

Gary Owen, State House Speaker, To Get Degree



GARY OWEN

Gary M. Owen, speaker of the Michigan House of Representatives, will receive an honorary degree at Midyear Commencement, Saturday, Dec. 17, when he will also deliver the main address.

Owen, a Democrat from Ypsilanti who has served in the House for the past 10 years, will receive an honorary doctor of political science degree.

Before being elected speaker earlier this year, he served as associate speaker pro-tem for six years. He has also been a member of the House Appropriations Committee, chairing its subcommittees on higher education, regulatory agencies, and supplementals and transfers, and was acting chairman of the Joint Capital Outlay Subcommittee. He represents the 22nd District.

A native of Alabama, Owen has lived in Ypsilanti since 1963. He has been involved extensively with community service, labor and political organizations.

Owen has an associate degree from Washtenaw Community College, a bachelor's in education and a master's in urban planning from the University of Michigan.

He was a member of the AFL-CIO and a skilled tradesman before teaching state and local government at Washtenaw.

He received the Ypsilanti Jaycees' Distinguished Service Award and was selected by the Michigan Jaycees as one of the Five Outstanding Young Men in the state.

Owen is married and has a daughter.

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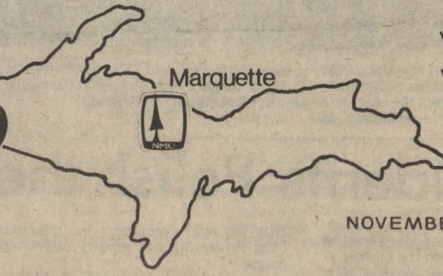
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COHODAS SCHOLARSHIPS — Among the most recent recipients of scholarships provided by Sam Cohodas are these 26 students at Northern who were awarded in November a total of \$25,000 for studies in various areas of business. They are: (sitting, from left) Shirley Larsen, K. I. Sawyer Air Force Base; Barbara Ball, and Ruth Sandstrom, Ishpeming; Mr. Cohodas; Joanne Mathys, Escanaba; James Jenkin, Ishpeming, and Debbie Mueller, Menominee; (2nd row, from left) Raymond Jahn, Marquette; Nanette Pearson, Kingsford; Eva Fontana, Sawyer AFB; Sharon

Reese, Marquette; Charlotte Wahlstrom, Kingsford; Lois Cox, Escanaba; Katherine Luft, Powers; Catherine Myers, Escanaba, and Karen Koster, Plymouth; (3rd row, from left) Philip Wolf, Bark River; Donald Godfrey, Alma; Jerry Witkovsky, Ishpeming; Barbara Beck, Marquette; Dan Peterson, Quinnesec; Margaret Erickson, Ishpeming; Andrew Ritchie, Houghton; Michael LeClaire, Iron Mountain; Jeffrey Thompson, New Haven, and Dean Krieg, Marquette. (NMU photo)

445 Degrees To Be Given At Graduation

Degrees will be awarded to 445 persons at Northern's Mid-Year Commencement exercises on Saturday, Dec. 17 in the C. B. Hedgecock Fieldhouse, beginning at 10 a. m.

Registrar Harry Rajala has announced that associate degrees will be granted to 42, bachelor's degrees to 346, master's to 55, and educational

specialist degrees to two.

Gary M. Owens of Ypsilanti speaker of the Michigan House of Representatives, will be commencement speaker and will receive an honorary doctor of political science degree. (see separate story).

The ceremonies will be telecast live by WNMU-TV, Northern's public television station.

Season's Greetings

Cohodas Scholarships Awarded To 26 Students Here

Sam M. Cohodas, well known Upper Peninsula banker, said he was "proud and happy" to provide scholarships for 26 students at Northern who are among the top scholars in the field of business.

During an awards luncheon Nov. 14 Cohodas said that he was "proud of the academic excellence of the students and quality of programs in Northern's School of Business and Management, and happy that the scholarships have helped students prepare for successful careers in the business world."

The students, primarily from the Upper Peninsula, are majoring in various areas of business. They were awarded Sam M. Cohodas School of Business and Management Scholarships.

"Northern has benefited in many ways from the leadership and support of Sam Cohodas," said President James B. Appleberry. "His aid has extended far beyond the area of business, and we greatly appreciate his continued commitment and interest."

According to Dr. Robert Han-

son, dean of the business school, the 26 awards bring the number of scholarships provided by three Cohodas family funds to 75 for a total of \$54,250 since 1970. Scholarship monies are derived from earnings on a total principal of \$113,400 provided by Cohodas in establishing the funds.

"The Cohodas scholarships have been a major support for our students over the years," Hanson said. "They have been a valuable incentive for many of our top scholars, and have assisted in leadership develop-

ment as well as academic excellence."

Of the 26 recipients, all but three are from the Upper Peninsula.

Each of 24 received a \$1,000 scholarship, while two were awarded \$500 apiece.

The two other funds are the Sam and Evelyn Cohodas Scholarships, established to honor Cohodas' late wife, and the Columbia Hansen Scholarship, in honor of Evelyn Cohodas' late sister.

Recipients of Cohodas scholarships must have a 3.0 (B) or better grade point

average, show potential for future growth and development, and be either juniors, seniors, or graduate students. Preference is given to residents of the Upper Peninsula.

Scholarships are awarded to students enrolled in courses of study in the Departments of Office Administration and Business Education, Accounting and Finance, and Management and Marketing.

Selection is made by the NMU Scholarships and Awards Committee.

Cohodas, a leading Midwestern financier and philanthropist who resides in

Ishpeming, also provided \$250,000 for establishment of the Cohodas Chair of Banking and Finance in Northern's School of Business and Management. Through the Cohodas endowment, a number of eminent economists have been brought to the university as lecturers.

He also serves as a trustee of the NMU Development Fund, and is president of the Presidents Club Committee which has raised over \$1.3 million for Northern through 267 contributing memberships.



Lucy G. Prellwitz, president of the Marquette Chapter of the National Federation of Business and Professional Women, presents the chapter's first "Outstanding Employer" certificate of recognition to Board of Control Chairman John C. Walch (right) with President James B. Appleberry looking on. (NMU photo)

'Outstanding Employer' Award Given NMU By BPW Chapter Here

Citing equitable and professional treatment of women employees, the Marquette Chapter of the National Federation of Business and Professional Women has presented its first "Outstanding Employer" certificate of recognition to NMU.

"It is particularly noteworthy that the university does not single out women for women's programs, but rather — in professional fashion, treats men and women with equality," said Lucy G. Prellwitz, chapter president.

In a letter to President James B. Appleberry, Prellwitz said that BPW members have

"quietly observed" area workplaces and "feel quite fortunate to have Northern available to us for educational, occupational, and professional opportunities."

She said the commendation was based on five specific points. These include providing opportunities for upward mobility and additional training for female employees, upgrading female employee pension plans, and for establishing liberal parental leave policies.

Prellwitz also cited Northern's development of a child care center and sensitivity to needs of female workers.

She noted that women fill "many academic and administrative positions such as Dean of Graduate Studies and Director of Research Development, Dean of the School of Nursing and Allied Health Sciences, Associate and Assistant Deans of Students, Associate and Assistant Directors of Admissions and Assistant Controller.

BPW is the oldest and largest organization of working women in the world, with a national membership of 155,000. Each of its 3,700 chapters monitors economic, social and political issues affecting working women, Prellwitz said.

Students 'Polish the Apple' For Sister Frye

Everyone knows the old standard method of keeping on good terms with the teacher — the proverbial polished apple. Well, at Northern, if students want to keep on good terms with Sister Ignatia Frye, they'd do well, also to polish up on their apple — the Apple Computer to be more exact.

"Just in the last 10 years, there's been a significant change in the computer industry," said Sister Frye. "Today, the smaller, more inexpensive computers are rapidly becoming a basic part of our daily lives."

Because of the lower costs, more and more schools are now able to purchase these smaller but powerful computers, giving students an earlier introduction without waiting for college to learn computer techniques.

Even at the college level, computer courses are no longer the province of the computer major. Students from all areas are finding such courses a necessity in competing for jobs.

"Robots are being used in business and industry to do a wide range of jobs, from the dangerous to the tedious. For instance, robots can be programmed to diffuse a bomb; or in business, a robot can communicate to the main computer, pricing items for sales, taking inventory, reordering."

One of the new uses for robots, she said, is in manufacturing, noting that Japan makes considerable use of robots.

"In order to keep down prices of automobiles, manufacturers are turning to robots. You don't have to pay them like employees, and they can work 24 hours a day with no coffee breaks, sick pay time, and so on."

A member of the Servants of the Immaculate Heart of Mary, Sister Frye for the past two years has been on staff at Northern as a visiting professor from Detroit's Marygrove College where she has been teaching since 1939.

At Marygrove, she is professor of mathematics and computer science and was director of the college's computer center until coming to Northern.

At NMU, Sister Frye teaches two sections of freshman level Principles of Data Processing and alternates teaching two higher level courses, Introduction to Systems Analysis and Design, and Data Base Program Development. The latter course was offered for the first time this past fall, and is being offered during both semesters this year.

"There are, definitely, very technical aspects to this field. However, due to the fact that microcomputers are being used so extensively, not only in business but also for personal use, everyone needs to understand certain facts about them, and I try to teach in a way that helps understanding. The use of the

IBM Personal Computers in Principles of Data Processing has greatly improved the course."

As an undergraduate, she majored in chemistry. Her master's program was in mathematics and she returned to physical chemistry for her doctorate 12 years later on a Ford Faculty Fellowship the first year the fellowship was offered.

It was during her teaching at Marygrove that Sister Frye got her introduction to computer science.

"I sort of came in the back door, you might say. I was asked to take over this one class in computer programming and the teacher offered to teach me something about it. So I agreed to teach it and, after a while, I decided I'd better get some training."

She spent seven summers studying the new field including a stint at the University of Grenoble, France where she helped graduate students write papers in English.

Other course studies and seminars included the University of Oklahoma, University of Maryland, the Argonne National Laboratory and Purdue University, among others.

At Marygrove, she has taught a wide range of computer courses and has also taught at the University of Detroit.

In May, 1979, she was named 'Outstanding Computer Educator of the Year' by the Association for Educational Data Systems.

In addition to teaching, she has published several articles on computer science and has presented various papers including a recent address at the 18th annual conference of the Michigan Association for Educational Data Systems held at Shanty Creek in the Lower Peninsula.

The paper, "Data Base Instruction in a University Setting," describes the course taught at Northern that has been recently recommended by the Data Processing Management Association (DPMA).

"This is probably my favorite class to teach. It's a brand new concept, a new field, and the students are very much interested in it."

As a member of both the religious and scientific communities, Sister Frye sees no conflict between her two roles.

"One helps the other."

As a former astronomy teacher, she thinks that life in space is "highly probable," noting that she wishes there were more efforts made in listening for signals from space.

"I think as we gain greater insight into the field of science, it gives us a greater understanding of what God is."

Her philosophy of teaching is a person-to-person contact. She doesn't like lecturing to her class.

"I like to call the students by name and to know them—to know who's on the ski team,

the basketball team, football and so on. And, for that reason, when I have a large class like my DP-110 which has about 50, it's somewhat hard to remember who's who. But eventually it gets under control. I like to have feedback from my students and I like them to ask questions in class."

She refers to her role as a teacher to that of a "minister of truth," comparing this role to her position as Eucharistic Minister at St. Michael's Catholic church.

"Just as I distribute communion to the parishoners at St. Michael's, as a teacher I offer truth and try to enable students to search for truth in their studies and in their lives in general, not restricting truth just to data processing."

With the popular blitz of the electronic era from home computers to video games,

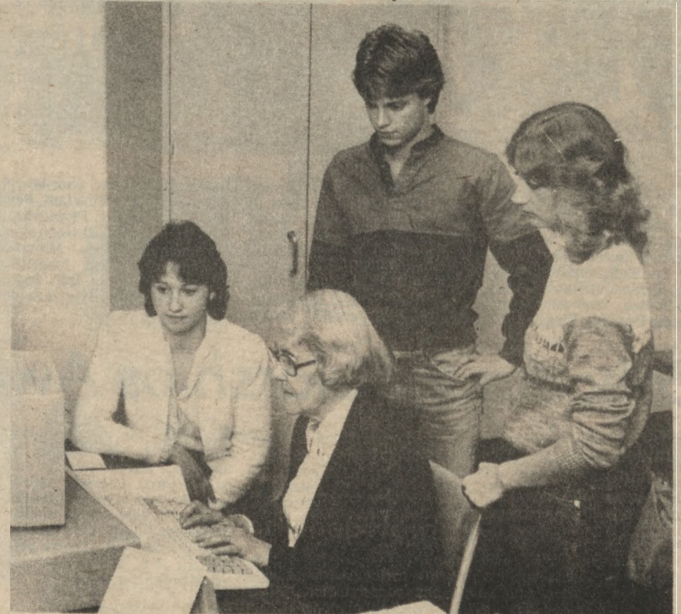
knowledge of the whats, whys and the hows of computer technology is rapidly becoming an industry of its own.

I don't think computers will become the fourth "r" in education with Reading, 'Riting, 'Rithmetic. I don't think it is as fundamental as the three "r's," although we use all three in computer science.

"As to video games, which can also be played on computers, one of the biggest difficulties is that they're so fascinating that students are apt to neglect other more important things they should be doing."

The influence of computer technology is definitely increasing and its effect, said Sister Frye, will be similar to what automation did when it first came in.

"Computers, or the use of robots, will cause social problems. Those jobs available will require more technical training. It's the lower level jobs that will be lost."



Sister Ignatia Frye (center) visiting professor in the Department of Management and Marketing, helps students understand the basics on computer technology. Looking on are (from left) Beth Webber, a medical

technology major from Caspian; Mike Knight of Marquette, majoring in accounting, and Diane Aggen, a data processing major from Carney. (NMU Photo)

WNMU-TV Launches \$50,000 Fundraiser 'Let It Show'

Upper Peninsula and northeast Wisconsin television viewers are being asked to "Let it Show!" This is the theme of one of three annual fundraisers which is being held live, on-air Dec. 3-12, by WNMU-TV.

"We're asking viewers to let their support for public broadcasting show by making a contribution to the station," commented station manager Bruce Turner.

"The goal of this fundraiser is \$50,000," Turner said, "which combined with the \$34,000 contributed during the August

drive and the funds forthcoming from the March '84 drive, will be used to purchase programs estimated this year at \$160,000 to \$170,000.

Becky Beauchamp, development director, said that viewer support is more important than ever to the station.

"Public broadcasting has incurred dramatic reductions in federal and state support during the past few years of governmental budget reductions," Beauchamp noted. "Until that trend is reversed, viewers' contributions will re-

main the lifeblood of public television."

The "Let it Show" fund drive will feature a variety of special programs for viewers, and will offer a selection of premiums in return for viewer contributions.

Programming highlights include: "Down Home Country Music," a three-hour country music special, Dec. 3; "Survival Specials," a look at sharks, Dec. 4; "Great Performances: Placido Domingo Celebrates Seville," Dec. 5; a special documentary on our twenty-five years in space on

"NOVA," Dec. 6; "From Star Wars to Jedi: The Making of a Saga" and "Magic!!! Starring Harry Blackstone," Dec. 7.

"I'll Fly Away: A Gospel Celebration," contemporary gospel music, Dec. 8; "A War Story," a true-life story of a Canadian doctor in a Japanese prisoner-of-war camp during World War II, Dec. 9; "Luciano Pavarotti in Concert," Dec. 10; a documentary about Central America's giant fig tree on "Nature," Dec. 11; and "Great Performances" with a tribute to opera's legendary Maria Callas, Dec. 12.

Watanen Chairs State Committee

John Watanen, Jr., associate professor of English, who is vice-president of the Michigan State Board of Education, has been named chairperson of the Board's Subcommittee on Postsecondary Education.

A member of the NMU faculty since 1968, Watanen has twice served as president of the NMU chapter of the American Association of University Professors, twice as chair of the NMU Academic Senate, and as chair of the School of Arts and Science Advisory Council.

"The Postsecondary Subcommittee will work in concert with Governor Blanchard and his Commission on the Future of Higher Education as well as with the leadership of the Legislature to call attention to the needs of postsecondary education and to help solve its pressing problems," he stated.

"The issues facing postsecondary education in Michigan today are at a critical stage and the Board of Education intends to exercise its constitutional mandate to serve as general

planning and coordinating body for all education, including higher education," Watanen said.

The Subcommittee will also review all grants and grant applications, contracts, and bidding processes involved with postsecondary education.

Long active in Michigan higher education and the state's Democratic Party, Watanen was the first Upper Peninsula to serve as an officer of the State Democratic Party when elected to a two-

year term in 1975.

Watanen was elected to the Board in 1977 and is a past member of the Board of Directors of the National Association of State Boards of Education. He has been a member of the Michigan Council for the Humanities since 1980.

In 1976, Dr. Urho Kekkonen, the late President of Finland, named Watanen as Knight 1st Class of the Order of the White Rose for his work in developing a Finnish Studies curriculum at NMU.



New Director With National Group

John Watanen has been elected Central Area Director of the National Association of State Boards of Education (NASBE).

He was elected Central Area Director by NASBE delegates from 12 midwestern states — Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota,

Missouri, Nebraska, North Dakota, South Dakota, Ohio and Oklahoma — at the 25th annual meeting of the National Association of State Boards of

Education in New Orleans.

NASBE is a non-profit association serving state boards of education throughout the U.S. Watanen has been active in NASBE since the late 1970s. He was a member of its Board of Directors in 1981-82, chairman of the Annual Meeting Committee in 1983 and has been a member of the Governmental Affairs Committee for three years.

Librarian Honored



NMU LIBRARIAN CITED — Prof. Roberta Henderson, reference librarian at Olson Library, was recently awarded a certificate and honorarium by the Sigma Xi Club for her outstanding help to science faculty and students. She is being presented the award by Dr. Maynard Bowers, president of Sigma Xi, and professor of biology. Sigma Xi recognizes librarians who contribute significantly to the



research efforts of the scientific community. Before joining Northern's staff in 1971, Henderson did professional work as a librarian and teacher in Japan, Germany, Uganda and Turkey. She has earned degrees from the University of Wisconsin-Stevens Point, the University of Wisconsin-Madison, the University of Denver, and NMU. (NMU Photo)

Hellman On Energy Program

Michael G. Hellman, associate director of physical plant and energy conservation coordinator, made a presentation at a Community Energy Management Workshop held recently in Battle Creek.

The conference was sponsored by the Energy Administration-Michigan Department of Commerce, the Michigan Municipal League and Michigan School Business Officials, and was held at the Stouffler Hotel.

Hellman was one of four who conducted a session dealing with energy conservation problems, successes and questions involving operations of buildings and power plants.

His presentation was based on Northern's Energy Conservation Program begun in 1973. It focused on the university's window replacement program completed in 1981, which has helped NMU avoid \$355,600 in additional heating costs during the first two years of installation.

The conference theme was "Saving Energy and Jobs in Michigan." Hellman's workshop was one of 27 held during a two-day program.

Sullivan, Thompson Co-Author Major Sociology Text

A major textbook introducing sociology to college students has been authored by two Northern professors and published in New York City.

Drs. Thomas J. Sullivan and Kenrick S. Thompson are co-authors of "Sociology: Concepts and Applications," published by John Wiley & Sons, Inc. of New York. It will be distributed nationwide and in Canada.

Beginning work on the book in 1979, both Sociology Department professors took sabbatical leaves to work on the project.

"We had just completed another textbook, and it became clear that the best way to communicate the excitement of sociology to the largest audience was to write a textbook for students taking the introductory course," Thompson says.

"There were times when our work on the project was so intense and time-consuming we were tempted to quit, but family support and the driving force of our interest in sociology compelled us to finish the book," he adds.

In 12 chapters, the book introduces sociology and basics of research, and covers topics including culture, socialization, deviant behavior, stratification and forms of inequality. It also discusses major social institutions such as family, health care, religion, education, politics and the economy, and considers other important social topics including population and community, collective behavior and social movements and social change.

"Sociology can never stand still," Sullivan points out. "Those interested in it are consumed with a constant drive to learn more about the human condition and to understand interactions between members of society."

He noted that it can be puzzling when one does not understand another's behavior, and "it's comforting to know about social behavior and understand it."

The book, "organized for the students who will read it," has "inserts" on sociological implications of current social concerns, and on how sociology is applied to people's daily lives.

Heavily illustrated, the book includes photographic essays by sociologists, using imagery as a source of information and research. Sullivan, a member of the faculty since 1972, earned a doctorate at the University of California-Santa Barbara. Thompson came to Northern in 1974, having received a Ph.D. at Ohio State University.

They are co-authors of "Social Problems: Divergent Perspectives" published by Wiley in 1980. Both have written numerous articles for professional journals.



Co-Authors Thomas J. Sullivan (left) and Kenrick S. Thompson.

Students Are Most Important . . .

The Student Is . . .
 . . . the most important person on the campus. Without students there would be no need for the institution.
 . . . not a cold enrollment statistic but a flesh and blood

human being with feelings and emotions like our own.
 . . . not someone to be tolerated so that we can do our thing. They are our thing.
 . . . not dependent on us. Rather, we are dependent on

them.
 . . . not an interruption of our work, but the purpose of it. We are not doing them a favor by serving them. They are doing us a favor by giving us the opportunity to do so.

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"Upon the subject of education . . . I can only say that I view it as the most important subject which we, as a people, can be engaged in . . ."—ABRAHAM LINCOLN

WNMU-TV Has 'Second Season'

There's a lot that's new starting on WNMU-TV this January — first-class drama and comedy, hard-hitting documentaries, innovative series and one-of-a-kind specials — exciting television to challenge and delight in the coming year.

FRONTLINE, the only weekly documentary series on television, starts its second season with "Crisis at General Hospital," a disturbing look at how the size of your income may determine the quality of health care you receive. Other new FRONTLINE programs examine Japanese management theory, the conflict in Ireland as seen by Irish Americans, and the financial empires of television preachers.

AMERICAN PLAYHOUSE, public television's acclaimed weekly drama series, begins its third season in January with productions based on the writings of three of America's most esteemed authors and playwrights. The season premieres with a 90-minute adaptation of Philip Roth's best-seller "The Ghost Writer," and continues with Mark Twain's "Pudd'nhead Wilson" and Sam Shepard's comedy-drama "True West."

Bill Moyers returns to public television this January in a major new series, A WALK THROUGH THE 20TH CENTURY WITH BILL MOYERS, documentary specials exploring the major events and personalities that shaped our century. The subjects are as diverse as the century itself, from a lively examination of newsreels to a contrasting study of the personalities of FDR and Adolf Hitler.

The world-famous Smithsonian Institution shares its riches when SMITHSONIAN WORLD premieres. Hosted by the celebrated author and historian David McCullough, each SMITHSONIAN WORLD program brings together the arts, humanities and science to explore topics like time and light, transportation, and communication.

The ever-popular NATIONAL GEOGRAPHIC SPECIALS returns with the documentary, "Among the Wild Chimpanzees."

This special documents the unparalleled scientific adventure of Jane Goodall, the Englishwoman who chose to live among the wild chimpanzees of Tanzania.

The real-life exploits of Sidney Reilly, said to be the spy who inspired Ian Fleming's creation of James Bond, are dramatized in a new 12-part series, "Reilly, Ace of Spies," on MYSTERY!

Early in January, the Emmy Award-winning theatrical spectacular THE LIFE AND ADVENTURES OF NICHOLAS NICKLEBY airs on public television. Peter Ustinov hosts this critically-acclaimed television adaptation of the Royal Shakespeare Company's production, originally broadcast last

year. The epic Charles Dickens classic features an enormous cast playing out the entire tangle of subplots that Dickens wove into his account of the fortunes and misfortunes of his dauntless young hero, Nicholas Nickleby. It's a theatrical experience you won't want to miss.

"The Magic Flute," Mozart's sophisticated fairy tale set to music, begins this season of GREAT PERFORMANCES. Conducted and hosted by James Levine, "The Magic Flute" is the first presentation from the celebrated Salzburg Festival to be seen on American television.

There's much more coming in music, too. LIVE FROM LINCOLN CENTER will present world-renowned flutist James Galway performing with the New York Philharmonic. LIVE FROM THE MET continues its celebration of the Met centennial with performances of Verdi's "Don Carlo" and Berlioz' "Les Troyens." And for those who prefer their music with a contemporary beat, AUSTIN CITY LIMITS and SOUNDSTAGE return to showcase popular hit artists.

In January MASTERPIECE THEATRE presents "The Irish R.M.," a humorous series about a British magistrate in turn-of-the-century Ireland. Also new on MASTERPIECE THEATRE this season: "The Tale of Beatrix Potter," John Hawkesworth's biography of the famous children's author and illustrator; and "Nancy Astor," starring Lisa Harrow as the Virginia belle who became the first female member of Britain's Parliament.

In science, public television remains the best choice on the dial. A new series, LIVING WILD, features the best in nature cinematography. NOVA continues its exploration of the world around us with new programs on alcoholism, ESP, Antarctica and the Mt. St. Helen's disaster. And the series NATURE continues as well, with new programs on Florida's wildlife, India's missing monsoon, and the million-dollar business in bees.

Public television continues to offer thoughtful analysis of the world around us. THE MACNEIL/LEHRER NEWSHOUR offers in-depth coverage of the news you need to know each weekday night. INSIDE STORY, a penetrating look at the way media does its job, returns with host Hodding Carter. ENTERPRISE, the series that reveals what really goes on inside the high-stakes world of business, visits Frank Perdue and other entrepreneurs in the new season. And on LATENIGHT AMERICA, host Dennis Wholey presents more interviews worth staying up for.

That's just a sample of what's in store this season — great viewing for a brand-new year.

New Robot Arrives For Industry, Technology Programs

The arrival of two industrial robots in September with a market value of \$85,000 has thrust the Industry and Technology Department into the state-of-the-art technology.

Prof. Thomas Meravi, who is helping develop the new program, selected one of the robots, a GMF S-108 model, at a Robots-7 convention earlier this year. It cost \$40,000 financed by an allocation from the university's land acquisition fund.

The second robot, a Kawasaki Unimate 6060, was obtained through a donation from General Motors Corp. Meravi hopes to have both robots operational in November.

The robots represent two of the three main types found in industry today, Meravi says. The GMF S-108 operates on an all-electric, five axis, simultaneous motion system. The Unimate is on a hydraulic slide which enables it to be positioned left and right of center, as well as having hydraulic axis motions.

The third type of robot is pneumatic. "There has been a lot of work on our part to ready ourselves for this equipment. With the cooperation of the operations and maintenance staff, we moved a spray booth, poured a concrete floor, installed a track and placed wheels on the robot," Meravi says.

Meravi plans to equip his new robots with welders to allow for performance of various welding tasks.

The two robots represent a gradual shift in the department in its goal to change with the times. Beginning next semester a Robotics Applications course will be offered, the first of a three or four part series, depending on the interest level of the students.

Meravi emphasizes that industry is looking for people with familiarity and understanding of robotics and its integration with manufacturing systems.

A recent University of Michigan study predicts that by 1990, 50 to 100 thousand robots will be operating in manufacturing facilities in the United States.

"Where some jobs are disappearing, others will be created, and we need a work force which will be knowledgeable about robotics."

Meravi says.

Other faculty members will also be receiving robotics training.

Another area Meravi plans to explore, with additional help from the Computer Science Program, is in integrating robots and microcomputers.

"We have plans to involve students from different disciplines in robotics. It is an excellent application for a variety of students to have experience in operating industrial robots."

The concept of robotics was begun in the early 1960's by Joseph Engelberger who developed the first Unimate robot. With the possibility of utilizing robots in hazardous areas and in monotonous jobs, the technology took a leap forward in the middle 1970's.

Meravi feels robotics is one of the keys to promoting U.S. competitiveness in the world market. "It must be implemented, however, with other areas of automation such as numerical control, flexible manufacturing and computer-integrated manufacturing to utilize the robot to its best potential."

The Industry and Technology Department has also been given a computer numerical control lathe with a market value of \$160,000.

Meravi's next upgrading project is in replacing the 25-year old numerical control equipment which will be used in conjunction with the new robots.

As the program advances, Meravi plans to combine equipment in Quality control with the Electronics Program, also recently endowed with gifts and grants through the efforts of Dr. William Rigby.

Meravi sums up the goals of the Industry and Technology Department as a desire to continually grow with industry. "As equipment changes, we have to change with it. The department is investigating the possibility of accreditation in the manufacturing field, but right now it is in the early stages of development. Robotics is the first step in seeing that this goal is realized."



Hal Losey (right), of GMF Robotics, Inc. puts touches on installation of a new S-108 industrial robot in the Department of Industry & Technology as Prof. Thomas Meravi, robotics coordinator, looks on. One of three major types of robots used in manufacturing today, the robot represents the latest in technology and cost \$40,000. (NMU photo)

what's happening

NEWS BRIEFS OF FACULTY-STAFF ACTIVITIES

Smith Gives Genetic Lecture

"Mendel's Peas, Recombinant DNA, and the Future" was the topic of a talk given here recently by Dr. Temple Smith, professor of physics. Smith has recently returned home from a two year leave at the National Institute of Health's DNA data base at the Los Alamos (N.M.) National

Laboratory. He was also visiting professor of mathematics and biology at the University of Southern California during his absence from Northern, where he helped develop computer methods for the analysis of the new wealth of genetic information.

Vets' Disorders Workshop Held

The after-shock and post-trauma stress disorders of Vietnam veterans was the topic of a one-day workshop here Dec. 1.

The purpose was to develop increased sensitivity for mental health and medical personnel and recognition of readjustment problems facing many Vietnam veterans. The workshop also attempted

to increase knowledge and awareness of the dynamics of the Vietnam veteran and give insight into effective intervention and approaches to care.

Sponsors were Community Mental Health, Marquette General Hospital, NMU Student Social Work Organization and Northern's Department of Sociology and Social Work.

Sex Role Paper Topic

A paper dealing with young people's beliefs and attitudes about family planning, based on survey data from Marquette Senior High School, was presented recently by a Northern sociology professor at the annual meeting of the American Sociological Association in Detroit.

Dr. Kenrick Thompson's paper, "Sex Role Orientation: A Primer of Scale Construction," discussed results of the investigation involving questionnaire responses from 240 students enrolled at Marquette Senior High School during 1977-78, regarding parenthood related issues.

National Security Forum

Questions on national security were addressed by two Northern professors at a National Security Forum here Nov. 29.

Fred Barry, associate professor of political science, offered a brief summary of the pamphlet, "Dollars for Defense: Translating Military Purposes into Spending Choices," published by the League of Women Voters Education Fund.

Barry and Dr. Miodrag Georgevich, professor of political science, answered questions on such subjects as U.S. military policy, U.S. participation in NATO, the strategic nuclear triad and the use of defense dollars.

The session was co-sponsored by the NMU Political Science Symposium and the League of Women Voters of Marquette County.

Allenstein In Solar Project

How does a homeowner build his own active solar heating system?

Richard Allenstein, chemistry professor, told of his experiences building a solar heating system in a program here recently.

Alenstein applied what he calls "standard solar" building principles to a home that is primarily a geodesic dome.

Rather than buying and installing commercially available solar panels and modules, Allenstein economized by making the solar heating system himself.

It utilizes moving air, stores heat in a rock bin, and provides domestic hot water.

The presentation included both slides and actual specimens of materials used.

Symposium On Lebanon

An open forum on the United States' involvement in Lebanon was held here Nov. 10.

"Why? United States in Lebanon?" featured a student-faculty panel which outlined circumstances leading to the current conflict.

Faculty members included Drs. Miodrag Georgevich, and Elisha Greifer, political

science; David Cooper, philosophy; Mokhlis Zaki, economics, and Steve Platt, psychology.

Student panelists were Rod Bebe, Michael Celovsky, Russell Dodge, Steve Nystrom and Jane Stenglein.

Moderator was Jeff Ratcliffe, president of the Political Science Symposium, sponsor of the event.

U.S.-Soviet Relations Eyed

A lecture titled "U.S.-Soviet Relations - Where are They Going?" was given by U.S. Foreign Service Officer Lawrence J. Goodrich here Dec. 6.

Goodrich, who has been with the State Department since

1977, currently works in the Economics Section of the Office of Soviet Union Affairs.

His appearance is being sponsored by the Political Science Symposium. It is free to NMU students and \$1 for non-students.

Jurmu Is New Head Of Alumni

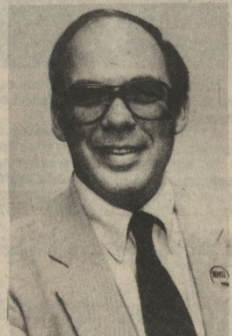
Jeffrey R. Jurmu of Menominee has been elected national president of the Northern Michigan University Alumni Association.

A 1970 graduate of NMU, Jurmu is prosecuting attorney of Menominee County. He received his law degree from the Thomas M. Cooley Law School in Lansing.

Jurmu succeeds Art Allen of Iron River as head of the 22,000 Northern alumni. His term of office is two years.

Named co-vic presidents to serve with Jurmu are Bruce Anderson of Troy, a 1961 graduate who is a division manager for the American Telephone and Telegraph Co., and Byron Johnson, class of '68, who is a staff attorney for Amway Corp in Ada.

All three are native Upper Peninsula residents. Jurmu is from Escanaba, Anderson from Marquette and Johnson from Bessemer.



JEFFREY JURMU

Their elections took place at the recent annual meeting of the Alumni Association Executive Committee.

Four members of the executive committee were reappointed to additional five-year terms on the alumni governing body. They are John Arger, '70, of Menominee; Edward Kukuk, '48, of Iron Mountain; Ivan Ryan, '54, of Gladstone; and Georgie Smith '70, a Menominee native who lives in Midland.

Calendar Sale Aids WNMU-FM

Upper Peninsula 4-H members are selling 1984 calendars to help raise funds for WNMU-FM, Northern's Public Radio Station, and for 4-H activities.

The 4-H member who sells the most calendars will win a Honda ATC70 3-wheeled motor vehicle, donated in part by Honda BMW of Marquette.

Calendars are \$2.00 each, with a portion going to 4-H and Public Radio 90.

The calendars are available from 4-H members, at WNMU-FM, and at the Candy Counter in the Don H. Boltum University Center at NMU.

Burger King Restaurants are adding their support with a 2-for-1 coupon for each month of 1984, attached to the calendar. The \$18.00 worth of coupons will be good at Burger Kings in Marquette, Ishpeming, Houghton, Kingsford and Escanaba.

Board Of Control Visits Project



BOARD OF CONTROL VISITS INDUSTRY & TECHNOLOGY DEPT. — President James Appleberry and Board of Control Chairman John C. Walch of Escanaba (left) listen to students Tim LeRoy of Wilson and Richard Tomasi of Marquette (right) as they explain their computer interfacing/process control project. Walch and other board members visited the Department of

Industry and Technology after a recent meeting here. The students are enrolled in a Digital Control Interfacing course, which provides the technical background for students to interface equipment such as electric motors, pumps, heaters, and various sensors to a variety of micro-computers and micro-processors.

Poems Are David's Legacy

David Wilder of Kalkaska was one of over 3,500 freshmen who enrolled at Northern in the fall of 1981. He was like many of his classmates who were eager to begin a new phase of their lives in a new place with high hopes for the future.

But David's expectations in coming to Northern were different in one big way. He knew he didn't have long to live but he wanted to make the best of the time he had.

David was right. He died of a genetic disease at home in Kalkaska during Spring Break in March of last year. He was 18.

David's friends and classmates at Northern knew he liked to write poetry. His poems touched on many aspects of life — the beauty of nature, peace, love, pollution, the seasons, death and his high school days in Kalkaska.

David's parents, Lee and Don Straughen, found a manuscript of his poems in his room with a booklet on "how to publish."

"We felt that David wanted to share his poems with others by putting them in book form, so we had them published," Lee says.

She, Don, and David's sister, Jody, presented a copy of "A Gift From David" to the NMU Library recently — a legacy from David to the university he liked so well.

David liked Northern from the first time he visited his sister, Jody, who was attending the

university in 1979-80.

"That's all he talked about," his mother recalls.

David suffered from the Marfan Syndrome, a genetic disease which often causes its victims to attain unusual height. At age 15 he was already six feet, four inches tall. The disease is accompanied by slow loss of eyesight, heart weakness and extreme elasticity of connective tissues throughout the body. During much of his life David was treated at the University of Michigan Medical Center in Ann Arbor, sometimes traveling there three and four times a year.

David's courage, his good sense of humor and his stamina — despite his serious physical handicaps — earned him the respect and affection of his friends and classmates in Kalkaska as well as at Northern. His hometown paper once featured him as "David Wilder — A Neat Kid."

"David liked the out of doors and nature," says Lee. "His other pastimes were chess and books."

"He came to Northern because he found himself close to nature, and he liked the friendliness he found there," she notes. "His book of poems is a gift we know he'd like to share with those who helped make the last months of his life happy and fulfilled."



Lee Straughen (center) presents a copy of her late son David Wilder's book, "A Gift From David," to Northern Michigan University Library Director Rena Fowler (right). David was a student at NMU from August, 1981 to his death in March, 1982. Also shown

are (from left) Lynn Norell, active in programs for handicapped students at NMU and friend of David's; his sister, Jody; Jeantz Martin, counselor at Student Supportive Services where David was often assisted, and his father, Don Straughen. (NMU photo)

Goldsmith On European Tour

A five-country European concert tour by Northern pianist Barry Goldsmith began Nov. 28 in Oslo, Norway.

Goldsmith, an instructor in the Department of Music, is on tour through Dec. 9, playing in London, England; The Hague, Holland; Brussels, Belgium and Bologna, Loda and Milano, Italy.

The solo tour is arranged by the International Concert Administration.

Concerts include music by Bach, Handel, Scarlatti, Haydn, Mozart, Beethoven, Schubert, Brahms, Schumann, Chopin, Liszt, Debussy, Schoenberg and other composers.

A member of the Music Department faculty since 1981, Goldsmith received his bachelor's degree in performance from the Manhattan School of Music and his master's from the Indian University School of Music. He completed the pianistic requirements towards his doctorate at the Peabody Conservatory, Baltimore.

Goldsmith has appeared in solo recitals and with orchestras in New York, Baltimore and other major cities, and has performed for radio broadcasts in New York. He also won the first Mieczyslaw Munz Prize in 1981.

BOOKS

In Review

By EARL HILTON



Helen MacInnes, Cloak of Darkness (New York: Harcourt Brace Jovanovich, 1982). 342 pages. \$13.95

Readers who enjoyed Helen MacInnes's "Above Suspicion" (1939), or any of her 18 novels between that and Cloak of Darkness, will be pleased to learn that she is still in form. The pattern of her novels has changed little. There is no need for change, because it still works.

For her hero she carried Bob Renwick forward from a previous novel but has given him a new assignment as head of a NATO counter-terrorist unit.

The scene, as in most spy stories, is international. We have come to expect them to be part travelogue, and MacInnes does not disappoint us. When Renwick discovers his name on the hit list of a KGB-connected firm supplying weapons to terrorists he pursues his would-be assassins through England, France, the United States, Holland, and Switzerland. Using a second point of view, MacInnes gives us the East African city of Djibouti as a bonus.

However, if you look forward to another common feature of the spy story — a succession of encounters with beautiful but dangerous women in these exotic settings — turn to the James Bond series, now carried on by John Gardner. Renwick is now married to Nora, who supplied the love interest in an earlier novel.

Nora, like other MacInnes heroines, is rather monotonously good, sweet, pure, beautiful, brave, and loyal, and Renwick is faithful to her. Besides, he is kept too busy for Bond style escapades.

As in her other novels, MacInnes inserts some not-too-intrusive moral and political warnings. A retired British agent tells Renwick that the West is "much too good a civilization to throw away." Yet Renwick reflects that most people think only of "now, now, now, and me, me, me." They neither value freedom rightly nor realize how easily they may lose it.

But Renwick and his allies face danger daily and they know. There is no lack of action, suspense, or intrigue. The characters may be a bit flat, but don't be too sure you can tell the good guys from the bad. MacInnes can still surprise us just when we least expect it.

Earney, Taube At Geographers' Meet

Profs. Fillmore C.F. Earney and Sten A. Taube of the Department of Geography recently attended the annual meeting of the National Council for Geographic Education (NCGE) in Ocho Rios, Jamaica.

Earney presented a paper entitled "Law of the Sea, Resource Use and International Understanding," which focused attention on Jamaica as the future home for the International Seabed Authority (ISA).

The ISA is an organization

whose function will be to administer ocean resources, such as fish and minerals.

The topic of the NCGE meeting was field work in tropical areas. Participants also went on field trips throughout Jamaica, with visits to intensive subsistence farms, bauxite mines, historical sites and tropical rainforests.

Earney is a member of the National Council for Geographic Education's executive board.

Attorney Kunstler Is Speaker

William Kunstler, noted activist attorney who represented the "Chicago Seven" will be giving a lecture, "Is There Justice in America?," Wednesday, Dec. 7, at 8 p.m. in the Great Lakes Room in the Don H. Bottum University Center.

Admission is free to students with ID, and \$1 for non-students.

Kunstler, a leading activist attorney and civil libertarian, has been defense attorney in many controversial cases in recent years.

He has been involved in the cases of Joann Little, the Patty Hearst case, Wounded Knee, Seabrook, Attica, Freedom Riders, Daniel and Phillip Berigan, H. Rap Brown and a number of other controversial cases.

Kunstler is currently a volunteer staff attorney for the Center for Constitutional Rights. He received degrees from Yale University and Columbia University. He has taught at New York Law School, Columbia University, and Pace College, New York.

He has been honored with the Civil Rights Award and the Press Award from the New York State Bar Association. He is also the author of 10 books and numerous articles and book reviews.

Kunstler's visit is sponsored by the NMU Student Finance Committee, Students for Human Rights and the Human Rights Commission of NMU.

WNMU-FM Translator Approved

Approval for a new 10-watt translator for WNMU-FM, Northern's public radio station, has been received from the Federal Communications Commission.

Stephen W. Dupras, station manager, said that FCC approval has cleared the way for purchase of translator equipment, and a structural engineering architect is designing the installation.

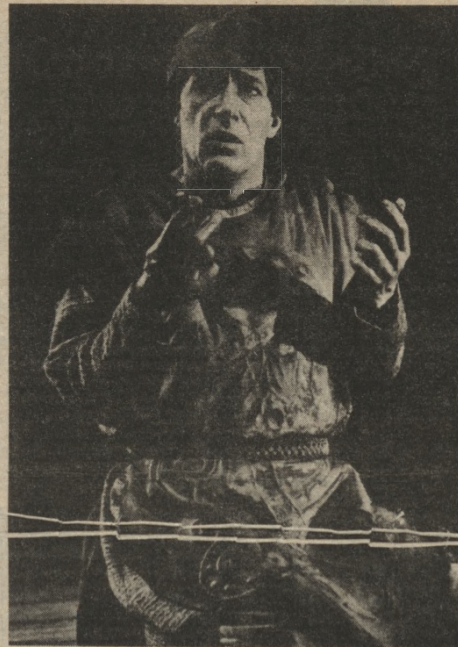
A gift of \$8,000 from the Shiras Institute of Marquette is helping to finance the project.

The translator will "greatly improve" reception of WNMU-FM in the Marquette area, and will be located atop Pine-Ridge Apartments.

Dupras noted that the station's signal has been impaired by the rough terrain and hills between the city and the radio transmitter in Ely Township, about 30 miles west of Marquette. The translator will solve the reception problem.

Although WNMU-FM is located at 90.1 on the radio dial, improved reception will be found at 102.3 by listeners in the Marquette area, once the translator is operational, Dupras said.

Shakespearean Actor Here



Nicholas Pennell, noted international actor from the Stratford (Ont.) Festival Theatre, visited campus for a week in November as artist-in-residence.

A highlight of his visit was a public performance of "The Actor and His Art" presented on the Forest Roberts stage.

In addition to his performance, Pennell's week included meetings with theatre and English classes, workshops with high school students and intensive workshop sessions with advanced actors at the Forest Roberts Theatre.

Loukinen Film Chosen To Represent U.S.

"Finnish American Lives," an award-winning 1982 documentary film produced and directed by an NMU sociologist, has been designated as suitable to represent American cinematography in international film festivals abroad.

Dr. Michael M. Loukinen, associate professor of sociology, was notified of the decision by the executive director of the Council on International Nontheatrical Events (CINE) Washington, D.C.

CINE Director S.R. Tamhane informed Loukinen the film had been screened by the organization's juries and had been selected to receive its Golden Eagle Certificate "as evidence

of its suitability to represent" United States and American cinematography in film competition in other countries.

There are more than 50 festivals in which the film could be entered, Tamhane pointed out. The film focuses on a three-generation farm family living near Ironwood.

"Finnish American Lives" previously won second place honors at New York City's American Film Festival and won the American Association of State and Local History Award of Merit. It has also been shown on National Public Television and was judged the best film of several hundred grant applications by the National Endowment for the Arts.

Farrell Named To National Committee

John P. Farrell, professor of geography, earth science and conservation, has been elected to the membership on the National Council for Geographic Education's Committee on Remote Sensing.

Remote sensing information is obtained by aerial photography, such as from satellites, space stations, and planes that photograph from 10,000 to 100,000 feet above the earth.

According to Farrell, the committee's primary concern is to keep grade school, junior high, high school and university teachers and professors as up to date as possible on remote sensing. The committee will focus on the use of remote sensing in the classroom, and integration of information obtain-

ed. The committee will also keep the NCGE membership informed on the state of the art in remote sensing.

Remote sensing provides data on thermal production, pollution, heat loss, and where water is located. It is being used in the current Michigan Land Use Survey.

Farrell will serve on the 11-member committee until 1988.

He joined the faculty in 1960, and received his bachelor's and master's degrees from the University of Michigan. He also coordinates the university's cartography program and its map depository.

Dr. Fillmore C.F. Earney, professor of geography at NMU, is a member of the NCGE Executive Board.

CJ Head On New Council

Prof. Robert Barrington has been named by Gov. James Blanchard as a charter member of the new Michigan Correctional Officer's Training Council.

Barrington, who is head of Northern's Criminal Justice Department, will serve a term expiring March 30, 1985.

The council will have responsibility for prescribing training requirements and certifying correctional officers for employment by the Michigan Department of Corrections and county jails throughout the state.

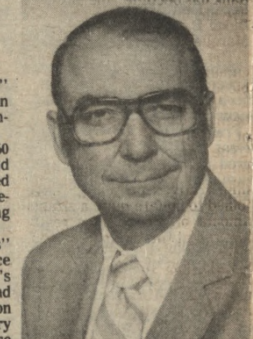
Michigan is pioneering in correctional officers training. The new council was established by Public Act 415 passed by the Legislature last year.

Barrington is considered a leading criminal justice educator and consultant nationally and in Canada. He has held national criminal justice posts in both countries and has been consultant to the government of Trinidad-Tobago.

He was recently awarded the John Edgar Hoover Memorial Medal for Public Service by the American Police Hall of Fame.

He holds bachelor's and master's degrees from the University of Wisconsin.

Before coming to Northern in 1977, he was professor and associate director at the Center of Criminology at the University of Ottawa in Canada.



ROBERT BARRINGTON

Edwards Conducts At MTU

Dr. Steven Edwards, director of choral activities at Northern, was a guest conductor for the Copper Country Choral Symposium held recently at Michigan Technological University in Houghton.

Two Northern graduates, Greg Campbell and Ann Wylie Campbell, were also involved in the Symposium. Greg, a music teacher at Hancock Elementary, conducted the Hancock Elementary Chorus. Ann, a music teacher at Houghton Elementary School, conducted the Houghton Elementary School Chorus.

Northern's Arts Chorale also participated in the symposium with a 20-minute performance. They were conducted by Edwards.

Over 300 singers, ages six to adult, participated in the eighth annual choral symposium.

Teacher Training Changes With Needs, Times



Dr. James Hendricks (right), head of the Department of Education at Northern Michigan University, and Dr. Elmer Schacht, dean of the School of Education, discuss Northern's education curriculum. (NMU photo)

It has become an accepted national trend to blame society's ills on the inability of the American educational system to educate — particularly on the teachers who "can't teach."

Changes which have taken place in society since the Northern Normal opened its doors in 1899 have been paralleled by changes in education as both have become more complex.

"We started out with one room schools," said Dr. Elmer Schacht, dean of the School of Education at what has become Northern Michigan University. "One teacher taught everything. Then the different disciplines were separated and different courses were created. We became departmentalized."

According to Dr. James Hendricks, head of the Department of Education, the department is responsible for the elementary and special education programs and for the graduate and continuing education programs. Secondary education students are advised and recruited through the departments of their major areas, he said.

Hendricks called the department "an important base of contact for schools, parents and teachers" and "an important face-to-face or phone-to-phone contact for certification across the nation."

"We keep up with certification requirements for other states," he said. "We work with both students entering the teaching field and current teachers."

Students in education at one time looked forward to returning to their own areas to teach, Schacht said, but are now showing greater willingness to relocate to other parts of the country. A large map of the U.S. posted on a wall in the Department of Education is scattered with dots which represent Northern grads who have gotten teaching jobs; there is at least one dot in almost every state of the union.

"I think our teachers are better than they've ever been," Schacht said. "They have more tools than they've ever had, more support systems than they've ever had."

Schacht and Hendricks both mention, however, that there is a decrease in the number of students going into teaching — par-

ticularly into the areas of math and science.

"As salaries of teachers have not kept up with the salaries of those in other professions," Schacht said, "many of our most able students are going into other fields."

"There are fewer people going into math and science who stay in education. Business, industry and the government are siphoning them off."

"Salaries in education are not the kind to maintain professional expertise," said Hendricks. "We have to find a system to allow teachers to use talent in classrooms with students and colleagues rather than being drawn off."

Hendricks said increasing efforts must be made to "attract a quality pool of applicants."

"We're encouraging the same group as we always have but there's someone coming along raiding the crop," said Schacht. "We're not lowering our standards. In fact we're raising them."

One way in which the department keeps standards high is through the use of a computer filing system which Hendricks said will allow the access to timely and accurate information on individual students as well as an up-to-date profile of all students in education — both in the elementary and secondary programs.

"The computer system will allow us to track progress of students," Hendricks said. "Students won't be able to fall between the shuffle of advisors and departments."

In addition to screening for academic qualities, Hendricks said screening for non-academic qualities such as personality, reliability and ability to work within an institutional rule-guided system will be increased.

Hendricks said efforts will be made to get students out into the public schools sooner and keep them there longer. A recommendation has been made to the state that a five-year program be created for students in education in which students would spend their final full year in a school both teaching and learning.

Hendricks and Schacht both noted that a number of people who started out in other professions have come to Northern to get degrees in education. "I hope it's a trend," said Schacht.

NMU Blood Bank Growing Rapidly

The NMU Employee Blood Bank has become "the most active blood bank in the county," says John Wells, director of Blood Bank Donor Services at Marquette General Hospital.

The blood bank has accumulated over 112 pints of blood since last March 1.

"A tremendous effort has been put forth by the employees at Northern," Wells stated. "The unions and the administrative personnel have joined to donate quite a sizable amount of blood. I am really amazed at this effort," he added.

According to Jane Wagon, chairperson of the NMU Blood Bank, the Clerical-Technical union started the bank. There are five other groups involved in the effort, which include American Federation of State, County and Municipal Employees, American Association of University Professors, Michigan Education Association, United Auto Workers/Administrative Professionals, and Administration.

"Prepare before blood is needed, not after, is how I feel about this," Wagon stated. "I'm satisfied with 100 units, but the bank can always use a little more," she added.

Wells said that "President Jim Appleberry has donated as often as he is allowed to. He exemplifies the spirit involved in this effort. We need those type of people."

The list of donors includes:

Mary Anderson, Appleberry, Alan Barker, Marie Beauchaine, Alice Beaudry, Darlene Bennett, Michael Brandly, Clifford Brin, Carmella Brunelle, Patricia Burke, Elsie Burns, Paul Campbell, David Carlson, Kevin Chezik, Susan Churchville, Elizabeth Connors, Rosemary DeLoach, Donald Dreisbach, Albert Feltner,

Duane Fowler, Gordon Gill, Kathleen Godec, and Kay Harrington;

Wallace Harvey, Norman Heffe, Rebecca Heinzelman, Suzanne Hellman, Cathleen Hirsch, Gregory Hopkins, Carol Huntoon, Vicki Ingham, Sharon Jarvi, Denis Johnson, Sheila Johnson, Drusilla Kierzek, John Kuhn, Mary Lou LaChappelle, Janet LaCombe, Cindy Lambert, Susan Lane, Susan Larson, James Livingston, Murray MacGrady, Robert Manning, Sue Marshall, Marcia Meldrum, Carol Moore, Carol Otte, Carl Pace, Shirley Pajeko, and Lew Peters;

Joan Peto, Kathryn Phillips, Michael Prutz, Harry Rajala, Elsie Rasanen, Lance Rhinesmith, Terrie Robbie, Michael Roy, Donald Schetter, Susan Schroderous, Scott Seaman, Joseph Skehen, Eric Smith, Roberta Stefanski, Matthew Surrell, John Swanson, Ron Thorley, George Tomasi, John Van Beynen, Raymond Ventre, Gerald Waite, Eugene Whitehouse, Donald Wierzbicki, Gerry Williams, and Sharon Zablocki.

For further information on donating blood, contact: Duane King, UAW-CT (7-2311); Don Schetter, AFSCME (7-2292); Joe Skehen, Senior Administrator (7-2627); John Kiltinen, AAUP (7-2282); Dan Rozman, MEA (7-2067); Jane Wagon, UAW/AP (7-2355).

Math Readiness Workshop Held

Dr. Carol A. Thornton, who has served as director of the Illinois State University Mathematics Learning Center, and consultant to the State Department of Education in Australia, was featured speaker.

A workshop on learning dif-



GEORGE R. CARNAHAN

National Post For Carnahan

Dr. George R. Carnahan, professor of management and marketing, has been elected national vice-president of Alpha Kappa Psi, the country's oldest and largest professional business fraternity.

He was chosen for the post at the group's annual convention in Detroit.

As one of the three national vice-presidents, Carnahan will play a key role in various fraternity functions across the country, including chapter installations.

Carnahan is a charter member of the NMU chapter of Alpha Kappa Psi, which was established in 1967. He was the chapter's advisor for 10 years, until 1977, and has also served as the national fraternity's district director and regional director.

facilities in mathematics for Head Start, nursery school and primary teachers in the Upper Peninsula was held here Nov. 18.

It was sponsored by the Education and Home Economics departments.

Pavlik Gets \$22,940 NEH Grant

The ancient roots of the Western world's value system will be the focus of a new course to be offered at Northern, developed under a grant from the National Endowment for the Humanities, Washington, D.C.

An NEH award for \$22,940 has been made to Dr. Katherine B. Pavlik, associate professor of English, to plan and offer the course. "Western Values: Greeks and Bible," to begin during the upcoming winter semester.

The new humanities course is interdisciplinary, Pavlik says.

It will deal with such areas as mythology, religion, philosophy, history, drama, and the fine arts.

She recently traveled to Washington to meet with other grant recipients.

"Similar courses are being planned at many universities around the country," she reports. "Apparently many educators in the humanities feel we need to re-examine our programs and focus once again on areas which have been somewhat neglected in recent years."

"Development of these types of courses can be seen as part

of the university level 'back to basics' movement," she adds.

The course will explore contributions of the Greeks and Judeo-Christian traditions to Western civilization. It will be team-taught by Pavlik and members of the English, history and philosophy departments. It will focus on the Western world's legacy of moral, intellectual, and aesthetic values from these two groups of ancient peoples.

Dr. Pavlik received her bachelor's and master's degrees and her doctorate from the University of Michigan.

JOY, SHARING AND CARING

This holiday season, our first at Northern, will be a celebration of new experiences and friendships at the University, in the Marquette community, throughout Michigan and with our alumni across the nation.

We want to share with each of you in a special way the bountiful gifts of the Christmas Spirit. We extend to everyone best wishes for the Yuletide Season, and we hope health and happiness will be yours in 1984 and for many years to come. May God bless all of you.

**PRESIDENT and MRS.
JAMES B. APPLEBERRY**



The 1983-84 Wildcat Gymnastics Team took a break along the fitness trail during early season training. Pictured (from left) Lori Farrell, Rochester, N.Y.; Kelly Boucher, Menominee; Kristy Beadle, Ludington; Michelle Keiser, Rockford; Hope LaViolette, Escanaba; Marilyn Goodell, Ludington; Lyn Whitton, Menominee; Joanne Rogers, Grand Rapids; Ann Desjarlais,

Livonia; Stephanie Watson, Traverse City; student assistant Theresa Berube, graduate assistant Joan Carey, and head coach Lowell Meier. The squad will tumble in the season at home December 10, when they meet Wis.-Oshkosh and Wis.-Superior at 1:00 p.m. (NMU (NMU Photo)

Speed Skating Rink Readied

Work began in November on a 400-meter oval Olympic-sized speed skating rink on the NMU campus.

Construction of the facility is being financed by Northern with volunteer assistance of the Michigan National Guard.

The rink is nearly completed, according to Karen Kunkel, director of NMU's Great Lakes Sports Academy and Outreach Programs.

Kunkel, said the project is experimental. "If there's enough interest and use, we will consider constructing a permanent speed skating facility."

The rink, costing approximately \$7,000, is located north of the Physical Education In-

structional Facility (PEIF), and just east of Presque Isle Ave. It will be used as an auxiliary facility to the short track speed skating training rink in the PEIF Ice Arena.

"We plan on developing a number of community-based programs in speed skating, serving both university students and residents of the area," Kunkel pointed out.

The facility has four parallel lanes and is being built to Olympic regulations, she added.

A new full-time speed skating coach has been hired for the program, she said.

Contact Kunkel at 227-2519 for additional information.

News-Review



SPORTS

Basketball Season Produces Surprises, Frustrations

The basketball season for both men and women at Northern has produced pleasant surprises and frustrating disappointments.

The Wildcats men own a 3-3 mark and are halfway through a grueling 13 game first half season schedule which includes only three games at home. The 'Cats have two games left on a four game road swing and then make one home appearance before playing another five straight away games.

The pleasant surprise came in a 71-67 overtime win at the University of Detroit Dec. 5. NMU scored 12 straight points in the first half to take a 28-21 lead and held a five point advantage at the half. The Titans forced the extra sessions by scoring a basket in the final minute of regulation.

Coach Glenn Brown's cagers opened the season with a 82-76 win at home, but then dropped road games at Grand Valley,

75-70, and Wis.-Stevens Point, 64-46. The squad returned home to defeat Upper Peninsula rival Lake Superior 92-78 and then lost another road contest 96-78 to the Michigan Wolverines.

The Wildcats women opened with Lake Superior at home and took a 91-76 win. The 'Cats hosted Saginaw Valley and Wis.-Milwaukee and lost 95-60

and 61-56 to drop their record to 1-2.

Coach Anita Palmer has only one senior and two juniors to provide leadership of a squad of 15 members.

The team will travel to Michigan Tech, Oakland, and Northwood; before hosting Wis.-Oshkosh and Ferris State prior to the Christmas break.

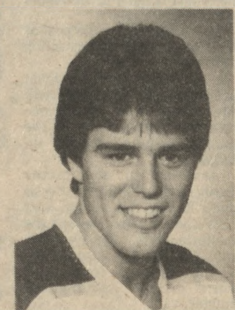


Where's the puck? Members of both the NMU Wildcats did manage to control the score defeating MU 6-1 and 9-5. Northern is 7-9 overall and tied for fifth place in the Central Collegiate Hockey Association standings.



Looking over the sauna recently built in the NMU locker room in Lakeview Arena are Rick Comley, coach of the NMU hockey Wildcats, and Dr. John Diddams (left) president of the Blue Line Club. The club provided about \$2,000 for the sauna, which will aid in weight loss and injury treatment for members of the NMU hockey team. Currently there are 41 members in the

Blue Line Club. Each contributes a minimum of \$500 toward NMU's intercollegiate ice hockey program. Members of the Blue Line Club's executive committee, in addition to Diddams are Drs. John Wojcik, Mark Callaghan, Phil Dennis, and P.R. Dhadphale. All are Marquette physicians.



BOB CURTIS
ICE HONOR — Northern Michigan University sophomore forward Bob Curtis has been named to the 1984 U.S. National Junior Hockey Team. Curtis, from Edmonds, Wash., will compete in the World Junior Championships in Sweden Dec. 25-Jan. 3. Fifteen members of the 20-man squad have been named.

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