Front End Analysis of Holo Holo Outreach College

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I certify that I have contributed 33.33% of the effort to the conceptualization, information

collection and analysis, and writing of this paper. If asked, I will be able to succinctly

describe any portion of the paper. I understand that I am responsible for all of the

contents and will be evaluated for the total project.

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Abstract

Maikaʻi University students with special needs and diverse learning styles are not receiving instructional accommodations from their professors. They are not succeeding in their courses and are not graduating on time. This is problematic because these students will likely become unmotivated, non-contributing members of society. The university must honor its mission to create an equitable learning environment as federal and state funding, accreditation, and most importantly, students, all depend on it.

A systems approach was utilized to determine how best to produce the outcomes of graduating students with special needs and diverse learning styles. A needs assessment revealed that Maikaʻi University does not require its professors to be formally trained in differentiated instructional design and development. Only 15% of university professors meet this standard, with only 10% of students graduating on time.

Maikaʻi University must implement new policies in order to achieve the outcomes. A change analysis revealed the university president as the authoritative figure to promote changes to the system. Changes include, mandating professors to receive professional development and training in differentiated instructional design and methods, initiate an incentives and rewards program to encourage buy-in, a technology plan to update assistive technology and instructional resources, and further institutionalize Universal Design for Learning requirements.

Much of these policies will be disseminated and diffused through the Holo Holo Outreach College system. Trainers at the college will be responsible for training university professors on instructional design methodologies, assistive technologies, and new federal and state laws that impact persons with disabilities and special needs.

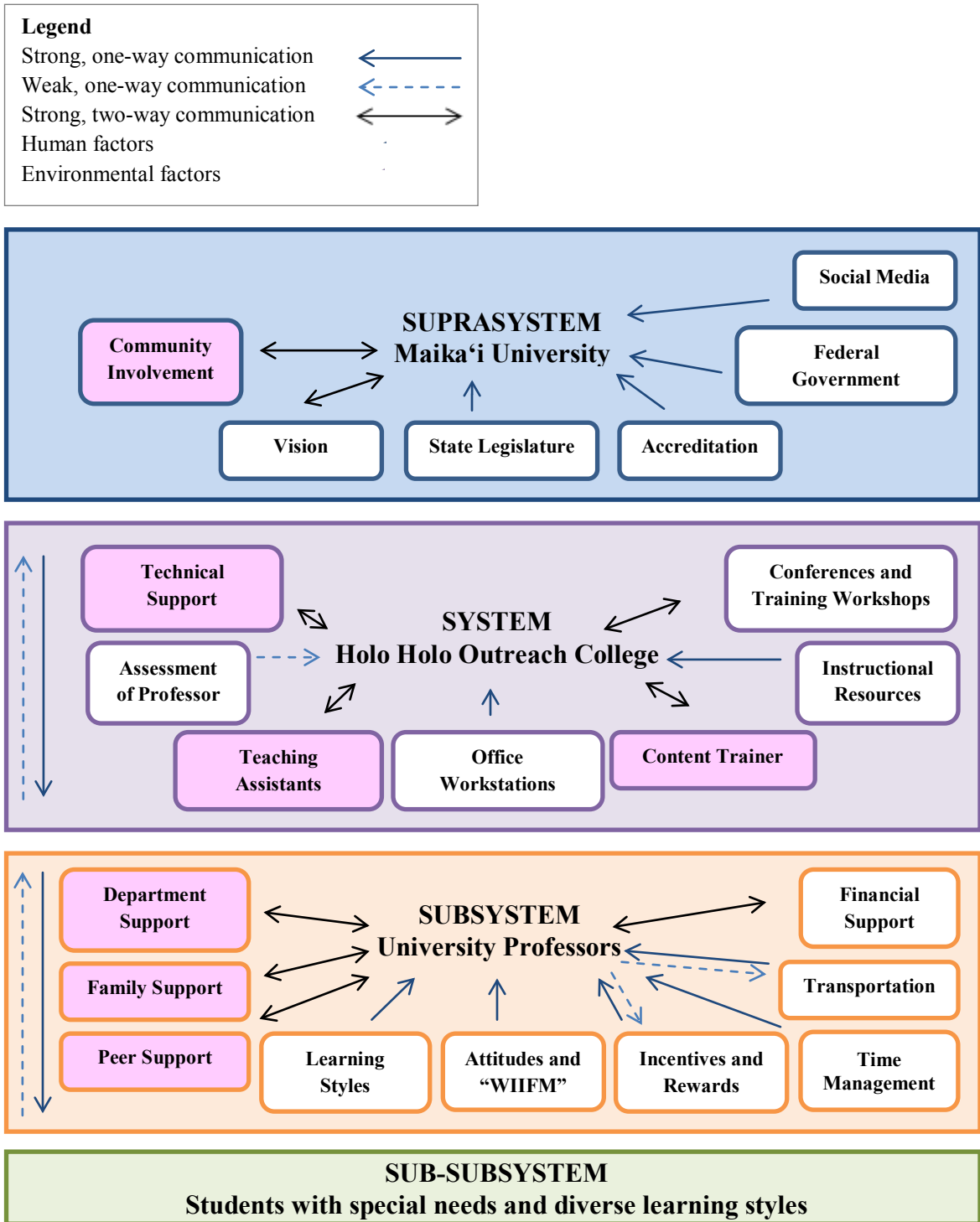# TABLE OF CONTENTS

LIST OF FIGURES

Figure 1. Systems analysis chart of Holo Holo Outreach College.

SYSTEM ANALYSIS

Introduction

Maikaʻi University is located on the island of Akamai and serves about 23,000 undergraduate, graduate, and doctoral students. Students come from a diverse range of learning styles and ethnic, cultural, and economic backgrounds. With such a variety of students, Maikaʻi University finds it extremely important to provide a learning environment that is equitable. Every student is given a fair and equal opportunity to grow, become successful, and to reach their maximum potential by pursuing higher education at Maikaʻi University.

The Holo Holo Outreach College (HHO) is a valuable system within Maikaʻi University. The college provides adult courses to serve all learners, including university students, staff, professors, and adult professionals from the community, through the use of adaptive, innovative, and accessible resources. Part of the vision at Maikaʻi University is to reach all of its learners, including students with diverse learning styles and special needs. In accomplishing this vision, trainers at HHO play an integral role.

HHO strives to advance and enhance their training by adapting and modifying their instructional methods. Their hope is to share their teaching pedagogy and methods with university professors to assist them in their instruction of university students. As Maikaʻi University strives to accomplish its vision, the quality of education will improve and benefit everyone in the Akamai society.

Suprasystem – Maikaʻi University

Maikaʻi University has many environmental factors that impact its operations, which impacts the system of the HHO and the subsystem of university professors, as

shown in *Figure 1*. Some key factors to be discussed are: 1) the federal government, 2)

community involvement, 3) the state legislature, 4) accreditation, 5) social media, and 6)

vision.

Federal Government. The federal government plays a crucial role in how

Maikaʻi University runs its operations. Any new laws or amendments set by the federal

government will have an impact on Maikaʻi University's strategic planning, procedures,

and policies. Because the university receives funding from the government, it must

comply. Such changes will directly affect both its employees and its student body. It is

typically a one-way relationship where the university is not able to challenge federal laws

and will only abide by them. For example, the government enacted the Rehabilitation

Act in 1973. Every few years, new amendments are made to the act that further

addresses the needs of individuals with disabilities, such as Section 508, which requires

that all federal agencies ensure any electronic and information technology is accessible to

individuals with disabilities. The university has a responsibility to ensure that Section

508 is applied to its technology infrastructure.

Community Involvement. Since the university receives funding from the federal

government in order to run its operations, it must ensure that all related university

infrastructure and policies, as well as, personnel are compliant with government rules and

regulations. Otherwise, individuals with disabilities, students and the community at large

may file grievances against the university, which may result in the loss of federal support

and the possible release of non-compliant personnel. Many federal laws stem from the

interests of the nation, and by way of community involvement, such as public forums like

the Board of Education, teachers unions, commissions on disabilities, and other special

interest groups. Feedback from the community is necessary to know if institutions are abiding by the laws or not. Public opinion is valued by Maikaʻi University because it's very important in building a good reputation. The last thing a university needs is a bad one.

State Legislature. The state legislature is also responsible for creating laws that best represent the interests of its citizens, as well as, relaying any federal mandates. Here, bills are most often proposed by advocacy groups and analyzed and debated. To become official, however, advocacy groups must register with the Secretary of State. One such advocacy group is the Hawaii Disability Rights Center, which was established to carry out federal mandates set by Congress that created a nationwide Protection and Advocacy and the Bill of Rights Act of 1975. Various Maikaʻi University programs receive federal funding through state agency channels, such as the Department of Education and the Department of Health and Human Services. The university must ensure that programs comply with task orders set by both the state and the federal government or risk losing their funding and support.

Accreditation. A university that is compliant with government and state mandates is also a university that is generally in compliance with accreditation standards as well. Accreditation is a measure of quality. It helps to assure both prospective and continuing students that they are receiving a high quality education at their chosen institution that meets certain standards. Quality assurance is usually conducted by private organizations outside of the university through site visits and interviews. A few examples of accrediting organizations include the Western Association of Schools and Colleges (WASC) and the Distance Education and Training Council (DETC). However,

in some foreign countries, the government or ministry of education is the accrediting body.

It is extremely important for educational institutions to be accredited because it influences a student's choice of which institution to attend. Accreditation, similar to public feedback, is important in helping to build a positive image of Maikaʻi University.

Vision. The federal government, the state legislature, accreditation, and community involvement all come together to help Maikaʻi University to shape its vision, or mission statement. The vision is a collective statement that has been drafted by the Board of Regents that explains the purpose of Maikaʻi University. The vision is as follows:

Our vision is to create an educational environment that is equitable, innovative, participatory, and accessible to all learners regardless of race, gender, sexual orientation, class, or disability. Every human has the right to education and we strive to ensure that each student advances in their knowledge and understanding in order to better serve their community.

Social Media. Maikaʻi University must maintain a good reputation. It must live up to its vision statement of being fair and equitable. A university that is consistent with its vision statement and complies with government, state, and accreditation standards is a university that will generally be in the good eye of the public. Word of mouth, surveys and evaluation tools, news and social networking are just some aspects of social media that will directly affect the university's image as well. Facebook, Myspace, Wall, Twitter, and blog spaces are examples of other, more contemporary social media tools.   Maikaʻi University has very little control over what the public writes or says about it; however it

does have much control over how it runs its university operations to ensure a fair and equitable learning space.

System – Holo Holo Outreach College

HHO has many environmental factors that impact its operations, which also affects the subsystem of university professors. A few key factors to be discussed in the system of HHO include: 1) content trainers, 2) assessment of professor, 3) instructional resources, 4) conferences and workshops, 5) teaching assistants, and 6) technical support.

Content Trainers. HHO plays an important role in helping to shape university professors to comply with the vision of Maikaʻi University. Content trainers provide instructional resources to improve the role of university professors.

Assessment of Professor. In order to build a curriculum that is suitable to the diverse learning styles of university professors, HHO trainers will be assessing the abilities of professors to learn new materials. Content trainers will adjust their instructional resources accordingly. This includes examining cognitive, psychomotor, and affective learning styles. Creating an environment that is conducive to learning will likely to motivate university professors to employ similar techniques into their own instruction.

Instructional Resources. HHO offers flexible programming to include evening, weekend, and distance education courses to accommodate the time limitations of working professionals. The content trainers use a variety of instructional resources. One such resource is distance education, such as web conferencing or course management systems, like WebCT, to deliver instructional content. Trainers have access to well-equipped classroom facilities to conduct face-to-face instruction, as well as, a resource library,

computer workstations, and meeting rooms. Professors are welcome to reserve the facilities and training resources, such as textbooks and manuals. The flexibility and accessibility of HHO facilities and resources ensures that professors are prepared with the necessary tools that are conducive to their professional development.

Conferences and Workshops. Other resources available through HHO that professors, as well as, even trainers, may take advantage of are professional conferences and workshops; however, attendance does not necessarily guarantee any type of course credit. Conferences and workshops may be hosted by HHO or may be off-site. They will typically consist of discussion panels, best practices, and content experts from various sectors of society, including the public and private business sectors and federal and state. They are informative spaces where current trends and relevant issues are discussed and networks are made. Exposure to a variety of learning methods and opportunities keeps professors interested in HHO course topics.

Teaching Assistants. It is integral that teaching assistants are also recognized in the HHO system. Teaching assistants assist the content trainers with answering any questions that professors may have about HHO course content. This ensures that all inquiries are answered in a timely manner. Their role is not to replace the content trainers, but it is complementary. They also assist with grading, advising, and tutoring.

Technical Support. Technical support is crucial in maintaining the operations of HHO facilities and technology equipment, especially for courses that are delivered via distance education modalities. There must be reliable technicians ready to assist with troubleshooting so that classes may proceed.

Subsystem – University Professors

In the pursuit to maintain an adaptive, innovative, and accessible learning environment for all Maikaʻi University students, university professors are responsible for creating an equal learning opportunity for all students. Their advancement of instructional strategies is possible through continued professional development offered at HHO. However, there are functional and human factors that may affect professors' participation. These factors include: 1) department support, 2) family support, 3) peer support, 4) financial support, 5) time management, 6) transportation, 7) attitudes (WIIFM) and 8) incentives and rewards.

University professors have families, friends, and supervisors. Respectively, professors have duties and responsibilities for each group and must meet certain expectations. Professors require strong support and encouragement from human factors when they expend additional time and energy outside of their regular work and personal schedules. Therefore, professors must maintain good communication with their employing department, their families, and peers.

Department Support. The employing department of professors must communicate its desired outcomes and expectations. The department must ensure that professors are meeting instructional goals and objectives, especially if Maikaʻi University is funding for professional development. Simultaneously, professors must communicate their needs, such as leaving the office early to attend development courses or requesting a leave of absence to attend a week-long conference. They may be required to demonstrate and share learned content upon request by their department. For example, if the content

is teaching diverse learners, do professors provide examples of newly learned teaching methods and techniques?

Family Support. Communication between professors and their family is equally important. For example, professors may have children or may be caregivers. Family support and their understanding are critical in completing professional development. It requires assistance from spouses and extended family networks to look after their children and elders, especially when they may be studying extensively, collaborating with peers, or attending conferences and workshops.

Peer Support. Peer support is also necessary because it promotes shared knowledge and networking. Particularly on a professional level, peer support from within their department, or the larger university, may introduce different perspectives that may impact professors' professional development. Peer collaboration may enlighten any issues professors may be experiencing within the professional development program. Such professional collaboration among university colleagues helps to maintain a collective and unified university, college, and department.

Financial Support. The availability of financial support usually depends on professors. If professors are willing to apply for financial support to continue their professional development, they must maintain and demonstrate good academic standing. Financial support encourages and enables professors to receive professional development from HHO. The income of professors alone is usually not enough to supplement the costs of attending professional development courses. Without appropriate funding or financial support from other resources, professors may have difficulties fulfilling university and department requirements. This requires professors to initiate and to

communicate a financial need to their department. The department in turn will seek appropriate funding from Maikaʻi University and other external funding sources. Additionally, the university and the department must communicate the types of funds that are available for professional development, such as scholarships and grants.

Time Management. As with financial support, successful time management is critical for professors since the majority of them already have full-time and often, demanding jobs. Professors must be able to juggle their work, as well as, their personal life commitments at the same time that they are attending courses at HHO. Often, professors will need to leave their work or family environments early in order to arrive to class on time or to meet with group members.

Transportation. Transportation also plays heavily since professors must travel to and from work and professional development courses. They must be able to judge time to utilize appropriate and available transportation options in order to make their appointments.

Other functional factors exist for professors, such as incentives and rewards, attitudes, and learning styles. All of these exhibit dependence between professors and HHO. For example, HHO may advertise and campaign compliance issues and whether they are being met by professors. The advertisement addresses Maikaʻi University's attitudes, serving as positive reinforcements for university professors to take initiative and enroll in professional development courses. The advertisement may reach more professors if it also includes information on incentives and rewards, delivery methods of the professional development courses, and more of the positive outcomes of training and how they align with Maikaʻi University's mission.

Attitudes (WIIFM). Attitudes are the feelings and emotions professors may have about the idea of pursuing professional development. The hope is that professors will be intrinsically motivated to obtain professional development to enhance their professional portfolio and to seek improved ways to better serve their learning community. On the other hand, there are professors that may ask the question of "What's in it for me?" (WIIFM).

Incentives and Rewards. Professors that are extrinsically motivated by WWIFM require additional incentives and rewards to attend professional development courses. As *Figure 1* indicates, professors are usually not able to negotiate the types of incentives and rewards that they receive. They are more at the discretion of Maikaʻi University or the employing department. Such incentives and rewards may include credits to maintain a teaching position, a course buy-out, or a promotion.

DISSEMINATION AND DIFFUSION

Change Characteristics

The change characteristics of the HHO learning environment are evaluated by targeting at specific individuals or groups of people. They will be categorized as change leaders, gatekeepers, or blockers. Each category of people will have some direct impact on the change process.

Change Leaders

Professional development of university professors is optional. Various individuals see the need for a mandatory professional development program. Change leaders discover the imperfections of the system and seek ways to improve it. There are potentially five change leaders that may help to create a catalyst of change, which include: 1) students and parents, 2) authority figures, such as a department chair, dean, and university administrators, and 3) university professors.

Students would like to see an improvement in their professors' teaching methods. Parents are supportive of their children to succeed in a fair and impartial learning environment. Their efforts become stronger when many students and parents band together with the same concerns to form advocacy groups or commissions. In these ways, student and parents are the strongest agents of change because they are the ones who are committing tuition to attend Maikaʻi University. This tuition can easily be transferred to other universities if students and parents so desire to. Without a student body, there would not be a functional university.

Change leaders are also within Maikaʻi University administration, such as department deans, chairs, and administrative student support staff. They see the need to

better train their professors in order to comply with federal laws concerning the

accommodation of learners with disabilities. They support professional development of

its employees and colleagues and desires to maintain standards set by Maikaʻi University.

The university president is a very strong change leader, whose face and name is

representative of the university's mission. Their duty is to diffuse and promote change

ideas.

Another important and very strong group of change leaders is that of university

professors themselves. It is this group that interacts with students in the classroom the

most. Therefore, it's reasonable to assume that the image that students have of Maikaʻi

University is due largely in part to the quality of instruction that is being received from

their professors. University professors who seek improvements to the system desire to

create, not only a positive image of the university that they represent, but also a positive

image of themselves.

Gate Keepers

A gate keeper is defined as someone who controls access to information or

resources within their domain. A requester must go through the gatekeeper in order to

receive access. The gate keeper has the power to refuse or grant such access, or may set

limitations. The Maikaʻi University system has five potential gate keepers and they are:

1) trainers, 2) technical support, 3) fiscal officers, 4) secretaries, and 5) maintenance staff.

Trainers are responsible for training university professors with standards-based

content; however, trainers may not always provide all the information or the proper

elaborations. To gain full access to the trainers' knowledge, learning professors must be

enthusiastic, interactive, and motivated to seek clarifications.

Technical support is also crucial in the system due to their role of maintaining the technology infrastructure. They offer technical support and help to ensure that all hardware and software are functioning properly for training purposes and maintaining networks for online training. University professors must be respectful when making requests for technical assistance and must not impose unreasonable demands.

Fiscal officers provide daily oversight on how Maikaʻi University spends and manages its budget and funds. Generally, fiscal officers have the authority to approve or deny purchase requisitions. Final decisions are based on the availability of funds and the proper approvals. There must be reasonable justification for the expenses.

Secretaries are often overlooked, but they play an important role as liaisons between authority figures and the rest of the system. Greetings, acknowledgement, recognition, and engaging questions with secretary support staff creates good rapport and may help the requester to obtain the information or resource that is needed.

Additionally, maintenance staff should be acknowledged. They maintain the physical grounds and office spaces at the university. Without their support, the system would become a very unpleasant place to conduct business. Unsanitary conditions, broken and unstable furniture, and other building or utility maintenance issues would be the results of neglectful maintenance staff. Acknowledging their work and presence helps to make them feel appreciated. Providing them with a sense of belonging to the university system motivates them to continue to do their jobs well and on time.

Blockers

Usually blockers are resistant to change with good reasons. According to Ronald G. Havelock (1973), it is best to listen, involve, and incorporate the ideas and suggestions

of those the change will affect. Maikaʻi University has five potential blockers, which are: 1) university professors, 2) parents, 3) peers, 4) technology coordinators, and 5) authority figures, such as department chair, dean, and university administrators.

University professors are responsible for implementing their department's curriculum plan. In addition, they are given the option of receiving training through HHO on strategies that will help to enhance their classroom instruction. Any change in Maikaʻi University policies will impact department policies. The university desires that professors become more accountable for their instruction, to ensure that they are meeting standards, and to align with the mission statement. Unfortunately, some professors either unintentionally neglect to make accommodations to students with learning disabilities, or they may feel that these learners shouldn't be treated any differently from other learners. Either way, their attitudes and actions will affect their student learners and their learning outcomes.

Other parents, such as parents of students with no disabilities and peers, may also be blockers. This group may feel that such instructional changes will hold the entire class behind. Educating this group on the many benefits differentiated instruction and Universal Design for Learning (UDL) requirements may help to earn their buy-in. Maikaʻi University offers many public forums, such as community events, meetings, and public service announcements to the learning community to disseminate information about any university policy changes. These platforms provide opportunities for the public to express concerns and suggestions.

Technology coordinators, or technical support, are also key players and may act as blockers as well. They provide innovative tools and strategies to assist professors and

students. For example, they may need to train professors on how to add closed captioning and scripting to video presentations. They also assist diverse learners and learners with disabilities on how to use various assistive technologies. The university relies on technology coordinators to be up-to-date with UDL requirements. They must also be proponents of UDL. If they are not, coordinators become blockers to change.

Various authority figures within the university system may act as blockers to change. Such figures may include department deans or chairs. They are responsible for ensuring that all university and departmental policies are complied by other department faculty and staff. They must exemplify Maikaʻi University standards and mission. For example, if the dean is not a proponent of change, the dean may not be motivated to enforce any policy changes to instruction or the curriculum. Consequently, professors in this department will not be required to make any instructional changes.

Incorporating Change into the System

In order to implement change into the system, there must be strategies for recruiting change leaders. HHO offers night, weekend, online and flexible class schedules to accommodate the working schedules of Maikaʻi University professors. However, even with flexible scheduling, university professors may still require incentives or rewards to fully buy into a change in their workload. A strategy must be developed to change the attitudes of professors' desire to differentiate their instruction in order to better accommodate their students.

The strategy must also target senior faculty professors who are less likely to adapt to change. Additionally, it must include input from all individuals that may be impacted, such as university professors, trainers, students, maintenance workers, administrative

staff, student services personnel, and secretarial staff. Setting up focus and test groups also helps to provide feedback and evaluation before changes are fully implemented. This helps to expose any problems or issues early in the change process, as well as, provides an overview of expectations. Another component of this includes periodically reviewing the HHO professional development program by Maikaʻi University administration for quality and relevance.

Strategies for Overcoming Blocks to Change

There will be opposition to mandatory professional development. For example, professors who already have a heavy workload and other obligations may feel pressured and overwhelmed with the addition of mandatory professional development. HHO must promote and create a positive image of its professional development program. This must aim at professors, but also other blockers to change. As was mentioned, students, parents, and other university personnel may have reasons for blocking change. Maikaʻi University and HHO must work together to develop creative promotion ideas.

The long term outcomes are university professors receive official recognition, promotions, and possible pay raises for their compliance, as well as, the renegotiation of workload policies. However, change does not happen without a price. For example, university professors must take initiative and invest their time to receive professional development at HHO on new laws and regulations regarding accommodating learners with disabilities and differentiated instructional design. It is critical to continually strengthen communications among university professors, university administration, HHO trainers, and the general public to emphasize the positive outcomes of mandating professional development.

Strategies for Recruiting Change Leaders

Strategies to motivate and encourage university professors to become change agents should be addressed. Professors are responsible for the instruction that their students receive in the classroom. If students are not performing well, professors must be motivated to seek long-term solutions to create better student outcomes. If professors are not motivated, the repercussions could mean that students become unhappy and likely, their family and the entire learning community suffer. University administration must also be change leaders and role models for professors of the mission of a fair and equitable learning environment. The university president must be the exemplifying role model that represents the best interests of Maikaʻi University and the entire learning community. HHO trainers must model after the president in their daily instruction as they are liaisons between the administration and the professors. They will receive instructional guidelines from the university on the appropriate curriculum plan to introduce to university professors.

Other strategies to recruit more change leaders is to advertise or perform community outreach that publicizes the expected improvements to students, parents and the general learning community of Akamai. Some forms of advertising may include postcards, newsletters, web pages, social media tools, public service announcements, and newspaper ads. Reaching out to the community in these ways may motivate individuals to take part in focus and test groups that help to improve university instruction.

Recommendations for Monitoring and Long-Term Maintenance

To monitor and maintain changes for the long-term, HHO must maintain an open-communication and feedback system with the professors and Maikaʻi University.

Professors must be assessed every semester in the training room and in their classroom to determine if training content has been mastered. Additionally, an annual review of how many students have graduated and the number of professors who have completed the training program will be evaluated. The results will be communicated to the professors' employing department, as well as, to university administration. Maika'i University will also compile the data and submit reports to federal and state bodies, as well as, make them publicly available to the learning community.

University administration and trainers at HHO will ensure that the professional development program continues to meet the needs of professors. Trainers will be tasked with updating training curriculum to ensure accuracy and relevancy. In order for trainers to continue duties, external and internal funding must be available to support their salaries. There must also be a continuing allocation to fund the incentives and rewards program of university professors, as well as, ensuring that equipment and facilities are well maintained and up-to-date with current trends in technology.

NEEDS ASSESSMENT

Information and data must be gathered in order to assess the true needs of the system. The data to be collected include:

1. The number or percentage of students with disabilities who graduate and drop out every year.

2. The number or percentage of professors who attend professional training and development.

3. The quantity, quality, and variety of professional training and development opportunities available to professors at HHO.

4. Prior knowledge, attitudes and learning styles of professors.

5. Department and university policies on incentives, rewards, and "buy-in".

6. The university's technology plan or program.

The needs assessment methods that are utilized include, the Critical Incident Technique (CIT), which consists of focus-group discussions, interviews, and surveys; the Fault Tree Analysis (FTA) to identify undesirable events and outcomes that may negatively affect the mission of the system; and the Delphi Technique which identifies the consensus, or the common goals of a group of people in the system. These methods have provided ample data to assist with discerning needs.

Learner Characteristics

Cognitive. Maikaʻi University has 17 different colleges and schools that provides quality education to its learning community on the island of Akamai. Without professors, there would be no knowledge dissemination to students. Maikaʻi University consists of 1,700 professors, where 85% possess a doctoral degree. This signifies to the intellectual

ability to provide qualitative education to students. 75% of the professors are from the

United States and 25% are from other countries. The professors come from highly

academic and research backgrounds. Their contributions to Maikaʻi University include

setting high standards and expectations for their students. Their performance has helped

to distinguish the university as the top 25 of public universities to attend.

Physiological. The population of professors at Maikaʻi University is well-

balanced, both gender-wise and culturally. 55% of the professors are male and 45% are

female. The range of ages is also well proportionate to maintain a variety of

perspectives. From 2009-2010, the university had 28% of their professors ranging in the

age of 30-35 years old, 38% ranging in the age of 36-49, and 34% ranging in the age of

50 and up. University professors come from diverse cultural backgrounds, which include

Chinese, Spanish, White, Hawaiian, Filipino, Japanese, Indian, African American, and

French.

The majority of professors are physically and emotionally healthy. Maikaʻi

University promotes healthy lifestyles by providing professors with reasonable health

insurance packages, psychological counseling services, free gym memberships, and

convenient and healthy food initiatives from Dining Services. The university believes

that a healthy body is a healthy mind. It also encourages professors to balance their

personal and professional lives with regular exercise. In 2009-2010, 75% of the

professors used Maikaʻi University gym facilities.

Affective. The attitudes of Maikaʻi University professors are expected to be

positive towards student learning and development. Expectations include providing a

challenging and fair educational environment, have flexible office hours, and to have a

desire to attain professional development for themselves in order to enhance their portfolios and their classroom instruction. The university has a combination of associate, assistant, and fully-tenured faculty professors, as well as, lecturers and adjunct faculty. There is a good majority of faculty who are on a tenure track position. Having tenure is very important to many professors and it is usually associated with respect and having seniority. To receive tenure, professors must publish a certain amount of articles in popular journals in a year. This is in addition to their teaching workload. Many professors are so focused on achieving tenure that many other duties and responsibilities are often neglected, such as teaching, professional development, and student advising.

Once professors receive tenure, they are usually satisfied with their professional path in academia. They do not desire to invest extra time in professional development because they have already invested it in other processes, such as publishing. The university does not mandate professional development, which it unintentionally reflects a negative attitude towards expanded learning. As a result, professors are not empathetic to the needs of their students. However, there are some professors that have the desire of higher achievement for themselves and their students, but time constraints are an issue. In a recent survey, 60% of Maikaʻi University professors stated that they would be willing to participate on board meetings with the university president, regents, and administration to discuss any important issues that would affect workload and instructional policies, especially if they help to enhance the quality of education at the university.

Social Characteristics. Because Maikaʻi University is located on an island, there are many factors that may impact the ways professors teach and acquire information and

resources, as well as, how they lead their personal daily lifestyles. For example, it is usually expensive to travel to and from Akamai, which limits professional development speakers to travel to the island and for professors to attend conferences off-island.

With a public university like Maikaʻi University, funding can be competitive and limited based on the economic status of the state and country at large. For example, in 2009-2010 there were budget cuts due to the state's economic downturn. This affected the socio-economic status of professors' salaries and the university's funding by the state. With budget cuts, professors were paid less and funding for technology tools, upgrades, and professional development became limited. As the 2010-2011 school year approaches, the university has stabilized and is seeking other means of financial support through grants and other sources of federal funding. Depending on the number of service years and their tenure status, professors at Maikaʻi University average about $80,000 per year.

Supporting professors is integral in maintaining a unified environment within the university. As was stated previously, there is a higher percentage of male professors compared to female professors. This could be due to the role of motherhood that may prevent women from pursuing higher education and an academic profession. The time, commitment, and expectations of becoming a university professor does not always support being a mother and wife. In fact, from the 45% of women professors, 20% are married, and of the 20%, only 5% have children ranging all ages. Of the male professors, 40% are married, and of the 40%, 50% have children ranging all ages. These statistics serve as tools towards understanding time and various life commitments that university

professors may have that impact their professional development and classroom instruction.

Aside from instruction, it is also important that professors maintain social activities in and out of the university setting. Fortunately, Maikaʻi University understands this and encourages faculty picnics, birthdays, holiday events, and other social gatherings. These help to build cohesion, unity, and a stronger sense of community and belonging. 85% of professors attend these functions. This level of social participation helps to indicate that professors are generally positive, collaborative, and healthy. Consequently, this contributes towards a healthy learning and teaching environment.

Performance and Task Analysis

Job functions of Maikaʻi University professors include:

1. Integrate the mission statement of Maikaʻi University into teaching practices.

2. Apply new teaching strategies to better accommodate students with special needs and diverse learning styles. See *Figure 2*.

3. Communicate with colleagues and students.

4. Acquire new knowledge by reading scholarly journals and attend professional conferences.

5. Differentiate instruction to meet the needs of all learners.

6. Instruct undergraduate, graduate, or doctoral students in content of expertise.

7. Prepare lectures and activities for university students.

8. Demonstrate enthusiasm for content being taught.

9. Pursue an area of research to contribute to the learning community of Maikaʻi University.

10. Provide timely feedback to students.

11. Maintain regular office hours.

12. Guide students during research.

13. Participate in university and department board meetings and serving on projects and special committees.

14. Evaluate students work, such as projects, exams and, self-reflections.

15. Assess course each semester.

Job: University Professor Function: Apply new teaching strategies to better accommodate students with special needs and diverse styles.	
Inputs	Outputs
• Attend four professional development workshops per year • Knowledge of student needs • Knowledge of adaptive technology • Collaborate with department and colleagues	• Provide differentiated instruction to better serve students with special needs and diverse learning styles • Understand new ways of incorporating adaptive tools for teaching and learning
Equipment and Resources	Skills, Knowledge, and Attitudes
• HHO professional development trainer • Computer and other technology tools • IT support • Students of the Maikaʻi University • Funding to support professional development workshops	• Apply differentiated instruction • Ability to use adaptive technology tools • Knowledgeable about student needs • Commitment to the Maikaʻi University's vision statement • Enthusiastic about enhancing instruction

Figure 2. Task analysis worksheet.

Tasks

1. Modify instruction to meet the needs of all learners.

2.   Identify specific learning needs or disabilities among students.

3. Access assistive technologies for instruction.

4. Apply multiple technology and adaptive tools and resources to enhance
    student learning.

5. Attend at least four professional development courses per year.

6. Apply new knowledge by incorporating new teaching strategies.

7. Advise teaching assistants to support all learners

8. Maintain collaboration with students.

9. Apply the mission statement of Maikaʻi University within teaching.

Constraints and Resources

Personnel are very important resources yet they can also be constraints if the
university does not utilize the resources appropriately. An open communication and
feedback system is important to ensure cooperation and buy-in. Any university policy
changes must be shared with all who may be impacted.

Additionally, personnel costs must be addressed. HHO must have enough trained
personnel to conduct professional development courses or personnel to maintain facilities
and technology resources, such as IT support to assist HHO trainers, professors, and
students with assistive technology. The university must ensure that is has funds to cover
the costs of salaries and fringe benefits of HHO staff.

The lack of appropriate equipment may also act as a constraint to Maikaʻi
University's new instructional policies. The university will require more equipment and
software to accommodate the variety of delivery methods needed for training. In addition

of a new technology plan, its equipment must be updated on a yearly basis, or as needed.

Purchasing equipment and software licenses become very costly. The university must

include a line item that is reflective of its equipment needs. Maintaining federal and state

funding ensures that this need is supported.

It is important to note that many of the constraints and resources are centered on

funding. The university needs to maintain federal and state funding resources in order to

continue its operations. Not having enough funding for materials, supplies, salaries,

fringe benefits, and other program costs could be a significant constraint. With enough

resources, Maikaʻi University will have peace of mind to implement modifications to the

system as necessary for the benefit of its learning community.

Discrepancies

Due to a change in federal requirements, the university must restructure its

university and instructional policies. The needs assessment provides data of the current

state of the system and it is also exposes the gaps, which allows outcomes to be identified

and targeted.

Presently, there is not a standardized policy of professional development or a

technology plan for university professors. Maikaʻi University professors are heavily

individualistic. Although there is an overall Maikaʻi University mission, professors seem

not to align themselves with it. *Figure 3* indicates a high drop-out rate of 90% of those

students who require additional learning assistance and are not graduating on time. There

is not a convenient system that allows professors to access instructional resources, such

as technology, facilities, personnel, and variable learning content to address the needs of

students with learning disabilities.

The professional development program at HHO does not have the proper curriculum to meet the university's mandated federal requirements. In the current state, there are very few professional development courses, if any, that are available to professors. The HHO environment is also not flexible to the schedules of university professors. Policies on instructional standards are not established or defined. Therefore, many professors are not required to differentiate their instruction nor are they aware of the opportunities to enhance their instructional methods. Additionally, student assessment is not linked to methods of instruction. This makes it difficult to hold professors accountable for their instruction and to determine the learning needs of students.

Figure 3 also indicates that the university is only meeting 25% of the new requirements and policies set by federal or state agencies, 85% of professors are not attending professional development courses, and 15% of professors meet the standards. This means that 85% of university professors neglect to support students who require additional learning assistance. Only 10% of university students graduate on time.

Some outcomes of the current system include students not succeeding in their courses and not graduating on time because they are not receiving additional learning assistance and the appropriate assistive technology. Since professors are not required to seek professional development, they are not motivated to enhance their instruction. As a result, students are not self-sufficient nor are they contributing members of society as they will be unhappy, on welfare, and not motivated to learn.

To improve the state of Maikaʻi University, professors should be required to attend professional development courses, which will be made available and defined by

standards. The assessment of students should also be linked to methods of instruction, so that professors can improve their understanding and accommodation of students' needs.

The training program should include appropriate and relevant curriculum content that will help professors to improve their instructional methods. The program should also allow flexibility in scheduling, such as the option to enroll in online learning or weekend and evening courses. This flexibility should encourage a higher percentage of professors to complete their professional development program. Additionally, the program should also make available assistive technology resources. This should be a part of the university's technology plan for accommodating students. Students with special needs will have a higher percentage to complete courses to graduate timely.

Maika'i University should meet 100% of the requirements by 2015 if the necessary modifications are implemented. 100% of professors should meet the standards, 75% of university students will graduate on time, and 100% of professors will complete four professional development courses per year.

Importantly, as indicated by *Figure 3* in the column of "Outcomes," differentiated instruction should become common practice for university professors at Maika'i University. Professors should be continually motivated to seek professional development in order to become successful instructors. Students with special needs should be learning successfully and should become self-sufficient and contributing members of society.

	Inputs	Processes	Products	Outputs	Outcomes
What Is	• There is no standardized policy of training for professors • Individualism • Multiple visions • Limited access to instructional resources (technology, facilities, personnel, and learning content)	• Differentiated instruction is not required to meet diverse learning and special need students • Professors are not equipped with the proper instructional resources • Professors are not required to attend PD courses • Students' assessment not being linked to methods of instruction • Few PD courses available to professors • Standards are not defined to professors • Professors are not motivated and required to seek professional development	• Assistive technology is not part of the technology plan • The training program does not have the proper curriculum • Inflexible training environment (no online, no weekend training, no evening) • Students do not complete courses for graduation • Professors do not complete their PD course requirements	• 15% of professors meet standards • 10% of university students graduate on time • University is meeting only 25% of the requirements (new policies set by fed or state) • 85% of professors are not attending professional development courses	• Diverse students and students with disabilities are not succeeding in their courses, nor are they graduating on time • Students are not self-sufficient nor are they contributing members of society (students are not happy, on welfare, not motivated to learn)
What Should Be	• Standardized policy of training for professors • Group collaboration • Conform to one, unified vision of Maika'i University mission statement • Open access to instructional resources	• Professors required to attend PD courses • Many PD courses are available to professors • Standards are defined to professors • Students' assessment is linked to methods of instruction • Differentiated instruction is required to meet diverse learning and special needs students • Professors are motivated to seek professional development in order to be successful and contribute to the betterment of society	• Assistive technology is part of the technology plan • The training program has proper curriculum • Flexible program training environment (online, wknd training, evening) • Students complete courses on time for graduation • Professors complete their PD courses requirements	• 100% of professor meet standards • 75% of university students graduate on time • University meets 100% of the requirements by 2015. • 100% of professors are attending four professional development courses per year	• Diverse students and students with disabilities are succeeding in their courses and are graduating on time • Students are self-sufficient and contributing members of society because they are succeeding in their learning environments

Figure 3. Discrepancies chart.

Needs and Problem Statement

What Is. Maikaʻi University professors are not required to accommodate diverse students and students with learning disabilities. Neither are they motivated to seek professional development. For those that do take initiative, they are not acknowledged nor given a proper promotion. The consequence is students are struggling in their learning environment. Students are not self-sufficient nor are they contributing members of society. They are unhappy, on welfare, and not motivated to learn. Students and parents of Maikaʻi University and the Akamai learning community are expressing their concerns to the administration, their government and state officials, and the local media. Maikaʻi University is beginning to receive a bad reputation. This may cause the university and its programs to lose funding and support. The university will lose its good reputation and may cause professors and students to seek other academic institutions.

What Should Be. Professors understand the importance of differentiated instruction in order to accommodate students with diverse learning styles and disabilities. Students are learning successfully because they are receiving proper assistance, such as note takers, interpreters, professors making copies ahead of time, and scripting. Society benefits from having successful and motivated professors who strive to go above and beyond to provide what it takes for students to be self-sufficient and contributing members of society. Maikaʻi University meets federal, state, and accreditation standards to maintain funding stream in order to run operations and continue its programs.

The Gap and Discrepancy. According to *Figure 3*, only 15% of university professors are meeting the teaching standards set by Maikaʻi University. The university does not have a standardized policy of incorporating professional development and much

of the training is optional. Professors are obviously not well-equipped with proper

instructional resources to meet the learning community's demand for reasonable

accommodation in the classroom. Therefore, Maikaʻi University must implement a

standardized policy of mandatory professional development. By taking the necessary

steps required by federal and state grantors ensures that the university meets standards

and maintains its funding sources.

Goals

Currently, Maikaʻi University does not require university professors to pursue

professional development. Therefore, professors are either unaware or unmotivated to

enhance their instructional methods. One goal is for the university to institute a policy of

mandatory professional development into its instructional policies. Secondly, the

university administration must collaborate with HHO to develop appropriate curriculum

plans that are relevant and meets standards. To reward and further incentivize the change

in university policies, Maikaʻi University must aim to establish a reward and incentives

program for its professors. The ultimate goal is that students with diverse learning needs

and disabilities will receive reasonable accommodation to graduate and to be successful

and contributing members of their community.

Design Implications

There are design implications to the system that are derived from this analysis

which include, restructuring university policies to mandate professional development of

university faculty professors and aligning classroom instruction to comply with the

university's mission and federal and state funding requirements. Maikaʻi University

administration is looking at long-term outcomes that creates a learning environment that

benefits everyone, from professors to students to federal and state stakeholders. The biggest change to this system is requiring professors to supplement their workload with professional development and training. An evaluation and open communication systems and an incentives program are crucial in motivating compliance and buy-in from professors. University administration will communicate performance information to their funding stakeholders every fiscal year to ensure that funding is renewed. As long as the university maintains its funding stream, professional development and training programs will remain sustainable.

Recommended Solutions

In order for Maikaʻi University to more closely align itself with its mission statement and to satisfy the demands of the learning community for reasonable learning accommodations for its student, it must implement the following modifications:

1. Maikaʻi University must restructure its instructional policies to mandate professional development and training for its professors. Professors must attend training sessions on topics of differentiated instruction and methods for diverse students and students with learning disabilities. They must also attend workshops and conferences that relate to new federal and state regulations that impact persons with disabilities. The drawback would be that professors' workloads may increase. However, with an appropriate incentives and rewards program, professors will find it worth their while to participate.

2. HHO must offer professional development courses and training content through a variety of delivery modalities, such as face-to-face (F2F), online, interactive television, and web conferencing. This ensures that university

professors are able to attend the appropriate training sessions that best meets their needs and schedules. One possible downside of offering multiple modalities means that HHO must have enough trainers on hand to meet the demands of professors. Ideally, Maikaʻi University will maintain federal and state funding streams in order to pay for additional trainers.

3. The university must institute a technology plan that researches and evaluates its educational technologies on a yearly basis, so that its delivery modalities are up-to-date, accurate, and relevant. Assistive technology is included in this. Considerable time will be spent by the technical support staff to train all users, from professors to students, on how to properly use the equipment.

4. Maikaʻi University must further institutionalize and mandate Universal Design for Learning (UDL) requirements and incorporate a variety of assistive technologies to aid university students and learners with disabilities. UDL benefits everyone because it makes all learning content accessible. Similarly to assistive technology, technical support staff will spend a considerable amount of time to train all users, from professors to students, on UDL requirements.

If Maikaʻi University implements the recommended solutions, the university will become more aligned with its mission statement. It would also demonstrate its compliance to federal and state laws and regulations regarding the education of students with special needs and diverse learning styles. This will ensure that university programming, technology updates, incentives, rewards, and personnel salaries will continue to receive funding and remain sustainable.   The island of Akamai benefits

because its students will become self-sufficient contributing members of society because

students are learning successfully and graduating in reasonable time. Students will grow

to reach their maximum potential and become well-positioned to obtain good jobs. They

will have equal opportunity and access to achieve a higher quality of life.

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