

III. Institutional Priorities: [Duluth](#)

Academic Excellence – Faculty, Reputation

Investing in Best Departments

- **Matching faculty lines with needs:** Utilization of faculty position pool; open lines are returned to the Vice Chancellor for Academic Administration.

Investments to Strengthen Interdisciplinary and Legislative Initiatives

- **Design Initiative:** UMD hired one new tenure-track faculty member and a one-semester visiting professor; many guest artists visited the campus. Faculty taught courses utilizing Visualization and Digital Imaging Laboratory (VDIL) technology.
- **Cellular and Molecular Biology:** One FTE faculty member was hired to expand UMD's initiative in cell and molecular biology.
- **State Agricultural Special – Freshwater:** Two new FTE faculty were hired to expand UMD's course offerings, research opportunities, and leveraged funds in the freshwater resource initiative.

Measuring Results

- In FY01, funding from 16 faculty lines was reallocated to prioritized needs within academic units for FY02.
- Revised curriculum for graphic design majors; increased number of majors in graphic design by 69 percent over two years; increased faculty research in VDIL.
- Additional \$290,000 in Army Research funds; established a genomics center on campus; increased research collaboration between College of Science and Engineering and UMD medical school faculty.
- Increased viability of the Large Lakes Observatory; leveraged funds producing additional instrumentation.

Students

Investments to Strengthen the Undergraduate Experience

- **Advising:** Network advising programs across campus; continuing development of the Electronic Portfolio; reviewing undergraduate programs.
- **Undergraduate Research Opportunities Program (UROP):** Increased opportunities for undergraduate research and creative activity.
- **Introduction to College Learning (ICL):** One-credit course provides academic, personal, and social enrichment to first-year students; focuses on technology, campus resources, study skills, values and ethics, learning styles, relationship and conflict management.
- **Laptop Initiative:** 166 juniors and seniors in four majors (accounting, education-early childhood, theatre-design emphasis, and sociology/anthropology/criminology) participated in the laptop initiative in FY01.

Measuring Results

- Added 2.5 FTE advising positions; reviewed 75 percent of undergraduate programs.
- Received funding for 102 UROP students; an additional 570 students participated in undergraduate research or independent study; supported 14 student presenters at the National Conference on Undergraduate Research (NCUR); two NCUR presenters chosen to participate in undergraduate research meeting/presentation on Capitol Hill.
- 832 students enrolled in 31 sections of ICL in FY01.
- 832 ICL students and 513 School of Fine Arts (SFA) students are using the Electronic Portfolio.
- Increased retention three to five percent over non-ICL participants.
- 20 courses have been redesigned for increased technology use in the Laptop Initiative program.

Engagement: Access and Outreach

Expanding Access: Educational Programs

- **Center for Economic Education (teaching and learning initiative)**
 - Improve the quality and quantity of economic education and economic literacy with a focus on preK-12 teachers
 - Provide credit and non-credit workshops and seminars for teachers, curriculum supervisors, administrators
- **Arrowhead Preparing Teachers for Tomorrow's Technology Today (APT3) College of Education and Human Service Professions (CEHSP)**
 - Faculty, teachers, and students work together in "collaboratories" learning and applying technology
- **Chester Park Lab School CEHSP and SFA**
 - Coordinate and place teacher education music students
 - CEHSP students from physical education, early childhood education, elementary education, teaching visual arts, and educational technology programs actively engage in teaching and learning with Chester Park Lab School students
 - Students completing practicum student teaching, UROP, and APT3 projects work collaboratively with Chester Park teachers and parents
- **Continuing Education (CE)**
 - Outreach to high school students through the College in the Schools program
 - Outreach to community members through evening programs
 - Coordinate Masters of Education (M.Ed.), Masters of Liberal Studies (MLS), and Masters of Science in Engineering Management (MSEM) programs
 - Outreach to senior citizens through University for Seniors
- **Social Work Distance Education Masters Program (CEHSP):** Provide opportunity for American Indian professionals to obtain a masters degree in social work.
- **Fond du Lac Tribal and Community College Teacher Education Program:** Provide education degree to American Indian students.
- **SFA Kindermusik, Kinderkeys, and Suzuki Programs:** Provide lessons and performance experience.

Expanding Outreach: Regional and Statewide Service and Community Engagement

- **Natural Resources Research Institute (NRRI):**
 - Mission: To foster economic development of Minnesota's natural resources in an environmentally sound manner to promote private sector employment
 - Provide near-term economic development efforts that contribute to private sector job creation and retention
 - Focus applied research and development on natural resources to develop products, processes, and services
 - Expand natural resources research to provide a knowledge base for sound environmental and economic decisions
- **Bureau of Business and Economic Research (BBER) School of Business and Economics**
 - Provide research on business and economic issues in northeastern Minnesota and statewide
 - Serve as a data center, respond to inquiries for data
 - Provide a training ground for students interested in hands-on research experience
 - Provide the UMD community with economic information
- **Minnesota Sea Grant Program**
 - Work with individuals and communities to maintain and enhance the environment and economies along Lake Superior and inland waters
 - Provide outreach services to region and state

Measuring Results

- **Center for Economic Development (CED)**
 - Collaborate with teacher education faculty to provide training for pre-service teachers
 - Conduct student programs such as the Lake Superior Economic Challenge
 - Conduct research in the area of economic education
 - Maintain up-to-date library on research and materials related to economic education
 - Work with Minnesota Council for Economic Education to establish working relationships with economics educators in other countries
- **Chester Park Lab School:**
 - 200 Chester Park students and parents participate in performances three times/year
 - 160 UMD students and 12 UMD faculty engage in professional development activities such as collaboratively integrating technology into the curriculum
 - 332 Chester Park children have benefited from the teaching and learning activities of UMD students
 - Utilize Title IV-E funds to partner with Bemidji State University to offer MSW through Child Welfare Scholar
- **Continuing Education (CE)**
 - Provide college-level courses in local high schools; schools maintain funding base and students receive college credit
 - Degree and job-skill oriented evening programs provide opportunity for non-traditional students to prepare for new careers

- Cohorts run in Duluth, International Falls, and at UMM. MSEM reaches out to working engineers across the state.
- 23 students taking UMD teacher education courses taught by American Indian faculty on tribal college campus.
- **SFA Kindermusik:** 300 elementary students are enrolled in music programs and participate in performances each year.
- **APT3:** Used in preK-12 classrooms for teaching and learning with a diversity and rural focus on addressing the digital divide.
- **NRRI:**
 - Leverage \$3.4 million of State Special funds into an operating budget of \$13.7 million.
 - Minerals
 - Coleraine Research Laboratory collaborations with industry to improve taconite pellet processing efficiency and quality
 - Using \$600,000 federal grant to accelerate research and outreach on value added iron products
 - Studying one million feet of drill core to understand copper-nickel deposits and associated precious metals
 - Forestry/forest products
 - Developed an advanced laboratory capability to work with value added solid wood products and composites
 - Developed process to commercialize chemical derivatives from birch bark; UMD formed limited liability company with two partners to bring products to market
 - Organized the MN Hybrid Poplar Research Cooperative to develop and commercially demonstrate alternative sources of wood fiber
 - Peat/peat products
 - Assisted small companies in establishing peat-harvesting operations
 - Have taken a lead in starting the MN Peat Association
 - Water and the environment
 - NRRI houses the University's largest research program on water and the environment
 - Active staff outreach to meet constituent demand for environmental and resource management information
 - Obtained a \$6 million grant to study biological indicators that predict the health of the Great Lakes system
 - Conduct outreach effort with contractors, resorts, homeowners, and governmental agencies
- **BBER**
 - Published economic indices, provided forecasts for northeastern Minnesota, conducted input-output studies for public and private sector
 - Conducted the Northeast Minnesota Skills Assessment Project with the Minnesota Department of Economic Security
 - Cooperates with the Humphrey Institute on an industry cluster study of northeastern Minnesota's economy

- **Minnesota Sea Grant Program**
 - Identify needs, fund research, translate research results, facilitate policy decisions
 - 13 professionals and four students in media relations program generated 400 reporter contacts, resulting in stories reaching 272 million people
 - Web site features 820 pages of information and averages 80,000 hits per month
 - Publication center fills 1,000 orders for publications annually

Strengthening the University Community: Human Resources

Supporting and Developing a Diverse Faculty and Staff as Teachers and Researchers

- **Technology Camp:** Faculty participate in a one-week camp, resulting in enriched curriculum delivery (Web pages, chat rooms, video streaming, etc.) for UMD courses.

Recruiting and Retaining a Diverse Faculty and Staff

- **Target of Opportunity (TOP) Funding:** Three FTE faculty were hired using TOP and Bridge funds.
- **Chancellor's Diversity Initiative:** Visiting scholars and artists have given residencies, and public and classroom lectures, and worked individually with UMD students and faculty; approximately \$35,000 invested annually.

Measuring Results

- **Tech Camp:** Over a three-year period, FY99-FY01, over 25 percent of UMD faculty (100) participated in Tech Camp.
- **TOP:** Increased number of faculty of color; added an American Indian woman to the staff of the Education Department to teach diversity courses.
- **Diversity Initiative:** Over 24 visiting scholars have given residencies and lectures, and worked with students and faculty individually; enables UMD to recruit a more diverse faculty and student body.

