FORT HAYS STATE UNIVERSITY

Shaping the Future of Learning at FHSU: A Digital Master Plan

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Executive Summary

FHSU recognizes the transformative power of digital learning to expand access, enhance student experiences, and position the university for long-term success. The Digital Master Plan charts a comprehensive path for FHSU to become a leader in equitable, high-quality online and hybrid learning. This plan requires a university-wide commitment to innovation, collaboration, and a student-centered approach. Success hinges on the dedication of faculty, staff, and administrators working together to embrace evolving technologies, prioritize inclusive teaching practices, and foster a culture of continuous improvement in our digital learning environments.

To capitalize on this growing demand and solidify FHSU's position as a leader in the digital learning landscape, the following industry trends further underscore the need for a strategic and well-defined plan. Higher Education industry indicators show strong growth in post-pandemic online and hybrid learning enrollment from 2021 to 2022, much of which is due to adult undergraduates (Garrett & Simunich, 2023). At the same time there has been increased demand for online learning from traditional age undergraduates, adult undergraduates, and graduate students. Not only is demand for online courses increasing, but the number and variety of higher ed institutions willing to deliver online learning is also increasing.

These factors will create more choices for students and more competition for FHSU. Although FHSU is well-established as a provider of high quality and low cost online education, that reputation is fragile in the face of the current level of market change. Potential higher ed competitors are learning fast and many have more prestigious names and large budgets to go with their reputations. These exigencies make it essential that we take a hard look at how FHSU can continue to compete in the changing online learning landscape, as quality becomes an increasingly important factor for students as they decide which institution of higher learning is their best choice.

The FHSU Digital Master Plan extends the university's physical master plan to strategically improve online learning ecosystems and student success. Incorporated into the Strategic Plan in

July 2021, it focuses on developing robust digital systems that facilitate meaningful student-to-content, student-instructor, and student-to-student interactions (Moore, 1989). The project was initiated when our collective experiences through the pandemic forced us to confront the reality that there is a quality gap between on-campus and online learning experiences at FHSU. The motivation behind the development of the digital master plan is to improve equity and quality across instructional modalities.

A digital master plan creates a cohesive vision and strategy for the digital learning experience, just as a campus master plan aligns the physical learning spaces. It provides high-level guidance on the intentional and purposeful use of the educational technologies, tools, platforms, and systems necessary for a robust online learning experience. Like a physical campus plan, a digital plan ensures online learning spaces, resources, and support services work together in a systematic way. It coordinates digital components so they are not disjointed or redundant. Students benefit from a unified ecosystem where the virtual learning experience is thoughtful and consistent.

Building upon FHSU's existing strategic plan and student success initiatives, the Digital Master Plan seeks to create a cohesive framework for advancing online learning and equity. This plan leverages data from the National Survey for Student Engagement (NSSE), internal surveys, the National Institute for Student Success (NISS) Diagnostic Analysis and Playbook, and an analysis of Blackboard Learning Management System usage. Recommendations will align with the FHSU Strategic Plan, NISS/KBOR Analysis, and the Provost's 2023-2024 Academic Priorities.

To inform this comprehensive plan, consultants from the Anthology Education and Research Center conducted interviews and focus groups in April 2023, complementing existing surveys and analyses. Their final report, delivered in July 2023, provided valuable insights that have been integrated into this framework. This framework goes beyond proposing new initiatives; it strategically coordinates existing efforts and identifies key areas for improvement, ultimately enhancing the efficacy of online teaching and learning at FHSU.

1. **Actionable Data for Equitable Online Learning :** Track data that disaggregates student success by demographics like first generation status, and online vs. face-to-face course delivery. Analyze data related to online course engagement, completion rates, and learning outcomes to identify areas for improvement in online course design and delivery specifically regarding equitable access and success for all learners.
2. **Consistency in Online Course Design and Delivery**: To ensure that students taking online courses have the necessary opportunities to connect meaningfully with content, faculty, and other students, courses need to be structured consistently so students can focus on learning rather than on how to navigate inconsistently designed courses.
3. **Intentionally Provide Opportunities for Students to Connect with faculty, support staff and other students Inside and Outside of Formal Course Structure**: FHSU needs to formalize these opportunities to facilitate connections and reduce perceived risk, especially those who might feel isolated in online environments, to build connections with peers, mentors, and faculty.
4. **Improve Support for Digital Competencies for University Teaching at an Institutional Level**: Create a culture of peer learning and support to facilitate faculty adoption of inclusive teaching practices, culturally responsive pedagogy, and digital literacy skills. Provide our faculty with a systematic approach to develop their digital competencies, empowering them to effectively leverage technology in their online courses.
5. **Streamline Communication for Online Learning Success**: Provide clear and accessible information about digital learning resources, student support services, and expectations related to online learning, promoting equity and reducing potential confusion or barriers for students.

Prologue

Digital Master Plan: Purpose and Scope

FHSU recognizes the transformative power of digital learning to expand access, enhance student experiences, and position the university for long-term success. The Digital Master Plan charts a comprehensive path for FHSU to become a leader in equitable, high-quality online and hybrid learning. This plan requires a university-wide commitment to innovation, collaboration, and a student-centered approach. Success hinges on the dedication of faculty, staff, and administrators working together to embrace evolving technologies, prioritize inclusive teaching practices, and foster a culture of continuous improvement in our digital learning environments. To capitalize on this growing demand and solidify FHSU's position as a leader in the digital learning landscape, the following industry trends further underscore the need for a strategic and well-defined plan.

The idea of an FHSU Digital Master Plan was conceived in the wake of the 2020 Covid-19 pandemic. The emergency remote teaching protocol that was in effect beginning in March 2020 (February 2020 at partner institutions in China) forced us to rely solely on technologies such as Blackboard and Zoom to engage with our students in the learning process. This experience raised a question that we may never have thought to ask; “Would we be ready if our physical campuses were to shut down and we had to rely on our existing technology infrastructure and teaching and learning ecosystem to deliver courses to all of our students?”.

There was a general sense at FHSU that we were better prepared for the move to emergency remote teaching than many other universities. After all, we had the advantage of having been in the business of online teaching for many years and many of our faculty have online teaching experience. Despite that experience, we were not as ready as we could, or should, have been. We did manage to deliver our courses online, but primarily because there was a tacit agreement among all stakeholders that our makeshift solution was the best we could come up with, given the extenuating circumstances. However, not everyone was happy and going *back to normal* was an oft heard refrain.

Through surveys administered to students in May 2020 and May 2021, we gained insights into the student experience. A common theme was that students felt a lack of connection and

expressed the need for more opportunities to interact with faculty and peers. Face-to-face students were much more vocal about feeling isolated during emergency remote teaching. However, when explicitly asked about connection, online students reported feeling even less connected than our displaced face-to-face students.

In July 2021, the digital master plan project was added to Goal 4 (Resources and Infrastructure) of the FHSU Strategic Plan. This followed SmithGroup's presentation of the physical master plan to the Senior Leadership Team in spring 2021. SmithGroup framed the physical master plan as follows: "The campus is a center for engagement and a community designed to support learning, citizenship, and leadership. The plan aims to guide the continued growth and development of the FHSU campus towards that ideal."

The SmithGroup physical master plan report encapsulates the vision for an engaged campus in these 7 *Guiding Principles*:

1. Build Community- spaces to study, collaborate, and interact.
2. Reinforce Campus Culture & Identity- kind generous welcoming and caring.
3. Prioritize Student Success- help students succeed at the highest level.
4. Make a Campus of Connections-prioritize the pedestrian.
5. Be Flexible & Resilient- upgrade technology and create a stronger “sense of place”.
6. Optimize Our Facilities- utilize campus grounds as a learning environment.
7. Capitalize on Our Assets & Differentiators.

Work on the digital master plan acknowledges the limitations of this physical campus-centric perspective in the context of online learning and particularly for FHSU online students, who will not experience the Hays campus in person. Exploratory work on the digital master plan began in earnest in October 2021 when FHSU entered an agreement with the Anthology/Blackboard Higher Education Consulting Group. In March 2022, President Tisa Mason constituted a Digital Master Plan Committee and charged it as follows:

> *The FHSU Digital Campus Master Plan envisions a technology enabled, connected student experience that extends beyond physical campus boundaries. The purpose of the Digital Master Plan is to support all FHSU students regardless of location to create a*

learning environment that is open, connected, extensible, and sustainable. Our objective is to: a) articulate and map our current teaching and learning ecosystem, b) determine how well that ecosystem supports our mission as well as the five core goals of the FHSU Strategic Plan, and c) create a vision for enhancements to this ecosystem that supports current and future students in becoming engaged global citizen-leaders.

Just as the FHSU physical Campus Master Plan is a guide for the physical growth and development of the institution over and beyond the next decade, the digital campus master plan will look at the intangibles; infrastructure, processes, and resources that move our university forward. Members of this steering committee have been invited to help draft this plan based on their unique perspectives and breadth of experience.

At the center of this work is the question of how we can create an analogous center of engagement to the one outlined in the SmithGroup plan for FHSU students engaging with us online. The digital master plan seeks to understand how we can engage with our online students in community building, reinforcing campus culture, creating a campus of connections, and other guiding principles identified by the FHSU community and SmithGroup as important to the student experience. It is through this lens that the first-of-its-kind FHSU Digital Master Plan was created.

As you consider this plan keep in mind the charge limits the scope to what has been identified as the FHSU teaching and learning ecosystem. Therefore, while the physical master plan touches on all 5 of the FHSU Strategic Plan Goals, the digital master plan will focus on the following:

- Goal 1.3- Faculty Development
- Goal 2.2- Student Success Analytics
- Goal 2.6- Creating a Culture of Belonging
- Goal 2.7- Learning Outcomes and High-Impact Practices
- Goal 2.8- Circles of Support
- Goal 4.2- Master Plan as it relates to Resources and Infrastructure

Finally, despite the plan's emphasis on the online student experience, the recommendations are not meant to apply exclusively to that student population. When faculty and students learn to connect more intentionally and meaningfully in an online or mixed modality environment, the teaching and learning experience improves for everyone.

Introduction

The Covid-19 pandemic first impacted our international partner universities in China. At the end of January we learned that students in China would not be going back to their campuses for the Spring semester but would, instead, be taking all of their courses online. This set of challenges presaged and paralleled those we would be facing domestically a little more than a month later. On March 16th 2020, Fort Hays State University closed the campus in Hays as part of the response to the Covid-19 pandemic. A week later, on March 23rd, FHSU faculty began teaching all courses that had previously been delivered on-campus through an emergency remote teaching protocol. Although the transition was certainly jolting for our campus and the 4000-plus students who had been expecting to attend their classes on-campus, we had an advantage over a number of universities due to the tight integration between our on-campus and online programs.

FHSU Online is not a separate and distinct entity. A large number of faculty, who teach in classrooms on-campus, also teach online sections of the same classes. On-campus students can, if they choose, take some of their courses online and, potentially, have the same instructor for their on-campus course as they do for their online course. When we transitioned online, as part of the pandemic response, many of our instructors had online teaching experience and fully online versions of their courses.

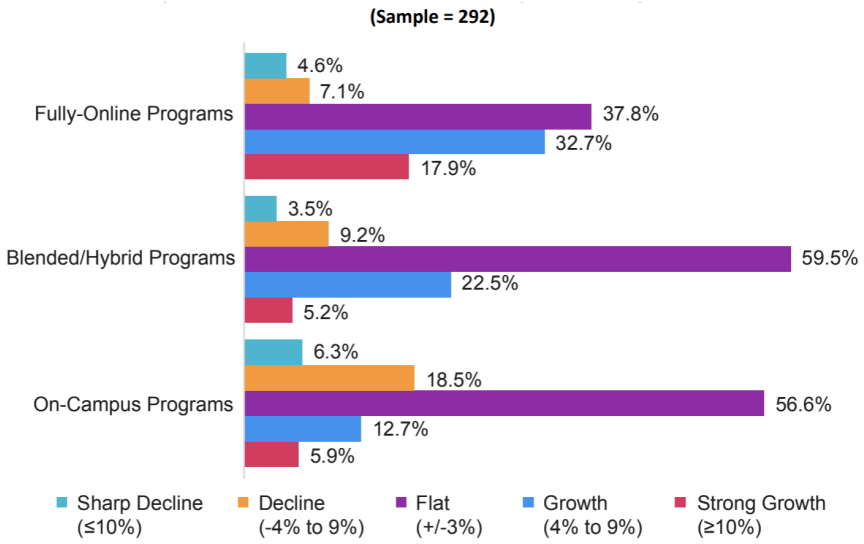
Despite this advantage, the turmoil brought about by the pandemic impacted everyone and prompted a question that we might never have asked: “What would happen if the university closed tomorrow, and we had to teach all of our classes using our existing digital infrastructure and teaching and learning ecosystem?” We now have some answers to that question, and these answers have instigated and significantly shaped this digital master plan. Although the plan’s focus will be on the FHSU digital teaching and learning ecosystem, we will begin with a more global perspective.

A 2023 Quality Matters & Eduventures Survey of Chief Online Officers entitled “Chloe 8: Student Demand Moves Higher Ed Toward a Multi-Modal Future” received survey responses from 317 university COOs (6.7% response rate). The report title gives a strong hint about the

influence of the pandemic and the changing landscape of online education. “The majority of Chief Online Officers (COOs) reported strong growth in online and hybrid learning enrollments from 2021 to 2022, as contrasted with stagnant or declining in-person numbers.” (Garrett & Simunich, 2023). Much of this shift is among adult undergraduates as shown in Figure 1.

Figure 1

2021-2022 Enrollments Shifts Among Adult Undergraduates

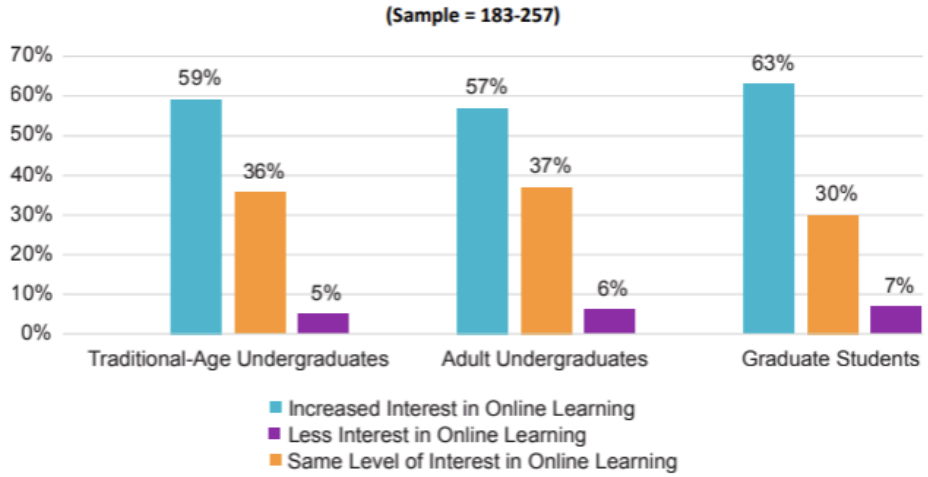


Note. From “2023 CHLOE 8 Report,” by Garrett & Simmunich, 2023, *Eduventures Research and Quality Matters*. Copyright 2023 by Eduventures Research and Quality Matters.

These numbers are echoed in student interest numbers shown in Figure 2 in which we see an increasing demand for online learning for a majority of students.

Figure 2

Rising Student Interest in Online Learning by Institution, 2021-2022

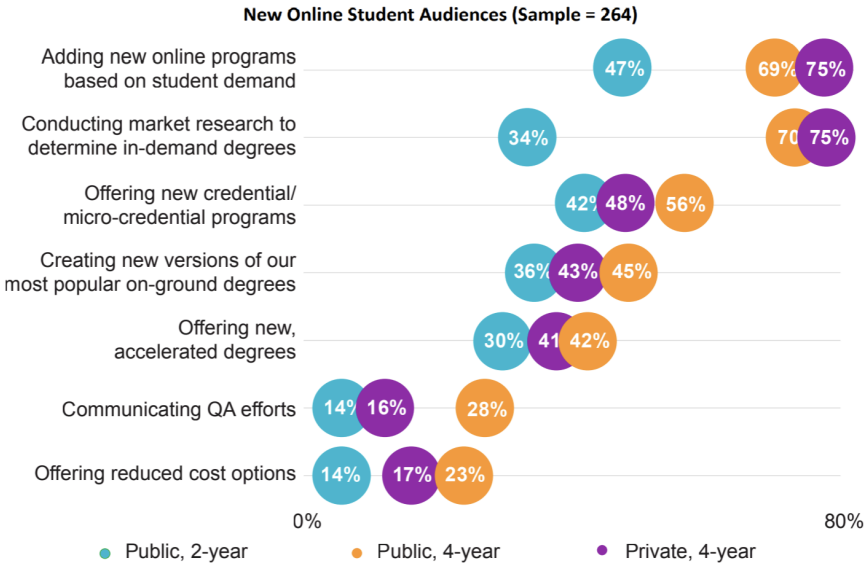


Note. From "2023 CHLOE 8 Report," by Garrett & Simmunich, 2023, *Eduventures Research and Quality Matters*. Copyright 2023 by Eduventures Research and Quality Matters.

Finally, Figure 3 shows how various types of institutions are dealing with this shift.

Figure 3

How Different Institutions Types are Pursuing New Online Student Audiences



Note. From "2023 CHLOE 8 Report," by Garrett & Simmunich, 2023, *Eduventures Research and Quality Matters*. Copyright 2023 by Eduventures Research and Quality Matters.

The information is provided here to illustrate that, not only is demand for online courses increasing, but the number and variety of higher education institutions willing to deliver online learning is also increasing. These factors will create more choices for students and more competition for FHSU. Although FHSU is well-established as a provider of high quality and low cost online education, our reputation is fragile in the face of the current level of market change. Potential higher ed competitors are learning fast and many have more prestigious names and larger budgets to go with their reputations.

FHSU needs to act quickly to remain competitive. The digital master plan has been created to help us take a hard look at the lessons we have learned from our pandemic stress test, make decisions about where we need to improve, and develop strategies for implementing those improvements.

The FHSU Strategic Plan and the New Postsecondary Context

FHSU is a regional comprehensive university and American Association of Colleges and Universities (AASCU) member. Our university has a responsibility to serve the needs of our region. To fulfill this role, we must align our mission with the principles laid out by AASCU to promote equity, upward mobility, prosperity, and civic engagement as higher education continues to change. As Mildred Garcia, AASCU President and CEO, states in the forward to *Recommitting to Stewardship of Place* (2022), "it is time to deepen that anchor of being the educational, economic, and social hubs of the communities we serve" (AASCU, 2022). These responsibilities are essential to consider as we engage with our online students.

As of September 2023, 4007 FHSU online students reside in Kansas. That is 66% of our total online population. Thus, our responsibilities as *Stewards of Place* reaches well beyond FHSU's physical campus. These students come to us for an accessible education that will provide them opportunities for upward mobility. By the same token, preparing these students for high-demand jobs in the local labor market will contribute to the well-being of our region and our Kansas communities.

The FHSU 2019-2024 Strategic Plan is a good indicator of how we see our role as a regional comprehensive university. The five strategic goals are woven into the university mission to provide accessible quality education to Kansas, the nation, and the world through an innovative community of teacher-scholars and professionals to develop engaged global citizen-leaders. Those five goals are 1. Academic Excellence, 2. Student Success, 3. Strategic Growth, 4. Resources and Infrastructure, and 5. Community and Global Engagement.

The digital master plan is situated in Goal 4.2 (Resources and Infrastructure). The primary focus, however, is on “accessible quality education”. Therefore the primary focus of this report will be on how our digital teaching and learning ecosystem can support Goal 2 (Student Success). It is expected that, as we reach the end of the current five-year strategic plan, recommendations made through the digital master planning process will help inform the next iteration of the current strategic plan.

The Plan

The FHSU Digital Master Plan extends the university's physical master plan to strategically improve the online learning ecosystem and student success. Incorporated into the Strategic Plan in July 2021, the digital master plan focuses on developing robust digital systems that facilitate meaningful student-to-content, student-instructor, and student-to-student interactions. The project was initiated when our collective experiences through the pandemic forced us to confront the reality that there is a quality gap between on-campus and online learning experiences at FHSU. The motivation behind the development of the digital master plan is to improve equity and quality across instructional modalities.

On a physical campus, classrooms and other university spaces provide opportunities for teaching and learning to take place. These opportunities are possible in formal classrooms as well as the informal spaces beyond the boundaries of those classrooms. In these informal spaces students have the opportunity to reflect on and process more formal activities in a number of ways. This typically includes casual conversations with instructors and other students that occur before or after class, inside or outside the classroom. We don’t always need to manage these connections since the thoughtful design of the campus physical spaces has provided numerous settings and opportunities for these interactions to occur.

Fully online students have fewer opportunities to interact, either formally or informally. This is in part because the idea of a digital campus and community, where those informal interactions might occur, has not been fully realized. In the online ecosystem we need to be more intentional about creating meaningful context-specific opportunities for students to connect. Being intentional about promoting the type of interactions that don't require our attention in face-to-face situations can be quite challenging, especially for those of us who are accustomed to engaging with students in person.

A digital master plan creates a cohesive vision and strategy for the digital learning experience, just as a campus master plan aligns the physical learning spaces. It provides high-level guidance on technology, tools, platforms, and digital infrastructure necessary for a robust online learning experience. Like a physical campus plan, a digital plan ensures online learning spaces, resources, and support services work together in a systematic way that aligns with the FHSU strategic plan and other student success initiatives already in place. It coordinates digital components so they are not disjointed or redundant.

Students benefit from a unified ecosystem where the virtual learning experience is thoughtful and purposeful. There is also a widespread belief that our online students, notably our undergraduate students, don't need or want this type of interaction to be part of their learning experience. In fact, our online students are often characterized as *transactional* (Shin, 2003). We assume that they are independent, self-motivated, and have a clear idea of why they are here and where they want to go. While this is certainly true for some of our online students, we need to acknowledge the transformational aspect of the non-traditional student journey.

We must also embrace our role as a regional comprehensive university and our responsibility to the 66% of our online students who are Kansans. Our responsibilities as *Stewards of Place* is to support these students, who will be engaged citizens, community leaders, and future taxpayers who will lift Kansas communities, the state, and the country.

Transformational Students

While our digital teaching and learning ecosystem is meant to serve all students, it is important to recognize the differing circumstances of our online students vs. the typically younger on-campus students. Research shows non-traditional students often attend part-time while working full-time, have family responsibilities, and are financially independent (Zack, 2020). FHSU's non-traditional online students mirror these findings in that they likely delayed college enrollment and are typically older than traditional age college students. This, in part, accounts for the fact that they are 2-3 times more likely than traditional college age students to leave school without completing a program or degree (Berker, Horn, & Carroll, 2003; Choy, 2002; Taniguchi & Kaufman, 2005).

Non-traditional students, particularly those who are low-income, first-generation, caregivers, working full-time, or returning to college after a break, often feel like they don't fully belong in higher education. AASCU identifies these non-traditional students as the "new majority" and expects their numbers to grow substantially in the coming decades (AASCU, 2022). Many states want to see this population earn college degrees and credentials (Soares et al., 2017). However, these non-traditional students' motivation to pursue higher education can be fragile. It would not take much for them to rethink whether going to college is truly worth the effort.

A negative initial experience with college that might be seen by some as inconsequential, like the confusion of not knowing how to navigate their first Blackboard course, or not fully understanding the content in a lecture video, can trigger an intense feeling of not belonging or not being smart enough. These frustrations can seem more overwhelming for online students who don’t have ready access to connections or resources available to students on-campus. This sense of inadequacy and real or perceived lack of agency can trigger a powerful self-preservation instinct and cause these students to give up before things get worse (Hoggan & Browning, 2019).

Thus, the FHSU Digital Master Plan is focused on how we, as an institution, use technology to deliver learning experiences and how students engage with those experiences. When designing online courses, our aim should be to create a transformational learning experience for students, rather than just a transactional exchange of information. We should provide scaffolding and

support structures to guide online students through a meaningful educational journey that facilitates deep learning and growth.

In this digital master plan we will be examining some of the pain points for our students, inside and outside of their online courses, explore strategies and technologies for addressing those issues, and make recommendations on how to close the connection gap for our online, non-traditional students.

The Teaching and Learning Ecosystem

FHSU's digital teaching and learning ecosystem needs to be more than a loosely related collection of technologies. It needs to provide educators with the means to create a student-centered, connected environment through which to purposefully integrate technologies, instructional strategies, and support structures tailored to engage students in the learning process.

We frame this discussion using Moore's (1989) "Three Interaction Types" model for distance learning, which upholds learner-to-content, learner-to-instructor, and learner-to-learner interactions as core mechanisms for facilitating understanding, achievement, and community. Throughout the rest of this report we will refer to Moore's interaction types as "student-to-student", "student-to-content", and "student-to-instructor". Students connect with the content, instructors, and each other in meaningful ways through purposeful course design. By designing learning experiences using a balance of these three interaction types we can provide structure as well as opportunities for active learning, communication, feedback, and community building in online courses.

We acknowledge that there are many factors, inside and outside of directed course activities, that contribute to the learning process but, for this project, it was necessary to limit the scope to those technologies that are integrated through the Blackboard Learning Management System (LMS) and available to all faculty. This included Blackboard's native features such as announcements and discussion boards, as well as course activities that take place through functional integrations such as Feedback Fruits, Packback, VoiceThread, and Yellowdig. However, it excludes courses

for which Blackboard is merely a connection point that links to Google or other external source. This excludes department, program, or course-specific integrations such as digital course-based textbooks or lab products purchased by students through Pearson, McGraw Hill, Cengage or other publishers. Other valuable aspects of the ecosystem, such as the Forsyth Library, tutoring, and the writing lab, are essential parts of the ecosystem. However, currently we lack the ability to associate those activities with specific course activities.

We have also limited the scope of this exploration to aggregated course activity and are not looking at individual colleges, departments, courses, faculty, or students. The only distinction being made here is that between courses delivered on-campus and those delivered online.

That being said, the FHSU digital teaching and learning ecosystem wasn't systematically designed. Rather, it evolved in response to the perceived needs of our faculty, staff, and students. Some amazingly creative work has been done by faculty and staff in implementing the diverse array of platforms, tools, and processes that comprise the current ecosystem. However, prior to the creation of the digital master plan, we haven't had the ability to articulate the multiplex functionality of that ecosystem nor to provide an efficient way to share the ways that faculty and students have been interacting in that ecosystem.

Plan of Action

Work on the FHSU Digital Master Plan was conducted in four steps.

1. **FHSU Student Voice:** Four student surveys conducted between 2020 and 2022 were analyzed; two post-pandemic surveys (May 2020 and May 2021), results from the 2021 NSSE survey, and the Tiger-2-Tiger Social Belonging Survey (November 2022).
2. **The NISS Playbook and the FHSU Strategic Plan:** A discussion of the NISS Playbook and how that informed the direction of the digital master plan and FHSU Strategic Plan Goal 2 (Student Success).
3. **The FHSU Teaching and Learning Ecosystem Audits:** We conducted two audits of the digital teaching and learning ecosystem. The first analyzed design and delivery patterns in FHSU online courses, and how the design and delivery influenced student engagement with those courses. Next, we examined the technologies available in the digital teaching and learning ecosystem and mapped the functionalities of those technologies to strategies designed to promote opportunities for students to interact with content, faculty, and one another.
4. **Gap Analysis and Recommendations:** The overall analysis was shared with the Blackboard/Anthology's Education and Research Consultants to synthesize the findings from the first three steps. The consultants then met with FHSU stakeholders to validate the issues uncovered in the steps. We then worked with the consultants and the FHSU Digital Master Plan working group to formulate the recommendations presented in this report.

FHSU Student Voice

The pandemic underscored gaps in our digital infrastructure. When FHSU rapidly transitioned all instruction online in March 2020, it became clear that equitable access to learning depends on technology. This unexpected shift online leveled the playing field between on-campus and online students, illuminating disparities in their experiences. Student surveys revealed that online students lack the robust learning opportunities available to on-campus students. This stark realization highlighted the need for an IT plan that bridges divides and provides all students

equal access to a high-quality education, regardless of location. Moving forward, we must leverage technology to create continuity rather than discontinuity between on-campus and online learning.

Feedback from students, collected through multiple survey instruments from 2020 through 2022 provided the impetus for the FHSU Digital Master Plan. This section analyzes the FHSU May 2020 and May 2021 post-pandemic student surveys, the FHSU 2021 NSSE survey, and the results of the Tiger-2-Tiger/ Social Belonging Survey conducted in November 2022.

May 2020 Post-Transition Survey

On March 16th Fort Hays State University closed the campus in Hays as part of the response to the Covid-19 pandemic. Three months later we launched a survey to gain insights into how our move to emergency remote teaching, as well as other pandemic related circumstances, had impacted our students' overall learning experiences during the Spring 2020 semester.
There were 721 total respondents; 313 were on-campus students who had transitioned to remote teaching and 408 were FHSU Online students.

Main Survey Takeaways

The survey included basic demographic questions, Likert-scale questions designed to ascertain the perceived impact of FHSU's Covid-19 response on students, their perceived workload, their perception of FHSU's efforts to communicate with them, and their experiences with their courses. Student responses painted a pretty positive picture of the FHSU transition, which was encouraging. However, the quantitative survey questions were mostly focused on course structure and students' course-based experiences.

We also asked some open-ended questions and it was only after reviewing student responses to these qualitative questions did we see that the picture wasn't as rosy as we first thought. Of the open-ended questions, the responses that really captured our attention were to the following, "The changes that took place as part of the Covid-19 response were unexpected and affected

everyone differently. This may have changed your working environment, your access to technology, and/or resources. Please tell us how those changes influenced your course experiences.”.

The responses were both revelatory and heartbreaking. Traditional on-campus students opened up about their sense of isolation, the loss of motivation, and the impact of the loss of connection with friends and classmates on their mental health. The stories from our online students were of a more pragmatic nature. They spoke about children at home and job-related issues. Both groups talked about the challenges of shared computers and access to the internet. What really caught our attention was the student response to the ‘change’ aspect of the question. As we studied the responses to this question we were struck by the underlying current of “no change” responses. When we disaggregated those responses between online students and on-campus students we discovered that 36% of our online students reported “no change”, compared with only 5% of our on-campus students.

At first glance, it seemed reasonable that such a large percentage of our online students would report ‘no change’, since the modality of their courses hadn’t changed. Upon reflection, however, we came to realize that, if 36% of our online students responded ‘no change’ while experiencing household upheaval, working from home, fighting for computer time with their children, and the countless other changes we all faced in 2020, when all the while our on-campus students were reporting a lack of connection and motivation, then we needed to take a closer look at what our online students were really telling us by reporting ‘no change’. Looking through the lens of our own, pandemic-induced sense of isolation, we began to see the online student experience through new eyes.

May 2021 Post-Pandemic Survey

In May 2021, following another year of emergency remote teaching and isolation, we had the opportunity to pursue answers to some of the questions raised through the 2020 survey. We broadened our focus to get a better sense of how our students were connecting with FHSU, faculty, and one another. To better understand the nature of learning community dynamics we

administered the Community of Inquiry (CoI) survey to both online and transitioned face-to-face students (Garrison, Anderson, & Archer, 2010). The CoI survey is a quantitative instrument designed to provide insights into teaching, social, and cognitive presences based on the CoI theoretical framework for online learning. It aims to evaluate the educational experience from the learner's perspective.

In the CoI framework, *teaching presence* represents the essential role instructors play in orchestrating the educational experience and supporting meaningful learning outcomes in online and blended courses. Our subsequent analysis uncovered a connection between student responses to questions related to *teaching presence*, and responses to a survey question that focused on student-to-student interactions. The connection was both surprising and concerning, and ultimately led to work on the digital master plan.

Connections with Classmates and the Learning Experience

The survey asked students to report how many classmates they interacted with over the course of the semester to discuss course-related activities. We specifically asked them to exclude required interactions such as discussion boards or group projects. When we parsed the responses between our online students and our on-campus students we discovered that 61% of our online students connected with none of their classmates, as opposed to only 23% of our on-campus students.

The relationship between student connections and aspects of *teaching presence* is surprising. Students who did not feel connected with their fellow classmates in a course also tended to report that the instructor was not engaging with them as evidenced by lower likert responses to statements such as,

- “The instructor was helpful in guiding the class towards understanding course topics in a way that helped me clarify my thinking.”
- “The instructor helped to keep course participants engaged and participating in productive dialogue.”
- “The instructor helped keep the course participants on task in a way that helped me to learn.”
- “The instructor provided feedback in a timely fashion.”

Both the May 2020 and the May 2021 surveys were revelatory and ignited our interest in creating the digital master plan, the goal of which was to gain a deeper understanding of how we connect with our students online, understand the weaknesses in our current processes, and make recommendations about how we can build a digital teaching and learning ecosystem that creates social and technical supports that facilitate and encourage student-to-student and student-instructor interactions.

NSSE Survey 2021

The National Survey of Student Engagement (NSSE) provides valuable information on behavioral measures of student engagement. “Because of its strong emphasis on student behaviors, NSSE differs markedly from other surveys of college students that examine their values and attitudes or their satisfaction with the college experience. The focus on behavior is both concrete and actionable: When results fall short of what is desired, the behavioral measures suggest avenues of intervention.” (Center for Postsecondary Research Indiana University School of Education, 2021).

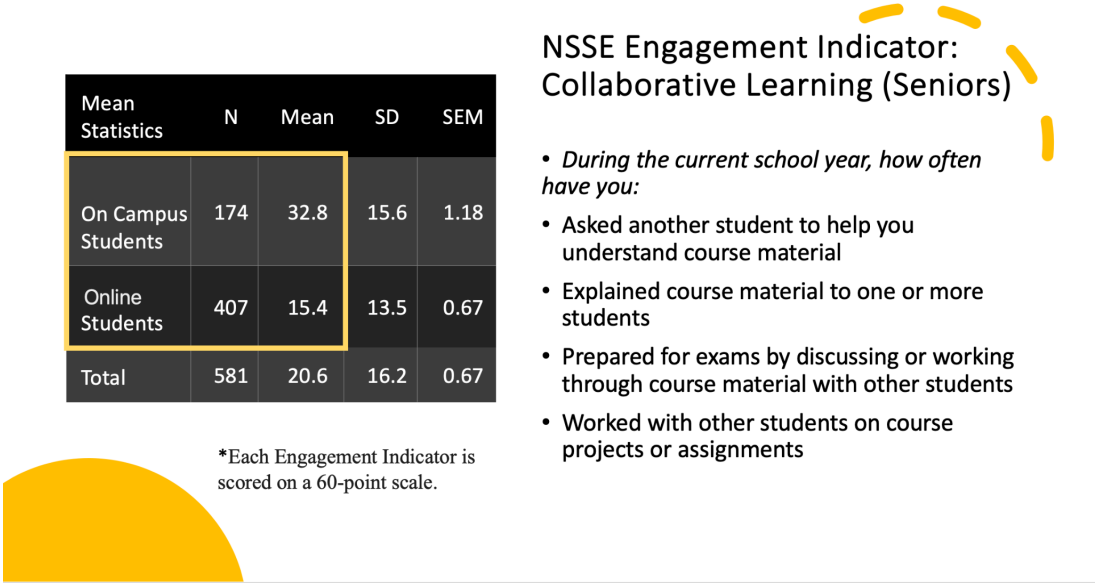
NSSE identifies 10 “Engagement Indicators” (EI) nested within four broad themes; academic challenge, learning with peers, experiences with faculty, and campus environment. EIs are summary measures based on sets of NSSE questions examining key dimensions of student engagement. This report focuses on *learning with peers* and *experiences with faculty*, since those areas focus on student-to-student and student-instructor interactions, respectively. These are also the only areas where FHSU underperforms our Peer, Public Plains Masters, and Public Master Size institutions. This gap becomes more acute when we focus solely on the responses of our online students.

Each EI is scored on a 60-point scale. To produce an indicator score, the response set for each item is converted to a 60-point scale (e.g., Never = 0; Sometimes = 20; Often = 40; Very often = 60), and the rescaled items are averaged. Thus, a score of zero means a student responded at the bottom of the scale for every item in the EI, while a score of 60 indicates responses at the top of the scale on every item. The Figure 4 below compares scores for *collaborative learning* and

student-to-faculty interactions between FHSU seniors who primarily take courses on-campus and those that take courses online.

Figure 4

NSSE Engagement Indicator: Collaborative Learning (Seniors)



Mean Statistics	N	Mean	SD	SEM
On Campus Students	174	32.8	15.6	1.18
Online Students	407	15.4	13.5	0.67
Total	581	20.6	16.2	0.67

*Each Engagement Indicator is scored on a 60-point scale.

NSSE Engagement Indicator: Collaborative Learning (Seniors)

- *During the current school year, how often have you:*
- Asked another student to help you understand course material
- Explained course material to one or more students
- Prepared for exams by discussing or working through course material with other students
- Worked with other students on course projects or assignments

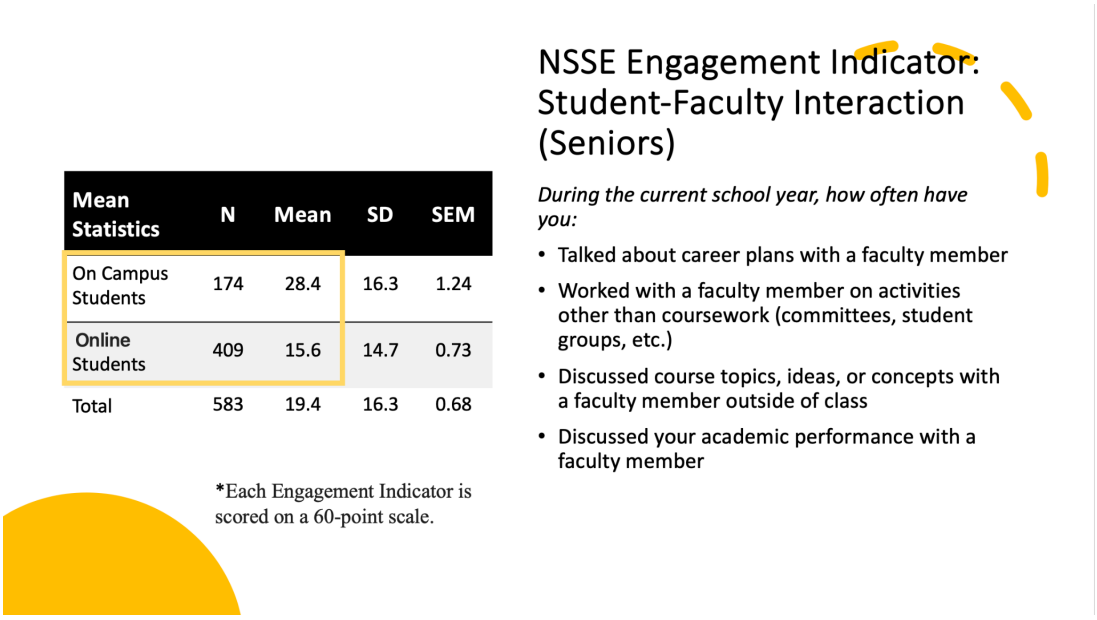
The standard NSSE reports helped us identify areas where, according to student responses, we were performing below our peer institutions. Student responses were disaggregated so that we could explore differences between our online students and on-campus students. The above (and below) figures presented in this section shows the disparity in those scores for both *collaborative learning* and *student-to-faculty engagement*. The figures also present the survey questions that are used to define each engagement indicator.

It is arguably much easier for our on-campus students to engage in collaborative learning behaviors, since their proximity to one another provides them with opportunities to interact with one another organically. The same could be said for student-to-faculty interactions (Figure 5). Without the opportunity for our distance learners to visit our offices or talk with us before or after class, connecting becomes more daunting. It's much easier to approach an authority figure in a natural setting where you can clearly see whether or not they will be receptive to a

discussion than it is to initiate contact via email. The formality will be a barrier to many students who will be afraid of looking foolish, or will dismiss valid concerns rather than risk rejection.

Figure 5

NSSE Engagement Indicator: student-to-faculty Interaction (Seniors)



Mean Statistics	N	Mean	SD	SEM
On Campus Students	174	28.4	16.3	1.24
Online Students	409	15.6	14.7	0.73
Total	583	19.4	16.3	0.68

*Each Engagement Indicator is scored on a 60-point scale.

Likewise, it is more difficult, and perceived as more risky, to connect with one another in an online environment. However, this is all the more reason to implement strategies and tools that can facilitate more meaningful connections between ourselves and our online students. It is also equally important to not only encourage our students to reach out to one another, but also provide them with the means to make those connections. The Tiger-2-Tiger platform described in the next section was implemented as a way to support students in making those important, informal connections between one another.

Tiger-2-Tiger Survey 2022

Results from FHSU's 2020 student survey highlighted significant disparities between the experiences of FHSU online versus on-campus students. Specifically, online learners reported much lower levels of connection with faculty, access to resources, and engagement with peers.

These findings prompted the university to take action, in the form of the Tiger-2-Tiger online community to provide an easily accessible way to support virtual students' sense of belonging. Work on designing and creating Tiger-2-Tiger began in late 2020 and the community was launched in late February 2021.

Tiger-2-Tiger represents a virtual version of the transitional spaces that on-campus students naturally encounter as they depart from a classroom or traverse the campus. It is an example of an easily implemented, yet highly effective intervention. Students expressed a need for a simple, low risk way to connect with one another online and that is what we provided. The key to the simplicity of the intervention is, just as we don't need to organize and schedule the conversations on-campus students have when walking across campus, we don't need to have that level of oversight in Tiger-2-Tiger.

Since its launch, Tiger-2-Tiger has gained strong traction with over 1,400 active student members. Online learners have frequently expressed appreciation for finally having a dedicated space to engage with fellow students. As one out-of-state online student shared, "This is just the type of thing I needed...I hope to connect with a few of you and maybe make a friend or two here."

To evaluate Tiger-2-Tiger's effectiveness, a follow-up survey was conducted in November 2022. When asked whether or not our on campus and online students felt like they belonged, both populations overwhelmingly stated they belonged, with 82% of our on campus students and 81% of our online students agreeing. However, when students were asked if they felt connected with their peers 47% of our online population agreed, compared to 70% of our on-campus students.

Results on questions designed to measure Tiger-2-Tiger's efficacy showed 74% of online students using the platform felt part of the FHSU community, compared to only 55% of non-users. Similarly, active Tiger-2-Tiger members reported higher rates of feeling connected to peers. While work remains to fully close the engagement gap, these metrics clearly demonstrate the platform's positive impact on fostering virtual student relationships and sense of belonging.

Tiger-2-Tiger has helped facilitate informal interactions between students. However, as we think about more formal course-based environments things become more complex. Objectives and

deliverables become more structured and expectations have higher stakes. The next section outlines the scope of those challenges and the complex nature of the potential solutions.

NISS Playbook and Student Success: Strategic Plan Goal 2:

In 2021, The Kansas Board of Regents (KBOR) partnered with Georgia State University's *National Institute for Student Success* (NISS) to adopt innovative, evidence-based initiatives to serve as a catalyst that would drive student success changes for Kansas' regent institutions. FHSU's participation in this process began in October, 2021 and culminated in the NISS Diagnostic Analysis and Playbook delivered to FHSU in April 2022. The diagnostic process included fact gathering about student support operations; a survey delivered to campus stakeholders; and interviews with key institutional personnel. The customized NISS Playbook provided FHSU a high-level roadmap of steps for improving student success supports and outcomes.

The diagnostic analysis provided an overview of our current status, our key strengths, and our key challenges at FHSU. On the positive side, they note improving retention rates and the increasing number of degrees awarded. However, they stress the "need for better delivery and coordination of student supports to reduce attrition" beyond the freshman year. The report also applauds FHSU's dedication to, and interest in, student success.

The diagnostic analysis revealed three central issues: 1) uneven support for large-scale student success programs, 2) uncoordinated academic advising, and 3) ongoing equity gaps. To address these challenges, the playbook outlines four key recommendations: First, standardize academic advising practices across colleges and departments to provide consistent guidance. Second, bolster financial aid policies to improve affordability and accessibility for all students. Third, redesign the university's course planning and review system to ensure high-quality, coordinated offerings. Finally, enhance online student outcomes by aligning resources to barriers like improving access to support services.

It is important to note that the NISS Playbook recommendations are endorsed and supported by KBOR and FHSU is accountable to implement those recommendations and to regularly report our progress to KBOR. FHSU has also taken the additional step of integrating the NISS recommendations into the FHSU Strategic Plan. This has been done to demonstrate that these are FHSU priorities and not to be regarded as an additional burden.

Here is how they align with the current FHSU Strategic Plan. ***Standardized advising*** is currently being addressed in Student Success Goal 2.1 and ***strengthening financial aid*** in Strategic Growth Goal 3.2. Both of these recommendations fall outside the scope of this digital master plan. Our focus here is on NISS Playbook recommendations 3, ***redesign university course planning***, and 4, ***enhance online student outcomes.*** Also, implicit in the NISS Diagnostic Analysis and Playbook, is the critical need for data to inform and support all strategy recommendations.

Gaps in Understanding and Addressing Issues Faced by Online Students

One of the questions asked by the NISS team as part of their diagnostic analysis was, "Does Fort Hays currently disaggregate student support information by primary modality of students? (Online Only Students vs. Residential Students)." The answer; "We currently do not in terms of data management" (NISS Playbook). Thus, recommendation #4 in the Playbook is to "Improve outcomes for online students by better understanding the specific obstacles they are facing and by targeting supports in response". In order to improve outcomes the Playbook recommends the following action step; "track and distribute course and program data on success rates by course modalities as well as demographic group" (NISS Playbook).

The NISS Playbook highlights key student success challenges that we face at FHSU. The Playbook very specifically identifies where those challenges lie, and provides clear, actionable steps to guide us through the process of addressing those challenges. In this section we have summarized two major, interrelated challenges that impact our digital teaching and learning ecosystem. One, our online students are not provided with the same level of support as our on-campus students, and two, FHSU lacks real-time data to identify potential success indicators to help us understand where we need to focus our support strategies for online students.

The FHSU Teaching and Learning Ecosystem Audits

Blackboard *Analytics 4 Learn* Audit

A recurring theme throughout the NISS Playbook is the need for data to make informed decisions around strategies that will support student success. Our courses are the foundation for that success and, therefore, we needed to get a better understanding of how our online courses are designed and how those design decisions impacted student engagement and success.

The first audit uses Fall 2021 data to categorize Blackboard courses based on how well they have incorporated interactive elements in the course design. The measure of success isn't only based on the design itself, but also on the level of actual student engagement with those elements. We accomplish this using the Blackboard's Analytics 4 Learn (A4L) diagnostics software and a modified course archetype framework, developed through a 2016 Blackboard study and described in "Patterns in Blackboard Learn Tool Use: Five Course Design Archetypes" (Whitmer, 2016).

These archetypes were devised by Blackboard data scientists in 2016 when they conducted a study that included 70,000 courses from 927 institutions, with 3,374,462 unique learners using Blackboard Learn. In January 2022 we integrated Blackboard's A4L with the Blackboard LMS. The objective was to determine if there was a correlation between how a course was designed and subsequent learner engagement, as measured by time on task and grade outcomes. The five Blackboard archetypes are listed and described in the table below.

Table 1

Five Course Archetypes

COURSE ARCHETYPE
Supplemental Content-heavy. Low interaction
Complementary One-way communication through content, announcements, and gradebook
Social High peer-to-peer interaction through discussion board
Evaluative Heavy use of assessments
Holistic High LMS activity with balanced use of assessments, content, and discussion

Note. From "Patterns in Course Design: How Instructors ACTUALLY Use the LMS," by Whitmer, 2016.

The archetype model was utilized because it is easy to see the relationship between each of the archetypes and Moore's three types of interaction (1989). For instance, a *Supplemental* course relies on very little interaction. The Supplemental archetype is more often seen in face-to-face courses, in which an instructor might use Blackboard as a way to deliver content and provide students a place to submit assignments. A course is designated *Complementary* if it includes some interaction between students and content and/or student and instructor.

Social courses have the potential for a lot of student-to-student interactions but would not have more substantive interactions between students and their instructors or their course content. *Evaluative* courses promote high interactivity between students and content through an extensive use of assessments. Finally, *Holistic* courses are the only archetype that balances all three types of interaction.

We applied this model to FHSU data in February of 2022. However, we faced a number of roadblocks. The first was to alter Blackboard's interaction set to include technologies that are commonly used in FHSU course design but which were not accounted for in the original model.

For example, tools like Yellowdig had to be categorized as fitting into the *Holistic* archetype because it represented all three types of interactions. The second challenge was to accurately integrate Workday data fields with the course design and activity data. We would need this to sort results by semester, college, student delivery modality, student time-on-task, and grades. We resolved these two challenges sufficiently enough that we were able to accurately analyze the Fall 2021 data. It is presented in Table 2.

Table 2

Fall 2021 Course Interactions Aligned with Course Archetypes

Fall 2021 Course Interactions	Interaction Type	Supplemental	Complementary	Holistic	Evaluative	Social
Avg Activity by Course Content	Student-to-Content	37.82	46.21	64.83	38.42	21.02
Avg Activity by Assessment	Student-to-Content	10.57	14.05	15.91	6.7	1.61
Avg Activity by Discussion	Student-to-Student	14.43	24.9	39.36	24.99	14.14
Avg Instructor Interactions	Student-to-Instructor	1,174.70	1,582.00	2,527.50	1,643.60	819.1
% Items Accessed	Student-to-Instructor	19.20%	27.00%	37.60%	29.40%	18.10%
Course Count		633	371	59	20	24
Avg Time in Course		84	105	134	91	42
Avg Activity in Course		5756	7304	9827	6260	2968

The table above illustrates the types and frequency of student interactions across online courses offered in Fall 2021. The first column identifies the type of activity, while the second column specifies whether the interaction is between student-to-content, student-to-student, or student-to-instructor. The next five columns display either the amount of time or the number of interactions for the listed forms of engagement based on course archetype. It is important to emphasize that these courses do not purposefully conform to a specific archetype. They just happen to have been designed with a mix of activities that align with the identified archetypes.

The purpose of this table is to provide a general overview of the course activity and its distribution across different archetypes.

A key comparison is between supplemental (content-heavy, low interaction) and holistic (balanced activity types) courses. On average, students in holistic courses engage 64.83 times with course content, while those in supplemental courses have 37.82 content interactions. Holistic courses also see substantially higher engagement between students and instructors (2,527 interactions versus 1,174) as well as among students through discussions (39 interactions versus 14).

Additionally, the percentage of total course items accessed by students is 37.6% for holistic courses but only 19.2% for supplemental. This indicates that the variety of materials and activities in holistic courses leads to broader engagement.

The comprehensive nature of holistic courses also translates to greater overall participation - students have 9,827 activities versus 5,756 in supplemental courses. Time spent in holistic courses is likewise higher at 134 hours compared to 84 hours. Despite the increased student interaction in courses that are designed more holistically we have a long way to go on that count.

In Fall 2021 there were more than 600 courses categorized by A4L as *supplemental* and less than 100 categorized as *holistic*. The implications of these findings are significant and highlights the need for us to be more intentional about creating opportunities for interaction within courses. It is also important to recognize that small steps can make a big difference. The *complementary* archetype, represented by 370 courses in Fall 2021, is a case in point. The *complementary* archetype differs from the *supplemental* archetype in that it focuses on enhancing and improving existing systems or processes. Specifically, the focus is on improving communications between the instructor and students.

Complementary courses provide more announcements, more feedback on assessments, and more deliberate use of student discussions. These small improvements increased student time in their

courses from an average of 84 hours to 105 hours and percentage of course items accessed from 19.2% to 27%.

Opportunities for Designing Interactive Online Courses

If we are to design courses using Moore's Three Types of Interaction (1989) as a guideline then we must have the technology available in our digital teaching and learning ecosystem to make that happen. Our current teaching and learning ecosystem contains a variety of social and technical tools and processes that have been designed for this purpose. However, before a decision is made to incorporate a specific technology in a course it is important to understand what learning objective, or objectives, each of these technologies can help you realize.

We propose developing a consultative process using specific AI applications to assist faculty in navigating the complexities of course design. Specifically, one of the primary challenges faced by faculty when designing engaging online courses is aligning meaningful learning interactions with measurable course outcomes. While faculty excel in knowing their course content, they often lack training in effective course design and creating engaging learning experiences. This tends to be compounded when trying to design for online learning environments.

Recently, Blackboard has released an AI Design Assistant that is integrated into Blackboard Ultra. This AI assistant can help create modules, assignments, assessments, and rubrics. Additionally, Microsoft Copilot Studio can supplement instructional design by being trained on TILT's model for effective course design, including OSCQR (online course quality review), RSI (regular substantive interaction), and SMART learning objectives (specific, measurable, achievable, relevant, and time-bound). Thus, faculty can be guided through the process of effective course design from defining measurable course learning objectives to designing engaging learning activities and constructing assessment rubrics.

Teaching and Learning Ecosystem Technology Audit

As we stated earlier in this report, our original digital teaching and learning ecosystem wasn't systematically designed; rather, it was developed over time to meet specific or general needs

identified by faculty, students, or staff. However, over the last few years we have worked to intentionally build an ecosystem with diverse functionality and a variety of ways to incorporate interactive activities in the design of an online course.

At this juncture it is important to differentiate between Blackboard's native technologies and the additional functionality provided by third-party technologies that have been incorporated into the digital teaching and learning ecosystem. The Blackboard LMS is designed to create a centralized environment for individual courses. Blackboard facilitates:

- The delivery of course content - Blackboard allows instructors to create learning modules, post syllabi, lecture notes, multimedia content like videos or simulations, readings, and more. This supports student-to-content interaction.
- Communication - Blackboard has announcement features, discussion boards, email, journals, and messaging tools that enable student-instructor and student-to-student interaction.
- Assessment - Online quizzes, assignments, grading rubrics, and plagiarism detection tools allow student work to be evaluated, enabling student-instructor interaction around assessments.
- Collaboration - Space for group projects and peer activities, facilitating student-to-student interaction.
- Organization - Activity Stream, calendars, task lists, and content folders help organize the course effectively.
- Accessibility - Blackboard Ultra was rebuilt with a focus on inclusive design and accessibility in mind, following standards and guidelines closely to create a more usable learning environment for all students. FHSU has also deployed Blackboard Ally, ReadSpeaker and VidGrid video captioning to support accessibility requirements.

As the summary above indicates, Blackboard Ultra has built-in technologies that support interaction. The discussion board is the most frequently used for that purpose, although many faculty incorporate the *Groups* function. Over the years, several non-native technologies, designed to facilitate various aspects of interaction, have been integrated into Blackboard. These technologies have been designed to improve both instructor and student experience around

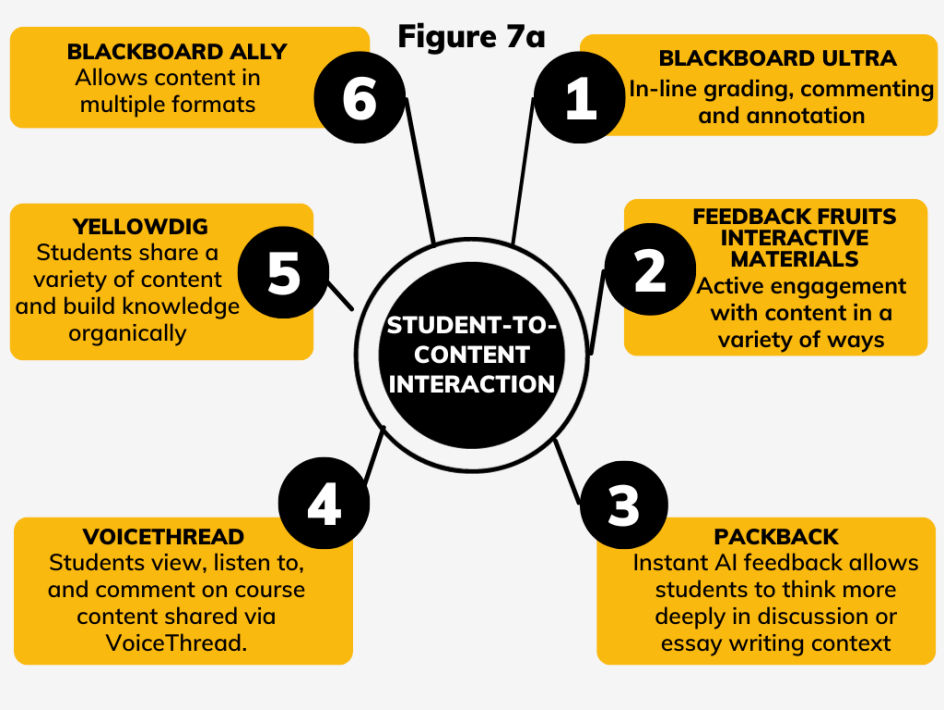
activities such as virtual office hours, accessibility, writing support, knowledge building and sharing, peer review, interacting collaboratively with content, collaborating on projects, and interacting informally in both synchronous and asynchronous modalities. In addition to Blackboard-native tools, the primary technologies that support these activities are FeedBack Fruits, GoReact, InScribe, InSpace, PackBack, VidGrid, VoiceThread and Yellowdig. The primary benefit of incorporating these technologies into Blackboard courses is that they enable the creation of a much wider range of activities by providing the infrastructure to manage and streamline complex processes around activities that would otherwise be extremely difficult or impossible to build within the course.

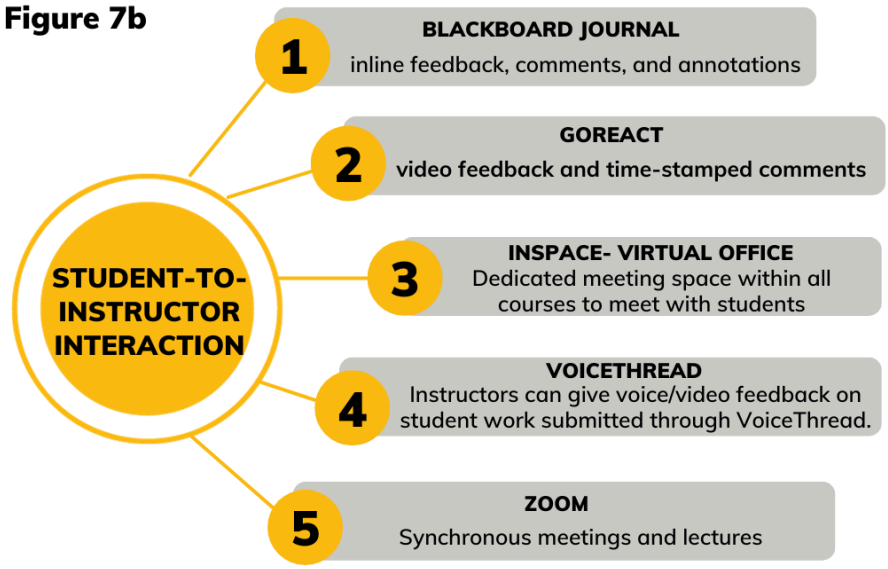
Although Zoom was not originally considered to be part of the digital teaching and learning ecosystem, its inclusion is a result of the pandemic necessitated move to emergency remote teaching in 2020. Adoption of Zoom skyrocketed in March of 2020 when our on-campus students were sent home. Zoom became the tool of choice to connect synchronously with, and deliver content and lectures to, our students. Although not designed as a pedagogical platform, the mass adoption of Zoom during the pandemic and the familiarity that everyone now has with the platform, has made it a default tool of choice for many synchronous meetings.

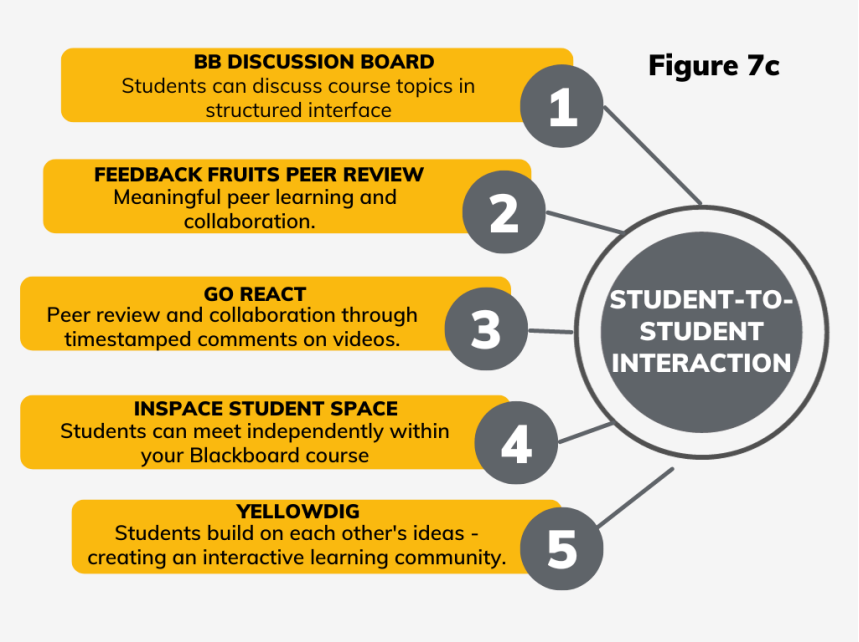
The figures below illustrate how these technologies support multiple approaches to the process of teaching and learning. This graphic representation has been designed to show the primary ways that each of these technologies is, or can be, used in the service of students interacting with course content (Figure 7a), their instructors (Figure 7b), or with other students within the Blackboard infrastructure (Figure 7c).

Figure 7

Blackboard Teaching & Learning Ecosystem: Interaction Type Alignment







These technologies have been designed to facilitate meaningful interactions among online students, who don't have the same opportunities to connect as our on-campus students. These technologies have features that, if deployed for the intended purpose, will facilitate essential connections. However, there is an additional step. Unlike in-person courses where student interactions can happen organically, most online technologies require instructors to intentionally build in opportunities for the type of casual engagement that would normally arise on its own in a face-to-face setting. This can be challenging since in traditional classrooms, students can interact and connect informally without the instructor facilitating those moments or even being aware of them. In the online space, instructors have to purposefully incorporate chances for informal student-to-student and student-instructor interactions that mimic what transpires naturally in a physical classroom.

While these technology platforms have been adopted to facilitate student interactions and, ultimately, student success, they are also designed to make it easier for instructors to implement and manage interactive activities. Our objective, as we seek to improve the quality of our online courses, is to assure that we can provide FHSU faculty with the tools and strategies they need to easily and efficiently design and deliver engaging courses, now and in the future. It is also essential, as we discuss in Recommendation 4, to provide a comprehensive program of training and support to educate our faculty on best practices.

That being said, we must also acknowledge a general perception among faculty that there are too many tools. As the consultants report, “We found that the large number of tools available to support online instruction is an issue. There is general confusion on the part of faculty as to what tools are best used for which engagements or outcomes in their courses.”. We will address the issue of *too many tools* in Recommendation 2.

When Do Students Engage?

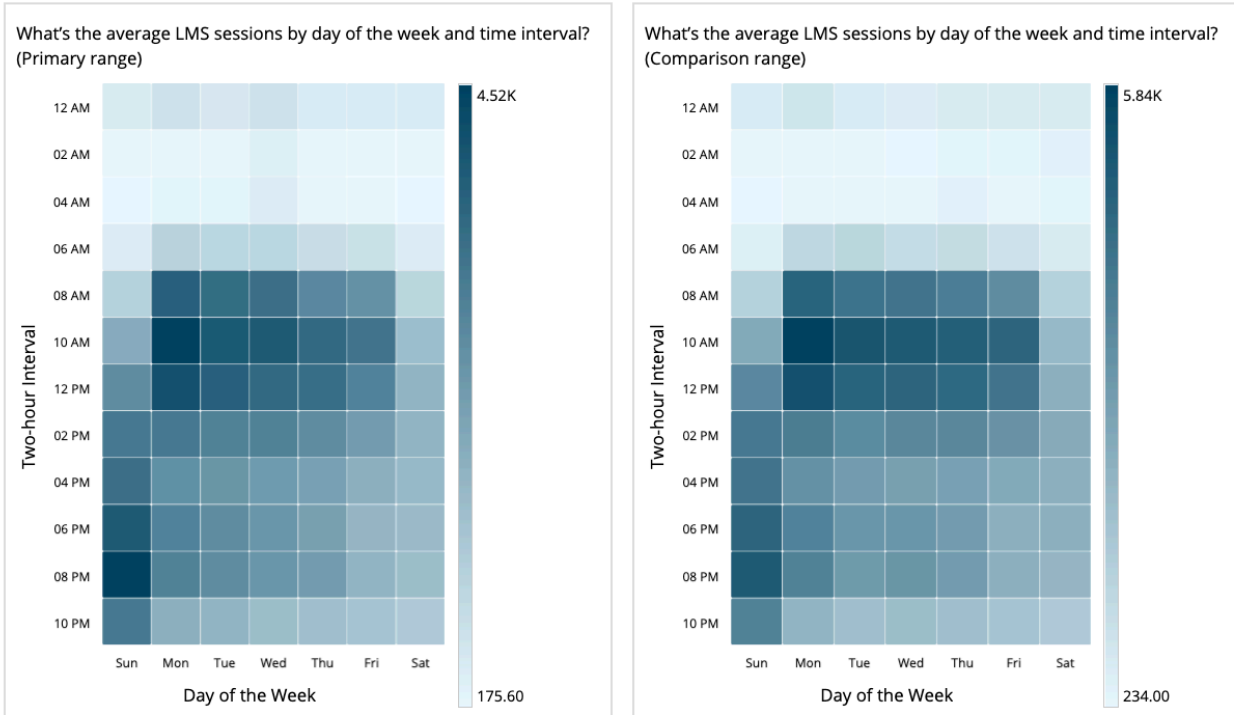
This data visualization sheds light on when students typically engage with Blackboard courses. It reveals clear patterns in average session duration across different times of day, encompassing all student populations (not just online learners). The data suggests that students dedicate larger blocks of time to studying and coursework during mornings (potentially 8 AM - 12 PM) and evenings (possibly 6 PM - 10 PM). Additionally, there's a notable surge in activity on Sunday afternoons and evenings.

However, our current Blackboard support team operates on a schedule mirroring on-campus student hours (8 AM - 5 PM, Monday-Friday). This creates a gap for online students facing technical issues or access problems outside these hours. Consider the scenario of an online student encountering an assignment submission issue at 10 PM on a Sunday night, with the instructor not properly opening the link. With no available support until Monday morning, this student might experience unnecessary stress and inconvenience, potentially impacting their sleep and daily schedule.

This example highlights the need to re-evaluate processes and support structures originally designed for face-to-face students. To better serve online learners, we must adapt our support systems to consider their unique access patterns and potential challenges outside of traditional business hours.

Figure 8

Average Blackboard Session per Day of the Week



Gap Analysis: Anthology's Education and Research Consulting Group

In 2022 FHSU engaged consultants from Anthology's Education and Research Center. Defining the scope of work for this engagement was a consultative and iterative process where the agreed upon engagement would be a gap analysis and qualitative analysis of various stakeholder experiences and mindsets regarding the digital teaching and learning ecosystem at FHSU.

The consultants were provided with all student survey data, the NISS Playbook, the Blackboard A4L Archetype Audit, and the Ecosystem Technology Audit. This context formed a baseline for their plan of the engagement, which began in 2022 with data collection, continued with onsite interviews in April 2023 and the sharing of findings in May 2023, and concluded with the submission of their final report in July 2023.

The Anthology team met with on-campus, online and China-based faculty and students, the Senior Leadership Team, Student Services, and both the TILT and Technology Services staff. In

total they met with 63 people, either in individual or group sessions. While some of these interviews were held remotely, the majority took place face-to-face while onsite at FHSU. The purpose of the interviews was to correlate group perceptions with more specialized and focused input and experience.

Given what the consultants characterized as “the already mature approach and process of FHSU in developing both the Strategic Plan and Digital Master Plan”, the Anthology team narrowed its usual broad engagement approach to focus on assessing stakeholder sentiments around student success and student engagement in the FHSU digital learning environment.

The consultants found that despite a strong culture of ensuring student success and high student engagement with the institution, there are opportunities to expand student engagement using both technical and structural improvements to the student and faculty experience. Their preliminary findings and recommendations are as follows:

Anthology Findings:

- Students feel they belong at the institution yet would like deeper engagement with each other and with faculty. Engagement varies by modality.
- Student success is important to all stakeholders interviewed.
- Faculty feel overwhelmed by the variety of tools and there are varying degrees of comfort with using online technology tools with teaching.
- Online courses vary greatly in terms of quality and structural organization.
- Faculty are experiencing “adoption fatigue.”
- Communications at all levels are not unified or universal.

Anthology Recommendations:

1. FHSU should strive toward more consistency in online courses design via the use of templates or the like. The adoption of the Ultra course experience for all courses will help reduce inconsistency across courses.
2. FHSU should support expanded engagement opportunities for students, faculty, and instructors.

3. FHSU should facilitate a culture of peer learning to assist faculty in sharing best practices and pedagogy.
4. FHSU should refine and/ or create communication policies and procedures to ensure that a consistent message is being delivered throughout all parts of the digital campus.

We worked with the consultants to synthesize the findings from the Plan of Action. The consultants then met with FHSU stakeholders to validate the issues uncovered in the Plan of Action steps. We then collaborated with the consultants to formulate the following recommendations.

Recommendations: Scope and Purpose

Online Learning Excellence through Strategic Recommendations

The COVID-19 pandemic highlighted a critical need to improve the quality and equity of online learning experiences at Fort Hays State University (FHSU). In response, the FHSU Digital Master Plan was developed to bridge the gap between online and on-campus learning. Building upon the university's existing strategic plan and student success initiatives, this plan outlines a comprehensive framework to achieve online learning excellence.

This section presents a series of actionable recommendations informed by various data sources illuminated in the previous sections. The National Survey for Student Engagement (NSSE), internal surveys, the National Institute for Student Success (NISS) Diagnostic Analysis and Playbook, and an analysis of Blackboard Learning Management System usage all contribute to a data-driven approach to online learning improvement. These recommendations directly align with guidance provided through the FHSU Strategic Plan, the NISS Playbook, KBOR Pillars and the Provost's 2023-2024 Academic Priorities, ensuring a coordinated and strategic effort towards online learning success.

The following recommendations aim to:

- Foster a culture of collaboration and innovation for faculty in adopting educational technology.
- Enhance communication across the university to provide clear and consistent information about online learning resources and expectations.
- Leverage data to identify and address barriers faced by online learners, promoting equitable access and success.
- Cultivate a sense of connection and belonging among online students through dedicated communities and interactive learning experiences.

Integration into the FHSU Strategic Plan 2024-2027

The five recommendations that follow articulate pathways and actionable strategies to lead the university forward to making progress toward each of these goals. However, prior to examining each of these strategic paths it is important to position this digital master plan as an integral part of FHSU's 2024-2027 Strategic Plan. The recommendations included here clearly align with the continuing strategic plan goal themes 1 (*Academic Excellence)* and 2 (*Student Success)* and also further the work begun through Strategic Plan 2019-2024 as follows:

- Recommendation 1: Actionable Data for Equitable Online Learning is aligned with Strategic Plan Strategy 2.2 (Develop predictive analytics to increase communications with faculty and advisors at various points along the student learning path.)
- Recommendation 2: Consistency in Online Course Design and Delivery is aligned with Strategy 2.7 (Focusing on learning outcomes, including high-impact practices in all courses, and developing classes that focus on student interest and engagement.)
- Recommendations 3: Foster Student Connections Inside and Outside Courses is aligned with Strategy 2.6 (Create a culture of belonging by having a growth mindset both in student self-perceptions and in academic design.)
- Recommendation 4: Improve Support for Digital Competencies for University Teaching at an Institutional Level. While not explicitly a part of the outgoing strategic plan, work is currently underway to incorporate this recommendation into the next iteration of the FHSU plan.
- Recommendation 5: Streamline Communication for Online Learning Success, does not align with existing goal strategies but it does fit with the the ongoing efforts around the Strategic Plan to make sure the the FHSU community understands the *why* the *how ,* and more importantly the *how everyone can contribute* to the important work of the strategic plan.

All of the above recommendations directly, or indirectly, address Goal Theme 2: Student Success, which emphasizes empowering all students to define, evaluate, and achieve their goals while fostering engaged global citizens. We propose incorporating these recommendations as actionable strategies within the upcoming three-year strategic plan. This integration ensures

continuity with the current Goal 2's valuable initiatives while leveraging the comprehensive analysis conducted during the two and a half years spent developing this digital master plan.

Proposed: Strategic Plan Goal 2 Desired Outcome:

Reduce the achievement gap in online course completion rates, disaggregated by student demographics, by increasing student satisfaction with online course design, delivery, and opportunities for connection through data-driven implementations.

The achievement gap highlights disparities in academic performance and outcomes between online students and their on-campus counterparts. This gap is evident in measures such as course completion rates, graduation rates, and other indicators of student success.

Online learners, who may include a higher proportion of non-traditional students, such as first-generation college students, students from low-income backgrounds, students of color, students with disabilities, and adult learners, face unique challenges that can impact their academic performance. These challenges may include limited access to campus resources, feelings of isolation, and difficulty engaging with course content and peers in a virtual environment.

To address this achievement gap, it is important to monitor both lagging indicators, such as course completion rates and GPAs, which reflect past performance, and leading indicators, such as student engagement and satisfaction with online courses. By tracking these leading indicators, the university can identify students who may be at risk of falling behind and provide timely interventions and support services to help them succeed.

The digital master plan aims to promote equity in online education by closing the achievement gap and ensuring that all students, regardless of their background or learning modality, have access to the resources and support they need to thrive academically.

Recommendation 1: Actionable Data for Equitable Online Learning

Objective: Improve equitable access and success for all learners in online courses, with a focus on addressing achievement gaps and removing barriers to student progress.

Strategy: Establish a feedback loop through data analysis, identification of barriers, and development of targeted support services will lead to continuous improvement in online learning at FHSU.

Benchmark:

- Integrate a comprehensive data system throughout the FHSU LMS, SIS, and systems by 1.5 years.
- Reduce the achievement gap between online and face-to-face course completion rates, disaggregated by student demographics (e.g., first-generation status) by 5% over the three years of the 2024-2027 Strategic Plan.
- Identify potential program improvements based on NISS identified challenges of DFW rates, success by modality, and bottleneck. (NISS Prioritized Action 3)

The Anthology consultants assert that the LMS and the Student Information System (SIS) are the two most important data sources from which to conduct a data-informed analysis and work in this direction has already begun. As part of the NISS Playbook recommendations, and under KBOR direction, FHSU has contracted with EAB to implement two complementary student success platforms.

The first is Navigate, which is designed to support the work of our centralized advisors (NISS Playbook Prioritized Action 1) and provide technology and data analytics to help identify at-risk students early and connect them with appropriate resources to support retention and completion. The second complementary platform is Edify, which will provide a centralized data warehouse along with real-time dashboards for all university stakeholders.

This will help us address one of the main issues identified in the NISS Playbook, as well as the consultant report, and allow us to implement strategies at scale and track progress in real-time. It will provide us with insights into which strategies are working and which are not, allowing us to be more targeted and efficient in our strategic actions.

This approach is also in alignment with Strategy 1.1, 1.2, 2.1, and 2.2, as well as two of the three Provost priorities of enhancing a results-oriented culture and the maturation of data management and usage. As evidenced by its multiple appearances in the FHSU strategic plan, a cultural shift must occur to address the need to be data-informed.

Recommendation 1 Action Steps:

1. Enhance Data Collection and Analysis: We will implement a comprehensive data system to collect and analyze data on critical course metrics, disaggregated by student demographics and course modality (online vs. face-to-face). This data will inform all aspects of online course design, delivery, and support services. The data will include, but not be limited to:
    - Demand: Course demand data (enrollment trends) will be used to ensure courses are offered at the right times and in the right formats to meet student needs.
    - Success by Modality: We will analyze student success metrics (e.g., completion rates, DFW rates, GPAs) by modality to identify any achievement gaps between online and face-to-face learners.
    - Bottlenecks: We will identify bottlenecks in the curriculum, such as required courses with limited availability or prerequisites that delay graduation.
    - Retention and Persistence: We will track student retention and persistence rates by course modality to identify areas where online students may face additional challenges.
    - Course Availability and Fill Rates: Data on course availability and fill rates will help us ensure online courses are offered frequently enough to meet student demand.

2. Identify and Address Barriers: Based on the data analysis, we will identify specific

barriers faced by online learners, such as lack of opportunities to connect and interact, and access to technology or support services.

3. Develop Targeted Support Services: We will develop and implement targeted support services to address the identified barriers and improve student success in online courses. This may include initiatives such as:
    - Providing online students access to technology and technical support.
    - Offering workshops and training sessions on online learning strategies and tools.
    - Establishing online tutoring and academic support services.

4. Actionable Insights: Based on the data analysis and identification of barriers, we will develop actionable plans to improve online course design and delivery. These plans will be specifically targeted towards promoting equitable access and success for all learners in online environments.

Investments and Budget:

- **Technology:**
    - **Edify:** Provides a central data warehouse and real-time Course Success Equity Accelerator dashboards for all stakeholders. Estimated Annual Budget: **$**160,000
    - **Anthology Illuminate:** Allows users to segment data by student demographics (e.g., race, ethnicity, first-generation status) and course modality (online vs. face-to-face). This facilitates the identification of potential achievement gaps between different student populations in online courses. Estimated Annual Budget: $0 for base version
- **Additional Considerations:**
    - Allocate resources for data collection, analysis, and reporting (potentially through existing staff).

Total Estimated Annual Budget: $160,000

Recommendation 2: Consistency in Online Course Design and Delivery

Objective: To ensure that students taking online courses have the necessary opportunities to connect meaningfully with content, faculty, and other students, courses need to be structured consistently so students can focus on learning rather than on how to navigate inconsistently designed courses.

Strategy: Improve student engagement through increased course-based interaction opportunities and consistent design.

Benchmark:

- 20% increase student engagement with online courses within 2 years as evidenced by Blackboard Ultra adoption and the implementation of purposeful opportunities for additional student-to-student and student-to-instructor interactions.
- 100% Ultra adoption by Fall 2025.

As evidenced by our findings from the previous sections of this report, online education is in flux. Demand is increasing along with the demand for quality. However, quality can't simply be measured by how closely an online learning experience follows the structure and delivery of an on-campus classroom experience. It is natural to believe that content delivery, in the form of readings and video lectures, is the primary activity in our online courses because that is the most planned and overt activity in our on-campus courses.

However, many activities that take place inside and outside the classroom are often overlooked because they happen organically and, often out of our sight and without our knowledge. Our online students lack the means and opportunities to participate in these activities on their own. It therefore becomes our responsibility to intentionally design these activities into the structure of a course.

In the Blackboard A4L Archetypes Audit, we analyzed the relationship between course design, as represented by Blackboard's archetypes, and student engagement with their courses. The results of that analysis support the disparity in student success depending on course design. Data

from the NSSE survey conducted in Step 1 of our Plan of Action - "FHSU Student Voice" - reveals gaps in course design and delivery between online and on-campus courses. The survey shows significantly fewer opportunities in online courses for collaborative learning through student-to-student and student-instructor interactions, both within formal course activities and informal out-of-class engagements. These results highlight the need for FHSU to facilitate more occasions for students and faculty to connect and engage, both formally and casually, in the online environment. By improving opportunities for collaboration and interaction, we can enhance the online learning experience.

Two common concerns expressed by online students are the lack of interaction opportunities and the inconsistent course designs. According to the consultants, the most frequent complaint from online students is not having enough chances to interact with peers both within and outside of class. This is supported by our collected survey data. While not all online students may desire engagement due to factors like age, jobs, and other commitments, the consultants believe all students should have the option. The abundance of tools used across courses inhibits interaction, as students must repeatedly learn new platforms instead of engaging with peers.

Another issue raised is frustration with varying course designs term to term. Students do not want to learn new tools for every class. The proliferation of tools diminishes engagement opportunities, as students must spend time learning new platforms rather than engaging with their courses using more familiar tools. To address both concerns, the consultants offered two potential solutions. The first was to implement consistent and uniform course templates based on Blackboard's Social, Evaluative, and Holistic Course Archetypes. However, we rejected this specific approach as too limiting and challenging to put in place. Instead, we are opting for the consultant's alternative recommendation of developing standardized "rubric-based packages" that allow for more faculty customization while still providing consistency.

Rubric, in this application, refers to course design rubrics rather than those rubrics incorporated into courses for the purpose of assessing student work. These packages would demonstrate how course attributes, design elements, and specific recommended third-party tools can be used in each course type to achieve an engaging course environment. As shown in the ecosystem technology audit, there is a wide, but manageable, array of technologies in the FHSU Teaching

and Learning Ecosystem designed to support students interacting with and engaging in the learning process. This approach would also provide opportunities to teach faculty how to effectively use these tools in a standardized format, while meeting the pedagogical needs expressed by individual faculty members.

We believe this approach is a more realistic strategy for FHSU to implement. The focus will be on two things: 1) adopting Blackboard Ultra to give all courses a consistent look and feel, and 2) using rubric-based packages that integrate Moore's three-part model of student interaction and engagement. By adopting Blackboard Ultra university-wide, we can create fully customized courses that still have a uniform appearance, unlike Blackboard Original. This means students will have the advantage of consistent structure and navigation in all their Blackboard course shells. Each course template will be designed according to the SUNY Online Course Quality Review Rubric (OSCQR, n.d.).

The rubric-based templates show how to intentionally design three types of interaction in online courses. These templates allow for variations in the balance of interactions based on course structure and teaching style. The OSCQR framework offers guidelines for integrating interactive activities in a simple and iterative process. Moreover, recent developments in generative AI, including those integrated into the Blackboard Ultra platform, assist instructors and instructional designers in aligning interactive activities with course outcomes and generating course modules. These course design aspects will alleviate the most time-consuming part of course development.

As part of the templating process we will implement a protocol for streamlining the breadth of educational technologies that are integrated into those templates. Although we believe in the efficacy of the current suite of technologies, we also acknowledge that too many choices and too many processes can be confusing for both faculty and students. Thus the benefits associated with a specific technology might be outweighed by difficulties associated with adoption and implementation.

Appendix E provides information on the current adoption and usage rate of all TILT supported educational technologies. As part of this recommendation we propose using this data, along with a critical feature analysis, to right size the number of offerings and to align any future changes to

support the other recommendations in this plan. This possible streamlining would let us concentrate our time and resources on the technologies with the widest benefit at FHSU.

Recommendation 2 Action Steps:

1. Transition to Blackboard Ultra with structured support by TILT.
    - Measurable Course learning outcomes: inform decisions about course content, instructional methods, and online learning tools to ensure students are acquiring the intended knowledge and skills. (Build generative AI app to scale this process)
    - Flexibility: Packages provide guidance while allowing faculty customization.
    - Engagement: Based on Moore's model for student interaction, promoting collaboration and discussion.

2. Technology Streamlining: Reduce the overwhelming number of educational technologies offered, focusing on the most beneficial ones.

    - Professional development will provide best practices for online student engagement with tools in the Teaching and Learning ecosystem.

Investments and Budget:

Much of the work necessary to support this recommendation can be accomplished with the support of TILT. However, the most labor intensive activities involve the creation of measurable course outcomes and the alignment of those outcomes to program outcomes, on the one hand, and to course activities and assessments on the other.

To facilitate and scale this work it will be necessary to incorporate custom-designed generative AI applications that will serve a consultative role in this process.

- **Technology:**
    - **CoPilot Studio:** Course Development AI support. First Year: $2400
- **Additional Considerations:**
    - The primary investment for this recommendation is faculty development. Resources will be allocated to workshops and training sessions to familiarize

faculty with the rubric-based packages and effective use of recommended technologies within the standardized Blackboard Ultra environment.

- Additionally, resources will be needed to conduct a critical feature analysis of the current educational technologies offered by TILT. This analysis will inform the streamlining process, ensuring we focus on the most impactful tools for online learning at FHSU.
- **Program Re-development:** Refresh - 3 programs in Year One @ $5000 per program: $15,000

Total Estimated Year One Budget: $17,400

Recommendation 3: Foster Student Connections Inside and Outside Courses

Objective: Ensure the teaching and learning ecosystem provides ample opportunities for student-to-faculty and student-to-student interactions inside and outside of courses.

Strategy: Create and foster a multi-channel approach to student connection.

Benchmark:

- Expand student access to Blackboard support offering 24/7 live support and AI chatbot assistance by Spring 2025.
- Reduced student isolation and increased feelings of belonging as benchmarked through Nov. 2022 survey results by improving peer-to-peer learning and support networks by the addition of 5 program communities in Year One.

While not all students will want or need to connect with one another, or with faculty and staff in informal, non-transactional ways, even the most task-oriented students need support if something doesn't work the way it's supposed to. The example of the student having no way to submit an assignment before the due date is a perfect example of that and thus extending Blackboard support is an essential strategy for helping all our students feel connected whenever they need to connect.

That being said, many of our students want to feel connected to the community. An initial response by FHSU as a result of the May 2020 post-pandemic survey was the creation of a student-centric social platform that we called Tiger-2-Tiger. The student response to Tiger-2-Tiger was gratifying. Our online learners showed great enthusiasm for the community and quickly reached out to one another. Some students reached out to others just to connect while others asked for advice. By Fall semester 2022 there were more than 800 students active on Tiger-2-Tiger each month and in a 2022 survey were able to determine that students who participated in Tiger-2-Tiger felt significantly more connected to FHSU than students who didn't participate.

The success of the Tiger-2-Tiger community highlights the need for members of our online student community to connect and interact with one another inside and outside of specific course-related work. Many of the comments from our online students when Tiger-2-Tiger was first introduced spoke to not only the need for the community, but also gratitude that FHSU had intentionally created it for our students.

> "Wow! I hope this gets off the ground and becomes "a thing"! It is definitely needed, I believe, for we virtual and/or non-traditional students to connect, feel included.... I'm a non-Facebook person but want some connecting with fellow FHSU students. I'm 50-something, returning to school after I raised my kids to adulthood. Each of us at FHSU is unique and in unique seasons of life.
> Thanks to the team that put this together! It takes time for a resource such as T2T to take flight, so be patient and thanks again!"

This quote is representative of so many of our online students. We can't assume they, unlike our on-campus students, will connect with one another on their own. It takes effort and risk. Therefore, we need to embrace our responsibility, as a university community, to provide our online students with multiple channels through which they can connect with one another. While this recommendation's current focus is on connections within courses, we must also think more broadly about how projects like Tiger-2-Tiger can be used to connect our students outside the virtual classroom.

In light of the favorable outcomes achieved by Tiger-2-Tiger, there are ongoing endeavors to establish communities centered around programs utilizing the InScribe platform, which served as the foundation for Tiger-2-Tiger. The Speech and Language Pathology department is currently developing a community aimed at fostering connections among online students who have enrolled in their newly introduced certificate program. Likewise, the Teacher Education program has recently established a community dedicated to student teachers. Although these initiatives are still in their nascent stages, they represent a promising trend in facilitating student-to-student interactions based on program affiliations. Similar to Tiger-2-Tiger, students will have the autonomy to determine the manner in which they engage with one another within a low-risk environment. However, unlike Tiger-2-Tiger, these students will share more commonalities and possess compatible academic objectives.

We have also implemented InSpace, a synchronous environment for students to meet and connect, as a way to facilitate engaging online student orientations. First deployed in Spring 2023, InSpace as a platform for FHSU Online orientations has shown great potential and has received significant positive feedback from our online students. The platform introduces FHSU Online students to an engaged environment where they can connect with one another in real-time, as well as make connections with student support services. Based on its initial success, FHSU Online is in the process of hosting its first ever Open House in Spring 2024 using InSpace. Academic departments have been recruited to utilize the space and design their rooms to best engage potential students. These represent promising opportunities to facilitate student-to-student interactions in informal learning environments.

Recommendation 3 Action Steps:

1. Expand on the success of Tiger-2-Tiger by the creation and promotion of:
    - Program-Specific Communities: Utilize InScribe to create communities for students within academic programs.
    - Open House Events: Host online open houses using InSpace for prospective students to connect with current students and faculty.
    - Online Orientations: Leverage InSpace for engaging online student orientations, facilitating real-time interaction and connection with support services.
2. Promote and support student organizations use of InSpace.

    - Student Government: Promote InSpace use for student government meetings and town halls.
    - Co-curricular Activities: Promote and support InSpace for co-curricular activities as defined by HLC (e.g. virtual SACAD).
3. Online 24/7 Blackboard Support: Provide both live and chatbot assistance for Blackboard issues:
    - Blackboard Tier 1 support weekends and 4:30 pm - 8 am weekdays.
    - Premium chatbot.

Investments and Budget:

- **Technology:**
    - **InScribe:** Platform for communities that can foster peer-to-peer interaction, collaboration, and a sense of belonging among students with shared academic interests. $35,000 (currently supported by Strategic Plan Goal 2.6)
    - **InSpace:** Platform for dedicated online communities and interactive engagement features that can improve student awareness and utilization of university resources while facilitating collaboration. $10,000 (currently supported through Innovation and Entrepreneurship grant)
    - **Blackboard Support 24/7:** Year One - Tier 1 support, premium Chatbot and initial set up $54,954. Year Two - Tier 1 Support and Premium Chatbot $31,546.

- **Additional Considerations:**
    - **Training and Support:** Providing adequate training and support to faculty, staff, and students on effectively utilizing InSpace functionalities is crucial for maximizing its impact on fostering student connections.

    - **Community Management:** Develop a strategy for community management within InSpace to ensure a positive and productive online environment for students, faculty, and staff. This might involve assigning moderators, student ambassadors, or establishing community guidelines. (Estimated annual cost for graduate research assistant: $10,000)

Total Estimated First Year Budget: $110,000

Recommendation 4: Promote a Digital Competence Framework for Faculty

A strategy at an institutional level to improve digital competencies for university teaching

The success of the Strategic Plan Goal 2 recommendations in this digital master plan will depend largely on faculty and staff support. Recommendation 2, in particular, will rely on FHSU faculty buy-in and expertise. We know that there are both workload and change management challenges associated with this process. Which is why much of the recommendation 2 focus is on streamlining the teaching and learning ecosystem and supporting a consistent approach to the design of course shells within Blackboard Ultra.

However, we recognize that making improvements to the teaching and learning ecosystem, alone, will not be sufficient to support the changes that are required. Neither will a concerted effort by instructional design staff be effective without the support and buy-in from teaching faculty.

In today's digital world, technology permeates many aspects of our interactions, creativity, and daily work in education. The COVID-19 pandemic has accelerated the need to adapt quickly to remote teaching and learning, highlighting the importance of digital competencies. As we become more adept in this digital age, we aim to harness the advantages and effective ways of working that technology offers.

To achieve this, we propose using the Digital Competence Framework for Educators (DigCompEdu) as a guiding framework. The DigCompEdu framework provides a common language and structure to assess and compare opportunities for future professional development in digital competencies. It takes a straightforward approach, identifying six broad areas of activity relevant to teaching in a digital context, each divided into specific competences.

The six areas of competence in the DigCompEdu framework are:

1. Professional Engagement: Using digital technologies for communication, collaboration, and professional development.

2. Digital Resources: Effective and responsible use, creation, evaluation, and sharing of digital resources.
3. Teaching and Learning: Managing and using different digital methods and tools in teaching and learning.
4. Assessment: Applying different digital methods and tools in assessment and feedback.
5. Empowering Learners: Using digital technologies to empower students and make the learning environment more accessible, personalized, inclusive, and student-centered.
6. Facilitating Learners' Digital Competence: Supporting and facilitating students in developing their digital competencies.

By adopting the DigCompEdu framework, we aim to provide our faculty with a systematic approach to develop their digital competencies and foster digital literacy among our students. The framework offers six proficiency levels for each competence, allowing educators to assess their progress and identify areas for future development. The framework's adaptability will allow us to tailor it to our specific needs and context as a regional comprehensive university serving a diverse student population.

By incorporating this strategy into our digital master plan, we reaffirm our commitment to providing our faculty with the support and resources they need to effectively teach in a digital age. Ultimately, this will enhance the quality of our online learning ecosystem and better serve the needs of our digital learners.

Aligning the Need for an Institutional Digital Competency Strategy with Faculty Feedback

The feedback received from consultant-conducted faculty interviews and focus groups highlights the pressing need for an institutional digital competency strategy. By addressing the concerns and challenges expressed by faculty members, we can create a more supportive and effective environment for online teaching and learning.

1. Confusing number of available teaching and learning tools:

The DigCompEdu framework can help streamline and clarify the selection and use of digital tools by providing a structured approach to evaluating and implementing technologies based on specific competencies and learning objectives. By aligning tool adoption with the framework, faculty can make more informed decisions and avoid overwhelming tool options.

2. Faculty feeling overloaded:

Implementing a digital competency strategy based on the DigCompEdu framework can help alleviate faculty workload by providing a clear roadmap for professional development and tool integration. By focusing on key competencies and proficiency levels, faculty can prioritize their efforts and gradually build their digital skills without feeling overwhelmed.

3. Varying faculty attitudes regarding teaching online:

The DigCompEdu framework acknowledges that educators may have different levels of digital competency and provides a pathway for growth. By offering targeted support and resources aligned with the framework, we can meet faculty where they are and help them develop the skills and confidence needed to embrace online teaching, regardless of their initial attitudes.

4. Change/adoption fatigue:

Introducing the DigCompEdu framework as a consistent, long-term strategy can help mitigate change fatigue by providing a stable foundation for digital competency development. By communicating the framework's benefits and involving faculty in its implementation, we can foster a sense of ownership and engagement rather than imposing another top-down change.

5. Time constraints and the need for peer mentorship:

Implementing a digital competency strategy aligned with the DigCompEdu framework can help address faculty's time constraints by providing a structured approach to professional development. By establishing a peer mentorship program within the framework, faculty can receive targeted support and guidance from colleagues who have already developed expertise in online teaching.

By aligning our institutional digital competency strategy with the DigCompEdu framework and addressing the specific concerns raised by faculty, we can create a more supportive and empowering environment for online teaching and learning. This approach will help faculty build the skills and confidence needed to effectively teach in a digital age while also ensuring a more consistent and high-quality online learning experience for our students.

Objective: Collaborate with faculty to develop digital competencies aligned with the DigCompEdu framework, empowering them to effectively leverage technology in their online courses. Foster an inclusive and equitable learning environment that ensures access to high-quality learning experiences for all students. Create a culture of peer learning and support to facilitate faculty adoption of inclusive teaching practices, culturally responsive pedagogy, and digital literacy skills.

Strategy: Implement and cultivate a faculty peer community that enhances innovation, collaboration, and the development of digital competencies as outlined in the DigCompEdu framework. Provide targeted support and resources to increase faculty comfort and proficiency in using educational technologies, improving online course design, and adopting pedagogical approaches that promote student success and engagement.

Benchmark:

- Design and implement a comprehensive professional development program aligned with the DigCompEdu framework by Year One. Ensure the program provides resources, support, and collaboration opportunities for faculty to develop digital competencies across the six areas identified in the framework.
- Establish and promote regularly published multimedia resources built for and by faculty on innovative and effective online teaching techniques that align with the DigCompEdu framework. These resources should cover topics such as AI use in the classroom, Social Belonging, and best practices for each of the six DigCompEdu competence areas.

- Identify and support the adoption of the faculty community by peer champions who demonstrate proficiency in the DigCompEdu competencies by Year One. These peer

champions will serve as mentors and advocates for the digital competency strategy, providing guidance and support to colleagues in their professional development journey.

- Assess faculty progress in developing digital competencies using the DigCompEdu proficiency levels and self-assessment tools. Use this data to identify areas for improvement, inform future professional development offerings, and measure the impact of the digital competency strategy on faculty skills and confidence in online teaching.

- Evaluate the impact of the digital competency strategy on student learning outcomes, engagement, and satisfaction in online courses. Use this data to demonstrate the effectiveness of the strategy and make data-driven decisions for continuous improvement, ensuring that the strategy remains aligned with the evolving needs of faculty and students.

Recommendation 4 Action Steps:

1. DigCompEdu-Aligned Professional Development Program:

- Design and establish a comprehensive professional development program aligned with the DigCompEdu framework, covering the six key areas of digital competence for educators.
- Integrate the DigCompEdu framework and resources into TILT 101, 201, 301 courses, and the "Building Bridges" Workshop.
- Promote the DigCompEdu-aligned professional development program to all faculty, including adjuncts, through various channels, including the institutional website, learning management system, and faculty communication channels, to ensure wide accessibility and engagement.

2. Faculty Learning Community:

- Design and establish an InScribe community for faculty to share their journey as they identify their strengths and weaknesses with regard to their digital competencies and work to collaborate and support one another.

- "DigCompEdu Mentors": Identify and train a group of faculty mentors who have demonstrated proficiency in the DigCompEdu competencies to support colleagues in developing their digital skills and adopting effective online teaching practices.

3. Incentivize Digital Competency Development:

- Collaborate with institutional leadership to integrate the attainment of DigCompEdu proficiency levels into faculty evaluation and promotion criteria.
- Offer targeted professional development opportunities and resources aligned with the DigCompEdu framework to support faculty in advancing their digital competencies.
- Recognize and celebrate faculty achievements in developing digital competencies and implementing innovative online teaching practices aligned with the DigCompEdu framework.

4. Continuous Evaluation and Improvement:

- Regularly assess faculty progress in developing digital competencies using the DigCompEdu proficiency levels and self-assessment tools.
- Gather feedback from faculty on the effectiveness of the professional development program, workshops, and resources in supporting their growth in digital competencies.
- Use the assessment data and faculty feedback to inform iterative improvements to the DigCompEdu-aligned initiatives, ensuring they remain responsive to faculty needs and aligned with institutional goals for online teaching and learning excellence.

Investments and Budget:

- **Personnel:**
    - Allocate time for existing "Online Teaching Mentors" to dedicate to supporting colleagues (absorbed within existing roles).
    - Consider allocating a portion of a staff member's time to co-facilitate and moderate the faculty learning community within Blackboard (estimated annual cost: $[?]).
- **Technology and Resources:**
    - We are exploring the possibility of working with Innovative Educators, the group

we worked with to build the Online Student Success platform, to build a hub for DigCompEdu resources (estimated annual cost: $9,995).

    - Leverage our current OLC membership and promote the availability of OLC expertise and resources. Curate DigCompEdu aligned workshops and provide faculty the opportunity to attend workshops of interest to them. (estimated cost for 70 individual ~1 wk faculty workshops: $9800)

- **Incentives:**
    - Develop a plan for recognizing and rewarding faculty efforts in technology adoption and innovation through existing funding mechanisms (absorbed within existing budgets).

- **Total Estimated First Year Budget: $29,795**

Recommendation 5: Streamline Communication for Online Learning Success

The entirety of the FHSU Strategic Plan is designed to support Fort Hays State University and the success of our students. Therefore, it is essential that it is perceived as an agreed upon set of objectives and strategies that will lead to that success. A comprehensive communication plan has already been developed for the Strategic Plan but the complexities of the interconnections between various elements of the plan as well as external influences upon the plan are sometimes difficult to conceptualize. Without that understanding, not only does the *why* of these strategies get lost, but also lost are opportunities for faculty and staff to contribute meaningfully to the essential work of the plan.

Objective: Facilitating a comprehensive communication plan to support the university-wide culture shift that embraces the recommendations in the FHSU Strategic Plan, the Provost's Three Priorities, the NISS Playbook, and the FHSU Digital Master Plan. Provide clear and accessible information about digital learning resources, support services, and expectations related to online learning, promoting equity and reducing potential confusion or barriers for students and faculty.

Strategies:

- Increased student and faculty awareness and understanding of online learning resources and expectations.
- Reduced confusion and frustration for online learners and faculty.
- Enhanced alignment between strategic initiatives and student success goals.

Benchmark:

- Design and deploy a dashboard-like website that communicates the alignment between the strategic plan, the digital master plan, the Provost's Three Priorities, and the NISS Playbook by Year One.

According to the Anthology consultants, "by far the most common theme uncovered in our work at FHSU is confusion regarding communications processes and channels. This confusion was expressed by students, faculty, and staff. This finding goes beyond the purview of our report; however, it is important to address here as it relates to many of our recommendations."

As is common in so many complex organizations, improving communications at all levels and across all stakeholders is foundational for organizational growth and success. This is certainly true of FHSU, where this kind of communications audit, policy alignment, and digital tool guidance can contribute to all of the goals of the FHSU Strategic Plan. These goals inherently represent change management projects. There is no more important success component to change management than improving communications.

In order to facilitate this shift it is essential for FHSU to develop a coherent and consistent vision for student success, have a shared understanding of what student success means for the FHSU community, and the ability to measure the progress of FHSU's student success initiatives. TILT is currently developing an onboarding and adoption plan, along with a comprehensive communication plan to increase awareness and adoption of the technologies that are currently incorporated in the teaching and learning ecosystem. We believe that a better understanding of the technologies will help us build opportunities for students to strengthen their connections with content, faculty, and other students.

The NISS Playbook emphasizes the importance of communication strategies such as:

1. **Ensure that leadership communicates clear and unwavering buy-in**. Transformative change is never easy. It requires coordination and, at times, sacrifice across multiple units. In short, it requires leadership. The FHSU community must not only see that the President, the Provost, the Cabinet, and the deans support the changes outlined in this Playbook, but that leadership will accept nothing less than their successful implementation.

2. **Publicly and regularly connect the Playbook recommendations to your Strategic Plan** The FHSU community has developed and embraced an excellent Strategic Plan which prioritizes student success and equity. This Playbook has intentionally built a set of recommendations designed to operationalize critical components of your Strategic Plan. To reject the steps outlined in this Playbook is, in effect, to reject implementing Fort Hays State's Strategic Plan. Don't hesitate to make this point clear to campus stakeholders.

There also needs to be a broader awareness of how the FHSU Strategic Plan, the NISS Playbook, and the digital master plan relate to our mission and our vision. It is also important to be able to communicate that these are not separate and distinct strategy streams, but are all interrelated.

Recommendation 5 Action Steps:

1. **Develop a comprehensive communication plan to:**
    - **Articulate Vision:** Clearly define the university's vision for student success in online learning.
    - **Align Messages:** Ensure consistent messaging across all communication channels regarding strategic initiatives.
    - **Target Audiences:** Disseminate information through appropriate channels to reach specific student populations effectively.

Investments and Budget:

- Leverage existing communication staff and resources.
- Consider developing a centralized online learning resource hub to house all relevant information (absorbed within existing website development budgets).

Conclusion

The FHSU Digital Master Plan extends the university's physical master plan to strategically improve online learning ecosystems and student success. It aims to provide a high-level vision and set of recommendations to guide the institution's development of a robust, integrated virtual environment over the next 3-5 years. Motivated by pandemic-driven awareness of disparities between modalities, the plan focuses on developing robust digital systems facilitating meaningful student interactions.

While FHSU has a strong strategic plan and student success initiatives, this project addresses the unique needs of virtual learners. It aligns with, but does not replace, existing efforts. It serves as a guidepost for the direction FHSU needs to head while allowing flexibility to adapt to evolving internal and external realities.

Insights were gathered through the Plan of Action. A summary of the five recommendations include:

1. Implementing real-time tracking of quantifiable student success metrics to assure accountability.
2. Standardizing online course structures for consistent student experiences.
3. Providing intentional opportunities for student connections inside and outside courses.
4. Supporting faculty adoption of educational technology through a culture of peer learning.
5. Improving institutional communication channels across stakeholders.

In summary, this digital master plan outlines targeted strategies to elevate the quality of FHSU's online ecosystem. The digital master plan extends the university's physical master plan to strategically improve online learning ecosystems and student success. Motivated by pandemic-driven awareness of disparities between modalities, the plan focuses on developing robust digital systems facilitating meaningful student interactions. This project addresses the unique needs of virtual learners. The plan articulates institutional needs and desired capabilities at a broad level. It provides directional guidance to inform critical investments and initiatives.

But turning these recommendations into reality will require alignment with the university strategic plan and other ongoing initiatives as well as extensive requirements gathering, budgeting, and multi-stakeholder decision making beyond the scope of this document. However, by incorporating these data-informed recommendations focused on the online student experience into the university strategic plan, FHSU can continue to be regarded as a high-quality provider of affordable online education amidst growing market competition. Implementing this plan will strengthen the university's capacity to adapt and respond to future needs, sustaining our competitive edge over time.

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Glossary of terms

1. **Teaching and Learning Ecosystem:** The technologically enabled system that allows students and faculty to engage in the teaching and learning process at a distance. The ecosystem includes, at a minimum, technologies that help facilitate interactions between students and content, students and instructors, and students and students.
2. **OSQCR**: OSCQR stands for Open SUNY Course Quality Review. The rubric and the online course review process are implemented as a professional development exercise designed to guide online faculty to use research-based effective practices and standards to improve the quality, effectiveness, and efficiency of their online course design. FHSU TILT uses the OSQCR to ensure the quality of our online course development.
3. **Regular Substantive Interaction (RSI):** RSI compliance is the legal federal requirement that distinguishes the status of courses between distance education and correspondence courses. As stipulated by the U.S. Department of Education Regular Substantive Interactions (RSI) refers to the ongoing interactions between instructors and students that help support student learning and engagement in an online course.
4. **Community of Inquiry:** The Community of Inquiry (CoI) framework proposes that successful online learning experiences depend on the development of three interdependent elements; 1) Teaching Presence, 2) Cognitive Presence, and 3) Social Presence (Garrison, Anderson, & Archer, 1999). Key goals of the CoI framework include fostering trust and belonging, advancing understanding through collaborative inquiry, and supporting higher-order thinking skills.
5. **Course Archetypes:** The course archetype model developed by John Whitmer (2016) was designed to look at levels of interactions within Blackboard courses. Five course archetypes are described; these are 1) Complementary, 2) Supplementary, 3) Evaluative, 4) Social, and 5) Holistic.
6. **Interaction Theory:** The Interaction Theory presented by Moore (1989) describes three types of interaction in a course; 1) student-to-content, 2) student-to-instructor, and 3) student-to-student.
7. **Stewards of Place**: One of FHSU's responsibilities as *Stewards of Place* is to support Kansas students who come to us for an accessible education that will provide them

opportunities for upward mobility that will help lift Kansas communities. This is part of our responsibility as a regional comprehensive institution and is included in Provost Arnsdorf's second priority, *Focused Efforts on Community Engagement*.

8. **Learning Management System:** A learning management system (LMS) is a software application for the administration and delivery of courses. At FHSU, our LMS is Blackboard.
9. **Transformational Student:** A transformational student is a learner who has entered their educational journey with the desire to improve their life. They are typically older than traditional college age students, attend part-time, work full time, are financially independent, have family responsibilities, and are 2-3 times more likely than traditional college age students to leave school without completing a program or degree.
10. **Transactional Student:** A transactional student is characterized as one who approaches education as a transaction or exchange, and doesn't require our motivational support or encouragement. While some of our students can be characterized this way, it is essential to focus on the students who are hoping for a more transformation experience.