finding for Research Question 1 was based on a comparison analysis for Item 5 with that of Item 6 to gain an overall measure of the pre- and postcourse impact on

students' preparedness for online coursework. Before taking the course, 33.33% of students claimed to have been *unprepared* (22.22%) or *very unprepared* (11.11%). Nearly 67.00% claimed to have been *prepared* (44.44%) or very prepared (22.22%).

Table 2

Demographic Question Results

Demographic	No.	%
Gender		
Female	27	60.00
Male	15	33.33
Other	3	6.67
Age		
17 <	2	4.44
18 - 20	11	24.44
21-29	20	44.44
30-39	7	15.56
40-49	4	8.89
50-59	0	0.00
60>	1	2.22
Ethnicity		
Native American or Alaska Native	41	91.11
Hispanic or Latino	6	13.33
White	7	15.56
Black or African American	3	6.67
Asian, Native Hawaiian, Pacific Islander	4	8.89
Other	1	2.22
Graduation/GED		
Graduation from high school	34	75.56
Completed GED	9	20.00
Other	2	4.44

Note. N = 45; Ethnicity distribution equals more than 45 because some respondents chose more than one ethnic category; GED = general equivalency diploma.

After taking the course, the percentage of participants who felt they were *prepared* (37.78%) and *very prepared* (51.11%) after completing the course increased to 88.89%, an increase of 22.23%. The number of students who felt they were *very unprepared* dropped to zero, and the number who felt *unprepared* dropped by half

(11.11%). Table 3 illustrates the comparison of the percentage of participants *prepared* or *very prepared* vs. *unprepared* or *very unprepared* before and after the course, as well as the percentage of increase.

Table 3

Participants' Overall Preparedness Before and After the Course in Percentages

Course	Prepared	Very prepared	Total prepared	Unprepared	Very unprepared	Total unprepared
Before	44.44	22.22	66.66	22.22	11.11	33.33
After	37.78	51.11	88.89	11.11	0.00	11.11
Change	-6.66	+28.89	+22.23	-11.11	-11.11	-22.22

Note. $N = 45$.

Participant Responses for Items 7 and 8 were compared and also used to answer Research Question 1 by providing a measure of the pre- and postcourse impact on nine specific course-related activities. The nine activities included logging into the portal, checking grades, checking attendance, completing coursework, taking online tests and quizzes, printing a schedule and a transcript, being a good cybercitizen, and posting a message on the message board. For all nine activities, participants felt more prepared for the activities covered in the course after completing it than they did before. The overall mean percentage for all nine activities for *prepared* or *very prepared* was 64.71% before the course and 96.30% after the course. This represented an increase of 31.59%. Conversely, the percentages for *unprepared* and *very unprepared* fell from 35.42% before the course to 3.71% after the course. Table 4 illustrates the before and after percentages for preparedness for each of the nine activities and the overall mean percent

change.

According to percentages of students who felt prepared or unprepared for specific activities, the biggest change was for taking an online test or quiz. For this activity, the largest number of students moved from the unprepared categories to the prepared categories.

Table 4

Impact of Course Activities on Students' Preparedness

Course activity	Prepared/Unprepared		% Change to prepared and very prepared
	% Before	% After	
Logging in	77.78/22.23	97.78/2.22	20.00
Checking grades	64.45/35.56	97.78/2.22	33.33
Checking attendance	62.22/37.78	97.78/2.22	35.56
Completing coursework	62.22/37.77	97.78/2.22	35.56
Taking online tests and quizzes	57.78/42.23	97.78/2.22	40.00
Printing a schedule	55.56/44.44	93.33/6.67	37.77
Printing a transcript	56.82/43.18	93.33/6.67	36.51
Being a good cybercitizen	84.45/15.55	97.78/2.22	13.33
Posting a message on the message board	60.00/40.00	93.33/6.67	33.33
Overall mean percentage for all activities	64.59/35.41	96.30/3.71	31.71

Note. $N = 45$.

Before the course, 57.78% said they felt *prepared* (28.89%) or *very prepared* (28.89%). Over 42.00% responded they felt *unprepared* (15.56%) or *very unprepared* (26.67%) to take an online test or quiz before completing the course. After the course, the number who felt *prepared* (35.56%) or *very prepared* (62.22%) increased 40.00% to

97.78%. The number of students who felt they were *unprepared* dropped to 2.22%, and the number who felt *very unprepared* dropped to zero. These results were repeated with every activity covered, with students feeling more prepared after completing the course than before the course. For every activity, the number of students feeling *unprepared* decreased (13.33%-40.00%), and students feeling very unprepared dropped to zero. After completing the course, the activity for which students reported the highest level of preparedness was for being a good cybercitizen at 80.00% *very prepared* and 17.78% *prepared*, but they also started at the highest level of preparedness for any activity at 46.67% *very prepared* and 37.78% *prepared*. The percentage of students responding *prepared* overall at the end of the course for all activities ranged from 93.33% to 97.78%. Before completing the course, these students' preparedness for various activities ranged from 55.56% to 84.45%.

Research Question 2. What is the impact of the Jenzabar Online Orientation Course on students' understanding of the seven Anishinaabe values? The finding for Research Question 2 was that the Jenzabar Online Orientation Course had a positive impact on students' understanding of the seven Anishinaabe values. For all values, students reported a moderate level of understanding before the course and a moderate to high level of understanding after completing the course.

Table 5 illustrates percentages for level of understanding before and after the course for each of the seven Anishinaabe values and the overall mean percentage for all values. In addition, the category ratings (*high level*, *moderate level*, *low level*, and *no understanding*) before and after the course are shown for each of the seven values. Based on participants' responses to Survey Items 9 and 10, data analysis revealed an overall 25.89% increase in the number of students whose levels of understanding of the seven

Anishinaabe values changed from *no understanding* or a *low level* of understanding to a *moderate* or *high level* of understanding after completing the Jenzabar Online Orientation Course. The percentage of students who reported a *moderate* or *high level* of understanding of the values was 74.11% before the course and 100.00% after the course.

Table 5

Impact of Values on Students' Understanding

Anishinaabe value	% level of understanding before/after				Category rating for individual values Before/After
	High	Moderate	Low	None	
Respect	31.11/62.22	44.44/37.78	24.44/0.00	0.00/0.00	Moderate/High
Courage	28.89/57.78	42.22/42.22	28.89/0.00	0.00/0.00	Moderate/High
Wisdom	29.55/60.00	40.91/40.00	29.55/0.00	0.00.0.00	Moderate/High
Love	31.82/57.78	43.18/42.22	25.00/0.00	0.00/0.00	Moderate/High
Truth	31.11/60.00	46.67/40.00	22.22/0.00	0.00/0.00	Moderate/High
Honesty	31.11/62.22	46.67/37.78	22.22/0.00	0.00/0.00	Moderate/High
Humility	31.11/60.00	40.00/40.00	24.44/0.00	4.44/0.00	Moderate/High
Overall mean percentage for all values	30.67/60.00	43.44/40.00	25.25/0.00	0.63/0.00	Moderate/High

Note. $N = 45$.

The value of Humility was the only value any student reported *no understanding* of the value (4.44%). Wisdom was the value for which many students' responses fell into the *low level* of understanding category before completing the course (29.55%), followed by Courage (28.89%), Love (25.00%), Respect and Humility (24.44%), Truth (22.22%), and Honesty (22.22%).

The values for which students responded a *high level* of understanding after the course were Respect and Honesty (62.22%), followed by Wisdom, Truth, and Humility (60.00%), then Courage and Love (57.78%). The value for which there was the greatest reported change was Wisdom with a 29.55% increase in the number of students in the *moderate* and *high levels* of understanding categories after completing the course, followed closely by Courage and Humility (28.89%), Love (25.00%), Respect (24.44%), then Truth and Honesty (22.22%). In the course, the value of Wisdom was connected with completing coursework.

Research Question 3. What is the impact of the Anishinaabe values' inclusion in the orientation course on students' behaviors while using the LMS? At the heart of Anishinaabe philosophy is a commitment to live harmoniously with all of creation, including other humans, animals, and nature. The seven values and corresponding recommended behaviors guide individuals in their adherence to Anishinaabe philosophy. In the orientation course, these behaviors connect to specific tasks and tools in the LMS in an effort to align traditional beliefs and values with modern educational technology. The finding for Research Question 3 was that the inclusion of the values in the Jenzabar Online Orientation Course had a *moderate* to *high impact* on students' behaviors while using the LMS for online coursework and related activities.

Based on participants' responses to Survey Item 11, which looked at the impact of the course on each individual value, data analysis revealed that 91.43% of students reported a *moderate* or *high impact* of the Anishinaabe values on their behaviors while using the LMS. This matched closely with the results of Survey Item 12, which showed that, overall, 91.11% of students reported a *moderate* or *high impact* of the Anishinaabe values on their behaviors while using the LMS. According to the data in Table 6, students

rated the impact of individual values on their behavior higher than they did the overall impact of the values inclusion in the course on their behavior.

Table 6

Impact of Values' Inclusion on Students' Behavior

Anishinaabe value	High impact (%)	Moderate impact (%)	Low impact (%)	No impact (%)
Respect	57.78	35.56	0.00	6.67
Courage	53.33	37.78	2.22	6.67
Wisdom	57.78	31.11	4.44	6.67
Love	51.11	40.00	2.22	6.67
Truth	64.44	26.67	2.22	6.67
Honesty	66.67	24.44	2.22	6.67
Humility	53.33	40.00	0.00	6.67
Overall mean percentage for all values	57.78	33.65	11.42	6.67
Overall impact rating for the course	46.67	44.44	0.00	8.89

Note. $N = 45$.

Summary

The data for the findings came from analysis of the 45 responses to the JOOCS. Four demographic questions showed the demographics of the study's convenience sample were similar to the study's population. The three research questions were as follows:

1. What is the impact of the Jenzabar Online Orientation Course on students' preparedness for participation in online coursework?

2. What is the impact of the Jenzabar Online Orientation Course on students'

understanding of the seven Anishinaabe values?

3. What is the impact of the Anishinaabe values' inclusion in the orientation course on students' behaviors while using the LMS?

The finding for Research Question 1 was that the JOOC positively affected students' preparedness for participation in online coursework. Data analysis revealed the finding for Research Question 2 was the JOOC had a positive impact on students' understanding of the seven Anishinaabe values. For all values, students reported a *moderate* to *high level* of understanding after completing the course. For Research Question 3, data analysis showed the inclusion of the seven Anishinaabe values in the JOOC had a *moderate* to *high impact* on students' behaviors while using the LMS for online coursework and related activities.

Chapter 5: Discussion

Introduction

The problem addressed by this research was the low level of technology skills and access to technology among Native American students entering tribal colleges. The purpose of the study was to examine the impact of the culturally relevant Jenzabar Online Orientation Course on tribal college students' preparedness for participation in online courses and use of the LMS. The examination included the overall impact of the orientation course as well as the impact of the seven Anishinaabe cultural values incorporated into the course.

The name of the college's LMS is Jenzabar eRacer and used by students to access course material, communicate with instructors and classmates, participate in online activities, check grades, monitor their attendance records, register for classes, and access transcripts. Data for achieving the study's purpose were collected by administering a survey. Participants for the study were freshmen and transfer students at the target tribal college who had completed the Jenzabar Online Orientation Course. The results of the study produced information about the impact of a culturally relevant online orientation course for Indigenous American students.

The methodology for this study was quantitative. Data were collected from 45 participants using a questionnaire, the JOOCS. Survey items asked participants about the impact of the Jenzabar Online Orientation Course on their preparedness for participation in online coursework, the impact of the course on their understanding of the seven Anishinaabe values, and the impact of the Anishinaabe values' inclusion in the orientation course on their behaviors while using the LMS. The results answered three research questions. The data collected consisted of numerical scores and were analyzed

using descriptive statistical procedures.

Results

The finding for Research Question 1 was that the JOOC positively affected students' preparedness for participation in online coursework. Data from four survey items were analyzed to measure both overall preparedness for using the LMS for participation in online coursework and related activities both before and after completing the course and measured the pre- and postcourse impact on nine specific course-related activities. Analysis revealed a 22.23% increase in the percentage of students who felt *prepared* or *very prepared* for participation in online coursework. It also revealed an overall mean increase of 31.59% in preparedness for all nine activities after completing the course. Men and women reported a similar level of change in preparedness after completing the course.

Two of the activities from the course for which students scored their preparedness slightly lower than other activities, at 93.33% overall at the end of the course, were the two activities that were least intuitive in function: printing a schedule and printing a transcript. Although all the other activities took place within the online classroom, printing these two items required students to use a different section of the portal by clicking a different tab at the top of the screen. Steps included choosing one of five yellow folders (Registration), then clicking one of seven links to pull up either their schedule or their transcript. Once that item was displayed on the screen, the student had several options for printing the document. The multiple steps and the items' location under another tab outside of the online classroom where the other activities took place could explain why the students rated their preparedness for these activities slightly lower than most of the other activities. One other activity, posting a message on the message

board, was also rated a 93.33% overall preparedness at the end of the course. This activity also required several clicks and navigating through several folders due to the organization of the LMS.

When cross-tabulating survey results for ethnicity, results showed that non-Natives reported higher levels of overall preparedness both before and after completing the course. However, the number of non-Natives participating in the study was very small (n = 4), so this result is inconclusive. Natives were considered any student who categorized himself or herself as Native American or Alaska Native, even if they also chose another ethnicity. Analysis of specific activities revealed that Native and non-Native students reported similar levels of preparedness for specific activities within the LMS after the course, but non-Native students reported higher levels of preparedness for specific activities before the course. The data for ethnicity pointed to the course's usefulness for all students regardless of ethnic group in terms of both preparedness for specific activities within the LMS and for overall preparedness for online coursework and related activities (see Table 7).

The finding for Research Question 2 was that the Jenzabar Online Orientation Course had a positive impact on students' understanding of the seven Anishinaabe values. For all values, students reported a *moderate level* of understanding before the course and a *moderate* to *high level* of understanding after completing the course. The percentage of students who reported a moderate or high understanding of the values was 74.11% before the course and 100.00% after the course.

The finding for Research Question 3 was that the inclusion of the seven Anishinaabe values in the Jenzabar Online Orientation Course had a *moderate* to *high impact* on students' behaviors while using the LMS for online coursework and related

activities. Data analysis revealed that 91.43% of students reported a *moderate* or *high impact* of the Anishinaabe values on their behaviors while using the LMS.

Table 7

Preparedness by Ethnicity

Student	*N*	Very prepared	Prepared	Unprepared	Very unprepared
		Overall preparedness before/after by response category			
Native	41	24.39/51.22	41.46/36.59	21.95/12.20	12.20/0.00
Non-Native	4	0.00/50.00	75.00/50.00	25.00/0.00	0.00/0.00
		Overall preparedness before/after			
Native	41		65.85/34.15	87.81/12.20	
Non-Native	4		75.00/25.00	100.00/0.00	
		Preparedness for specific activities before/after			
Native	41				
Log in		41.46/70.73	36.59/26.83	14.63/2.44	7.32/0.00
Check grades		36.59/65.85	26.83/31.71	26.83/2.44	9.76/0.00
Check attendance		34.15/70.73	26.83/26.83	29.27/2.44	9.76/0.00
Find coursework		29.27/70.73	31.71/26.83	24.39/2.44	14.63/0.00
Take test/quiz		29.27/63.41	26.83/34.15	26.83/2.44	17.07/0.00
Print schedule		26.83/73.17	24.39/19.51	24.39/7.32	24.39/0.00
Print transcript		25.00/73.17	27.50/19.51	27.50/7.32	20.00/0.00
Good cybercitizen		43.90/80.49	39.02/17.07	14.63/2.44	2.44/0.00
Post a message		24.39/65.85	34.15/26.83	29.27/7.32	12.20/0.00
Mean scores		32.32/63.46	30.43/25.47	24.19/4.07	13.06/0.00
Non-Native	4				
Log in		50.00/75.00	25.00/25.00	25.00/0.00	0.00/0.00
Check grades		25.00/75.00	50.00/25.00	25.00/0.00	0.00/0.00
Check attendance		25.00/75.00	50.00/25.00	25.00/0.00	0.00/0.00
Find coursework		25.00/75.00	50.00/25.00	25.00/0.00	0.00/0.00
Take test/quiz		25.00/50.00	50.00/50.00	25.00/0.00	0.00/0.00
Print schedule		25.00/75.00	75.00/25.00	0.00/0.00	0.00/0.00
Print transcript		25.00/50.00	75.00/50.00	0.00/0.00	0.00/0.00
Good cybercitizen		75.00/75.00	25.00/25.00	0.00/0.00	0.00/0.00
Post a message		25.00/50.00	50.00/50.00	0.00/0.00	25.00/0.00
Mean scores		33.33/66.67	50.00/33.33	13.89/0.00	2.78/0.00

Note. $N = 45$.

Native students reported a *moderate* to *high impact* of the values on their behaviors in the LMS, while non-Native students reported a *low* to *moderate impact*. The data for ethnicity pointed to the course's usefulness for all ethnic groups in terms of both preparedness for specific activities within the LMS as well as for overall preparedness for online coursework and related activities. However, the inclusion of the seven Anishinaabe values was more influential on the behavior of Native students than non-Native students. Both groups reported increased understanding of the Anishinaabe values, but their inclusion in the course seems to be more meaningful for Native students. However, again, it should be noted the number of non-Native participants was only four and, therefore, did not constitute a large enough sample to draw any meaningful conclusions for the non-Native group.

Discussion

Results of the study indicated the online orientation course had benefits to students, which was supported by the literature. There was much research showing the benefits to students of taking an online orientation course prior to engaging in online educational activities (Hai-Jew, 2008; Jones, 2013; McClure, 2011; Milheim, 2012; Lee & Choi, 2011; Stewart et al., 2013). Online courses have been beneficial for allowing nontraditional Indigenous students with busy lives to pursue postsecondary education (Al-Asfour, 2012; Shah et al., 2014). Al-Asfour (2012) determined that one of the best practices of online education at tribal colleges is requiring students to take a technology course that includes use of the course management system. Ali and Leeds (2009), Jones (2013), and Lee and Choi (2011) recommended an online orientation course, even if it must be carried out face-to-face. The findings for Research Question 1 support these recommendations with students experiencing a positive impact on their preparedness for

using the LMS for online coursework.

Carruth et al. (2010) recommended that an online orientation course should require students to complete activities similar to those they will be required to do in the class. The Jenzabar Online Orientation Course covers how to access course material, communicate with instructors and classmates, participate in online activities, check grades, monitor attendance records, register for classes, and print schedules and transcripts. The survey measured the pre- and postcourse impact on students' preparedness for nine specific course-related activities and revealed an increase in preparedness for all nine activities after completing the course.

The average age of students at the target college during the semester when this study was conducted was 29 (Director of Enrollment Services, personal communication, September 14, 2016). Older students who are not coming to college directly from high school may have had a lapse in technology exposure and may not feel at ease using computers (Fire, 2009). The findings revealed the age group that reported the biggest change in their overall levels of preparedness for using the LMS was the group aged 30-39. In this group, 42.86% moved from the *unprepared* to the *prepared* categories.

The high dropout rate of Indigenous American students (Faircloth & Tippeconnic, 2010) ensures that the use of technology for academic activities will drop considerably after a student is no longer attending classes. Preparedness to use technology for academics is an important part of the college readiness picture for both high school graduates and GED earners (Ratliff, 2009). Brinkley-Etzkorn and Ishitani (2016) reported on the new computerized GED test. They found that students overall had negative feelings about the test–almost half preferred paper-based testing–and that older students had less confidence in their computer abilities. Twenty-two percent of students in the

study said they probably would not take the GED test at all if computer-based testing were the only choice. The paper-based test is no longer available (Brinkley-Etzkorn & Ishitani, 2016).

When cross tabulating the demographic data for high school graduates versus GED earners with survey items, GED students reported a significantly greater impact on both their overall preparedness and their preparedness for specific activities in the LMS compared to high school graduates. High school graduates reported themselves to be more prepared overall before the course than did GED students. High school graduates experienced a change of 17.65% in overall preparedness after the course, while GED students reported a change of 44.45% in overall preparedness after the course. Both groups reported similar levels of ending overall preparedness. The findings support the benefit of the course for all students in terms of technology skills.

Hai-Jew (2008) referred to the use of educational technologies with Native students who have historically been the "have nots" in the country's "digital divide" as "cultural border crossing" (p. 95). Rushing and Stephens (2011) found the incorporation of videos and images reflecting Native culture and images in websites raised the interest of Native youth participating in their study: "[T]echnology-based interventions targeting NW Native youth should be tailored to reflect their unique worldviews and social contexts" (p. 143). Attention to these needs could make the transition into postsecondary education easier for Native students (Collins, 2013a). This was the premise behind the creation of the Jenzabar Online Orientation Course. The findings of this study align with the evidence promoting the culturally relevant pedagogical theory upon which it was based, actively making cultural connections in education (Brown-Jeffy & Cooper, 2011); combining tribal values with modern educational technology (Cajete, 2010); and

considering the complexity of "Native American learners' living situations, worldviews, academic needs, understood values systems, rituals, and motivating topics of interest" (Hai-Jew, 2008, p. 101).

The findings for this research showed that the Jenzabar Online Orientation Course had a positive impact on students' understanding of the seven Anishinaabe values. Duran (2006), in his book *Healing the Soul Wound: Counseling with American Indians and other Native People*, discussed how important identity is to healing from the experience of colonization that Indigenous peoples have suffered. Duran attested to the "deep socialization into Western values" that many Indigenous people undergo "in the process of getting an advanced degree" (p. 37). In the Jenzabar Online Orientation Course, an attempt was made to include not only the seven Anishinaabe values in name but also the corresponding recommended behaviors, which are listed under the Anishinaabe Values and Philosophy in Appendix A, to keep the spirit of the words, not just the English translations for them. The values were also included in the course prominently in Ojibewemowin and in smaller font in English. In the description of the course and in the first introductory video to the course, it is explained the videos would show students how the use of the portal was connected to the seven Anishinaabe values.

The Office of Indian Education (2016) of the Minnesota Department of Education published a curriculum handbook for teachers in which the primary learning outcome was for all students to "be able to demonstrate an understanding of the American Indian values system" (p. 3). Yet, the Office of Indian Education warned not to make generalizations about all American Indians because

> the adherence to the value system can be described as a continuum ranging from those very traditional American Indians who behave completely according to the

> cultural value system to those American Indians who have become acculturated into the value system of the majority society. (p. 3)

Brown, Dickerson, and D'Amico (2016) concluded in their study of urban Indigenous youth that identity construction among Native Americans is complicated, with people experiencing "acculturative stress within families, including negotiating different generational attachments to American Indian/Alaska Native culture and identity" (p. 4). The authors discussed the stages of cultural identity proposed by Walters (as cited in Brown et al., 2016),

> in which individuals move from the internalization of victimhood and negative stereotypes to a sense of marginalization and being caught between two cultural worlds, then on to externalizing or rejecting the negative effects of colonization, and finally to a healthy, resilient AI/AN identity. (p. 1)

Brown et al. also found that many Indigenous youth in their study were disconnected from their culture, lacking knowledge and interest in their roots.

In this study, the age groups of Indigenous participants experiencing the biggest increase in understanding of the values from the low and no understanding categories to the moderate and high categories were the two youngest (17 or less, 100.00%; 18-20, 33.38%). The age group for the highest level of understanding after completing the course were the two oldest (40-49, 74.00%; 60 or greater, 100.00%). Although individuals move through this process of cultural identity construction at their own pace, these results do mirror the idea that young people have a lesser understanding of the values and thus benefitted more from the inclusion of the values in the course. Likewise, it follows that participants in the oldest age categories would have the highest level of understanding of the values.

Brown et al. (2016) confirmed that cultural identity is connected with behavior. There is a wealth of research on historical trauma, the concept that was developed to explain ongoing, internalized distress experienced by those, like Native Americans, who have been traumatized by historical atrocities and oppression and continue to live with the fallout passed down generationally. The true measure of cultural programming for Indigenous students is not only how much they learn about their own values and culture in the modern world but also the impact that their identity construction through education has on their behaviors and their lives.

The influence of the Anishinaabe values on participants' behaviors in the LMS was strongest for the two oldest groups (40-49, 60 or greater). This was determined by calculating the mean of all seven values for each of the four categories of influence–high level, moderate level, low level, and no influence–for each age group. Comparison across age categories showed a rating value of 100.00 each for those aged 40-49 and 60 or greater, followed by the youngest group (17 or less) at 52.04%. The three other age groups experienced a moderate level of influence on their behaviors. The same held true both for the influence of specific values on behavior in the portal as well as on overall reported influence of the values on behavior. That is not to say the influence of the values on behavior was negative or inadequate; most students still experienced a moderate to high level of influence of the values on their behaviors in the LMS overall.

Implications

The finding for Research Question 1 was that the Jenzabar Online Orientation Course positively affected students' preparedness for participation in online coursework regardless of gender, age, ethnicity, or GED vs. high school graduation status. The implications for this finding are that a wide variety of students can benefit from taking an

online orientation course in preparation for beginning online coursework and using the learning and management tools that will be required of them in the LMS.

Students will have different starting and ending levels of preparedness dependent upon a variety of personal characteristics, but overall online orientation courses are helpful in preparing them for the tasks they will need to complete using the LMS.

The inclusion of the values in the course with their corresponding recommended behaviors, in line with Anishinaabe philosophy as taught by the tribal college in this study, was an exercise in creating culturally relevant technology programming for Indigenous students. The finding for Research Question 2 was that the Jenzabar Online Orientation Course had an overall positive impact on students' understanding of the seven Anishinaabe values. The implications for this finding are that culturally relevant pedagogy is appropriate for technology education created for Indigenous students at a tribal college. Including videos and images reflective of Native culture, worldview, and language may add to the success of culturally relevant programming for Indigenous students of all ages and educational backgrounds.

The finding for Research Question 3 was that the inclusion of the seven Anishinaabe values in the Jenzabar Online Orientation Course had a moderate to high impact on students' behaviors while using the LMS for online coursework and related activities. This evidence is in support of the theory that culturally relevant pedagogy is meaningful and effective for Indigenous students (Adelman et al., 2013; Brown-Jeffy & Cooper, 2011; Cajete, 2010). Paris (2012) called for terminology to be changed to "culturally sustaining pedagogy" as the logical step in supporting "cultural pluralism and cultural equality" (p. 93) to stop the loss of heritage, language, and culture. Tribal colleges excel at this practice.

Limitations

A study may be limited in its design or methodology such that the findings of the research are impacted. An issue with the collection of data or the amount of data collected may influence the results of the study. In addition, it may be difficult to generalize the findings of the study to other populations, especially if a small or very specific population is studied. Various limitations could bring into question the internal or external validity of the research.

Threats to internal validity. There were no threats to internal validity in the selection of participants. All students who completed the course received the same consent form with an invitation to complete the survey. Participants were self-selected, and survey results were collected anonymously. A study has internal validity if it is shown that the manipulation of the variables in the study could be connected to a measurable outcome and external validity if the results of the study could be more widely applied to others (Fink, 2013). The use of comparative survey items designed to measure prior versus postcourse perceptions helped to verify the issue of internal validity because data analysis showed the course had a measurable outcome.

There may be some evidence of acquiescence bias in which the respondents answered in the way they believed the researcher wanted them to answer or made them look as if they were right, even though this was an anonymous survey and there were no right or wrong answers (Wivagg, 2011). In *The Encyclopedia of Survey Research Methods,* Holbrook (2008) indicated that acquiescence response bias reveals itself in the respondents' inclination to agree with survey statements. Acquiescence bias can result when respondents choose to agree with statements because of a desire to choose what they believe is the correct or otherwise most appropriate answer and may occur because

of the desire to be polite, especially in cultures where deference is considered polite (Wivagg, 2011). Acquiescence bias can be mitigated by the use of Likert-style responses (Holbrook, 2008). The survey used for this study included Likert-style responses.

Another consideration is that students might have answered the questions the way they thought they should have rather than giving their true answers because the course was part of the Path to Success first-year experience course. Even though they completed the survey anonymously, the before-and-after nature of some of the questions may have led them to report that their learning from the course was higher than it was. This is complicated by social desirability bias in which respondents' answers are skewed to portray themselves or their organization in a more favorable light (Brill, 2008). Considering the personal connection to the seven values Ojibwe students are expected to know as part of their culture, one might expect participants to answer that their familiarity with the values was higher than it is. In reality, 25% of the Native students in the study reported their prior understanding was at a low or very low (no understanding) level for all seven of the Anishinaabe values and 26% reported their prior understanding was at a high level for all of the values, leaving all other participants in the middle. Based on these data, the resulting bell-shaped curve indicates a normal distribution of answers.

Another possible internal threat to validity for the study may be the reliability and validity of the researcher-developed instrument. Steps taken to address this limitation included critical evaluation of the survey items. Three revisions and six pilot administrations took place before the final survey was developed. Formative and summative committees reviewed the survey, and cognitive testing was conducted between the formative and summative committee reviews. Issues of reliability are concerned with how consistently an instrument measures the information it is designed to

measure (Fink, 2013; Fowler, 2013). Test-retest reliability has not yet been determined by administering the survey to the same group at two different times, but the various survey administrations have shown similar results. However, some conflicting survey answers raise questions about the survey design. These answers may not point to problems with the survey but may reveal participants' tendency to under- or overrate their overall preparedness or understanding until presented with the chance to rate themselves on individual items. For example, although the one student in the 60 or greater category reported only a change from *prepared* to *very prepared*, when asked about specific tools and activities, this student reported five activities for which she or he was unprepared before the course but very prepared after the course: taking tests and quizzes online, printing a schedule and a transcript, being a good cybercitizen, and posting on the message board. This contradicts the student's reported overall readiness before the course.

For the four students aged 40-49 who reported an overall drop in preparedness, asking about specific tools revealed they felt less prepared after taking the course than they had before for only two activities: printing a schedule and posting to the message board. They were prepared or very prepared for all other seven activities. Although the two students in the 17 or less category reported no change in preparedness overall, when asked about specific tools, they did report an increase in preparedness for all activities except for being a good cybercitizen. As with the 60 or greater group, this contradicts the students' reported overall readiness before the course. Further analysis of individuals' responses from other age groups revealed that six other students had also reported their overall preparedness higher before completing the course than when asked about specific activities. It could be these students overestimated their preparedness before the course

before considering each of the individual activities.

Conversely, nine students did the opposite; their reported overall preparedness before or after the course was significantly lower than their reported preparedness for individual activities. In some cases, students reported themselves to be *unprepared* or *very unprepared* overall before the course and *prepared* or *very prepared* after the course, then reported themselves to be *prepared* or *very prepared* for all or most activities before the course. This could be an instance of acquiescence bias; participants may have recorded their starting preparedness low and their ending preparedness higher in an effort to answer the survey in a way that seemed desirable, but when presented with the option to rate themselves on individual activities, they were more accurate in their ratings. It would be difficult to say for sure without collecting qualitative data from the students.

In other instances, participants reported their preparedness after the course as *unprepared* or *very unprepared*, but when asked about specific activities rated themselves as *prepared* or *very prepared* on all or most items. In these cases, it could be that an unprepared rating for any one or two activities leads to a feeling of unpreparedness overall, despite being prepared for all other activities. A participant may feel unprepared for using the LMS overall even though he or she is prepared for all activities. Because this happened in only one case, it could also have been an error in reporting. The design of the JOOCS was to collect data to answer three research questions. Because the researcher developed the questionnaire, one limitation is the lack of statistical validity and reliability information.

Threats to external validity. Generalizability is a potential external threat to the validity of this study. However, the collection of demographic data that were compared to

the demographic data of the entire population served to provide insights related to external validity and generalizability. Because the demographics of the sample closely matched the demographics of the population, the study's results can be generalized to the population of the target site. Threats to external validity make the results of the study less generalizable to other populations for various reasons. Ojibwe language and culture are unique. There are 566 federally recognized tribes in the United States (Indian Affairs, 2015) and the seven Anishinaabe values and their meanings may not have parallel constructs in other Native languages and cultures. Likewise, Indigenous students from more urban or affluent areas who attended secondary schools with better access to and use of computer technology for learning may come to college better prepared for the use of an LMS. Therefore, this course designed for the students at one school may not be applicable to students with different backgrounds. Demographic questions on the survey were used to determine if these characteristics affected some individual students' experience with the course. Although 73% of students at the tribal college were educated in reservation schools, Indian boarding schools, and public schools on or adjacent to the reservation, a minority came to the college from other areas of the state and country.

Generalizability of the research findings and conclusions for this study to other populations are limited because of the relatively small number of students in the study and the study being conducted at only one college. Although the results may be generalizable to the larger population at the college and to future groups of incoming students with similar characteristics, the results may not be transferable to other tribal colleges or other Indigenous-serving institutions.

Recommendations for Further Research

Augmenting the findings here with qualitative data through a mixed-methods

study might answer some of the questions about some students' conflicting answers in the previous section. Qualitative data would provide more information on the thoughts and feelings of students about both the technological aspects of the course and the culturally relevant material in its design. A larger sample of participants would also be helpful in validating the findings of this study and for purposes of generalizability. Conducting a study with a random sample of participants from geographically dispersed tribal college locations could allow for results that are more generalizable.

Other tribal colleges serving different tribal populations may want to create similar courses encompassing different values and using their own languages to determine if there is wider significance in creating culturally relevant online orientation courses for Indigenous students. Comparing the impact of this or a similar course on Native vs. non-Native students would shed light on the value of culturally relevant pedagogy for Indigenous students compared to non-Native students.

References

Abrams, D. E. (2015). Reforming high school American history curricula: What publicized student intolerance can teach policymakers. *Texas Journal on Civil Liberties and Civil Rights, 20*(3), 1-16. Retrieved from http://ssrn.com/abstract=2613086

Adelman, H., Tayor, L., & Nelson, P. (2013). Native American students going to and staying in postsecondary education: An intervention perspective. *American Indian Culture and Research Journal, 37*(3), 29-56. doi:10.17953/aicr.37.3.01130638k210j380

Al-Asfour, A. (2012). Online teaching. *Tribal College Journal, 23*(3), 20-23. Retrieved from http://www.tribalcollegejournal.org/archives/17194

Al-Asfour, A., & Bryant, C. (2011). Perceptions of Lakota Native American students taking online business course at Oglala Lakota College (OLC). *American Journal of Business Education, 4*(10), 43-50. doi:10.19030/ajbe.v4i10.6063

Ali, R., & Leeds, E. (2009). The impact of face-to-face orientation on online retention: A pilot study. *Online Journal of Distance Learning Administration, 12*(4). Retrieved from http://www.westga.edu/~distance/ojdla/winter124/ali124.html

Allen, I. E., & Seaman, J. (2013). *Changing course: Ten years of tracking online education in the United States*. Babson Park, MA: Babson Survey Research Group and Quahog Research Group, LLC.

American Indian Higher Education Consortium. (2012). *Sharing our stories: Strengthening our nations through tribal education.* Retrieved from http://www.aihec.org/our-stories/docs/reports/AIHEC _AIMSreport_May2012.pdf

American Indian Higher Education Consortium. (2014a). *Statement of the American*

Indian Higher Education Consortium regarding President Obama's proposed College Value and Affordability Rating system and related issues. Available from http://www.aihec.org/

American Indian Higher Education Consortium. (2014b). *Tribal colleges and universities: Educating, sustaining, innovating, engaging*. Retrieved from http://centerforschoolchange.org/wp-content/uploads/2014/10/Cariie-Billy-Paper.pdf

American Indian Higher Education Consortium. (2015). *Statement of the American Indian Higher Education Consortium submitted to the United States Senate Committee on Appropriations, Subcommittee on Labor, HHS, Education, and Related Agencies*. Retrieved from http://www.aihec.org/what-we-do/docs /FY16/FY2016_LaborHHS(S)_4-3-2015.pdf

American Indian Higher Education Consortium & Systemic Research, Inc. (2009). *American Indian Measures for Success (AIMS) Factbook 2007: Tribal colleges and universities report*. Retrieved from http://www.aihec.org/our-stories/docs /reports/AIHEC_AIMS _FactBook2007.pdf

American Indian Higher Education Consortium, The Institute for Higher Education Policy, & Sallie Mae Education Institute. (2000). *Creating role models for change: A survey of tribal college graduates*. Retrieved 12/12/15 from ERIC database. (ED456947)

Baratz, S. S., & Baratz, J. C. (1970). Early childhood intervention: The social science base of institutional racism. *Harvard Educational Review, 40*(1), 29-50. doi:10.17763/haer.40.1.m243170whqq36766

Bartlett, L., & Brayboy, B. M. J. (2005). Race and schooling: Theories and

ethnographies. *The Urban Review, 37*, 361-374. doi:10.1007/s11256-005-0021-3

Benton, S. (2012). Crossing the digital divide: College of Menominee Nation uses technology to restore language. *Tribal College Journal, 23*(3), 15-17. Retrieved from http://www.tribalcollegejournal.org/archives/17173

Bissell, T. (2004). Digital divide dilemma: Preserving Native American culture while increasing access to information technology on reservations. *The Journal of Law, Technology and Policy, 2004*, 129-150. Retrieved from http://illinoisjltp.com /journal/wp-content/uploads/2013/10/bissell.pdf

Brayboy, B. M. J. (2004). Hiding in the ivy: American Indian students and visibility in elite educational settings. *The Harvard Review, 74*, 125-152. doi:10.17763 /haer.74.2.x141415v38360mg4

Brayboy, B. M. J. (2005). Toward a tribal critical race theory in education. *The Urban Review, 37*, 425-446. doi:10.1007/s11256-005-0018-y

Brayboy, B. M. J., Castagno, A. E., & Maughan, E. (2007). Equality and justice for all?: Examining race in education scholarship. *Review of Research in Education, 31*, 159-194. doi:10.3102/0091732X07300045

Brescia, W., & Daily, T. (2007). Economic development and technology-skill needs on American Indian reservations. *The American Indian Quarterly, 31*(1), 23-43. Retrieved from http://www.jstor.org/stable/4138893

Brill, J. E. (2008). Likert scale. In P. J. Lavrakas (Ed.), *Encyclopedia of survey research methods* (pp. 427-429). Thousand Oaks, CA: Sage.

Brinkley-Etzkorn, K. E., & Ishitani, T. T. (2016). Computer-based GED testing: Implications for students, programs, and practitioners. *Journal of Research and Practice for Adult Literacy, Secondary, and Basic Education, 5*(1), 28-48.

Brown, R. A., Dickerson, D. L., & D'Amico, E. J. (2016). Cultural identity among urban American Indian/Alaska Native youth: Implications for alcohol and drug use. *Society for Prevention Research, 17,* 852-862. doi:10.1007/s11121-016-0680-1

Brown-Jeffy, S., & Cooper, J. E. (2011). Toward a conceptual framework of culturally relevant pedagogy: An overview of the conceptual and theoretical literature. *Teacher Education Quarterly, 38*(1), 65-84. Retrieved from ERIC database. (EJ914924)

Cajete, G. A. (2010). Contemporary Indigenous education: A nature-centered American Indian philosophy for a 21st century world. *Futures, 42,* 1126-1132. doi:10.1016/j.futures.2010.08.013

Carruth, A. K., Broussard, P. C., Waldmeier, V. P., Gaulthier, D. M., & Mixon, G. (2010). Graduate nursing online orientation course: Transitioning for success. *Journal of Nursing Education, 49,* 687-690. doi:10.3928/01484834-20100831-06

Castagno, A. E., & Brayboy, B. M. J. (2008). Culturally responsive schooling for Indigenous youth: A review of the literature. *Review of Educational Research, 78,* 941-993. doi:10.3102/0034654308323036

Chaloux, B. N. (2004). Policy: The inconspicuous barrier to expanding e-learning in community colleges. *New Directions for Community Colleges, 128,* 79-84. Retrieved from http://www.qou.edu/arabic/researchPgm/eLearningRchs/inconspicuous.pdf

Chavez, A. F., Ke, F., & Herrera, F. A. (2012). Clan, sage, and sky: Indigenous, Hispano, and Mestizo narratives of learning in New Mexico context. *American Educational Research Journal, 20*(10), 1-32. doi:10.3102/0002831212441498

Cho, M. H. (2012). Online student orientation in higher education: A developmental

study. *Educational Technology Research and Development, 60,* 1051-1069. doi:10.1007/s11423-012-9271-4

Cho, M. H., Shen, D., & Laffey, J. (2010). Relationships between self-regulation and social experiences in asynchronous online learning environments. *Journal of Interactive Learning Research, 21*, 297-316. Retrieved from ERIC database. (EJ895940)

Collins, R. K. (2013a). Introduction: Reducing barriers to Native American student success in higher education. *American Indian Culture and Research Journal, 37*(3), ix-xvi. doi:10.17953/aicr.37.3.022728x7h8173725

Collins, R. K. (2013b). Using captions to reduce barriers to Native American student success. *American Indian Culture and Research Journal*, *37*(3), 75-86. doi:10 .17953/aicr.37.3.025wr5k68l15021q

Cote-Meek, S., Dokis-Ranney, K., Lavallee, L., & Wemigwans, D. (2012). Building leadership capacity amongst young Anishinaabe-kwe through culturally-based activities and creative arts culturally-based leadership program. *Native Social Work Journal, 8*, 75-89. doi:10.2105/AJPH.2008.156497

Creswell, J. W. (2008). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (3rd ed.). Upper Saddle River, NJ: Pearson.

Cunningham, A. F., & Redd, K. E. (2000). *Creating role models for change: A survey of tribal college graduates*. Retrieved from http://www.ihep.org/research/ publications/creatingrole-models-change-survey-tribal-college-graduates

Dawson, A. S. (2012). Histories and memories of the Indian boarding schools in Mexico, Canada, and the United States. *Latin American Perspectives, 39*(5), 80-99. doi:10 .1177/0094582X1 2447274

De Mars, A. (2010). Internet usage by Native Americans with disabilities living on American Indian reservations in the Great Plains. *Rural Special Education Quarterly, 29*(2), 34-40. Retrieved from Questia database.

Demirbilek, M. (2014). The "digital natives" debate: An investigation of the digital propensities of university students. *Eurasia Journal of Mathematics, Science and Technology Education, 10*, 115-123. doi:10.12973/eurasia.2014.1021a

De Vaus, D. (2014). *Surveys in social research* (6th ed.). New York, NY: Routledge.

DeVoe, J. F., Darling-Churchill, K. E., Snyder, T. E. (2008). *Status and trends in the education of American Indians and Alaska Natives: 2008* (NCES 2008-08). Retrieved from http://nces.ed.gov/ pubs2008/2008084.pdf

Doshier, S. B. (2003). *An evaluation of a reservation-based baccalaureate nursing program*. (Doctoral dissertation). Retrieved from http://www.editlib.org/p /119958/

Duran, E. (2006). Healing the soul wound: Counseling with American Indians and other native people. New York, NY: Teachers College Press.

Edmunds, R. D., Hoxie, F. E., & Salisbury, N. (2006). *The people: A history of Native America*. Stamford, CT: Cengage Learning.

The Education Trust. (2013). *The state of education for Native students.* Retrieved from http://www.niea.org/data/files/research/2013_state ofedfornatstudents_edtrust.pdf

Evans-Campbell, T., Walters, K. L., Pearson, C. R., & Campbell, C. D. (2012). Indian boarding school experience, substance use, and mental health among urban two-spirit American Indian/Alaska Natives. *The American Journal of Drug and Alcohol Abuse, 38*, 421-427. doi:10.3109/00952990.2012.701358

Faircloth, S., & Tippeconnic, J. (2010). *The dropout/graduation crisis among American*

Indian and Alaska Native students: Failure to respond places the future of native peoples at risk. Retrieved from ERIC database. (ED511323)

Federal Communications Commission. (2014). *Native nations consultation and policy.* Retrieved from http://www.fcc.gov/encyclopedia/native-nations-consultation-and-policy

Fink, A. (2013). *How to conduct surveys: A step-by-step guide* (5th ed.). Thousand Oaks, CA: Sage.

Fire, N. (2009). *A contextual perspective of traditional Native American distance online learning in a tribal college* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses database. (Document ID No. 3357705)

Fowler, F. J., Jr. (2013). *Survey research methods*. Thousand Oaks, CA: Sage.

Galla, C. K. (2010). *Multimedia technology and Indigenous language revitalization: Practical educational tools and applications used within native communities* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses database. (Document No. 3427681)

Gaytan, J. (2015). Comparing faculty and student perceptions regarding factors that affect student retention in online education. *American Journal of Distance Education, 29*(1), 56-66. doi:10.1080/8923647.2015.994365

Gilmore, M., & Lyons, E. M. (2012). Nursing 911: An orientation program to improve retention of online RN-BSN students. *Nursing Education Perspectives*, *33*(1), 45-47. doi:10.5480/1536-5026-33.1.45

Graham, C. R. (2015). Case studies: An authentic research method. In C. D. Dziuban, A. G. Picciano, C. R. Graham, & P. D. Moskal (Eds.), *Conducting research in online and blended learning environments: New pedagogical frontiers* (pp. 97-113).

New York, NY: Routledge.

Guillory, J. (2013). Tribal college collaborations. In H. J. Shotton, S. C. Lowe, & S. J. Waterman (Eds.), *Beyond the asterisk: Understanding Native students in higher education* (pp. 95-108). Sterling, VA: Stylus.

Haag, M., & Coston, F. (2002). Early effects of technology on the Oklahoma Choctaw language community. *Language Learning and Technology, 6*(2), 70-82. Retrieved from http://llt.msu.edu/vol6num2/haag/TMP38ml2dxmqz.htm

Hai-Jew, S. T. (2008). Culturally targeted online course redesigns for English composition and research writing: A case study. *MERLOT Journal of Online Learning and Teaching*, *4*(1), 94-109. Retrieved from http://jolt.merlot.org /vol4no1/hai-jew0308.htm

HCM Strategists. (2010). *Beating the odds: What it means and why it's important.* Retrieved from http://hcmstrategists.com/analysis/beat-the-odds/

Hermes, M., & King, K. A. (2013). Ojibwe language revitalization, multimedia technology, and family language learning. *Language, Learning, and Technology, 13*, 125-144. Retrieved from http://hdl.handle.net/10125/24513

Higher Learning Commission. (2013). *Distinctive and connected: Tribal colleges and universities and higher learning commission accreditation—Considerations for HLC peer reviewers*. Retrieved from http://aihec.org/resources/documents /reports/HLC%20TCU.pdf

His Horse Is Thunder, D. (2012). *Breaking through tribal colleges and universities*. Retrieved from http://aihec.org/our-stories/docs/reports/BreakingThrough.pdf

His Horse Is Thunder, D., Anderson, N., & Miller, D. G. (2013). *Building the foundation for success: Case studies of breaking through tribal colleges and universities*.

Retrieved from http://www.jff.org/sites/default/ files/BT_ BuildingFoundationForSuccess_040813.pdf

Holbrook, A. (2008). Acquiescence bias. In P. J. Lavrakas (Ed.), *Encyclopedia of survey research methods* (pp. 3-4). Thousand Oaks, CA: Sage.

Hunt, B., & Harrington, C. F. (2010). The impending educational crisis for American Indians: Higher education at the crossroads. *Indigenous Policy Journal, 21*(3), 1-13. Retrieved from http://www.Indigenouspolicy.org/index.php/ipj/article/view /21

Indian Affairs. (2015). *Tribal directory*. Retrieved from http://www.bia.gov/WhoWeAre/ BIA/OIS/TribalGovernmentServices/TribalDirectory/

Jaggars, S. S. (2011). *Online learning: Does it help low-income and underprepared students?* (Working Paper No. 26). Retrieved from http://ccrc.tc.columbia.edu /media/k2/attachments/ online-learning-help-students.pdf

James, K. (2006). Identity, cultural values, and American Indians' perceptions of science and technology. *American Indian Culture and Research Journal, 30*(3), 45-58. doi:10.17953/aicr.30.3.b54252h856734610

Jones, K. R. (2013). Developing and implementing a mandatory online student orientation. *Journal of Asynchronous Learning Networks, 17*(1), 43-45. Retrieved from http://sloanconsortium.org/publications/jaln_main

Kaifi, B. A., Mujtaba, B. G., & Williams, A. A. (2009). Online college education for computer-savvy students: A study of perceptions and needs. *Journal of College Teaching and Learning, 6*(6), 1-16. doi:10.19030/tlc.v6i6.1130

Kaler, B. C. (2012). A model of successful adaptation to online learning for college-bound Native American high school students, *Multicultural Education and*

Technology Journal, *6*(2), 60-76. doi:10.1108/17504971211236245

Kelso, M. (2011). What is the affect of an online orientation course on student satisfaction? In *Proceedings of Global TIME 2011* (pp. 406-419). Association for the Advancement of Computing in Education. Retrieved from http://www.editlib .org/p/37110/

Kemper, K. R. (2013). Tribal sovereignty means competition, broadband access, and economic development for Indian country: A law and economics analysis of the efficiency of the FCC's Standing Rock Sioux case. *Journal of Information Policy, 3*, 442-463. doi:10.5325/jinfopoli.3.2013.0442

Kicking Woman, C. L. (2011). *The tribal college movement: Ensuring that Native American students successfully complete an associate degree and persist to earn a four-year degree* (Doctoral dissertation). Retrieved from http://scholarworks .umt.edu/etd/1330/

Kitchen, J., & Hodson, J. (2013). Living alongside: Teacher educator experiences working in a community-based aboriginal teacher education program. *Canadian Journal of Education*, *36*, 144-174. Retrieved from http://cje-rce.ca/index.php/cje-rce/ article/download/1249/1551

Kivunja, C. (2015). Innovative methodologies for 21st century learning, teaching and assessment: A convenience sampling investigation into the use of social media technologies in higher education. *International Journal of Higher Education, 4*(2), 1-26. doi:10.5430/ijhe.v4n2p1

Koutropoulos, A. (2011). Digital natives: Ten years after. *MERLOT Journal of Online Learning and Teaching*, *7*(4), 525-538. Retrieved 12/12/15 from http://jolt .merlot.org/vol7no4/koutropoulos_1211.htm

Ladson-Billings, G., & Tate, W. F. (1995). Toward a critical race theory of education. *Teachers College Record, 97*(1), 47-68.

Lebo, H. (2013). *World Internet Project international report 2013* (5th ed.). Retrieved from http://www.digitalcenter.org/wp-content/uploads/2013/12 /2013worldinternetreport.pdf

Lee, Y., & Choi, J. (2011). A review of online course dropout research: implications for practice and future research. *Educational Technology Research and Development, 59*, 593-618. doi:10.1007/s11423-010-9177-y

Macartney, S., Bishaw, A., & Fontenot, K. (2013). *Poverty rates for selected detailed race and Hispanic groups by state and place: 2007-2011*. Retrieved from https://www.census.gov/prod/2013pubs/acsbr11-17.pdf

Magee, C., Rickards, G., Byars, L. A., & Artino, A. R., Jr. (2013). Tracing the steps of survey design: A graduate medical education research example. *Journal of Graduate Medical Education, 5*(1), 1-5. doi:10.4300/JGME-D-12-00364.1

Mander, J. (2014). *Generations: GWI audience report summary Q2 2014*. London, England: Global Web Index.

Mann, H. (2003). Prologue elder reflections. In M. K. P. Benham & W. J. Stein (Eds.), *The renaissance of American Indian higher education: Capturing the dream* (pp. xvii-xxix). Mahwah, NJ: Lawrence Erlbaum.

Martinez, D. (2014). School culture and American Indian educational outcomes. *Procedia—Social and Behavioral Sciences, 116*, 199-205. doi:10.1016/j.sbspro .2014.01.194

McClure, J. (2011). *Components of an effective online pre-course orientation for supplemental online students* (Doctoral dissertation). Retrieved from http://hdl

.handle.net/10792/280

Milheim, K. L. (2012). Toward a better experience: Examining student needs in the online classroom through Maslow's hierarchy of needs model. *MERLOT Journal of Online Learning and Teaching, 8*, 159-171. Retrieved from http://jolt.merlot .org/vol8no2/milheim_0612.htm

Miller, M. (2014). *Minds online: Teaching effectively with technology*. Cambridge, MA: Harvard Corporation.

Minthorn, R. S., Wanger, S. P., & Shotton, H. J. (2013). Developing native student leadership skills: The success of the Oklahoma Native American Students in Higher Education (ONASHE) conference. *American Indian Culture and Research Journal, 37*(3), 59-74. doi:10.17953/aicr.37.3.01843v2733240715

Monaghan, P. (1993). "Critical race theory" questions the role of legal doctrine in racial inequity. *Chronicle of Higher Education, 39*(42), A7-A9.

Montana Digital Academy. (2015). *Student online learning readiness assessment.* Retrieved from http://www.montanadigitalacademy.org/documents/readiness/ MTDAStudent Readiness.pdf

Morris, T. L., & Meinrath, S. D. (2009). *New media, technology and internet use in Indian country: Quantitative and qualitative analyses*. Washington, DC: New America Foundation.

Muilenburg, L. Y., & Berge, Z. L. (2005). Student barriers to online learning: A factor analytic study. *Distance Education, 26*(1), 29-48. doi:10.1080/ 01587910500081269

National Endowment for Financial Education. (2015). *Developing your vision while attending college book one: Making the decision to attend college.* Retrieved from

http://www.collegefund.org/userfiles/file/nefeone.pdf

National Indian Education Association. (2008). *Using culturally based education to increase academic achievement and graduation rates.* Retrieved from http://www.niea.org/data/files/policy/culturallybasededbp.pdf

National Indian Education Association. (2010). *Native education 101: Basic facts about American Indian, Alaska Native, and Native Hawaiian education*. Retrieved 12/12/15 from ERIC database. (ED500010)

Newell, K., & Adesope, O. (2011, October). *Examining cultural and technological barriers to Native American students' use of online college degree programs*. Paper presented at the World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education, Honolulu, HI.

Office of Indian Education. (2016). *American Indian history, culture, and language curriculum framework: Values*. Retrieved from http://education.state.mn.us/mdeprod/idcplg?IdcService=GET_FILE&dDocName=MDE058461&RevisionSelectionMethod=latestReleased&Rendition=primary

Ortega, W. (2012). UTTC now offers 3 accredited 4-year degrees. *Tribal College Journal, 23*(3), 44-47.

Paris, D. (2012). Culturally sustaining pedagogy: A needed change in stance, terminology, and practice. *Educational Researcher, 41*(3), 93-97. doi:10.3102/0013189X12441244

Pember, M. A. (2012). Forty years of "fire in the belly." *Tribal College Journal, 24*(2), 19.

Picciano, A. G. (2015). Models of survey research. In C. D. Dziuban, A. G. Picciano, C. R. Graham, & P. D. Moskal (Eds.), *Conducting research in online and blended*

learning environments: New pedagogical frontiers (pp. 55-69). London, England: Routledge.

Pontes, M. C. F., & Pontes, N. M. H. (2012). Enrollment in distance education classes is associated with fewer enrollment gaps among nontraditional undergraduate students in the U.S. *Journal of Asynchronous Learning Networks, 16*(1), 79-89. Retrieved from ERIC database. (EJ971041)

Radhakrishna, R. B. (2007). Tips for developing and testing questionnaires/instruments. *Journal of Extension, 45*(1), 1-4. Retrieved from http://www.joe.org/joe/2007 february/tt2.php

Ratliff, V. (2009). Are college students prepared for a technology-rich learning environment? *Journal of Online Learning and Teaching, 5*(4). Retrieved from http://jolt.merlot.org/vol5no4/ratliff_1209.htm

Revere, L., & Kovach, J. V. (2011). Online technologies for engaged learning: A meaningful synthesis for educators. *The Quarterly Review of Distance Education, 12*, 113-124. Retrieved from EBSCO database.

Reyhner, J., & Eder, J. (2015). *American Indian education: A history*. Norman, OK: University of Oklahoma Press.

Richardson, J. W., & McLeod, S. (2011). Technology leadership in Native American schools. *Journal of Research in Rural Education, 26*(7), 1-14. Retrieved from http://jrre.vmhost.psu.edu/wp-content/uploads/2014/02/26-7.pdf

Ritzhaupt, A. D., Liu, F., Dawson, K., & Barron, A. E. (2013). Differences in student information and communication technology literacy based on socio-economic status, ethnicity, and gender. *Journal of Research on Technology in Education, 45*, 291-307. doi:10.1080/15391523.2013.10782607

Ross, T., Kena, G., Rathburn, A., KewalRamani, A., Zhang, J., Kristapovich, P., & Manning, E. (2012). *Higher education: Gaps in access and persistence study* (NCES 2012-046). Washington, DC: U.S. Department of Education.

Rushing, S. C., & Stephens, D. (2011). Use of media technologies by Native American teens and young adults in the Pacific Northwest: Exploring their utility for designing culturally appropriate technology-based health interventions. *The Journal of Primary Prevention, 32,* 135-145. doi:10.1007/s10935.011.0242-z

Sanchez, J., Stuckey, M. E., & Morris, R. (1998). Distance learning in Indian country: Becoming the spider on the web. *Journal of American Indian Education, 37*(3), 1-17. Retrieved from http://www.jstor.org/stable/24398380

Shah, M., Goode, E., West, S., & Clark, H. (2014). Widening student participation in higher education through online enabling education. *Widening Participation and Lifelong Learning, 16*(3), 36-57. doi:10.5456/WPLL.16.3.36

Shotton, H. J., Lowe, S. C., & Waterman, S. J. (2013). Introduction. In H. J. Shotton, S. C. Lowe, & J. Waterman (Eds.), *Beyond the asterisk: Understanding Native students in higher education* (pp. 1-19). Sterling, VA: Stylus.

Shotton, H. J., Oosahwe, E. S. L., & Cintron, R. (2007). Stories of success: Experiences of American Indian students in a peer mentoring retention program. *The Review of Higher Education, 31*(1), 81-107. Retrieved from ERIC database. (EJ780835)

Simonson, M., Smaldino, S., & Zvacek, S. (2012). *Teaching and learning at a distance: Foundations of distance education* (5th ed., Kindle ed.). New York, NY: Pearson.

Simonson, M., Smaldino, S., Albright, M., & Zvacek, S. (2015. *Teaching and learning at a distance: Foundations of distance education* (6th ed., Kindle ed.). Charlotte, N: Information age.

Snyder, T. D., & Dillow, S. A. (2015). *Digest of education statistics 2013* (NCES No. 2015-011). Retrieved from ERIC Database. (ED556349)

Stein, W. J., & Jetty, M. (2002). The story of distance learning at Salish Kootenai College. *Journal of American Indian Education, 41*(2), 19-28. Retrieved from http://jaie.asu.edu/v41/V41I2A3.pdf

Stewart, B. L., Goodson, C. E., Miertschin, S. L., Norwood, M. L., & Ezell, S. (2013). Online student support services: A case based on quality frameworks. *MERLOT Journal of Online Learning and Teaching, 9*, 290-303. Retrieved from http://jolt .merlot.org/vol9no2/stewart_barbara_0613.htm

Stillwell, R., & Sable, J. (2013). *Public school graduates and dropouts from the Common Core of data: School year 2009–10* (NCES Publication No. 2013-309rev). Retrieved from http://nces.ed.gov/pubs2013/2013309.pdf

SurveyMonkey. (2015). *How it works*. Retrieved from https://www.surveymonkey.com/ mp/take-a-tour/?ut_source=header

Todacheene, V. (2008). *A sense of community in distance education: A tribal college student's perspective* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (Document No. 3327528)

Tuttle, H. (2013). Technology-based curriculum development in Native language learning: How computer-assisted cultural education supports contemporary Native youths. *Arizona Journal of Interdisciplinary Studies, 2*, 6-20. Retrieved from https://journals.uair.arizona.edu/index.php/azjis/article/view/16792/16499

Tyler, D. A., Shield, R. R., Rosenthal, M., Miller, S. C., Wetle, T., & Clark, M. (2011). How valid are the responses to nursing home survey questions? Some issues and concerns. *The Gerontologist, 51*, 201-211. doi:10.1093/geront/gnq095

Van Dierendonck, D., & Nuijten, I. (2011). The servant leadership survey: Development and validation of a multidimensional measure. *Journal of Business and Psychology, 26*, 249-267. doi:10.1007/s10869-010-9194-1

VanAlstine, M., Ramalho, E. M., & Sanchez, T. (2002). The story of Crownpoint Institute of Technology and its alternative livestock program. *Journal of American Indian Education, 41*(2), 48-57. Retrieved from http://jaie.asu.edu/v41/V41I2A4.pdf

Varma, R. (2009). Attracting Native Americans to computing. *Communications of the ACM, 52*(8), 137-140. doi:10.1145/1536616.1536650

Verbos, A. M., Gladstone, J. S., & Kennedy, D. M. (2011). Native American values and management education: Envisioning an inclusive virtuous circle. *Journal of Management Education, 35*(1), 10-26. doi:10.1177/1052562910384364

Verbos, A. M., & Humphries, M. (2013). A Native American relational ethic: An Indigenous perspective in teaching human responsibility. *Journal of Business Ethics, 123*(1), 1-9. doi:10.1007/s10551-013-1790-3

Vogel, L. R., & Rude, H. (2010). Native American educational leader preparation: The design and delivery of an online interdisciplinary licensure program. *Educational Considerations, 38*(1), 17-23.

Vogt, W. P., Gardner, D. C., & Haeffele, L. M. (2012). *When to use what research design.* New York, NY: Guilford.

Warhol, L. (2012). Creating official language policy from local practice: The example of the Native American Languages Act 1990/1992. *Language Policy, 11*, 235-252. doi:10.1007/s10993-012-9248-5

Waterman, S. J. (2007). A complex path to Haudenosaunee degree completion. *Journal*

of American Indian Education, 46(1), 20-40. Retrieved from https://urresearch .rochester.ed/fileDownloadForInstitutionalItem.action?itemId=27737&itemFileId =12119

Wilson, M. F. (2012). *Student technology survey results.* Cass Lake, MN: Leech Lake Tribal College.

Wilson, M. F. (2014). *OO 100 1 - Online orientation.* Retrieved from http://my.lltc.edu/ ICS/ Academics/OO/OO___100/2013_SP-OO___100-1/

Wivagg, J. (2011). Forced choice. In P. Lavrakas (Ed.), *Encyclopedia of survey research methods* (pp. 94-96). Thousand Oaks, CA: Sage.

Woodke, L. R. (2006). *Helping students walk two worlds: Creating positive experiences for students in online classrooms at a tribal college* (Doctoral dissertation, Capella University). Retrieved from https://books.google.com/books?isbn= 0542771195

Wozniak, H., Pizzica, J., & Mahony, M. J. (2012). Design-based research principles for student orientation to online study: Capturing the lessons learnt. *Australasian Journal of Educational Technology*, *28*, 896-911. doi:10.14742/ajet.v28i5.823

Appendix A

Anishinaabe Values and Philosophy

Inendizowin (Humility)

- Recognize oneself as an equal part of creation
- Be careful what one says around others
- Demonstrate empathy to others
- Be respectful of the thoughts and ideas of others
- Recognize one's weaknesses and acknowledge the capacity for self-growth
- Develop and practice good listening and observation skills

Debwewin (Truth)

- Speak as honestly as one can according to one's perception
- Be loyal in all relationships
- Avoid hypocrisy

Zoongide'ewin (Courage)

- Face difficult situations with bravery
- Acknowledge one's personal weaknesses and develop strength to combat them
- Demonstrate the ability to take initiative and speak when asked

Gwayakwaadiziwin (Honesty)

- Maintain truthfulness, sincerity, and fairness in all one's actions
- Possess the ability to manage confidential information
  Communicate with others fairly and truthfully

Manaaji'idiwin (Respect)

- Accept cultural, religious, and gender differences
- Maintain high standards of conduct at all times
- Safeguard the dignity, individuality, and rights of others
- Practice ethical behavior at all times

Zaagi'idiwin (Love)

- Work cooperatively and harmoniously with others
- Show kindness and compassion
- Demonstrate acceptance and the empowerment of others
- Offer hope, encouragement, and inspiration

Nibwaakaawin (Wisdom)

- Seek guidance from elders and advisors
- Take time to reflect upon experiences
- Acknowledge the opportunity to learn from others
- Persist in acquiring knowledge and improving skills
- Strive to accomplish goals and dreams

Appendix B

Online Orientation Course Script

Online Orientation Course Script

This script is provided for you in case you are unable to view the videos.

1. **Introduction**

   Welcome to Leech Lake Tribal College! These instructional videos will help to orient you to the online learning management system that we call the portal. Some colleges use programs like Blackboard or Desire to Learn for their online classwork. Here at LLTC we use Jenzabar. Jenzabar is our portal for online classwork.

   In addition to showing you how the portal works and how to get the most from its tools as students, these videos will show you how the use of the portal is connected to the seven Anishinaabe values upon which Leech Lake Tribal College is founded: *humility, truth, courage, honesty, respect, love, and wisdom.* Let's get started!

2. **Getting to know the portal**

   The Anishinaabe value of respect – manaaji'idiwin – is about maintaining high standards of conduct at all time. As a requirement of your classes, you may be asked to log in to the portal to access coursework, participate in discussions, take tests, and more. It is important that you maintain high standards of academic conduct by completing all required class activities, including those online. You can also show respect for your instructor by doing all assigned activities to the best of your ability. And don't worry – we're here to guide you every step of the way!

   So let's look at the portal…

   The first step is to gather your login information. Your username and password were sent to you in a letter from Student Services but can also be obtained from the library. Your username consists of your 6-digit student ID number, and your password is 123456.

   To log in, go to the Leech Lake Tribal College website: www.lltc.edu. At the top left hand side of the page, click the "Student Portal." Fill in your username and your password.

   To find your classes, click on +My Courses on the left hand side of the page

under Quicklinks. Choose a class to view the class portal. The main page of each class's portal may look a little different, but most will have bookmarks, handouts and a calendar. The following videos will show you the other pages of your class portal.

3. **Viewing your attendance**

   The Anishinaabe value of humility – inendizowin – helps you to recognize your own strengths and weaknesses, to acknowledge the need for growth and change, and to develop and practice good listening and observation skills. These qualities are related to attendance. Coming to class, listening and learning are at the heart of your education.

   To check your attendance in the portal, click on the attendance link in the menu on the left hand side of the page. If you find that your attendance has been marked incorrectly, contact your instructor as soon as possible. Instructors do not give grades just for showing up, but they may grade for attendance by giving a pop quiz or evaluating your participation in class. If you come late to class you may be marked absent.

   Visit the attendance section of the portal for one of your classes now to see what this section looks like.

4. **Taking tests and quizzes online.**

   It takes courage – zoongide'iwin – to face difficult situations. Taking tests and quizzes in a classroom often takes bravery, but taking them online can be stressful, too. On the other hand, your get your results right away since most online tests and quizzes are computer graded. You can find any tests or quizzes that your instructor has assigned in the Coursework section of the class portal. Just click on the Coursework link on the left hand side of the page. You will see a list of assignments along with due dates. Make sure to do your test or quiz on time, because once an assignment is closed, your instructor may not allow you to make it up, or you may lose points for late work.

   Click on the test or quiz you wish to take then click the blue link at the bottom of the page that says to start the test or quiz. The instructions will tell you if you can

take the test or quiz more than one time and how much time you have to take it. If there is no time limit, you may work as slowly as you like, and the instructor probably expects you to use your notes and book. You will not, however, be able to leave the test screen or search the internet without your computer screen shutting down automatically.

When you have completed the test, your grade will instantly appear!

5. **Being a good cybercitizen**

The Anishinaabe value of honesty – gwayakwaadiziwin – is directly related to your behavior in the online classroom. The rules of Netiquette require that you maintain truthfulness, sincerity, and fairness in your actions, manage confidential information with discretion, and communicate with others fairly and truthfully. This is also true of email communications. In addition to speaking honestly and respectfully, you should also take care to write properly and sign all emails with your name.

Finally, all students must be aware of the LLTC Academic Integrity Policy which requires honesty in all academic matters.

6. **Participating in discussions**

It is the Anishinaabe way to speak as honestly as you can and to be loyal in all relationships. Truth – debwewin – is an important part of participating in online discussions. To find the discussions, click on Collaboration on the left hand side of the page for your class. You will then see three boxes: Forums, Chat, and Coursemates. To take part in online discussions, click the Forums link. On the right side of the page, you will see the most recent posts, and at the bottom of the page you will see the discussion folders. Click on the link next to the yellow folder corresponding to the discussion you need to work on, and on the next page, click the blue Add a Post button. You can then type in the subject of your post, and type what you want to write in the box below. When you are done, click submit, and your post will appear on the discussion board for others to read.

To reply to a post, click the blue Reply button and type your reply in the box. Don't forget to submit so that others can read your reply.

Now, visit the collaboration section of the portal for this class and take part in the discussion called "Introductions."

7. **Completing coursework**

Completing your coursework will allow you to gain wisdom – nibwaakaawin. It allows you to reflect on your experiences, to take the opportunity to learn from others, to acquire knowledge and skills, and to accomplish your goals and dreams. The wisdom you gain will often come from elders, advisors, and instructors, but you will also learn from your fellow students.

Finding your coursework in the class portal is easy. Just click on the Coursework link on the left hand side of the page. You will see a list of assignments along with due dates. Make sure to do your assignment on time, because once an assignment is closed, your instructor may not allow you to make it up, or you may lose points for late work.

Click on any assignment to see the instructions and to download any documents your instructor has included. Some assignments require you to upload a finished project, like an essay or a PowerPoint presentation. Click the Upload a file link at the bottom of the page. Browse your computer to find the file then click the Add file button. Finally, you must click the blue checkmark button to turn in your assignment.

Visit the coursework section of the class portal now. View the assignment called Learning Styles. Complete it then upload your assignment.

8. **Checking your grades**

Checking your grades can also take courage, because it is an opportunity for you to acknowledge your personal weaknesses and plan to develop the strength to

combat them. Sometimes you won't agree with the grade you received, or you won't be able to find a grade because an assignment hasn't yet been graded. You may need courage in these cases to take the initiative, contact your instructor, and speak forthrightly about your grades.

Let's look at the grades page of the class portal. Click on Gradebook on the left hand side of the screen. You will see your current grade at the top of the page and the list of assignments below. If there is a grade missing, it could be that your instructor hasn't graded it yet. Contact your instructor by email, phone, or face-to-face in the faculty office to discuss your grades. You can also get help from peer tutors in the learning center. If you feel that you are falling behind in the class, special arrangement can sometimes be made if your show courage and talk to your instructor as soon as you realize that you're behind.

Did you know that you can print your own transcript using the portal? You can print your class schedule, too. Click on the STUDENTS tab at the top of the page just under your name. Then click on the yellow Registration folder. To print your schedule, click the Student Schedule link. To print your transcript, click the Unofficial Transcript link.

9. **Staying motivated**

The Anishinaabe value of love – zaagi'idiwin – may not seem to have any connection with staying motivated, but it means to work cooperatively and harmoniously with others, to show kindness and compassion, to accept and empower others, and to offer hope, encouragement, and inspiration. Sometimes it is easier to do these things for others. To stay motivated you may need to allow others to help you, to become part of the community here at Leech Lake Tribal College. Get to know your classmates, communicate regularly with your instructors, go to the learning center and the wellness center, and take advantage of all the activities that we have here on campus, like study groups and Monday drum lunches.

Being successful in college is also about organization and time management. Download the worksheet called "Staying Motivated," and complete the activities. Email this worksheet to your instructor.

Appendix C

Online Orientation Course Checklist

Online Orientation Course Checklist

Check off these topics as you complete the activities.

- ☐ INTRODUCTION
  - Watch the video "Introduction."
- ☐ GETTING TO KNOW THE PORTAL (*manaaji'idiwin – respect*)
  - Watch the video "Getting to know the portal."
- ☐ VIEWING YOUR ATTENDANCE (*dabasendizowin – humility*)
  - Watch the video "Viewing your attendance."
  - Add a comment answering this question: *How is attendance related to the Anishinaabe value of humility?*
- ☐ TAKING TESTS AND QUIZZES ONLINE (*zoongide'iwin – courage*)
  - Watch the video "Taking tests and quizzes."
  - Add a comment answering this question: *What will happen if you leave the test screen or try to open another browser window during your online test or quiz?*
- ☐ BEING A GOOD CYBERCITIZEN (*gwayakwaadiziwin – honesty*)
  - Read the webpage "What is Netiquette?"
  - Take the Netiquette Quiz.
  - Watch the video "Being a good cybercitizen."
- ☐ PARTICIPATING IN DISCUSSIONS (*debwewin – truth*)
  - Watch the video "Participating in discussions."
  - Visit the *Collaboration* section of the portal, and take part in the discussion called "Introductions."
- ☐ COMPLETING COURSEWORK (*nibwaakaawin – wisdom*)
  - Watch the video "Completing coursework."
  - Complete the assignment called "Learning Styles," and upload the document.
- ☐ CHECKING YOUR GRADES (*zoongide'iwin – courage*)
  - Watch the video "Checking your grades."
  - Print a copy of your schedule and your transcript.
- ☐ STAYING MOTIVATED (*zaagi'idiwin – love*)

- Watch the video "Staying motivated." NOTE: The video mentions a worksheet. This is no longer required.
- Leave a comment answering the question: *The Anishinaabe value of LOVE is connected with hope and encouragement. Who do you have to provide you with hope or to encourage you.*

Appendix D

JOOCS Questions

DIRECTIONS: Mark the "one" best response choice for each question.

1. What is your gender?
    a. Female
    b. Male
    c. Other

2. What is your age?
    a. 17 or younger
    b. 18 to 20
    c. 21-29
    d. 30-39
    e. 40-49
    f. 50-59
    g. 60 or older

3. What is your ethnicity? Check all that apply.
    a. Native American or Alaska Native
    b. Hispanic or Latino
    c. White
    d. Black or African American
    e. Asian, Native Hawaiian or other Pacific Islander
    f. Other

4. Did you graduate from high school or complete a GED?
    a. Graduated from high school
    b. Completed a GED
    c. Other

5. **Prior to** completing the Jenzabar Online Orientation Course, how prepared were you for using the portal for participation in online coursework and related activities?

Very prepared	Prepared	Unprepared	Very unprepared

6. **After** completing the Jenzabar Online Orientation Course, how prepared were you for using the portal for participation in online coursework and related activities?

Very prepared	Prepared	Unprepared	Very unprepared

7. **Prior to** completing the Jenzabar Online Orientation Course, how prepared were you for using the portal for each of the following activities?

Activity	**Circle one** of the 4 response choices below for each listed activity			
Log in to the portal	Very prepared	Prepared	Unprepared	Very unprepared
Check grades in the portal	Very prepared	Prepared	Unprepared	Very unprepared
Check attendance in the portal	Very prepared	Prepared	Unprepared	Very unprepared
Find and complete coursework in the portal	Very prepared	Prepared	Unprepared	Very unprepared
Take an online quiz or test in the portal	Very prepared	Prepared	Unprepared	Very unprepared
Print schedule	Very prepared	Prepared	Unprepared	Very unprepared
Print transcript	Very prepared	Prepared	Unprepared	Very unprepared
Be a good cybercitizen	Very prepared	Prepared	Unprepared	Very unprepared
Post a message on the message board	Very prepared	Prepared	Unprepared	Very unprepared

8. **After** completing the Jenzabar Online Orientation Course, how prepared were you for using the portal for each of the following activities?

Activity	**Circle one** of the 4 response choices below for each listed activity			
Log in to the portal	Very prepared	Prepared	Unprepared	Very unprepared
Check grades in the portal	Very prepared	Prepared	Unprepared	Very unprepared
Check attendance in the portal	Very prepared	Prepared	Unprepared	Very unprepared
Find and complete coursework in the portal	Very prepared	Prepared	Unprepared	Very unprepared
Take an online quiz or test in the portal	Very prepared	Prepared	Unprepared	Very unprepared
Print schedule	Very prepared	Prepared	Unprepared	Very unprepared
Print transcript	Very prepared	Prepared	Unprepared	Very unprepared
Be a good cybercitizen	Very prepared	Prepared	Unprepared	Very unprepared
Post a message on the message board	Very prepared	Prepared	Unprepared	Very unprepared

9. **Prior to** completing the Jenzabar Online Orientation Course, what was your level of understanding of the seven Anishinaabe values?

Value	**Circle one** of the 4 response choices below for each Anishinaabe value			
Respect	High level	Moderate level	Low level	No understanding
Courage	High level	Moderate level	Low level	No understanding

Wisdom	High level	Moderate level	Low level	No understanding
Love	High level	Moderate level	Low level	No understanding
Truth	High level	Moderate level	Low level	No understanding
Honesty	High level	Moderate level	Low level	No understanding
Humility	High level	Moderate level	Low level	No understanding

10. **After** completing the Jenzabar Online Orientation Course, what was your level of understanding of the seven Anishinaabe values?

Value	**Circle one** of the 4 response choices below for each Anishinaabe value			
Respect	High level	Moderate level	Low level	No understanding
Courage	High level	Moderate level	Low level	No understanding
Wisdom	High level	Moderate level	Low level	No understanding
Love	High level	Moderate level	Low level	No understanding
Truth	High level	Moderate level	Low level	No understanding
Honesty	High level	Moderate level	Low level	No understanding
Humility	High level	Moderate level	Low level	No understanding

11. To what extent did the inclusion of information related to each of the following Anishinaabe values in the Jenzabar Online Orientation Course impact your behaviors while using the portal for online coursework and related activities?

    Circle one of the 4 response choices below for each listed Anishinaabe value.

Respect (examples of behaviors: maintaining high standards of academic conduct by completing all required class activities, including those online; showing respect for your instructors by doing all assigned activities to the best of your ability)

High impact	Moderate Impact	Low Impact	No Impact

Courage (examples of behaviors: facing difficult situations, like taking tests and quizzes; checking your grades online, acknowledging your personal weaknesses and developing the strength to combat them, contacting your instructor to talk about your grades)

High impact	Moderate Impact	Low Impact	No Impact

Wisdom (examples of behaviors: completing your coursework, reflecting on your experiences, taking the opportunity to learn from others, acquiring knowledge and skills, accomplishing your goals and dreams)

High impact	Moderate Impact	Low Impact	No Impact

Love (examples of behaviors: staying motivated; working cooperatively and harmoniously with others; showing kindness and compassion; accepting and empowering others; offering hope, encouragement, and inspiration; allowing others to help you, becoming part of the community at the college)

High impact	Moderate Impact	Low Impact	No Impact

Truth (examples of behaviors: participating in discussions, speaking as honestly as you can, being loyal in all relationships)

High impact	Moderate Impact	Low Impact	No Impact

Honesty (examples of behaviors: being a good cybercitizen; maintaining truthfulness, sincerity, and fairness in your actions; managing confidential information with discretion; communicating with others fairly and truthfully)

High impact	Moderate Impact	Low Impact	No Impact

Humility (examples of behaviors: recognizing your own strengths and weaknesses, acknowledging the need for growth and change, developing and practicing good listening and observation skills, coming to class)

High impact	Moderate Impact	Low Impact	No Impact

12. Overall, to what extent did the inclusion of information related to the Anishinaabe values in the Jenzabar Online Orientation Course impact your behaviors while using the portal for online coursework and related activities?

High impact	Moderate Impact	Low Impact	No Impact