

UNIVERSITY OF MICHIGAN – FLINT

REPORT

from

**ONLINE LEARNING CURRICULUM DEVELOPMENT
PURPOSE GROUP**

May 2003

**REPORT FROM ONLINE LEARNING CURRICULUM
DEVELOPMENT PURPOSE GROUP**

TABLE OF CONTENTS

Members of the Purpose Group on.....	ii
EXECUTIVE SUMMARY	iii
I. Introduction.....	1
a. Charge to the Purpose Group	1
b. Definition of Distance Education/Online Learning.....	1
c. An Overview of the Approach.....	3
II. Online Learning at UM-Flint	3
a. Historical Developments.....	3
b. Current Situation	5
i. Faculty Participation	6
ii. Students Participation.....	7
iii. Web-Supplemented Courses.....	7
c. NCA Statement on Preparedness of the Campus.....	10
III. Methodology.....	11
a. Internal Source of Data	11
i. Survey of UM-Flint Faculty	11
ii. Survey of UM-Flint Online Students	12
iii. Enrollment Market Analysis	13
iv. General Education Consideration.....	15
b. External Sources of Data.....	17
i. Recent Trends in Graduate and Undergraduate Fields of Study	17
ii. Survey of Online Programs at Select Colleges and Universities	18
c. Identifying Potential Candidate Programs	20
IV. Feedback from Academic and Administrative Units.....	21
a. Feedback from Academic Units.....	23
i. College of Arts and Sciences	23
ii. School of Education and Human Services.....	24
iii. School of Health Professions and Studies.....	24
iv. School of Management	26
b. Feedback from Administrative Units.....	27
V. Recommendations.....	28
a. Recommended Programs.....	29
b. Partnerships	32
c. General Education.....	33
d. Required Resources	33
VI. Implementation Issues	34
VII. Conclusions	35
References	37
Appendix A - Faculty Survey.....	38
Appendix B - Script for Online Degree Programs	40
Appendix C - Select Community Colleges with Online Programs	41

**REPORT FROM ONLINE LEARNING CURRICULUM
DEVELOPMENT PURPOSE GROUP**

**Members of the Purpose Group on
Online Learning Curriculum Development**

Vahid Lotfi - Associate Provost (Chair)

Ann Briggs - Office of Graduate Programs

Jon Davidson - Student

Lauren Friesen - College of Arts and Sciences

Linda Knecht - School of Health Professions and Studies

Denise Luethge - School of Management

Deborah Snyder - Office of Extended Learning

Eric Worch - School of Education and Human Services

DRAFT

REPORT FROM ONLINE LEARNING CURRICULUM DEVELOPMENT PURPOSE GROUP

EXECUTIVE SUMMARY

The Online Learning Curriculum Development Purpose Group was appointed by Chancellor Mestas in Fall 2002 to identify programs and courses that could be offered fully or partially online, and to make recommendations for their support and development. The Group consisted of several faculty members, two administrators, a staff member, and one student. It met on a bi-weekly basis during the academic year 2002/2003 and issued its final report in May 2003.

The Purpose Group examined the opportunities, challenges and readiness of the campus to develop and offer additional online/hybrid academic courses and programs. It began by reviewing the historical development of online learning at UM-Flint, the current situation, and the NCA statement on the preparedness of the campus to offer online degree programs. The University has had significant student participation, growth in online course offerings and increasing faculty acceptance for the feasibility of future online programs. These findings were reaffirmed by a survey of online students and a survey of UM-Flint faculty. At the same time, the Purpose Group became aware of some concerns by a few faculty members regarding the selection of programs identified for online instruction. A small number of faculty members also expressed a desire to be assured that the move toward offering online programs is a choice rather than an administrative mandate. The Purpose Group feels strongly that the concerns and preferences of faculty regarding participation in this new form of educational instruction must be respected. This and other considerations were included in potential program decisions as the initial recommendations for online programs were developed.

A number of internal and external surveys and reports were examined to determine demand for various fields of study and online program offerings at other institutions. The results indicated that there is significant demand for online/hybrid programs and courses. Accordingly, an initial list of candidate programs for online/hybrid instruction was developed. This list was then refined by considering the preparedness of the academic departments that would house such programs. Based upon the Purpose Group's findings, six graduate programs, an undergraduate degree and an undergraduate certificate program were identified as having potential for success as online/hybrid instruction. The list was then presented to the academic units for further comments. Graduate programs appear to offer the highest potential. Undergraduate programs, while feasible, offer greater challenges for complete online degree availability. This is due to reliance on general education courses, many of which are not available online at this time.

The Purpose Group also examined the possibility of collaborating with some of the Michigan community colleges. The twenty-eight community colleges in Michigan have formed a strong coalition, the Michigan Community College Virtual Learning Collaborative (MCCVLC) aimed at providing access to online courses at member

colleges in order to receive associate degrees online. Presently, fifteen community colleges offer complete associate degrees fully online and several others offer degrees in a combination of classroom and online modes of delivery. This poses an opportunity for UM-Flint to form partnerships where academically feasible to offer the second two years for those community college students seeking four year degrees. Additionally, such partnerships would expand the geographic reach beyond Genesee County and the surrounding community colleges. UM-Flint would be able to reach students at many of the twenty-eight community colleges which already have students who are experienced with technology and web-based learning.

In order to implement any of the recommended programs in this report, the Group identified six strategies. These strategies could encourage greater faculty participation and make certain that adequate student services are in place for developing and implementing successful online/hybrid programs. The six strategies include:

- **Provide incentives for participating departments**
- **Provide program and course development funding**
- **Establish a process to address coordination of online general education course offerings**
- **Track and report online learning activities**
- **Include online learning in academic program reviews**
- **Discuss appropriateness of online components in proposed new programs**

It is recommended that UM-Flint consider and provide comparable student services for distant students. The state of readiness for library, technical, and student services is adequate. However, there is room for improvement which requires attention to funding availability.

Online learning is no longer considered an “experiment” – it is a strategic necessity that an institution such as UM-Flint cannot afford to ignore. As other institutions of higher learning increase their online learning opportunities, our ability to attract quality students to UM-Flint continues to be challenged.

I. Introduction

In May 2002, as a follow up to *Purpose and Directions* [1], Chancellor Mestas appointed the Task Force on the Enhancement of the Student Experience and the Learning Environment (Student Learning Task Force.) The Student Learning Task Force was chaired by the Chancellor and included seven *Purpose Groups*. The *Purpose Group on Online Curriculum Development (Purpose Group)* was based upon the following [2]:

Offering more online and mixed-mode courses and programs is a very effective way of attracting students from beyond commuter range. Not all classes lend themselves to be taught online, and not all students are a good fit for online education. With that in mind, let us look carefully at what classes and degree programs could be offered online or through a combination of online and classroom instruction.

a. Charge to the Purpose Group

The formal charge to the Online Learning Curriculum Development Purpose Group was:

To identify programs and courses that could be offered fully or partially online, and to make recommendations for their support and development, with the intention of creating an online/mixed-mode curriculum.

The Associate Provost was asked to chair the Purpose Group. Members of the Purpose Group consisted of:

Professor Vahid Lotfi, Associate Provost (Chair)
Ms. Ann Briggs, Office of Graduate Programs
Mr. Jon Davidson, student
Professor Lauren Friesen, College of Arts and Sciences
Professor Linda Knecht, School of Health Professions and Studies
Professor Denise Luethge, School of Management
Dr. Deborah Snyder, Office of Extended Learning
Professor Eric Worch, School of Education and Human Services

The Purpose Group began meeting on a bi-weekly basis, starting September 2002. In arriving at any possible recommendations, the group decided to rely extensively on external as well as internal data and information. Throughout this report, there are frequent references to various types of online learning. The next section provides a brief overview of various types of online learning.

b. Definition of Distance Education/Online Learning

The North Central Association (NCA) of Colleges and Schools Commission on Institutions of Higher Learning defines *distance education* as follows [3]:

Distance Education is defined, for the purpose of accreditation review, as a formal educational process in which the majority of the instruction occurs when student and instructor are not in the same place. Instruction may be synchronous or asynchronous. Distance education may employ correspondence study, or audio, video, or computer technologies.

Online Learning

Using the above definition, *Online Learning*, therefore, is a type of distance education where the Internet is employed as the primary mode of instruction.

Online learning activities can be *synchronous* or *asynchronous*. In a *synchronous* learning activity learners are expected to be online at the same time. *Asynchronous* instructions do not occur in real time. Learners participate in learning activities at a time that is convenient for them. An online course may include both synchronous and asynchronous learning activities.

Web-supplemented, Mixed Mode and Fully Online Courses

An on-campus or face-to-face course may have an online (or Web-based) component. An on-campus course which utilizes the Internet to provide additional course materials and/or learning activities is referred to as *Web-supplemented*. In a *Web-supplemented* course, a significant portion of the instruction occurs face-to-face.

A course which utilizes the Internet to deliver a large portion of the instructional materials and/or activities, but also requires occasional on-campus or face-to-face sessions is referred to as a *hybrid* or *mixed mode*. The on-campus sessions might be intended for variety of instructional activities such as conducting case discussions, laboratory experiments, examinations, presentations, and so on. However, the number of such sessions should be limited to no more than 2-4 throughout a major semester.

In a *fully online* course **all** of the instructional activities occur online and learners are not expected to make any campus visits as a part of their course requirement. Holding of “optional” on-campus sessions are discouraged as well.

Hybrid and Fully Online Programs

A *fully online program* is a degree program (or certificate) which consists of *fully online* courses only. In addition, all of the student services (e.g., application, admission, registration, advising, etc.) can be accomplished without the need for any campus visits.

A *hybrid* or *mixed mode* degree program (or certificate) consists of fully online and/or hybrid courses. *Hybrid* programs have the potential to offer learners greater scheduling flexibility. They can be effective recruiting and retention tools, appealing to student populations outside the traditional UM-Flint service region. As such, inclusion of on-campus courses in these programs is **not** desirable.

c. An Overview of the Approach

The purpose group, at the very early stages of its work, had agreed that its final recommendations should fit within the mission of the University and that any recommendation should have a reasonable chance of success for implementation at UM-Flint. Therefore, the group began by conducting a comprehensive review of the state of online learning programs/courses at UM-Flint. This was followed by examining several sources of data and information to establish an initial list of potential programs, suitable for online/hybrid modes of instruction. The group then developed a set of criteria by which the initial list was narrowed down to a reasonable size. The final set of potential programs was then presented to the respective academic units to obtain additional feedback. In addition, the group held discussions with representatives from other university offices that might be affected by the expansion of online learning programs at UM-Flint. These data and information formed the basis for the group's final recommendations.

II. Online Learning at UM-Flint

Online learning at the University of Michigan-Flint is currently provided through Blackboard, a course management system managed by the Office of Extended Learning (OEL) and Information Technology Services (ITS). OEL is responsible for assisting with all academic and non-credit course design, development, training, and delivery-related matters. ITS provides support for the network infrastructure and oversees user access and related technical issues. Online academic course offerings, where students may access the course from any Internet connection on or off-campus, have grown significantly since the initial launch of six courses in winter 2000. This growth has been driven primarily by student demand for such courses as evidenced by waitlists for many courses every semester.

Today, the University of Michigan-Flint offers online courses from each of the three schools and the college and has one program fully online (RN/BSN) and one hybrid program (*NetPlus!*). Instructor demand for Blackboard courseware to support traditional classroom course delivery has grown steadily as instructors begin to understand the potential of the Internet for learning. It is anticipated that the University of Michigan-Flint community will continue to adopt this new technology as it evolves and improves and as instructor and student awareness and acceptance grows.

Below is a brief history of online learning at the University of Michigan-Flint, a description of the current situation, and a forecast for future needs.

a. Historical Developments

In May 1998 the Provost and Vice Chancellor for Academic Affairs, appointed a task force to develop a proposal for creating an infrastructure to support distance education on

the University of Michigan-Flint. Prior to this date, the University had created an interactive television (ITV) facility for delivery of distance education programming. The School of Management had used this facility to deliver its Master of Business Administration program to a group of students in Lansing. The arrangement had encountered technical and logistical difficulties and was abandoned after one year. The Department of Nursing had used the ITV system to offer some of its RN/BSN courses to a group of students in Port Huron. This operation was also halted when Internet-based courses became available at UM-Flint.

The task force was chaired by a faculty member and included members from various academic and non-academic departments. This included representatives from information technology services, library, television station, student services, learning resources center, graduate programs, and three faculty members. The task force met for a period of about one year and issued its final report in May 1999. The following were among the most significant recommendations of the task force report [4]:

- Distance learning programs/courses should be offered by the University
- The University needs to create an Office for Distance Learning (ODL), housed in Academic Affairs
- The distance learning effort will require seed money from the Provost for five years
- Long-term funding for the distance learning should be based on a combination of base funding and revenues generated by ODL
- The primary mode of delivery for distance education courses/programs should be the Internet.

The task force also identified a number of other issues such as the need for the establishment of an advisory committee, clarification of relationship between ODL and the TV station, role of the library, and faculty issues such as intellectual property, faculty load, remuneration, and many others. Most of these issues did not fall within the purview of the task force. Therefore, the task force compiled a list of such issues and referred their resolutions to either the proposed ODL or other entities within the University.

In August 1999 the Provost appointed the Executive Director of IT to serve as the Interim Director of Distance Learning with the charge of starting a pilot distance learning program within one academic year. The University also provided a contingent budget for launching the pilot project.

The interim director held a senior faculty rank in the business school and had some familiarity with online learning. He began by forming a distance learning work group within the IT department. Although, the task force had recommended that asynchronous or Web-based technologies be the primary mode of distance learning delivery, the University did not have any prior experience in this regard. A handful of faculty members were experimenting with html-based course Web pages and threaded discussions on the Internet. Several faculty members were using electronic mail in their face-to-face classes.

The distance learning work group began by conducting a feasibility study of how to establish an infrastructure to support distance learning. The study included a cost/benefit analysis of outsourcing the needed support versus creating an internal infrastructure. In this case, a number of factors were used to determine the viability of offering the service support internally versus outsourcing it. Five criteria were utilized to assess the viability of creating an internal infrastructure to support distance learning (service). They included available capacity, internal level of expertise, quality considerations, nature of the demand, and various costs.

Because the University had very little experience with the design, development, and delivery of Web-based course offering, availability of quality consulting services as well as time-to-rollout received the highest weights in comparing various course delivery systems. eCollege was initially selected to provide consulting services, course hosting and a course management software (CMS) that was compatible with existing campus technology, registration and record-keeping systems.

In August 1999, the University signed a contract which stipulated the creation of a virtual campus website as well as the development of 10 courses by winter 2000. The contract also included provisions for course hosting, 24x7 technical support, two full-day on-site training/consulting sessions using train-the-trainer approach, and instructional design support. The contract costs included a one-time flat fee for creation of the virtual campus website and a per-credit (per student) technology fee. The University decided to add a nominal overhead to the technology fee and pass the fee on to students.

Since that initial arrangement with e-College for provision of course hosting, creation, delivery and maintenance, the University has migrated all online courses to a new course management system provided by Blackboard and hosts all academic courses internally. This decision was made based on cost considerations and increased internal expertise and capabilities of the staff as the medium matured and new staff members were hired. The online convenience fee has been readily accepted by students willing to pay the fee for the convenience of accessing courses remotely and demand for such courses continues to grow each semester.

During Fall 2001, the Associate Provost began the implementation of recommendations from an earlier task force by moving the support for online learning programs to the Office of Extension and Continuing Education (ECE). ECE was renamed as the Office of Extended Learning (OEL) and staff members in support of online learning were transferred from ITS to OEL. Subsequently, a national search was conducted to recruit a permanent director for OEL. Dr. Deborah Snyder was hired to lead the new department on April 1, 2002.

b. Current Situation

Online courses receive the same academic attention that the on-campus courses do. All academic online courses are instructor-led and typically asynchronous through

Blackboard. The courseware allows the instructor to post assignments, lead discussions, hold virtual chats, post grades and announcements for students to view. Students may check their grades, post discussion input and assignments; view all lectures and other course materials via the Internet.

i. Faculty Participation

Faculty participation in the development and delivery of online classes at UM-Flint has experienced a steady growth. Figure 1 represents the number of completely online course sections offered since the start of the online learning program.

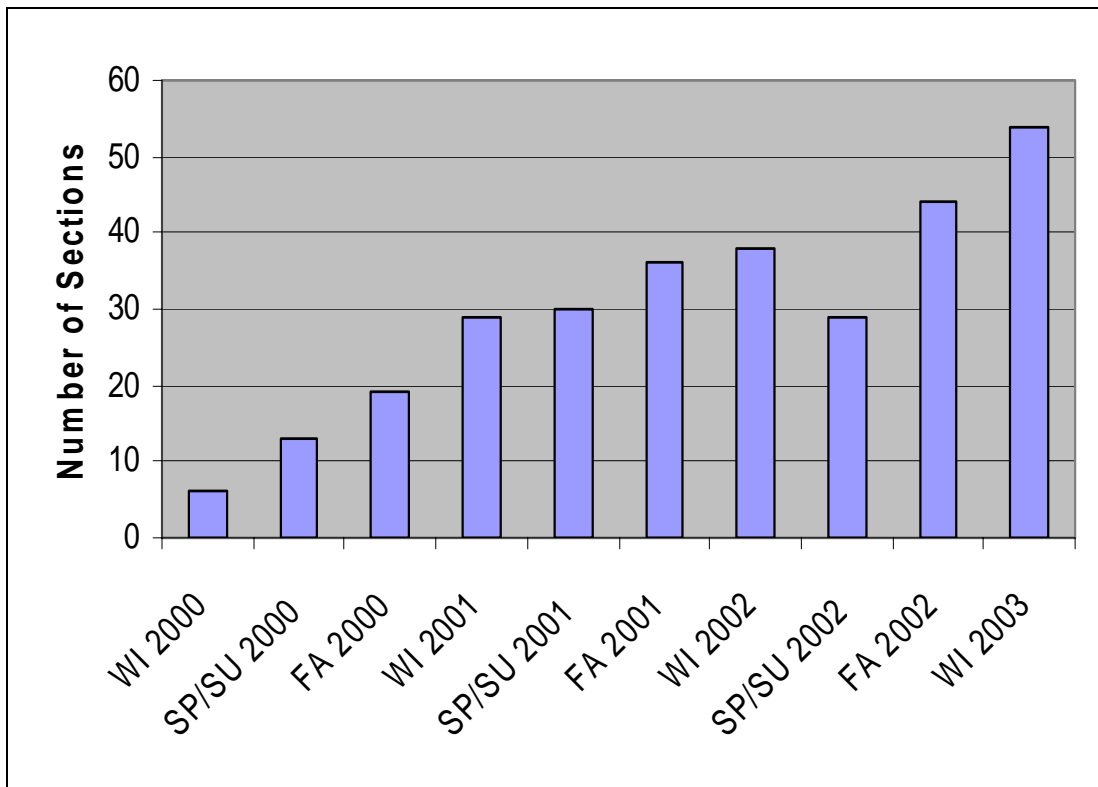


Figure 1. Number of Online Sections Offered

New online courses are launched every semester and instructors from every school/college are looking at ways they might augment their existing classrooms with online activities through Blackboard course delivery or through the addition of an online version of their course. Figure 2 represents the number of completely online course sections offered by major semester by school/college.

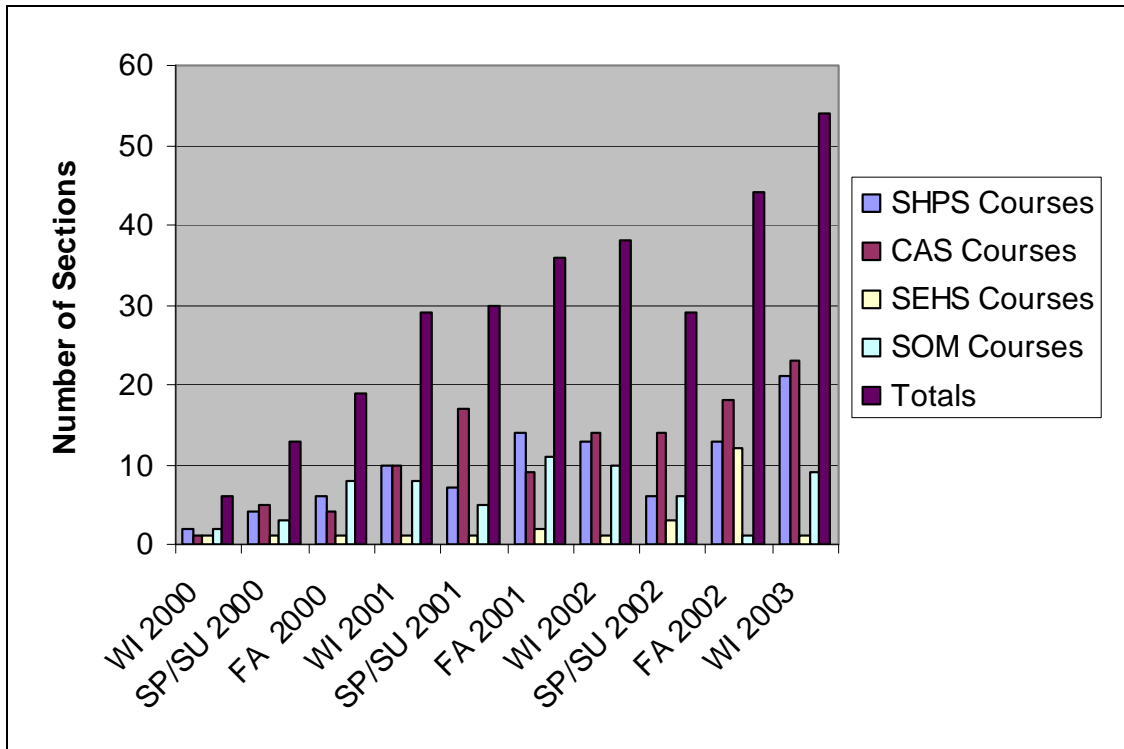


Figure 2. Number of Online Sections Offered by School/College

ii. Students Participation

The number of students taking online classes has witnessed a phenomenal growth. Figure 3 depicts the number of students taking online classes over the past three years. This figure has increased from 157 students in winter 2000 to over 1,380 in winter 2003. Students from all of the four academic units have participated in taking online classes. Figure 4 represents the number of students taking online classes by school/college.

iii. Web-Supplemented Courses

The relative success of online courses at UM-Flint resulted in increased awareness among many faculty members who were interested in experimenting with the Internet and use of the Web (in their teaching and learning) but were not quite ready to offer a completely online course. Additionally, instructors were searching for alternatives to pure classroom delivery of lecture materials through distance learning technologies while maintaining classroom activities as necessary (Web-supplemented and hybrid courses). Consequently, in Spring 2002 OEL opened the availability of Blackboard as a Web-supplement. As with the completely online courses, the Web-supplemented courses experienced a significant growth in a very short period of time. Figures 5 and 6 represent the number of Web-supplemented sections and the number of students.

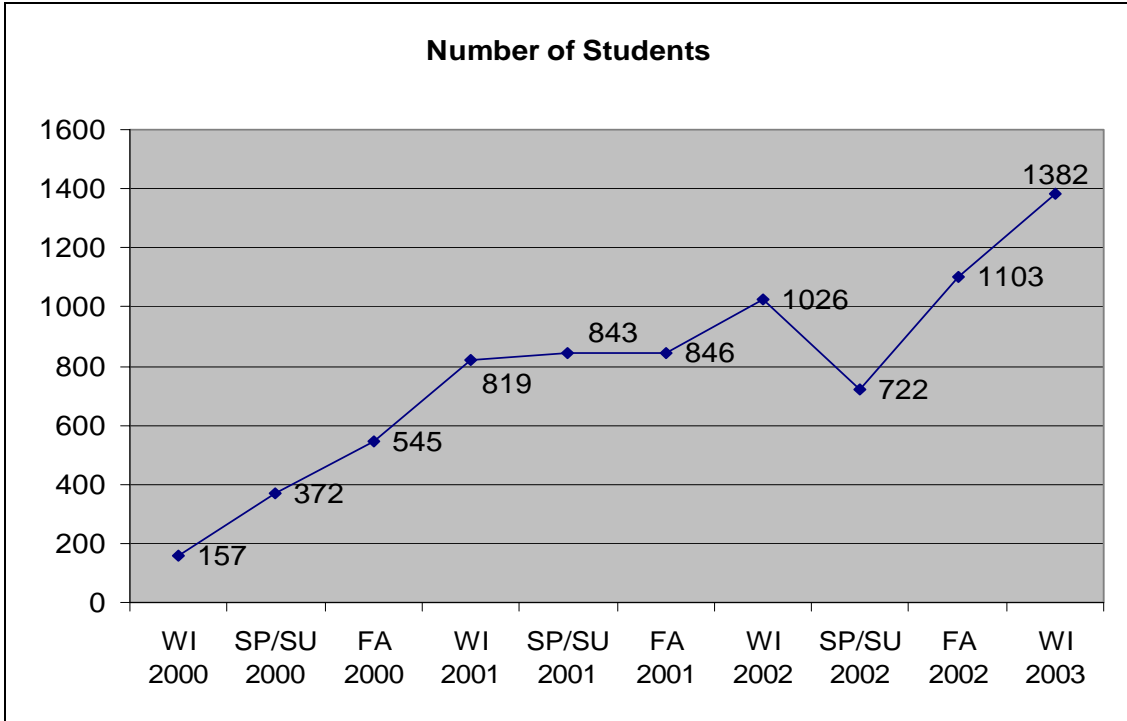


Figure 3. Number of Students in Fully Online Classes

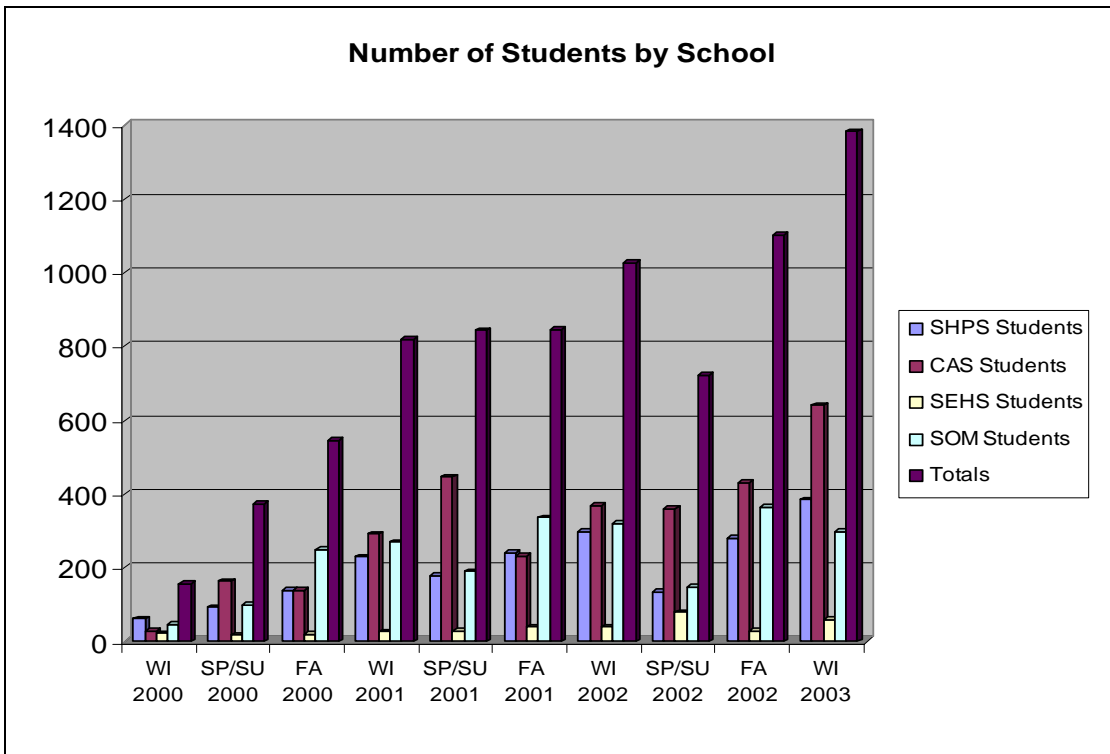


Figure 4. Number of Online Students by School/College

In addition, some faculty members are now exploring the development of hybrid courses. For example, the Biology Department will offer its first online course as a “hybrid online course,” where lectures will be delivered through the Blackboard system offering remote access for students and on-campus laboratory work. This first hybrid course will be offered Fall 2003 and is expected to be the first of many, if the experience is successful from a teaching and learning perspective.

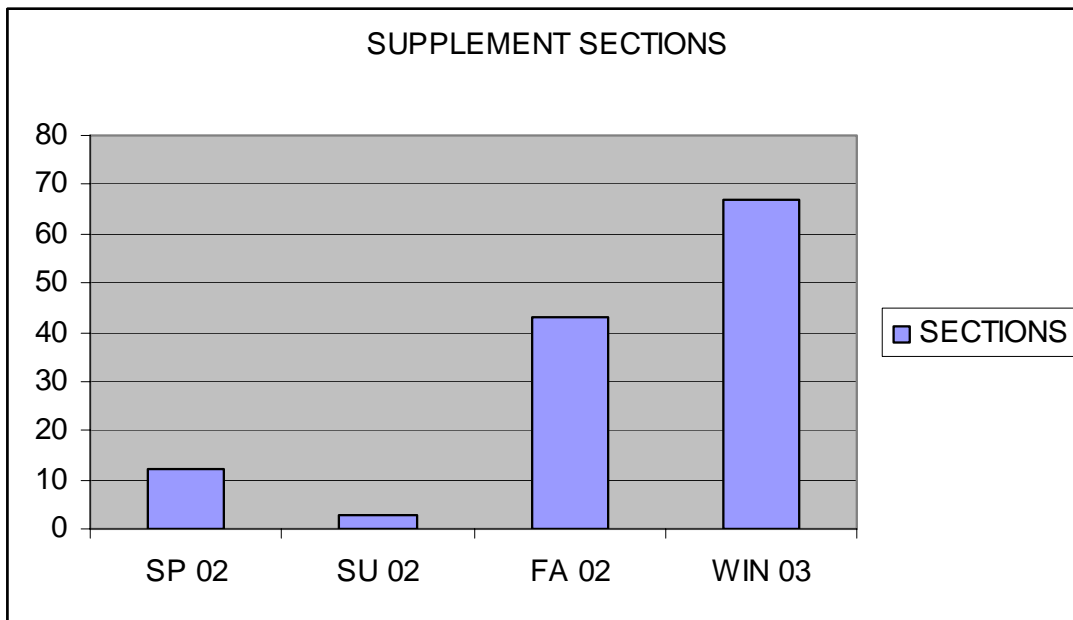


Figure 5. Number of Web-Supplemented Sections

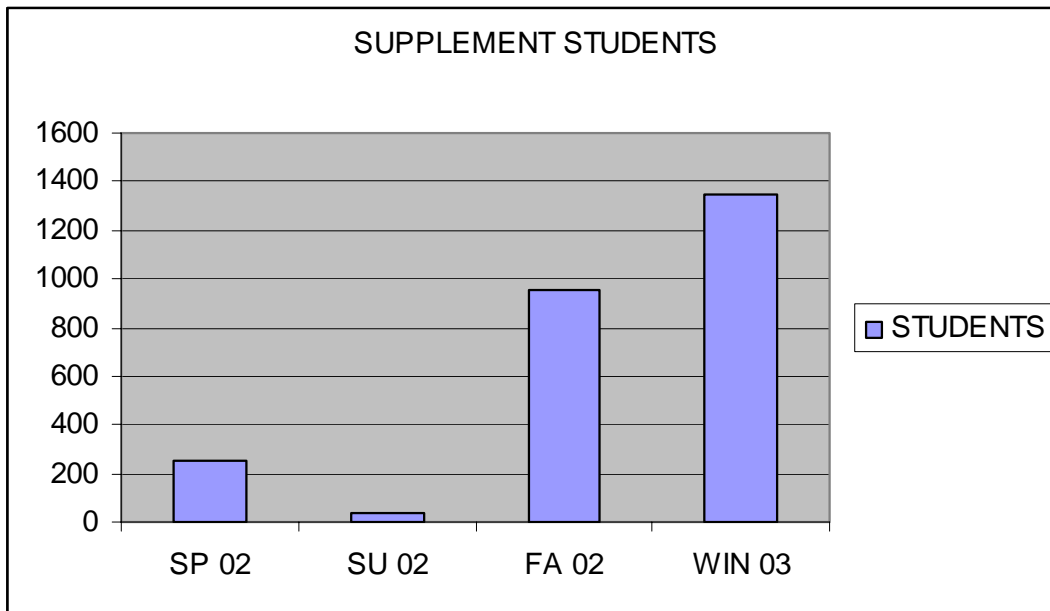


Figure 6. Number of Students in the Web-Supplement Classes

c. NCA Statement on Preparedness of the Campus

The development and offering of successful online/hybrid academic programs, to a large extent, depend upon the preparedness of the campus as a whole. Whereas the curriculum content is developed by faculty, many university offices play a critical role in supporting the development and delivery of online programs.

In Fall 2001, the University had requested from the Higher Commission of the North Central Association (NCA) of Colleges and Schools to approve its RN/BSN, the only completely online degree program. In winter of 2002, NCA conducted a focused visit at the University to evaluate the institution's request. The NCA focused visit was conducted by a two-member team. In assessing the preparedness of the campus to offer an online degree, the team met with the Chancellor, Provost, Dean of the School of Health Professions and Studies, the Associate Provost and Dean of Graduate Programs, the Director of the Nursing Program, the program faculty, students, and staff. In addition, the team examined extensive documentation and toured the computer labs and other offices. In March 2002, the visiting team issued its report [5] and approved the institution's request to offer the RN/BSN online.

Section 11 of the NCA report is entitled "Distance Education Consideration." This section contains an assessment of the Nursing department and the entire campus with respect to preparedness to offer online degrees. Although, it has been over a year since the report was first issued, a number of elements in the report still remain relevant. Below is a summary of these findings.

The assessment of the campus readiness to offer an online degree involved the delineation of its ability to comply with what is referred to as the "Best Practices for Electronically Offered Degree and Certificate Programs." The report states [5],

Materials on campus provided extensive documentation that the five components of the Best Practices for Electronically offered Degree and Certificate Programs had been considered and that the campus has in place the resources and processes to successfully offer and support distance delivery. Distance delivery is consistent with the campus missions and plans.

The report continues with remarks on the Office of Extended Learning as well as the Information Technology Services. It states [5],

Reconceptualization of the offices within academic affairs to an Office of Extended Learning subsequent to an extensive review of the existing structure, integration of the information technology services into academic affairs indicate careful thought about support of electronically delivered courses and programs. The campus is in the process of reviewing a proposed policy on intellectual property....The Office of Information Technology offers a wide range of supports to faculty and students ranging from help with course conversion to assistance with computer problems.

In another section of the report, highlighting the strengths, the report states [5],

The campus has a strong infrastructure to support on-line delivery of courses, including a well-staffed IT department, a recently reorganized division of extended learning, and in-service opportunities for faculty to develop the technical skills needed to develop on-line courses.

The report concludes by approving the University's request to offer the RN/BSN program online. While the NCA focused visit reaffirms the campus's ability to offer online programs, as the number of online courses and/or programs increases, adequate resources will be needed to maintain the quality support the campus has received in the past. In a subsequent section of this report, implementation issues surrounding the development and offering of new courses and degree programs will be presented.

III. Methodology

The Purpose Group, in an attempt to identify a set of courses and/or programs to be recommended as potential candidates for delivery in online/hybrid format, examined a number of studies and surveys. Some of the surveys (e.g., Survey of UM-Flint Faculty) were developed and administered by the Purpose Group. Others were extant studies and/or surveys undertaken by various campus offices or external sources. Outside sources of data and information provided the external validity needed to confirm findings based on internal data.

Examination of internal and external surveys and studies assisted the group in identifying an initial set of courses/programs that could be offered online. The group then developed a set of criteria by which the initial set was reduced to a smaller, more promising set of candidate programs. The Purpose Group focused exclusively on identifying degree programs or certificates that would be conducive for offering online or in a hybrid format. This decision was consistent with the goal of recommending options that would enhance student enrollment. In addition, the University already offered a relatively wide array of courses in online and Web-supplemented formats.

This section presents the major internal and external surveys/studies that were examined by the Purpose Group. It also presents the process of arriving at the most promising candidate programs that were presented to the academic units for further consideration.

a. Internal Source of Data

i. Survey of UM-Flint Faculty

There was unanimous agreement among the Purpose Group members that the UM-Flint faculty were best qualified to provide insight into curriculum delivery in the areas in which they teach. Therefore, the group conducted a survey of 310 current faculty

members at UM-Flint in October 2002. The survey was conducted to assess the interest of the faculty in teaching online courses and to identify courses and programs that may lend themselves, in whole or in part, to online conversion. Eighty faculty members responded to the survey for a response rate of 25.8%.

In part one of the survey (see Appendix A) the faculty were asked to identify courses and/or programs that could potentially be taught in an online environment. The results were overwhelmingly positive in response to identifying individual courses for conversion to an online mode of instruction. Seventy five percent of the faculty said that there are courses in their respective academic areas that may be a potential fit for online conversion. When asked to identify whole programs in their respective academic areas that could be converted to an online format, the majority (77%) of the faculty responded with “no” or gave no response. Still, 23% indicated that there are programs in their areas that could potentially be converted to an online mode of instruction. Further, there was a very positive response in identifying courses and programs that could be converted partially using online methods of instruction. Seventy-seven percent of those who responded indicated that there are such courses and programs in their respective subject areas.

In the second portion of the survey, faculty were asked to indicate whether or not they would be willing to teach an online class in future semesters. The majority (61%) responded positively. Of those who said they would not teach an online class if asked, 81% indicated that training for course development and online teaching would persuade them to possibly teach online. Only 16% of the faculty indicated they would not teach online, regardless of training opportunities.

In the final part of the survey, the faculty were asked to identify colleges and universities that they considered to be competitors with their respective departments’ programs, both at the undergraduate and at the graduate levels. Colleges and universities identified by faculty were then included in the list of select institutions that were surveyed regarding their online programs (see Section b. External Sources of Data.)

In summary, the survey results indicate a significant majority of respondents believe there are courses in their respective discipline that can be taught either completely online or as a hybrid and that with proper training and support, they would be willing to teach them. Further, while most respondents did not think that their respective academic program could be taught completely online, a significant majority indicated that such courses and programs could be taught in a hybrid or mixed mode.

ii. Survey of UM-Flint Online Students

During the fall 2002, the Office of Extended Learning conducted a survey of over 800 online students. There were 223 responses, resulting in a response rate of about 28%. While the goals of the survey were to determine the composition of online learning students as well as their overall satisfaction with their learning experience, they were also asked to express their interests in taking additional online classes and areas of interest.

The survey respondents consisted of about 70% female and 30% male students. They were 85% white and 15% non-white. Approximately, 41% were between 18 and 24 years of age, 18% between 25 and 29, 25% between 30 and 39, and 16% over 40. The estimated average age was 29 years. The majority (86%) of the respondents were employed with 5% working up to 10 hours per week, 11% up to 20 hours, 18% up to 30 hours, 27% up to 40 hours, 23% up to 50 hours and 2% work more than 50 hours per week.

There were 4.5% freshmen, 12% sophomore, 34% junior, 37% senior, and 10% graduate students (the remaining 2.5% were guest students.) When asked to rate their familiarity with the computer, about 10% rated themselves as beginners, 58% as intermediate, 25% as advance, and 7% as expert. Over 93% of the students had access to a computer either at home or at their home and place of work. Only 3% had no computer access at home or office and used the University computer labs. Approximately, 38% were taking their online course(s) for the first time and all of the respondents also were taking face-to-face classes.

A significant majority (about 70%) were taking one online course, with 20% taking two classes and another 9% taking three online classes. When asked if their class were not offered online would they have taken it on-campus, 33% responded negatively. When asked if they would like to see more online courses offered, 94% responded positively. Figure 7 represents desired subjects where the online students would like to see more online courses offered. The “other” category included Africana studies, accounting, mathematics, foreign languages, literature and writing, social work, and psychology.

When the online students were asked to express their opinion about the quality of their online classes, 8.6% rate the quality of online learning superior than face-to-face classes, 65.4% do not see a significant difference, and 26% thought that face-to-face instruction is superior to online learning.

Perhaps the most striking finding of the above survey (as far as the charge to the Purpose Group is concerned) is that the overwhelming majority of the respondents (94%) would like to see more online classes offered at UM-Flint.

iii. Enrollment Market Analysis

The Purpose Group also reviewed selected sections of an earlier study entitled, “Enrollment Market Analysis (EMA) for University of Michigan – Flint: Setting a Course for the Future [6].” In March 2000, the University commissioned Carnegie Communications, Inc. to conduct a full-scale enrollment market analysis. The study included six distinctive components consisting of environmental scanning, competitive analysis, focus groups, surveys, admissions assessment, and geographical analysis. The objective of the study was to provide background information, facilitating the development of the campus strategic plan. This included exploration of the opportunities

to recruit students from outside the University's traditional service region.

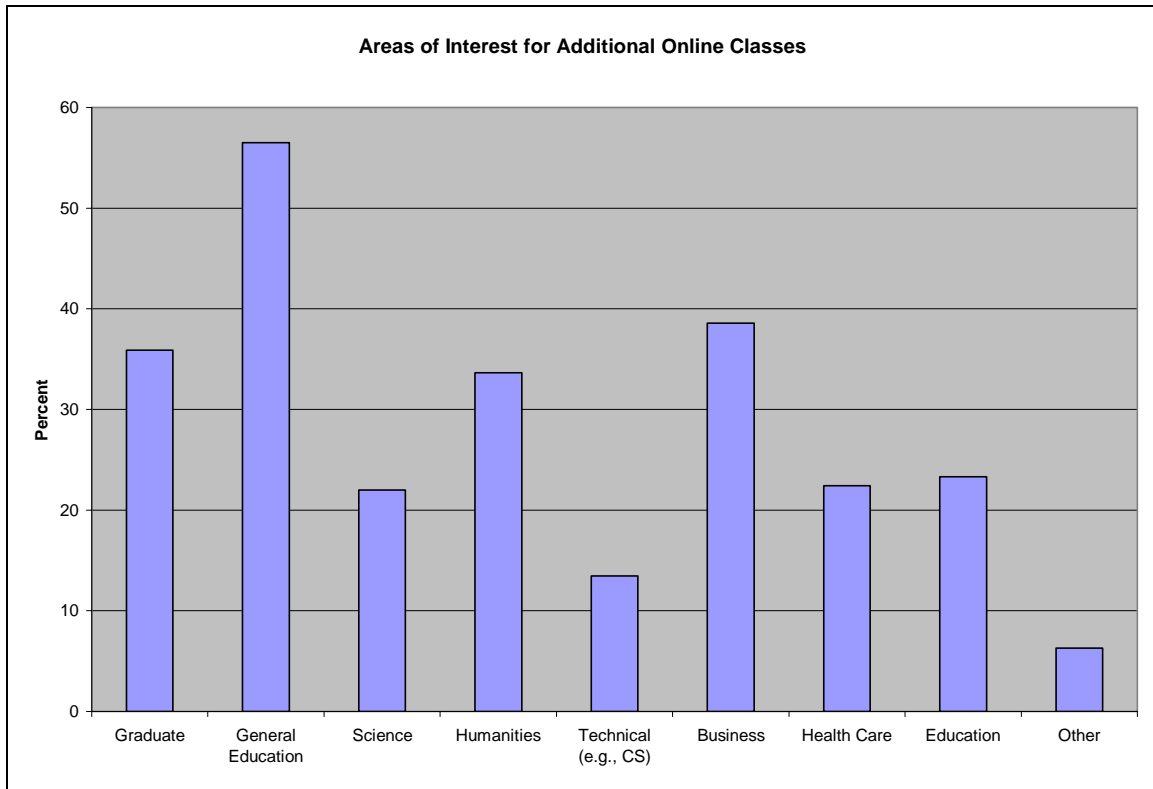


Figure 7. Desired Subjects for Additional Online Classes

The EMA study incorporated a number of different sources of internal as well as external data. A significant source of external data was an environmental scan, analyzing the current and projected population of the State of Michigan and Michigan high school graduates. The analysis included counts of population by age, population by select counties, age distribution by county and several other relevant demographics. The scan also provided population projections over the next 25 years and anticipated occupational trends. In addition, the EMA study contained surveys of faculty, staff, alumni, prospective students, and focus group analyses of current undergraduate students.

While the study contains several significant findings, two items: academic programs and distance learning, relate to the work of this Purpose Group. Below, is a list of some of the recommendations for future academic programs [6]:

- Service sector jobs in areas such as health care, accountancy, law, engineering, and the like are projected to increase as the industrialized Midwest (including Michigan, Indiana, and Ohio) continues to evolve beyond its traditional manufacturing base.

- *The Chronicle of Higher Education* reports that the top new majors include environmental science, business, health sciences, management, and nursing.
- Faculty and staff believe these programs are likely to attract new students: nursing, health care, physical therapy, management, computer science, education and engineering science...there are strong parallels between their perceptions and external predictions.
- Prospective students believe that some of the hottest majors right now include computer science, engineering, health care, and communications education.
- Prospects were asked what they intend to major in, and three of the top seven choices included education, health care, and nursing.
- Because survey respondents are most likely to be motivated to attend college “to get a good job”, we suggest that the University emphasize programs that train students for careers.
- Graduate students and adult learners indicated an interest in distance learning, yet our analysis found that while UM-Flint does offer some courses via distance learning, there are no actual on-line degrees offered; Baker College of Flint, Mott Community College, and Michigan State University all offer degrees via online instruction.

The above recommendations clearly indicate the need for further development of online curricula, particularly in academic areas where there is significant demand at both graduate and undergraduate levels.

iv. General Education Consideration

A critical success factor in completing an undergraduate degree program at UM-Flint, either online or in a hybrid format, is the ability of the students to complete their general education requirements and required program prerequisites in the same delivery format. Although it is conceivable that students might be able to complete their general education classes online (or on campus) at other institutions such as community colleges and then transfer the credits to UM-Flint, such a proposition has two major drawbacks. First, the UM-Flint department wishing to offer the online degree program will be dependent upon other institutions’ course offerings. This, in turn, will make the task of curriculum planning and advising significantly more complicated and subject to external risk factors. Second, UM-Flint will not earn the potential student credit hours, resulting in loss of tuition revenue.

At present, almost all of the general education classes at UM-Flint are offered through the College of Arts and Sciences (CAS). (The reader is referred to the University of Michigan – Flint Catalog for a detailed description of UM-Flint general education requirements.) The Purpose Group conducted a review of the online general education courses that have been developed. Table 1 is a summary of our findings as of this writing.

Table 1. UM-Flint Online General Education Courses

Area	Courses Developed
English Composition	two 100 level courses
Fine Arts	one 100 level course and one 300 level course
Natural Sciences	one 100 level course
Humanities	two 100 level, two 200 level, and three 300 level courses and one 400 level course
Social Studies	one 100 level, four 200 level, four 200 level courses
Analytical Reasoning	three 200 level courses
Cultural Studies	four 200 level and one 300 level courses
Foreign Languages	two 100 level courses
Value Inquiry	one 100 level and one 300 level courses
Western Civilization	one 100 and two 300 level courses

These courses (see Table 1) can be used to fulfill the various UM-Flint general education requirements. The UM-Flint general education requirements are comprised of several categories and area options. These categories and the availability of online sections of the respective courses are summarized in Table 2.

Table 2. Online General Education Requirements

Requirement	Offerings
English	Able to fulfill
Fine Arts	Able to fulfill – only two options
Natural Sciences	Unable to fulfill, one course offering
Humanities	Able to fulfill with some choice
Social Sciences	Able to fulfill with some choices
Area Options	
Analytical Reasoning	Unable to fulfill - A few courses in AR2, no AR1 or AR3
Cultural Studies	Able to fulfill
Foreign Languages	Able to fulfill – Spanish only
Value Inquiry	Unable to fulfill – only two course in VII
Western Civilization	Unable to fulfill – three course all in WC1

Although there has been growth in the number and variety of online general education classes over the last academic year, students are still unable to complete all of their requirements online. The Purpose Group identified the following as areas of concern:

- There is a definite need for the development and offering of additional general education courses, especially in area options where students cannot fulfill the requirements.
- There is no general oversight to assure that a sufficient number of courses are developed to fulfill the general education requirements online.
- There is no coordination to assure that courses are offered in a frequent and regular (predictable) pattern.

b. External Sources of Data

i. Recent Trends in Graduate and Undergraduate Fields of Study

An important part of any recommendation for the development of new degree programs, whether offered online or on-campus, is the demand for such programs. The National Center for Education Statistics (NCES) provides reports on the number of degrees conferred. A recent report by NCES contains information about the total number of bachelor's and master's degrees conferred by degree granting institutions during 1999-2000 [7].

Statistics from the above report were utilized to determine the top 20 graduate and undergraduate degrees conferred during the stated period. Figures 8 and 9 present the top 20 bachelor's and master's degrees conferred in 1999-2000, respectively.

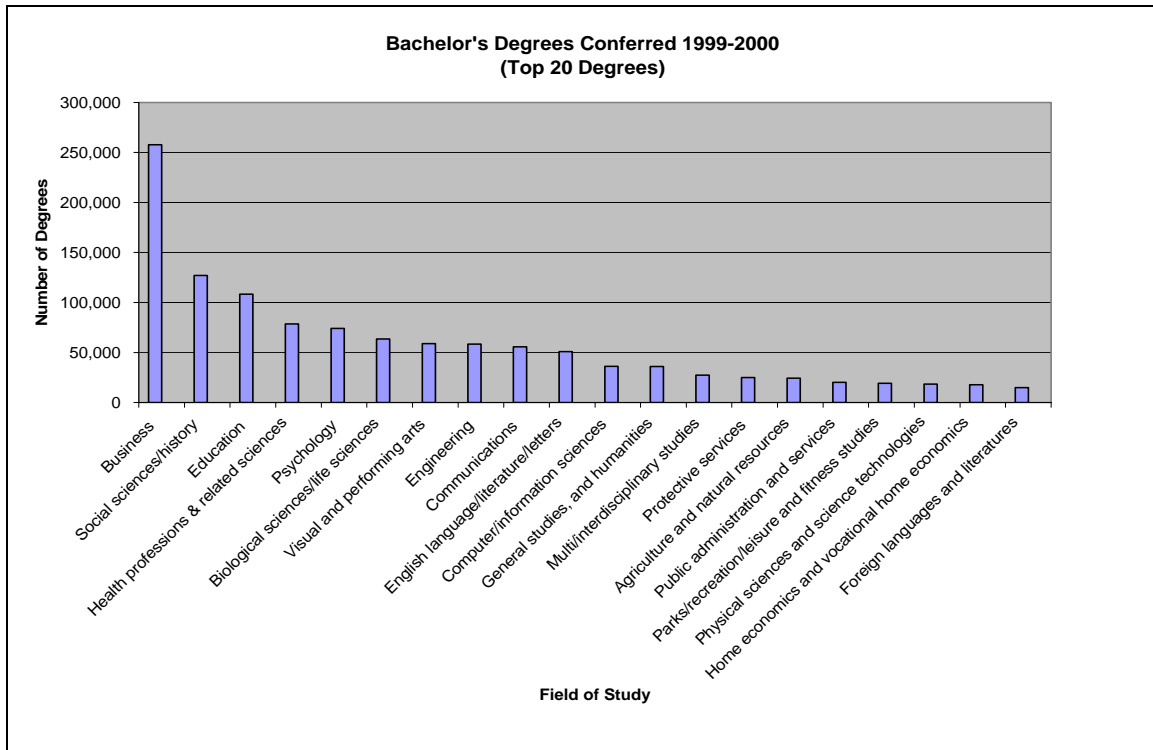


Figure 8. Top 20 Bachelor's Degrees in 1999-2000

At the undergraduate level (Figure 8), the number business degrees conferred (over 257,000 out of a total of 1.237 million conferred degrees) was by far the highest. The next four popular fields of study are social sciences/history (about 127,000 degrees), education (about 108,000 degrees), health professions (about 78,000 degrees), and psychology (about 74,000 degrees).

At the graduate level (Figure 9), education (about 124,000 out of a total of about 457,000 conferred degrees) and business (about 112,000 degrees) were the top two most popular

fields of study. This is followed by health professions (about 42,000 degrees), engineering (about 25,000 degrees) and public administration (about 25,000 degrees).

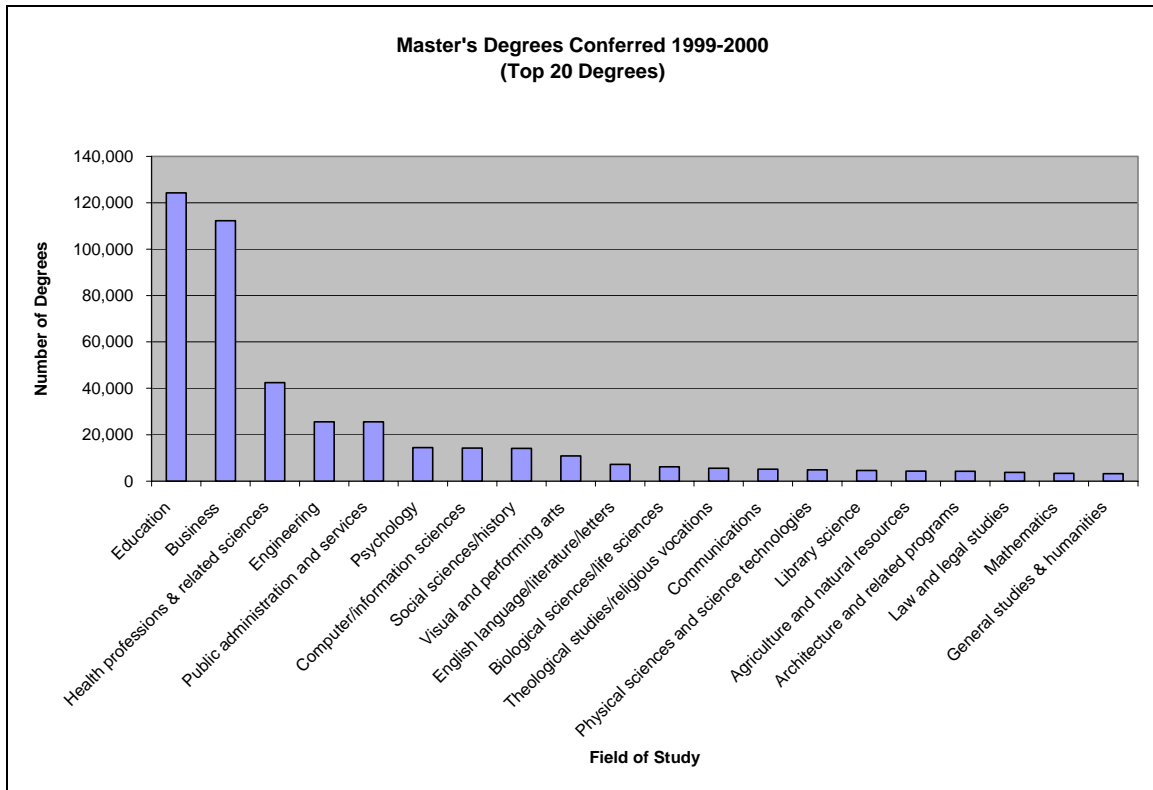


Figure 9. Top 20 Master's Degrees in 1999-2000

ii. Survey of Online Programs at Select Colleges and Universities

In order to become familiar with online learning program offerings at other institutions of higher learning, the Purpose Group conducted a survey of select colleges and universities that offered such programs. The group identified 28 colleges and universities (see Table 3) to be included in a survey. The selected colleges and universities were located in Michigan and other states. They had been noted in the UM-Flint faculty survey as a competitor school, the list used by the Committee on Economic State of Faculty, and/or the 2002 Peterson's Guide to Distance Learning Programs [8]. Six of these colleges and universities were identified as those with best practices in distance learning. They were Brevard Community College, Excelsior College, University of Illinois at Urbana-Champaign, University of Maryland at University College, Utah State University, and Weber State University.

The following categories of information were included in the survey: type of degree or certificate (B.S., M.A., Ph.D., etc.); program, track, or concentration name; credit hours required to complete the program; program accreditation, if any; cost of program; whether program is fully online or mixed mode (part online, part on-campus); on-campus

or offline counterpart, if applicable; course delivery method; number of students enrolled in program; and percent of full-time faculty teaching in program.

Data were gathered through a combination of personal contact with institutions (by phone and e-mail), printed materials from the institutions, and institution's Web sites. The collected data were current as of fall 2002. However, no information was readily available regarding the number of students enrolled or the percent of full-time faculty teaching in the programs, and that information is not included in the tables.

Table 3. Selected Colleges and Universities

Institution	City	State	Accreditation	No. of Programs
Baker College	Flint	MI	NCA	33
Brevard Community College	Cocoa	FL	Southern Association of Colleges and Schools (SACS)	9
Central Michigan University	Mt. Pleasant	MI	NCA	4
Eastern Michigan University	Ypsilanti	MI	NCA	4
Excelsior College	Albany	NY	Commission on Higher Education of the Middle States Association of Colleges and Schools	3
Ferris State University	Big Rapids	MI	NCA	3
Grand Rapids Community College	Grand Rapids	MI	NCA	1
Grand Valley State University	Allendale	MI	NCA	1
Kettering University	Flint	MI	NCA	0
Lake Superior State University	Sault Ste. Marie	MI	NCA	0
Lansing Community College	Lansing	MI	NCA	15
Michigan State University	East Lansing	MI	NCA	23
Mott Community College	Flint	MI	NCA	1
Northern Michigan University	Marquette	MI	NCA	0
Oakland Community College	Oakland County	MI	NCA	0
Oakland University	Rochester	MI	NCA	0
St. Clair County Community College	Port Huron	MI	NCA	0
University of Illinois at Urbana-Champaign	Urbana	IL	NCA	20
University of Maryland, University College	Adelphi	MD	Commission on Higher Education of the Middle States Association of Colleges and Schools	120
University of Michigan-Ann Arbor	Ann Arbor	MI	NCA	2
University of Michigan-Dearborn	Dearborn	MI	NCA	5
University of Phoenix	Phoenix	AZ	NCA	30
Utah State University	Logan	UT	Northwest Association of Schools and Colleges	2
Walsh College	Troy	MI	NCA	3
Washtenaw Community College	Ann Arbor	MI	NCA	0
Wayne State University	Detroit	MI	NCA	0
Weber State University	Ogden	UT	Northwest Association of Schools and Colleges	11
Western Michigan University	Kalamazoo	MI	NCA	1

Highlights

Of the twelve Michigan universities included in the survey, all offer courses in an online format. Michigan State University offers the most online programs (23). Lake Superior State University, Northern Michigan University, Oakland University, and Wayne State University do not offer any complete online programs.

Among the six Michigan community colleges examined, only Lansing Community College offers complete online programs. (Note: Some Michigan community colleges now offer certificate and degree programs that can be completed entirely by taking courses offered online by the college or through the Virtual Learning Collaborative; however, the degrees or certificates are awarded by the specific institutions listed.)

Among Michigan's private colleges, Baker College leads the way in online education, with 33 programs offered completely online.

Looking beyond Michigan's borders, data for several colleges and universities across the United States is provided for comparison. Among the seven institutions studied (including the University of Phoenix), University of Maryland at University College leads in Internet-based education with 102 programs completely online.

Standard course delivery methods are common at most of the institutions studied, with some exceptions. At the University of Michigan-Dearborn and University of Illinois at Urbana-Champaign, departments and instructors are free to use the technology of their choosing. (The same seems to be true of the University of Michigan-Ann Arbor.) Many institutions have developed their own software for course delivery, most notably Michigan State University's (MSU) Virtual University and Weber State University's WSU Online. MSU uses Blackboard as well. Interestingly, the nation's leading online education facilitator, the University of Phoenix, uses Microsoft Outlook Express and the Internet for course instruction.

The surveyed institutions offered a wide variety of online degree programs and certificates. They included simple certificate type programs with as few as 6 credit hours (e.g. Ferris State Certificate in Geographic Information Systems at a cost of \$1,272) to doctoral degrees (e.g., Central Michigan Doctor of Health Administration at a cost of \$47,691). Almost every type of degree program (i.e., associate, bachelor, master, and doctoral) was available in online/hybrid format. The available fields of studies or majors were numerous. Due to its high volume, the entire survey of selected institutions will not be included in this report. However, a copy of the report is available upon request. The interested reader should contact the Office of Associate Provost at the University of Michigan-Flint for further details.

c. Identifying Potential Candidate Programs

Upon completion of reviewing the above studies and surveys, the Purpose Group began the process of identifying potential degree programs and certificates to be offered

online/hybrid. Each member of the Purpose Group was asked to review all of the collected data/information, then suggest up to ten candidate degree programs/certificates. In suggesting candidate programs, group members were asked to consider students interest, appropriateness for online/hybrid delivery format, and compatibility with academic units at UM-Flint. This exercise resulted in an initial set of about 31 degree programs and certificates. The list contained one program that was already being offered online (i.e., MBA) and three other candidates that were deemed (by the group) impractical for online delivery at UM-Flint. Hence, the list of remaining 27 candidate programs was used for further consideration.

In order to reduce the list of candidate programs to a manageable size consisting of the most promising programs, the Purpose Group established three evaluation criteria as follows:

1. Number of other selected institutions offering the candidate program
2. Ranking in the NCES top 20 degrees conferred in 1999-2000
3. Number of online sections of courses offered by the respective academic department in fall 2002 and winter 2003

The first criterion is a proxy measure of the viability of offering such a degree program online. The second criterion delineates students' interest in the major field of study. The third criterion is a measure of preparedness of the UM-Flint academic department that will house the candidate program. The group also used a subjective measure of the members' intuitive assessment of a candidate program's demand by students and viability of offering it at UM-Flint.

The initial list of candidate programs consisted of five graduate degrees, 12 undergraduate degrees, six graduate certificates, and four undergraduate certificates. Because certificate type programs are generally the off-spring of actual degree programs, the Purpose Group decided to initially focus on the actual degree programs. Each entry in the initial set was then evaluated, using the above criteria. Table 4 presents the list of candidate programs together with their scores on the stated criteria.

After a careful review of the selection criteria scores, the group members agreed to present the candidate programs listed in Table 5 to the academic units for further consideration.

IV. Feedback from Academic and Administrative Units

In seeking feedback from the academic and administrative units, one member of the group was assigned the task of contacting the administrative units. The faculty representatives from the respective academic units were assigned the task of contacting the unit dean as well as departmental heads (chairs and directors). Feedback from academic and administrative units is described below.

Table 4. List of Candidate Programs and Selection Criteria Scores

Proposed Program	Offered at UM-Flint	NCES Ranking	Other Institut*	No. of online sec. FA02 & WI03
Graduate Degrees				
Computer Science		7	7	9 UG
Education - Instructional Technology		1	5	2 GR
Master of Public Administration	x	5	1	1 GR
Master of Science in Nursing	x	3	3	21 UG + 2 GR
Health Care Administration (MPA)	x	2	2	1 GR
Undergraduate Degrees				
Computer Science	x	11	6	9 UG
BBA	x	1	8	8 UG + 11 GR
Communication	x	9	1	2 UG
English	x	10	1	8 UG
Psychology	x	5	1	-
Sociology	x	2	1	-
Economics	x	2	-	-
History	x	2	-	-
Mathematics	x	-	-	-
Physical Geography	x	18	-	-
Political Science	x	12	-	-
Philosophy	x	-	-	2 UG
Certificates – Graduate				
Distance Education				
Educational Administration				
Gerontology				
Health Care Administration				
International Business				
Post Master's Certificate in Nursing				
Certificates – Undergraduate				
Minor in Computer Science	x			
Minor in Mathematics	x			
Minor in Technical Writing	x			
Technology & Comm.	x			

* Number of times the degree program, concentration, or similar degree appears on the list of surveyed institutions.

Table 5. Candidate Programs Presented to Academic Units

	Undergraduate	Graduate
Degree Programs	Computer Science	Computer Science
	BBA	Education – Instructional Technology
	Communication	Master of Public Administration
	English	Health Care Administration
	Psychology	Educational Administration
	Sociology	Master of Science in Nursing
Certificates	Minor in Computer Science	Distance Education
	Minor in Mathematics	Gerontology
	Minor in Technical Writing	International Business
	Technology & Communication	Post Master's Certificate in Nursing

a. Feedback from Academic Units

Because the number and the type of candidate programs varied by unit, the faculty representatives were encouraged to use an approach that they deemed most appropriate for obtaining the needed feedback. A packet of materials was prepared for use during the process of collecting feedback from academic units. The packet included a cover letter, the definition of online learning (section 1.b of this report), a script (Appendix B), and a copy of the programs/certificates listed in Table 5.

i. College of Arts and Sciences

The faculty representative assigned to seek feedback from the College of Arts and Sciences (CAS) distributed the packet of materials to the respective department chairs within CAS. Department chairs were encouraged to discuss the proposed programs with their faculty as they responded to the questions in the survey.

Five departments within CAS completed the feedback survey. In addition, the Chair of the Purpose Group conducted a personal interview with the Director of the Master of Public Administration (MPA) program. Of the five departments that completed the survey, one (Math) did not perceive a possibility of moving in this direction at this time. A summary of the other responses is presented below.

Feedback from the Department of Computer Science Engineering Science and Physics (CSESP) indicates some support for certificate program in CSC or CIS as well as a possible hybrid type Master of Science degree. The department believes it might be possible to offer additional 100 or 200 level CSC/CIS courses online. Additional faculty and course release time were identified as needed resources. Faculty have the skills to offer online/hybrid programs, but appear to have mixed feelings in this regard. The biggest resource constraint is lack of faculty support. The department does not face accreditation issues for offering online programs.

The Department of Communication/Art intends to submit a graduate program proposal next fall. Online and hybrid courses will be an integral part of the proposal. Both Communications and Art have plans to increase online and hybrid course offerings. Faculty training appears to be the key resource needed to implement these plans. Broad band access to Internet from home is highly desirable. Communication and Art students generally seem to respond well to online classes. New and younger faculty almost always have knowledge of online teaching. More senior faculty members also appreciate some of the advantages of online instruction. The department does not face any accreditation issues. As mentioned, the department plans to pursue the development of a graduate program that will include online/hybrid classes.

Feedback from the Department of Psychology identifies courses that include laboratory experiments and/or group work as the obstacle to offering online programs. The desire by the psychology students to attend graduate school is perceived as making online

learning not to be in the best interest of the students. Some faculty members in the department have considered offering online classes. The biggest resource constraints are administrative costs, need for additional faculty, technical support, and developmental costs. The department does not consider any circumstance under which an online degree can be offered.

The Department of English/Linguistics considers a complete online degree inappropriate at this time. However, the department considers offering certain courses online as practical. In fact, the department is already offering a number of online courses. The department is experimenting with offering freshmen composition classes, two introductory literature courses, and a linguistic course online. The online courses are proving to require more work by faculty than the conventional face-to-face classes. Opportunities for faculty training and mentoring by more experienced online teachers are highly desirable. The department is involved with faculty training and mentoring and is receiving assistance from the Office of Extended Learning. The development stipend for developing online classes is considered very important. The department is also considering using student assistants to help with the online classes. Students appear to like the flexibility offered by having some courses available online. There are a number of faculty members interested in teaching online. With respect to administrative support, the Office of Extended Learning has been helpful. CAS does not seem to have the needed support. The biggest resource constraints are release time for faculty to develop and teach online classes, the need to have smaller class sizes for the online sections, and the many skills needed to offer a complete program. In addition, certain courses require oral presentations by students which make offering a complete degree difficult.

The Director of MPA program believes there is strong interest among the program faculty to develop an online/hybrid MPA program, particularly in selected tracks. The program has made progress in this regard and one graduate course has already been developed for the educational administration track. The program needs the required human and financial resources to develop a complete online/hybrid program in selected track(s). Financial incentive such as the return of tuition revenue back to the department is imperative in implementing the development of an online MPA program.

ii. School of Education and Human Services

The faculty representative assigned to the School of Education and Human Services (SEHS) discussed the proposed programs for SEHS with select faculty colleagues. The support was very strong for the MA in Education with the Educational Technology specialization. This option seems to be well worth further exploration. Understandably, SEHS faculty were reluctant to comment on programs outside of their fields.

iii. School of Health Professions and Studies

Feedback from the School of Health Professions and Studies (SHPS) was obtained through personal interviews. The Purpose Group faculty representative met separately with Austin Agho, Dean of SHPS; Mary Periard, Director of Nursing; Suzanne Selig,

Director of Health Sciences and Administration; and the MSN Graduate Program Faculty. In addition, there were electronic mail communications with Professor Paulette Cebulski, Director of Physical Therapy.

Dean Agho is supportive of further expansion of online learning opportunities within the various SHPS Departments. Conversion of additional courses from on-campus to online is up to the discretion and resources of the individual departments. A key concern in the development of full programs in an online/hybrid modality is the availability of adequate resources to initiate, develop, market and sustain new online programs.

There are a number of additional courses within the various programs offered by Health Sciences and Administration (HSA) that could be converted to online or mixed mode courses. However, the offering of fully online or hybrid programs is not currently seen as viable. The interdisciplinary nature of many of HSA degree programs creates a logistic barrier. For a program to be developed as an online or mixed mode program, a variety of departments outside of SHPS would have to commit to offering the required courses in the online/mixed mode format. It is outside HSA's jurisdiction to require that conversion take place. The Program Director is supportive of having an increased number of the **classes** offered by HSA converted to an online or mixed mode format but stops short of recommending full programs in online/mixed mode. If there is strong interdisciplinary/cross unit support and commitment, she views the following as having potential as an online or mixed mode program: MPA with a concentration in Health Care Administration, Bachelor's in Health Administration and possibly Administration of Services to the Aged.

The Master of Science in Nursing (MSN) Program Faculty, the MSN Program Director, and the Director of the Department of Nursing are supportive of the development of the MSN program as a mixed mode program. While they do not feel that it is feasible to offer the MSN degree as a fully online program, they do support its development as a mixed mode program. The experience of the Department in offering the RN/BSN online program is viewed as strength. A few of the graduate classes are already offered online and a number of other graduate faculty have experience in online teaching.

New students living a further distance from campus could be recruited into the MSN program if offered as a mixed mode program. This would most likely include Michigan students from more than 1-1.5 hours from UM-Flint including the Upper Peninsula, students from Ohio, and students from a small area of Canada, particularly the Sarnia area.

A strong infrastructure was noted as priority in order to implement a conversion of the MSN to a hybrid program. This includes faculty development and support, high quality technological resources, and strong library resources. In addition, because the MSN program is strongly practice-based, the identification, development, and supervision of needed preceptors in the areas where students live is a key resource issue. The MSN Program Faculty identified 2-3 years as a practical time frame for implementing a conversion to a hybrid program once the commitment and resources are in place.

The faculty noted that the non-resident tuition structure for out-of-state online students might be a barrier. They recommended exploration of different models to promote competitive tuition. A noted concern for the change to a mixed mode delivery is the quantity/quality of faculty/student interaction. Faculty view this to be a strength of the program as it is currently offered. They want to maintain this strength in the conversion to a mixed mode program.

The Department of Physical Therapy is interested in converting select courses to an online format and to supplement other courses using online resources. However, the DPT degree cannot feasibly be offered online or mixed mode.

iv. School of Management

Feedback from the School of Management (SOM) was obtained from personal interviews with the SOM Dean, Area Coordinators, and the Director of Academic Programs. The questionnaire was used to collect responses to specific questions.

SOM already has a hybrid MBA program (*NetPlus!*) that is fully operational and is experiencing relative success. However, there is potential for an international MBA, and for an online BBA. An alternative first step would be to offer a BBA completion program (last 2 years), especially given the limited general education courses offered online that are part of the first two years of the BBA degree program.

The School has anecdotal data that support the appropriateness of additional online courses within SOM. For instance, it is known that competitor schools do offer both undergraduate and graduate degree programs completely online. Therefore, there is a desire to be able to offer upper-level undergraduate courses online or in mixed mode. In addition, there is solid evidence that many SOM students prefer online classes. The online classes fill up rather quickly and have long wait lists.

Additional faculty are needed to successfully offer additional online courses/programs. The most viable BBA concentration for offering online/hybrid is general business. It is not desirable to offer all of the BBA concentrations online. All of this assumes that incentives and resources are available, especially additional faculty, training for faculty and course releases.

SOM has a core of faculty who have the technical skills to offer an online graduate program. However, the degree of interest and technical skills vary. SOM has the administrative support to assist with the development and launch of an online program. However, this support is minimal. The School has a technical person who is clearly stretched to the limit. There is still a need for assistance with some of the more sophisticated technical areas such as the addition of net meetings to our programs, use of PDA's in the classrooms, faculty use of PC cameras, multiple media, etc.

The biggest resource constraints with regard to offering online programs are faculty leadership, faculty time, and support staff. There are no apparent accreditation issues that might be affected by an online program. AACSB accredits programs, not delivery systems. It is important to maintain the same standards (in both theory and practice) in all of the delivery systems. Given the availability of adequate levels of resources to initiate and maintain high quality program offerings, SOM would consider launching additional online/hybrid programs.

b. Feedback from Administrative Units

Members of the Purpose Group met with many members of the University of Michigan–Flint community to discuss matters related to continued growth of online course offerings and full program delivery. Student Services and Enrollment Management (SSEM) was identified as a critical component of online delivery if we are to move forward with recommendations for full online programs.

Vice Chancellor Virginia Allen and her staff and the Director of the Library, Mr. Robert Houbeck were contacted to discuss the present state of preparedness to address distant student service needs in the event additional online programs are launched in the future. It was determined that the University of Michigan–Flint is in good shape to provide essential services for distant students who cannot travel to campus for such services. Many services are already available to students via the website and noted below are additional services that SSEM and Library staff identified as issues for consideration as more online courses are offered and new programs are launched fully online in the future.

The generally agreed upon definition of online students are those who need to receive student services at a distance, either via the Internet, postal service, fax, and telephone. It was determined that local students who may take courses both online and in the classroom were not the primary concern since these students have on-site access and sufficient services through the website presently. Providing services at a distance for online students who take courses exclusively online to complete a program (presently the RN to BSN program, for example) were the primary focus.

Some of the issues discussed were as follows:

- Application, enrollment services, advising, financial aid, and electronic library resources are accessible for distant students presently.
- Additional services discussed that would enhance distant student services were tuition payment, career planning, tutorials based on campus programs, toll-free incoming calling access (there is an 800 number that goes to Ann Arbor but it is only for the State of Michigan), and equivalent counseling services.
- Admissions uses AOL and MSN Chat to answer questions online although that service is limited and a more integrated approach might be preferred.
- The library is in very good shape to provide electronic resources for distant students. The electronic collection is the best among UM-Flint peer institutions.

- The Association of College & Research Libraries (ACRL) report [9] would be a good resource as additional support services are designed.

Although, there is some room for improvement, with additional services there will be associated expenses. The University of Michigan–Flint SSEM and Library staff appear to be in good shape to attend to distant student needs. The ACRL Guidelines [9] raises the issue of **Equivalency of Services** for distant students, also noted by the Director of the Library and SSEM directors. Will we provide equivalent services to on-campus students and distant students? The ACRL guidelines recommend that institutions with online programs should aim at providing equivalent services.

Depending upon the level of distant service UM-Flint wishes to provide in order to meet the equivalency standard, how and who will pay for additional services and access will need to be addressed. For example, the Library had a distant student who ordered 50 articles that were not accessible electronically. The average cost of postage per article was \$4, thus \$200 to provide this service to the student. While this may be atypical, UM-Flint will need to consider how to address the cost of such services or alternative arrangements to meet such needs.

Once programs are identified, the Library will need to evaluate online abstract index service availability. Some of the services are very expensive and the decision will need to be made regarding whether to purchase or not, depending upon the need for the discipline. The Library would want to work with the faculty to evaluate whether or not UM-Flint has the resources they need in order to provide the service to distant students.

An additional point of discussion was the potential of hiring adjunct online instructors who might also be distant. It is fairly common among institutions with significant online program presence, to hire and employ qualified adjunct faculty as needed. Considerations for meeting distant instructor needs will also need to be discussed, if we move in that direction. The underlying motivation among all who were contacted in student service related functions was to minimize the “hassle factor” for students and faculty as they participate in online activity.

V. Recommendations

The Online Learning Curriculum Development Purpose Group has examined the challenges, opportunities, and readiness of this campus to increase the presence of online/hybrid instruction of academic courses and programs. In support of that effort, the group looked at many variables including, but not limited to: the historical development of online learning on this campus; the current situation; enrollment statistics; NCA statement on the preparedness of UM-Flint; recent trends in growth by field of study; status of online learning among institutions of higher education in Michigan and elsewhere (identified by members of the university community as similar or potential competitors); and national trends in the growth of online learning in higher education.

It was determined that this campus demonstrates both significant student participation and growth in online course offerings and increasing faculty acceptance for the feasibility of future online programs. This conclusion is supported by data collection which chronicled the history and growth of student and faculty participation. Surveys and personal interviews conducted with faculty, administrators, and students indicate increasing support for this method of academic delivery of courses and programs.

Other positive indicators, such as the growing interest among faculty to use Blackboard, the virtual classroom software in tandem with the face-to-face classroom, were also included in this historical picture. Growing interest in Internet accessibility, either in the classroom or for remote access, was considered a critical indicator for the feasibility of future online efforts. All of the information gathered suggests a high level of interest among students and a growing interest among many UM-Flint faculty members.

Surveys and interviews with faculty in CAS, SEHS, SHPS, and SOM were very positive about suggesting programs that might be considered for hybrid or complete online delivery over the next two to three years. Graduate programs appear to offer the highest potential followed by partnerships with community colleges. Undergraduate programs, while feasible, offer greater challenges for complete online degree availability. This is due to a relatively large proportion of general education courses, many of which are not available online. It is not anticipated that online general education courses will be offered in sufficient numbers in the near future.

There was some concern expressed by a few faculty members who wanted to make certain that serious attention be given to the selection of programs identified for online delivery. A small number of faculty also expressed a desire to be assured that the move toward online programs is a choice and that they will not be forced to teach through a web-based mode of delivery unless it is their preference. It is not the intention of this Purpose Group to give less than serious consideration to this concern. The members feel strongly that the concerns and preferences of faculty members regarding participation in this new form of educational instruction must be respected. This and other considerations were included in potential program decisions as the initial recommendations for online programs were developed. This list and the rationale for those programs selected are provided in the sections that follow.

a. Recommended Programs

Based upon the Purpose Group's findings, six graduate programs, an undergraduate degree in business and an undergraduate certificate program have been identified as having potential for success as online/hybrid instruction. The list of high potential programs was developed after considerable market research of competitive offerings, market and student demand for such programs, and the philosophical agreement and readiness of the involved academic department(s).

MPA - Educational Administration and Health Care

The Director of MPA supports the development of an online/hybrid MPA program and suggests that there is faculty support for such a program. The barriers to entry for such a program involve acquiring the necessary human and financial resources to support design and development of a new program.

Master of Arts in Education - Instructional Technology

There was strong support for an MA in Education with a concentration in Instructional Technology. Due to the nature of the area of study, it seems quite feasible to offer this program in an online or hybrid delivery mode. The Department of Education has not been actively participative in online course offerings to date, however, recent faculty hires have significant experience in educational technology and distance learning methodologies. The department appears to be cautiously supportive of such endeavors using online learning as a substitute for classroom delivery. Barriers to entry involve providing the necessary resources to support the design and development of such a program.

Master of Science in Nursing

There is considerable support among SHPS and the Department of Nursing leadership for expansion of online learning opportunities. An MSN degree delivered in a hybrid format appears to have high potential. The department has demonstrated strength in faculty technology skills and positive experience through the RN to BSN online program.

External research supports such a program based upon student demand and comparable competitive offerings. Additionally, this would give present UM-Flint online nursing students an opportunity to continue on to receive a MSN in a flexible and convenient format. Nurses often work hours that make regular classroom attendance problematic. This program would fill a critical need for nursing education on a convenient and flexible basis for nursing students and for those hospitals and clinics that employ them.

While the department does not consider an exclusively online program feasible, present MSN faculty have indicated that 2-3 years is a practical timeframe for implementing such a program. A hybrid program would potentially reach out to new markets beyond the customary geographic territory bound by driving distance. This program would minimize campus visits and it is predicted that UM-Flint will draw from both the lower and upper peninsulas of Michigan, northern Ohio, and regions of western Ontario, particularly the Sarnia area.

Barriers to entry for such a program involve issues that are addressable. Such issues as non-resident tuition structure, a strengthened infrastructure to support online teaching, high quality technological and library resources, and student services are all critical components for consideration in the program design and development. These issues will be addressed in the implementation section of this report.

Master of Science in Computer Information Systems

Faculty of CSESP identified the MS in Computer Information Systems (CIS) as having high potential for success as an online/hybrid program. The field of CIS continues to experience high demand for qualified and skilled graduates for employment in technology-related jobs. The faculty have the expertise and the willingness to work toward such a program given adequate human and financial support and resources.

International MBA

The School of Management also has significant online teaching strengths and experience with hybrid delivery through the *NetPlus!* MBA Program. There is a core of faculty who have the technical skills and the interest in further development of online/hybrid programs. External survey data suggests that business-related masters' degree programs are sought after in the marketplace.

Barriers to entry include insufficient administrative resources to deliver a second or third hybrid program which relies heavily on technological resources and administrative personnel for distant student services. Additional technology resources and training are necessary components if this UM-Flint moves forward with this program. An international MBA will require adequate funding for the additional expenses the School might incur due to faculty stipends, travel expense, and other associated operating costs. However, the programs should be self-supporting and profit generating if undertaken under a tuition-return model.

Presently, there is a relationship and desire to offer an International MBA in cooperation with the Togliatti Academy in Russia, Flint's sister city. Preliminary planning for a hybrid MBA delivered in Russia has been initiated. This program is designed to use a combination of UM-Flint faculty and Russian faculty teaching mainly online with an intermittent teaching presence in Russia. There is insufficient start-up funding for this hybrid program, however, SOM continues to seek grant funding for such an innovative program. Other barriers to entry are addressable although consideration to such issues is warranted if such a program should be developed.

BBA – General Business

Again, the School of Management has both the experience and capabilities among a core group of faculty and staff to deliver an online or hybrid program. The School has demonstrated success at the graduate level and acknowledges that there is potential to offer a similar program for delivery at the undergraduate level. Additionally, there is external support to indicate demand for such a program. Competitors in the area and nationally are experiencing success with online-delivered business degrees.

Barriers to entry include insufficient administrative resources to deliver a second or third hybrid program which relies heavily on technological resources and administrative personnel for distant student services. Additional technology resources and training are

necessary components if UM-Flint decides to move forward with this program. These barriers are addressable although they warrant consideration as the program is designed and developed.

Academic Certificate in Computer Science

Faculty and leadership in CSESP identified this as a potential for online/hybrid delivery. Computer science skill sets are sought by students for employment opportunities and external demand for such a program is probable. Present faculty have the expertise to deliver courses online although they express a need for additional faculty and course release time for new program design and development.

Master of Arts in Communication

One of the programs with very high potential for growth is already under consideration in the Communications Department. The Chairperson plans to submit a graduate program proposal next fall which will include online and hybrid courses as an integral part of the proposal. Faculty members of the communication department have been early adopters of technology and have experience with web-based learning and online course delivery. Communication students generally respond well to present online course offerings and most classes regularly experience waitlists. It is anticipated that a masters program holds great promise for online/hybrid delivery in the next one to two years.

A potential barrier to entry for this program is the present size of the department. There are relatively few full-time faculty members and an additional program that would expect to see significant prospects for student growth will require additional human resources and financial support. Other barriers, such as reluctance of faculty members or impracticality of course offerings delivered online, are not present.

b. Partnerships

Partnerships with community colleges raise some challenges with regard to transferability of coursework. The twenty-eight community colleges in Michigan have formed a strong coalition, the Michigan Community College Virtual Learning Collaborative (MCCVLC) aimed at providing access to online courses at member colleges in order to receive associate degrees online. Many of the institutions have articulation arrangements with universities and four year colleges for those community college graduates who plan to pursue their four-year degrees. There are presently fifteen community colleges that offer complete associate degrees fully online and several others which offer degrees in a combination of classroom and online modes of delivery.

This poses an opportunity for UM-Flint to form partnerships where academically feasible to offer the second two years for those community college students seeking four-year degrees. External research indicates that community colleges are seeking such partnerships and several institutions have already formed articulation agreements for online delivery of coursework commencing in a bachelor degree. Grand Valley State

University is active among those institutions with articulation agreements for the RN to BSN degree online. Undergraduate 2+2 business degree program partnerships are also becoming fairly common (See Appendix C).

Barriers to entry include the complexity of evaluating and accepting transfer credit and specific courses that might be better taken at UM-Flint. The determination is made at the academic department level for each course and program thus creating some roadblocks and raising valid concerns. One such concern is that community colleges offer many of the general education courses UM-Flint requires undergraduates to complete. This could have a detrimental effect on enrollment in those lower level courses that might then be transferred in rather than taken on this campus.

Partnership with community colleges, however, remains a growing opportunity for Michigan institutions, as community college students seek non-traditional modes of delivery to complete their degrees. Additionally, such partnerships would expand the geographic reach beyond the Genesee County plus territory and the surrounding community colleges. UM-Flint would be able to reach students at many of the twenty-eight community colleges which already have students who are experienced with technology and web-based learning.

c. General Education

Although general education is not a program per se, the Purpose Group studied the present state of availability of general education online course offerings. We also gathered information on the prospects of building adequate number of online courses in order to determine the feasibility of proposing online/hybrid programs at the undergraduate level. Our recommendation is that in order to expand online learning opportunities for undergraduates, UM-Flint must first address the availability of online general education offerings.

Although online students can theoretically fulfill these course requirements with the present general education course offerings, it is a practical difficulty as course selections are limited; classes fill quickly and frequently have waiting lists. This creates a dilemma presently for the Department of Nursing as they counsel distant RN to BSN students who need to fulfill general education requirements. Presently, many of those students must enroll as guest students at other institutions in order to meet these requirements. The College leadership is agreeable to seeking additional courses that are appropriate for online delivery and we applaud present efforts and encourage continued progress in this critical area.

d. Required Resources

It is recommended that UM-Flint consider and provide comparable student services for distant students. As stated in this report, the state of readiness for library, technical, and student services is adequate. There is room for improvement which requires attention to funding availability. The University makes a superb effort to accommodate our current

distant learners, often going to great lengths to satisfy students with very little dedicated resources.

As new online/hybrid programs are considered for design and development, it is imperative that faculty have support in the form of training, release time, development funding, mentoring, technical and administrative support.

Specific requests for certain services were discussed that would enhance distant student services. As new programs are added, these services will become necessary. Such services as online tuition payments, career planning, tutorials based on those available for campus students, an incoming and outgoing toll-free telephone number for communication with distant learners, and equivalent counseling services. The Library, academic department administrative, and student services staffing considerations in light of additional online students and programs warrant attention in order to ensure success and the high quality of learning that students expect from the University of Michigan – Flint. The next section discusses implementation issues in more detail.

VI. Implementation Issues

In order to implement any or all of the programs identified in the previous section as possessing high potential for online/hybrid delivery, a discussion of how the University of Michigan–Flint might proceed with positive steps toward executing such undertakings is necessary. The Group identified six strategies which could encourage faculty participation and make certain that adequate student services are in place to ensure successful launch and implementation. The strategies include:

- **Provide incentives for participating departments:**
In order to motivate departments to participate in the additional responsibilities involved in designing and developing a new online learning program, a plan to share tuition for the new program with the department might be considered. This has been an effective working model for the School of Management in administering the *NetPlus!* and SEHS in supporting the MAC program.
- **Provide program and course development funding:**
The Office of Extended Learning (OEL) currently offers a limited number of online course development stipends to support further development of new online courses. Faculty members are eligible for a one-time stipend for creating an online version of their course as long as it is offered on a regularly scheduled basis and meets the instructional design standards in place. The funding source for these stipends is the student convenience fee which must also support several other critical operations within OEL. An institutionally-supported policy for funding program and course development should be considered. In addition to course development expense, there are other costs related to program start-up that must be addressed.

- Establish a process to address coordinating online general education course offerings:**
 The continued success of the current undergraduate RN/BSN online program as well as the development and implementation of any new online undergraduate degree programs depend upon the availability of online general education classes. Establishing a formal process to address the development and scheduling of online general education classes is necessary to resolve this bottleneck. The process might involve various stake holders such as the CAS Curriculum Committee and/or Executive Committee; CAS Dean; Director of OEL and/or the OEL Advisory Committee; and representatives from other schools.
- Track and report online learning activities:**
 Initiate a regular tracking and reporting process for the status of online learning at UM-Flint. There is increased interest and momentum for additional course offerings among faculty in all major schools. This is, in part, due to the positive results, the popularity for such courses among students, and the documented statistics of growth and acceptance. The reporting system needs to be communicated to the wider UM-Flint community in order to reinforce the student demand for online learning opportunities.
- Include online learning in academic program reviews:**
 While online learning has many commonalities with face-to-face learning, there are distinct differences. As the University and academic units continue to examine formal programmatic review processes, attention should be given to the special needs of online learning programs. A suggestion for program reviews to include a discussion for potential online/hybrid course offerings may ensure that this development process continues at the departmental level on a regular and reported basis.
- Discuss appropriateness of online components in proposed new programs:**
 Include discussion of the appropriateness of an online component for proposed new academic programs. This adds a critical step to the process that will ensure ongoing attention to such opportunities on a regular and reported basis.

VII. Conclusions

Online learning is no longer considered an “experiment” – it is a strategic necessity that an institution such as UM-Flint cannot afford to ignore. As more and more institutions of higher learning offer online/hybrid learning opportunities, our ability to attract quality students to UM-Flint continues to be challenged. We hope this report provides an initial step in creation of a roadmap to explore offering viable additional online/hybrid complete programs at UM-Flint. It has been our pleasure to participate in the Purpose Group on Online Learning Curriculum Development and provide this report. It is with high expectations that the University of Michigan –Flint continues to experience success through its online learning endeavors. There is evidence to support significant growth

potential in several academic areas and it is certain that online learning will continue to grow in popularity among students and institutions of higher education. We look forward to participating in this growth.

References

1. Mestas, J. Purpose and Directions - Address to the Campus Community University of Michigan – Flint, November 2001. (<http://www.umflint.edu/home/remarks.doc>)
2. Mestas, J. Task Force on the Enhancement of the Student Experience and the Learning Environment (“Student Learning Task Force”), April 2002.
3. Handbook of Accreditation, Second Edition, NCA – North Central Association of Colleges and Schools Commission on Institutions of Higher Learning, Chicago, Illinois, September 1997.
4. *Proposal for Placement of Distance Learning in UM-F Organizational Structure*, Distance Education Task Force, The University of Michigan – Flint, May 1999.
5. *Report of a Focused Visit to University of Michigan – Flint, Flint, Michigan, February 4-5, 2002*, Higher Learning Commission of the North Central Association of Colleges and Schools.
6. *Enrollment Market Analysis for University of Michigan – Flint: Setting a Course for the Future*, Prepared by Carnegie Communication, Inc., October 2000. (<http://www.umflint.edu/home/analysis.htm>.)
7. U.S. Department of Education, National Center for Education Statistics, Higher Education General Information Survey (HEGIS), "Degrees and other Formal Awards Conferred" surveys, and Integrated Postsecondary Education Data System (IPEDS), "Completions" surveys, August 2001.
8. *Guide to 2002 Distance Learning Programs*, Peterson’s Division of Thompson Learning, Inc., Lawrenceville, NJ, 2001.
9. *Guidelines for Distance Learning Library Services*, Association of College and Research Libraries, fall 2000. (<http://www.ala.org/acrl/guides/distlrng.html>)

Appendix A Faculty Survey

The Purpose Group on Online Curriculum Development has been charged with identifying possible courses and/or programs that might be offered fully or partly online. Given the changes in technology, busy student schedules and the convenience that online classes offer, our students are increasingly asking for alternative scheduling and options in delivery of courses.

We believe that University of Michigan-Flint faculty are best qualified to provide insight into curriculum delivery in the areas in which they teach. Therefore, in order to ensure that the task force considers all feasible options, we are asking for your help.

Please take just a few minutes to complete the following brief questionnaire about courses and programs in your academic area. Recommending that a particular course or program as a candidate for an online course does *not* mean that course will ONLY be offered online. It would potentially allow the university to offer students more choices. We are simply looking for possible opportunities. **All of your responses will be kept strictly confidential.** Thank you very much for your assistance.

1. Irrespective of your personal preference to teach or not teach online, are there **courses** in your academic area that (in your opinion) may be a potential fit for conversion to an online mode of instruction? If so, which courses would you suggest?

2. Are there **programs** in your academic area that may be well-suited to an online mode of instruction? If so, which programs would you suggest?

3. Are there courses and/or programs that might lend themselves to partial online instruction? (For example, a course with lectures and labs or some lectures in addition to the online component.)

4. If you were asked to teach an online course that you presently teach or have previously taught, would you be willing to do so?

Yes _____ (please go to question 6)
 No _____ (please go to question 5)

5. If no, would you be more willing to do so if training for course development and online teaching were made available to you?

Yes _____
 No _____

6. While the university has identified other institutions that it considers to be competitors, we are interested in knowing which institutions YOU consider as competition for YOUR department's programs. Please check the institutions listed below which you consider competitors. (Mark all that apply)

	Undergraduate	Graduate
Central Michigan University		
Eastern Michigan University		
Ferris State University		
Michigan State University		
Oakland University		
University of Michigan Ann Arbor		
University of Michigan Dearborn		
Wayne State University		
Baker College		
Mott College		
Rochester College		
Walsh College		
Other (please specify)		

Please place the completed survey in the attached envelope and forward it to Ms. Ann Briggs in 221 French Hall by Friday October 4, 2002. Thank you very much for your participation!

Optional: _____
 Name Department

Appendix B

Script for Online Degree Programs

As you may know, the Online Learning Curriculum Development Purpose Group has been charged with "...identifying programs and courses that could be offered fully or partially online and to make recommendations for their support and development, with the intention of creating an online/mixed mode curriculum." The group consists of several UM-Flint faculty, staff, students and administrators and has been meeting since September 2002. The purpose group has collect and analyzed data/information from a number of sources to identify a set of potential degree or certificate programs.

The Purpose Group has identified several potential graduate and undergraduate degree programs and certificates that may be conducive to be offered either fully online or in a hybrid learning environment (mixed mode). We need your assistance and input in order to more fully develop a list of proposed programs, and to determine priorities for action. Thank you in advance for your cooperation.

◆ Do you have any data or thoughts about whether or not an online program would be appropriate in your area(s)?
◆ Do you have any data or thoughts about whether or not additional online courses would be appropriate in your area(s)? If yes, in which area(s)
◆ What types of resources would you need in order to make such a (course) program feasible? (such as additional faculty, training, course releases, technology, etc.) <i>(circle one or more)</i>
◆ Do you know whether or not students in your area would like an online program?
◆ Do faculty in your area have the a) skills and b) desire to teach in an online course/program? <i>(circle one or more)</i>
◆ Does your school have the administrative support to assist with the development and launch of an online program?
◆ What do you see as the three biggest resource constraints with regard to offering such a program?
◆ Do you have accreditation issues that might be affected by an online program?
◆ Are there any circumstances under which you might reconsider launching an online program?

Appendix C

Select Community Colleges with Online Programs

Community College	Community College 2 yr Complete Online Program	Articulation Agreements + 2 yr Complete Online Program	#
Bay de Noc www.baydenoc.cc.mi.us	~ Online classes currently offered	Franklin University (www.franklin.edu) University of Phoenix (www.uophx.edu)	
Delta www.delta.edu	Associates in Arts (Additional online courses available)	Franklin University (www.franklin.edu) Governors State University (www.govst.edu) Jones International University (www.jonessinternational.edu)	
Glen Oaks www.glenoaks.cc.mi.us	Associates in Applied Science (Additional online courses available)	Franklin University (www.franklin.edu) Governors State University (www.govst.edu)	
Gogebic www.gogebic.cc.mi.us	~ Online classes currently offered	Franklin University (www.franklin.edu)	
Jackson www.jackson.cc.mi.us	Associates in Arts and Science Associates in General Studies Dianostic Medical Sonography - Vascular Technology - (AAP) Dianostic Medical Sonography - (AAP) Nursing – Associates in Applied Science Certificates Available (Additional online courses available)	Franklin University (www.franklin.edu) University of Phoenix (www.uophx.edu) Walsh College (www.walshcollege.edu)	
Kellogg www.kellogg.cc.mi.us	~ Online classes currently offered	Franklin University (www.franklin.edu) Walsh College (www.walshcollege.edu)	
Kirtland www.kirtland.cc.mi.us	~ Online classes currently offered	Franklin University (www.franklin.edu)	
Lansing www.lansing.cc.mi.us	Associate in Business Associates in General Studies Certificates Available (Additional online courses available)	Capella University (www.capellauniversity.com) Central Michigan (www.cmich.edu) Franklin University (www.franklin.edu) Upper Iowa University (www.uiu.edu) Walsh College (www.walshcollege.edu)	
Macomb www.macomb.cc.mi.us	Associates in General Studies (Additional online courses available)	Franklin University (www.franklin.edu) U of M – Dearborn (www.umd.umich.edu) Walsh College (www.walshcollege.edu)	
Mid Michigan www.midmich.cc.mi.us	~ Online classes currently offered	Northwood University (www.northwood.edu)	

Monroe www.monroe.cc.mi.us	~ Online classes currently offered	Saint Leo University (www.saintleo.edu)	
--	------------------------------------	---	--

Montcalm www.montcalm.cc.mi.us	~ Online classes currently offered	Walden University - IP* (www.waldenu.edu) Walsh College - IP* (www.walshcollege.edu)	
--	------------------------------------	---	--

Mott www.mcc.edu	Associates in Applied Science Gen Bus Associates in Arts Associates in Science Associates in General Studies Certificates Available (Additional online courses available)	Walsh College - IP* (www.walshcollege.edu)	
--	--	--	--

Muskegon www.muskegon.cc.mi.us	~ Online classes currently offered	Capella University (www.capellauniversity.com) Davenport University (www.davenport.edu) Northwood University (www.northwood.edu)	
--	------------------------------------	--	--

I

St. Clair County - SC4 www.stclair.cc.mi.us	~ Online classes currently offered	Capella University - IP* (www.capellauniversity.com) Franklin University (www.franklin.edu) Walsh College (www.walshcollege.edu)	
--	------------------------------------	--	--

Schoolcraft www.schoolcraft.cc.mi.us	~ Online classes currently offered	Northwood University- IP* (www.northwood.edu) Walsh College (www.walshcollege.edu)	
---	------------------------------------	---	--

- Light grey represents community colleges that offer complete 2 yr online degree programs and their articulation agreements with universities to obtain complete +2 online degrees.
- White represents community colleges that are offer online classes. In addition, they have articulation agreements already established with universities to obtain complete +2 online degrees.
- Dark grey represents institutions that offer complete online degree programs and have established articulation agreements.

*IP – articulation agreement currently in progress