

Michigan: a SMART STATE for WOMEN?

Women and Higher Education

Published by the University of Michigan
Center for Education of Women



SUSAN W. KAUFMANN

SALLY SHARP

JEANNE E. MILLER

JEAN WALTMAN

January 2000

With funding by the Nokomis Foundation

CENTER FOR THE EDUCATION OF WOMEN
THE UNIVERSITY OF MICHIGAN
330 E. LIBERTY
ANN ARBOR, MI 48104-2289
(734) 998-7080
www.umich.edu/~cew

© 2000, Regents of the University of Michigan

The University of Michigan, as an equal opportunity/affirmative action employer, complies with all applicable federal and state laws regarding non-discrimination and affirmative action, including Title IX of the Education Amendments of 1972 and Section 504 of the Rehabilitation Act of 1972. The University of Michigan is committed to a policy of nondiscrimination and equal opportunity for all persons regardless of race, sex, color, religion, creed, national origin or ancestry, age, marital status, sexual orientation, disability, or Vietnam-era veteran status in employment, educational programs and activities, and admissions. Inquiries or complaints may be addressed to the University's Director of Affirmative Action and Title IX/Section 504 Coordinator, 4005 Wolverine Tower, Ann Arbor, Michigan 48109-1281. 313/769-0235. TDD 313/747-1388. University of Michigan Information 313/764-1872. The Regents of the University: David A. Brandon, Ann Arbor; Laurence B. Deitch, Bloomfield Hills; Daniel D. Horning, Grand Haven; Olivia P. Maynard, Goodrich; Rebecca McGowan, Ann Arbor; Andrea Fischer Newman, Ann Arbor; S. Martin Taylor, Grosse Pointe Farms; Katherine E. White, Ann Arbor; Lee C. Bollinger (ex officio).

EXECUTIVE SUMMARY	2
INTRODUCTION	3
WHY DOES THE EDUCATION OF WOMEN MATTER? The wage gap	4
WHY DOES MICHIGAN NEED AN INCREASINGLY EDUCATED LABOR FORCE? Meeting the needs of business Reducing unemployment Decreasing poverty Strengthening families	6
HOW WELL EDUCATED ARE MICHIGAN WOMEN?	9
WHO PAYS FOR THE COST OF A POST-SECONDARY EDUCATION IN MICHIGAN? Michigan scholarships and grants programs	10
WHY ARE MICHIGAN TUITIONS HIGH? The proportion of public college revenues that come from state appropriations The burden on families	12
HOW DOES THE AVAILABILITY OF CHILD CARE AFFECT EDUCATIONAL OPPORTUNITY?	14
WHAT IS THE EFFECT ON EDUCATIONAL OPPORTUNITY OF WELFARE REFORM? Educational opportunities under welfare reform	16
POLICY RECOMMENDATIONS	21
NOTES	22
SOURCES	24

MORE MICHIGAN WOMEN THAN MEN ATTEND AND COMPLETE COLLEGE , so why should we pay special attention to the factors that affect women's ability to get a higher education in Michigan? Women's experience is different from men's in several ways:

- ✘ Education is even more critical for women than men in determining labor force participation and economic success.
- ✘ In today's labor market, a woman with a bachelor's degree earns only 9% more than a man with a high school degree.
- ✘ Women's lower lifetime earnings make it more difficult for them to pay off college debts.
- ✘ Women are more likely than men to find their ability to enroll and succeed in college dependent on access to safe and reliable child care.
- ✘ Women are much more likely than men to be single parents, poor, and involved with the welfare system—all barriers to successfully completing college.
- ✘ The more education women have, the greater their children's educational attainment will be.

The success of two of the
GOVERNOR'S PRIORITIES
attracting new businesses to Michigan
and welfare reform—depends at least in
part on the state's ability to prepare its
citizens for the labor market.

Seefeldt, et al.,
Income Support and Social Services, p. 33

Since 1964, the mission of the UNIVERSITY OF MICHIGAN CENTER FOR THE EDUCATION OF WOMEN has been to lower barriers to women's full participation in education and employment within the University and the larger society. For those with the means to pay for the cost of college or eligibility for enough financial aid to make up the difference, access has been increasing. More women than ever are finishing at least four years of college. In fact, significantly more women than men are currently completing bachelor's degrees. However, poor women, some of whom in the past have been able to pursue education while receiving public assistance, now face nearly insurmountable obstacles. Their inability to achieve higher education is a loss to themselves, their children, and the state.

Thirty-five years of assisting women to advance their education and find productive work at a good wage has taught us many things. Foremost among them is that education is the best investment we, as a society, can make in women and their families. It is the most consistently effective means of lifting families out of poverty. It is the only way to create the highly skilled workforce that employers increasingly require.

The following report, prepared with the support of the NOKOMIS FOUNDATION—a Grand Rapids foundation dedicated to improving the economic self-sufficiency of women and girls—examines the importance of education to women, and the effects of tuition, state and federal financial aid programs, child care, and welfare policies on Michigan women's access to higher education.

Why does the EDUCATION OF WOMEN matter? Post-secondary education is the primary means to provide the training and skills the workforce needs for long-term, high-wage employability.

The more education women have,

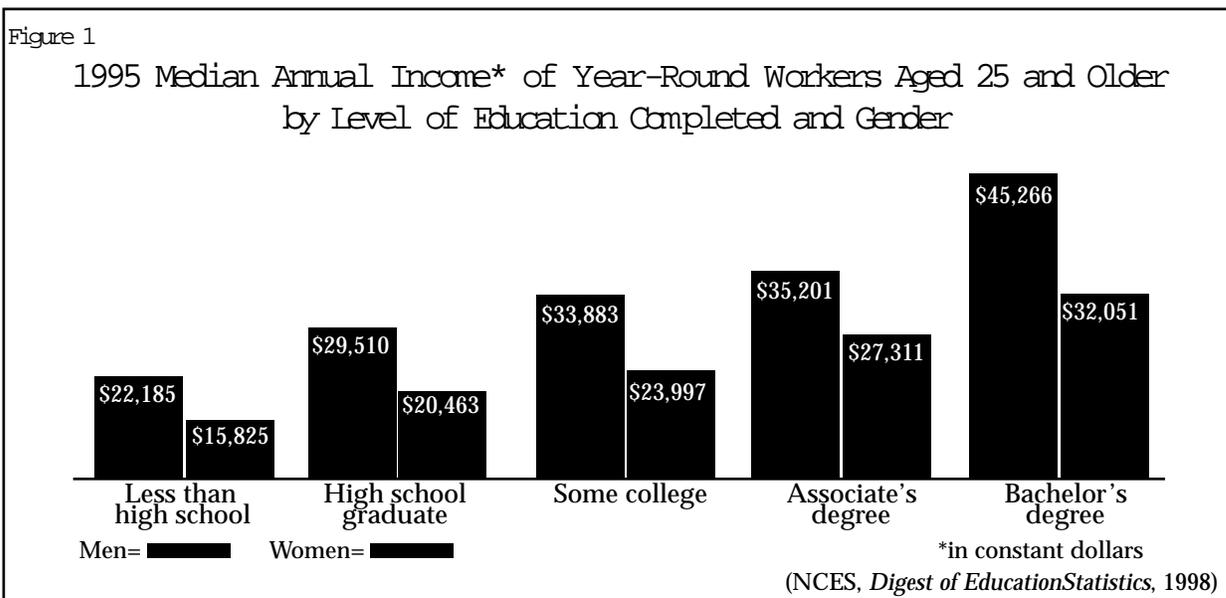
- the more likely they are to participate in the labor force,
- the less likely they are to be unemployed and/or dependent upon welfare,
- the more years they work,
- the higher their earnings are,
- and the more prepared Michigan women are to take their place in the highly skilled workforce employers increasingly demand.

All of these benefits of education are critically important, because Michigan women face tough economic times, even when times are good. In Michigan, as in other states, women are increasingly the sole economic support of their families, and they are more likely than men to be living and raising children in poverty.¹ Michigan ranks only 31st in the nation for the percentage of women living above the poverty line. Nearly a quarter of all Michigan households are headed by single mothers, and among those households, the percentage living in poverty (nearly 50%) is substantially higher than in the nation as a whole (42%).²

THE WAGE GAP

When women are employed, they face wage discrimination that limits their earnings. The Institute for Women's Policy Research has found that full-time women workers, on average, earn 74.4 percent of what men earn, while women of color earn even less. In Michigan, women earn only 62% of what men earn. This considerable wage disparity ranks Michigan 45th in the nation only six states have greater disparities.³

Labor market distortions including gender segregation (women and men holding different kinds of jobs) and wage discrimination cause women who hold bachelor's degrees to earn only 9% more than men with high school diplomas. Figure 1 clearly illustrates the wage gap. Recent research has demonstrated that the wage gap is narrowing for women who are better educated.⁴



When one of my sons was two and the other one a few months old, my husband abandoned me. For seven years I worked at the best jobs I could, not making more than \$7.00 an hour. To support myself and my family, I moved in with my mother. We used up her savings, not on purpose, but I know it dwindled because we were staying there. Finally I had it. It wasn't even a decision. It was more facing the fact that I am not going to be able to support myself and my family without going to school. Otherwise, if my mother dies, I am going to be living in a cardboard box with my kids. **There is no choice.** The whole big thing here is to be able to find work afterwards. I have got to go to the best place I can possibly get into, the best program regardless of costs, take out loans and get through it, to get a good job to support my family.

Victoria, mother of two sons, primary caregiver to her elderly mother, who recently completed her bachelor's degree at a Michigan public university.

MICHIGAN RANKINGS

- 31 Michigan ranks 31st in the nation for the PERCENTAGE OF WOMEN LIVING ABOVE THE POVERTY LINE.
- 35 Michigan ranks 35th in the nation for WOMEN'S LABOR FORCE PARTICIPATION.
- 45 Michigan ranks 45th in the nation for the RATIO OF WOMEN'S TO MEN'S EARNINGS

(Institute for Women's Policy Research, *Status of Women in Michigan*, Appendix III).

Why does Michigan need an increasingly educated job force?

An educated job force will position Michigan for the next decades by meeting the needs of business, reducing unemployment, decreasing poverty and strengthening families.

MEETING THE NEEDS OF BUSINESS

Governor Engler and other state officials have recently taken pains to point out that many relatively well-paying jobs in rapidly expanding fields do not require a college degree. Many, including such computer-related jobs as programmers, computer scientists, systems analysts, computer support specialists, and data base administrators do, in fact, generally require extensive college preparation. While women have made inroads into these heavily-male occupations, they are still under-represented. Although girls have recently achieved parity with boys in taking high school mathematics and science courses, in high school and beyond women are still not well represented in the computing and technical education programs that can lead to well-paying jobs. Other rapidly-expanding jobs that are more available to women, including home care aides and physical therapy assistants, can be secured with an associate's degree or a certificate, but they pay less well and offer little opportunity for advancement.

Newly released projections from the Bureau of Labor Statistics indicate that, between 1998 and 2008, "occupations requiring an associates degree or more education...will account for 40% of total job growth." In addition, the Bureau estimates that 70% of the 30 fastest-growing occupations generally require post-secondary education or training.⁵ Compared with projections made just a few years ago, a larger proportion of

these jobs are now expected to require education beyond high school.

In April 1998, the American Association of State Colleges and Universities (AASCU) released a special report, *Higher Education and the Labor Market*, detailing the growth in and transformation of the American economy, and emphasizing higher education's increasing role in developing the economy's human capital. This report predicts that the shift from jobs that require no post-secondary education to those requiring a college degree will accelerate. The largest and fastest occupational growth will be in professional specialties; the smallest and slowest increases will be in agricultural and manufacturing/production occupations. Figure

2 summarizes the growth rate of jobs and the corresponding level of education required.⁶

Increasingly, recruiters for high-tech jobs are leaving the state of Michigan to find workers with the skills to meet the demands of the emerging workplace. Recently, Michigan's U.S. Senator Spencer Abraham introduced federal legislation to allow companies to hire more foreign

workers to meet the increasing technological needs of the employment sector. Senator Abraham indicated, "If these companies can't find people to fill their jobs, they're going to move the jobs overseas."⁷ It is imperative that Michigan women get as much technical education as possible so that Michigan jobs can go to Michigan residents.

Between 1980 and 1990, college-educated women in Michigan saw their earnings increase by 12.8%, but the earnings of women with limited or no post-secondary education declined as much as 10.5%

Institute for Women's Policy Research,
The Status of Women in Michigan, 1996

Though U.S. productivity has increased only modestly in the last two decades, nearly all of that increase has been attributed to the overall increased education level of the workforce. In fact, various studies have estimated that increases in educational attainment have offset what otherwise would have been a serious decline in the growth in U. S. productivity.

Institute for Higher Education Policy.
Reaping the Benefits, p. 14

REDUCING UNEMPLOYMENT

In addition to helping improve Michigan's economy, post-secondary education helps improve women's lives. Figure 3 (page 7) illustrates that, as the education of women increases, the disparity between men and women's labor force participation narrows and women are significantly less likely to be unemployed.

"According to the January 1998 employment report from the U. S. Department of Labor, unemployment rates for those with a bachelor's degree or more are half that of those with a high school degree. . . . Those persons with less than a high school degree are more than three times as likely to be unemployed as bachelor's degree recipients" (The Institute for Higher Education Policy, *Reaping the Benefits*, p16).

The more education women have, the longer they remain in the labor force. The average woman with a college degree works for 32 years. In contrast, the average woman with less than a high school degree works for 20 years. More years of work equal higher lifetime earnings, larger social security payments, more pension

and other savings, and greater old-age economic security.⁸ Higher earnings also yield increased tax revenue to state and federal governments.

DECREASING POVERTY

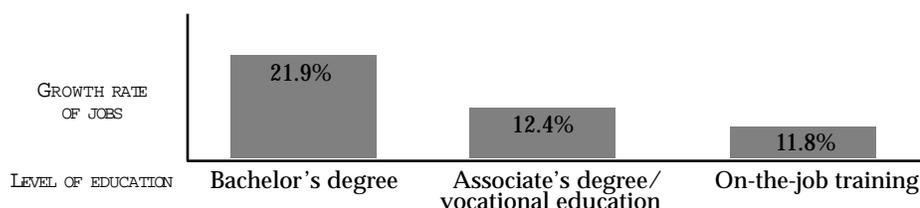
Not only does education increase women's rate and duration of employment, it also decreases the probability that they live in poverty. A December, 1997 report by the U. S. Department of Labor Bureau of Labor Statistics stated:

In general, the risk of living in poverty falls rapidly as individuals attain higher educational levels. Out of all persons in the labor force for at least half of 1996, those with less than a high school diploma had a higher poverty rate (16.2 percent) than high school graduates (6.3 percent). Workers with an associate's degree or 4-year college degree reported the lowest poverty rates, 3.2 and 1.5 percent respectively. Poverty rates generally were higher for black workers than for white workers at both higher and lower educational levels.

Poverty rates of white men and women were fairly similar at all educational levels; however, among black men and women, there were marked disparities, especially at lower education levels. The poverty rate for black women workers with less than a high school diploma was 30.6 percent compared to 18.1 percent for black men. Moreover, among high school graduates, the poverty rate of black women (18.0 percent) was almost twice that of black men (9.3 percent). Among college graduates, these differences disappear.⁹

Figure 2

Expected Growth Rates of Jobs Requiring Different Forms of Education between 1996 and 2006



(AASCU, *Student Charges*, 1998)

employment

The explosive growth of information- and technology-related industries and the simultaneous decline of manufacturing-related industries in recent years has led to a MARKED INCREASE IN THE NUMBER OF JOBS REQUIRING A COLLEGE EDUCATION.

AASCU, *Higher Education and the Labor Market*, p. 1

A recent study by Dr. Angela Reeves of Mott Community College in Flint, Michigan looked at 292 community college graduates who received a certificate or an associate's degree between 1990 and 1997 while participating in a Perkins-funded Single Parent and Displaced Homemakers Program. While students completing certificate or degree programs in general reported large increases in income, former welfare recipients made the biggest jumps. Those who had been welfare recipients before completing the certificate or degree reported an income of \$3,753 before enrolling and \$26,236 in wages and salaries at the time of the study—a 600% increase! Mean income from all sources for all study participants was \$7,424 before completing the program and \$27,642 in wages and salaries after.¹⁰

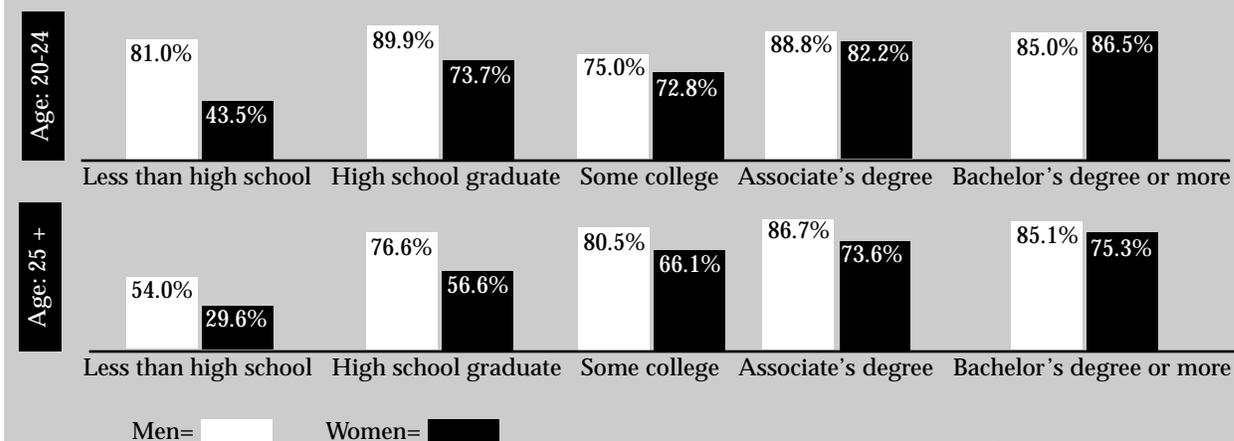
STRENGTHENING FAMILIES

Education not only increases labor market productivity and income growth, but it also has beneficial effects on the home environment and the educational abilities and aspirations of children. According to the Center for Women Policy Studies: “Studies in several states have found that post-secondary education not only increases women's income, it improves their self-esteem, increases their children's educational ambitions, and has a dramatic impact on their quality of life, enriching the women's personal lives and improving their relationships with their children.”¹¹ The more educated a woman is, the better her children's early language and reading skills, and the greater the likelihood that her children will be successful students.¹²

Given the importance of higher education to the state, women, and their families, examining women's educational attainment is critical.

Figure 3

Percentage of Labor Force Participation by Age, Gender and Level of Education



(NCES, *Digest of Education Statistics*, 1998)

How Well Educated Are Michigan Women? Since the early 1980s, women have represented more than half of all students enrolled nationally in higher education, and women earn more than half of all bachelor's degrees and master's degrees. At the same time, however, of all Americans who currently hold college degrees, men remain the majority, which has contributed to the imbalance of gender representation in many fields of work.¹³

In Michigan, 56.2% of the students enrolled in institutions of higher education are women.¹⁴ A distinction must be made, however, between the number of women who enroll and the number who eventually graduate from college. In fact, Michigan ranks 36th (out of 51, including Washington, D. C.) in the nation in terms of the number of women completing college. With 15.1% of its women aged 25 and older holding a bachelor's degree or higher, Michigan ranks better than only Alabama, Arkansas, Florida, Indiana, Iowa, Kentucky, Louisiana, Mississippi, Nevada, Ohio, Oklahoma, South Carolina, Tennessee, and West Virginia.¹⁵ Table 1 documents the educational attainment of women aged 25 and over in the United States and Michigan.

One explanation for the fact that, although Michigan women enter institutions of higher education at a high rate, they rank relatively

low in completion rates, is the fact that a majority of Michigan women enroll in college only part time. Research by the National Center for Education Statistics indicates that students who first enroll full time in bachelors degree programs are more likely to attain degree completion than those who enrolled less than full time.¹⁶ Their part-time status thus puts women at a disadvantage in terms of degree attainment. As a result of this and other factors, more Michigan women than the national average complete one to three years of college; however, fewer women than the national average complete four or more years.

The next part of this report discusses other aspects of higher education in Michigan that present barriers to women who strive to complete their education and participate equally in the job market.

Table 1

Educational Attainment of Women 25 and Older
in the United States and Michigan, 1990

Level of education	United States	Michigan
Less than high school	25.2%	23.0%
High school graduate	32.1	35.1
1-3 years of college	25.0	26.9
4 years of college or more	17.6	15.1

(Institute for Women Policy Research, *The Status of Women in Michigan*, 1996.)

Who PAYS for the cost of a post secondary education? The cost of higher education is a primary determinant of access for both women and men, and rising costs are increasingly burdensome to both. Although men and women are charged equally for the cost of attending college, women's experience differs in two ways.

First, their lower lifetime wages make it more difficult for them to pay off college debt. Second, they are more likely to attend part-time, and part-time students pay more on average per credit hour, since prolonged attendance subjects them to more tuition increases over time. In addition, they cannot take advantage of the fact that some colleges do not charge for credit hours in excess of a threshold each semester.

Funding for public higher education comes primarily from three sources. National averages of the percentage of costs funded from these sources for four-year public institutions are indicated in parentheses below:

- 1 the state, in the form of state appropriations generated from tax revenues (42%),
- 2 the federal government and other sources, in the form of federal financial aid, federal grants, gifts, and contracts (35%), and
- 3 students and/or their families, in the form of tuition and fees (23%).¹⁷

Even though state and federal governments bear a larger share of total costs than students and their families, tuition is becoming very difficult for many to afford. The cost of a college education, in terms of both constant dollars and relative proportion of an individual's or family's income, has dramatically increased.

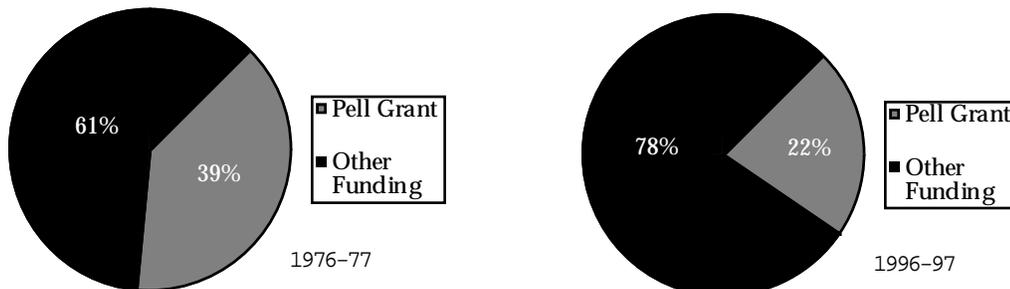
- Between school years 1980-81 and 1994-1995, the cost of tuition at four-year public post-secondary institutions nationwide increased 234%.
- The median household income, in contrast, rose by 82%.¹⁸

What is the Impact of Student Financial Aid on Access to College? Financial aid program opportunities have a significant impact on access to college. Student financial aid programs were originally designed to broaden access to post-secondary education for a larger and more diverse spectrum of students by offsetting the costs of tuition. In recent years, federal and state governments have been shifting away from a commitment to make college affordable to all students.

With rising tuition costs and diminishing state appropriations to higher education, students are dependent upon other sources, particularly scholarships and grants, for support. Yet, neither state nor federal grant and scholarship awards have kept pace with the rising costs of higher education. Pell grants, the primary federal aid program for low-income students, are worth only about half as much as they were 20 years ago, as reflected in Figure 5.

Figure 5

Proportion of the Cost of a Public 4-Year Institution Covered by a Pell Grant



(The Education Resource Institute, *Do Grants Matter?*, p.17)

tuition

MICHIGAN SCHOLARSHIPS AND GRANT PROGRAMS

There are a number of Michigan scholarship and grant programs available to Michigan residents attending schools in the state:

- Michigan Competitive Scholarships award \$1,200 to eligible students attending public universities.
- Tuition Grants provide \$2,400 to eligible students attending private state institutions.
- The Tuition Incentive Program encourages high school completion by covering up to 80 semester hours or 120 credits and mandatory fees at any participating community college or university in Michigan. TIP will also provide up to \$2,000 for tuition to students continuing their education beyond the associate's degree or certificate level. Students who have qualified for Medicaid at some point in the recent past are eligible.¹⁹
- The new Michigan Merit Award Scholarship Program, which was enacted into law in 1999, provides a scholarship of \$2,500 (increasing to \$3,000 for the Class of 2005) to high school students who meet certain criteria and attend an approved post-secondary education institution. To qualify, students must score well on the Michigan Educational Assessment Program (MEAP) High School Tests or a combination of some MEAP tests and a nationally recognized college entrance exam.

In the mid 90's dramatic cuts were made in the Tuition Incentive Program supporting attendance by poor students at public

Table 2
State Appropriations to Michigan Scholarship, Grant, and Incentive Programs

	FY 98-99	FY 99-00	% change 98/99 to 99/00
Tuition Incentive Program	\$1,750,000	\$5,250,000	200%
Competitive Scholarships	\$32,405,046	\$33,398,513	3.1%
Tuition Grants	\$59,121,069	\$61,072,064	3.3%
Michigan Merit Award Program	\$0	\$86,300,000	0%

(HB4302: Higher Education Budget; Detail by Institution [<http://www.state.mi.us/sfa/>])

institutions; this year's increase restores viability to the program. However, funding for Tuition Grants and Michigan Competitive Scholarships has in no way kept pace with inflation. Appropriations to those programs during recent years indicate that nearly equal numbers of students who attend public and private institutions are benefiting from them. Despite the fact that enrollment in private institutions represents only 16% of entire enrollment in the state of Michigan—less, if non-resident students are not counted—the students who attend private institutions receive approximately half of the money.

In 1997-98, Michigan appeared moderately generous in the total amount of money appropriated for need-based student financial aid when compared with Ohio, Indiana, and Wisconsin. However, Michigan's total 1997-98 student financial aid appropriation of \$95.29 million represented only 30% of Illinois' \$311.46 million. Michigan ranked next to lowest in the region in the percentage of undergraduates who receive need-based aid. In Michigan, only 22% of undergraduates received such aid, while Illinois offered it to over 35% of their undergraduates and Ohio and Wisconsin to nearly 30% of the undergraduates in their states. Michigan ranked last of the five states in the percentage (5.2%) of state appropriations to higher education that are given in the form of grants to students.²⁰

Furthermore, Michigan tuitions for four-year public institutions are high, increasing students' need for scholarships and other financial aid, and placing a greater burden upon families and individuals in paying for college.

Table 3
Average Tuition and Fees by Institutional Type for Selected Midwest States

State	Public 4-year	Public 2-year	Private 4-year
Michigan	\$3,986	\$1,578	\$9,683
Ohio	\$3,834	\$2,323	\$12,989
Illinois	\$3,525	\$1,290	\$12,424
Indiana	\$3,200	\$2,331	\$13,268
Wisconsin	\$2,747	\$1,942	\$12,492

(Chronicle Of Higher Education, *Almanac*, 1999)

funding

There appears to be DISPROPORTIONATE STATE SUPPORT of students attending private institutions in Michigan, despite the fact that private tuition is low when compared with surrounding states.

THE PROPORTION OF PUBLIC COLLEGE REVENUES THAT COME FROM STATE APPROPRIATIONS

Public post-secondary institutions are increasingly dependent on tuition as a source of revenue, as state legislatures appropriate more and more funds to meet other needs, such as Medicaid and prison construction. In Michigan, for example, state appropriations for the Department of Corrections increased by 71.9% between fiscal years 1989-90 and 1995-96. State higher education and community college budgets increased only 18.5% and 14.6%, respectively, in that same time period.²¹

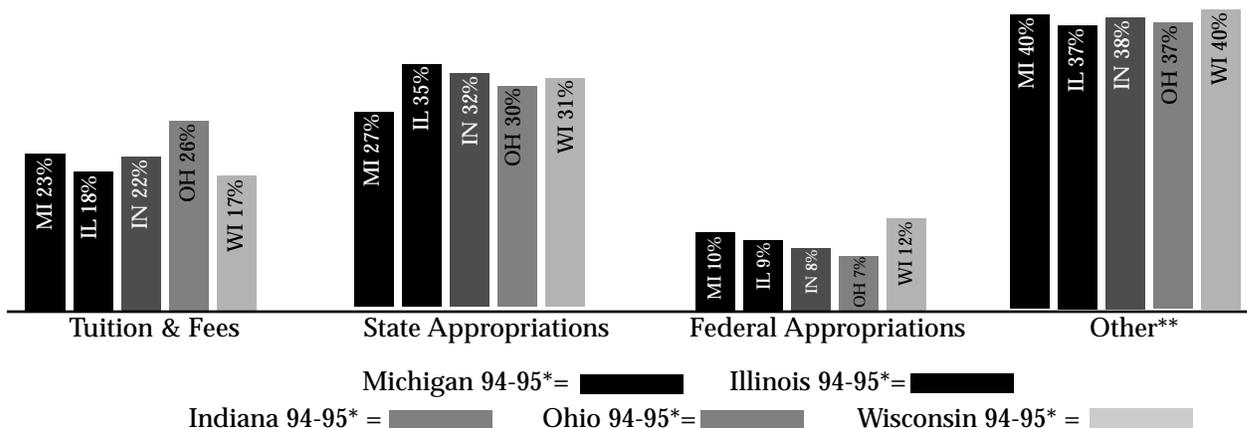
The Michigan Senate Fiscal Agency recently reported that, during the ten-year period between 1988-89 and 1998-99, adjusted gross appropriations for community health increased by 125.9%; for corrections, 122%; and for higher education, 42.9%.²²

Figure 6 lists the most recent breakdown of revenue sources for all public institutions of higher education as reported in the *Digest of Education Statistics*.

Between 1980-1981 and 1993-1994, the national average of state appropriations as a proportion of public college revenues fell from 56% to 42%. In 1993-1994, Michigan state appropriations provided only 36% of public 4-year college revenues, ranking it 41st out of 50 states. Michigan has a strong tax base that could be used to support post-secondary education better.²³

Figure 6

Percentage of Support from Tuition and Fees and State and Federal Appropriations for Selected States



* This is the most recent data available.

** other includes local appropriations, endowment income, hospital revenues, private gifts and grants.

(NCES, *Digest of Education Statistics*, 1998)

THE BURDEN ON FAMILIES

Michigan has the highest average tuition for public four-year colleges and the lowest average tuition for private four-year institutions in the Midwest.

Between 1978 and 1992, the average tuition paid by all students enrolled in Michigan post-secondary schools increased more than twice as much as the national average.

Between 1988-89 and 1998-99, the annual resident undergraduate lower division tuition and fees for fifteen Michigan colleges and universities increased by 95.3%.²⁴

Michigan's above-average public tuition costs place a disproportionate burden on families or individual students for the financing of higher education compared with other Midwestern states. In the U.S. as a whole, families pay 31.4% of the cost of public post-secondary education through their tuition payments; in Michigan, however, they pay 43.5%. When tuition is considered relative to median household income within the state, Michigan ranks as the 6th highest state in the nation in terms of family payment effort.²⁵

While the rising cost of higher education affects all students—even though women may be disadvantaged in coping with it—there are some barriers to access that women experience far more often than men.

Figure 7

In Which States Do Families Bear The Greatest Cost Of Education?

<u>State</u>	<u>National Ranking</u>
Michigan	6
Indiana	11
Ohio	14
Wisconsin	37
Illinois	49

(The higher the ranking, the greater the burden on families to pay for post-secondary education.)

(Halstead, *State Profiles*, 1997)

Financial aid is increasingly loan-based, which leaves **students** with growing and, in some cases, **staggering debt burden**. College debt has been increasing fastest for those students attending four-year public institutions and for nontraditionally-aged, part-time, and minority students. Many students graduate with such a **large debt** that they have a difficult time obtaining credit or buying a home.

HOW DOES THE AVAILABILITY OF CHILD CARE AFFECT EDUCATIONAL OPPORTUNITY? Women's ability to juggle the roles of wife, mother, student, and worker is affected by the availability of formal and informal supports. Even in most two-parent families, women are still the primary care-givers for young children. Single mothers who work and attend school simply must have reliable child care. The lack of on-campus and/or affordable, safe child care has particularly impeded the educational access, progress, and attainment of women, whether they have partners or are single mothers.

Student parents typically have low incomes while in school and often have limited transportation resources. Many are away from home and relatives who could help out. While many Michigan public institutions have child care programs, spaces are limited, costs are high, scholarships are infrequent, infant care and evening or weekend care are generally not available, affordability remains a major obstacle even for middle-income families—and students must compete for slots with faculty and staff. A recent survey of Michigan campus child care centers conducted by the University of Michigan Family Care Resources Program found that rates for full-time pre-school care range from \$100-\$168 per week. In Michigan communities, high quality, full-time child care currently costs \$800-900 per month for preschoolers. Infant and toddler care can run as high as \$1200 per month. The average cost

of full-time care in Michigan child-care centers is \$460 per month.

While undergraduate student financial aid packages can cover child-care costs, some colleges and universities tend to underestimate those costs and budget too little aid to cover them. In addition, such aid generally takes the form of loans, causing student parents to graduate with much higher loan debt than non-parents. In graduate and professional schools, where many student parents are found, virtually all aid is merit-based and does not include dependent allowances, so students are forced either to work long hours—which impedes their progress toward degrees—or to assume very large debts.

Low-income families, in general, have real trouble locating and paying for high-quality

The cost of full-time child care in a day-care center for one preschooler can equal or exceed the cost of undergraduate tuition at a Michigan university. Care for infants (when it can be found) and for toddlers is even more expensive. I have three boys. My youngest wasn't in school all day at the time I started school. I couldn't find baby-sitters. If you do, they want to be paid \$5 or \$6 an hour, and I only make \$5.15.

Helen, Welfare recipient enrolled in community college nursing program

“Studies in several states have found that post-secondary education not only **increases women’s income**, it improves their self-esteem, **INCREASES THEIR CHILDREN’S EDUCATIONAL AMBITIONS**, and has a dramatic impact on their quality of life, enriching the women’s personal lives and improving their relationships with their children.”

The more educated a woman is, **the better her children’s early language and reading skills**, and the greater the likelihood that her children will be successful students.

Gittell, Schehl & Fareri, 1990; Campbell, 1996

child care. They are more likely than more affluent families to have to use informal arrangements, such as care by relatives (including older siblings), tag-team parenting when two parents are available, and family day care homes that are often unlicensed and unregulated. At best, such arrangements are consistent, nurturing, and supportive but, at worst, they can be makeshift, unstable, inadequate, and dangerous. Even those who are able to secure spots in child-care centers still frequently struggle with poor care. A recent study conducted by a consortium of leading researchers in the field of early childhood found that “child care at most centers in the U.S. is poor to mediocre, with almost half of the infants and toddlers having less than minimal quality.”²⁶

The acute child care needs in Michigan have been exacerbated by the decision to waive the work requirement for new mothers receiving welfare for only twelve weeks instead of the federally permissible 52. Before the 1996 changes in welfare laws, there was already a serious shortage of licensed child-care slots in the

state. Since thousands of mothers of infants and young children have been required to enter the workforce, those shortages have become even more severe. According to the 1993 “Kids Count in Michigan Report on Child Care and Early Education in Michigan” there were 442,649 children under six in need of child care, while the estimated capacity of all licensed providers at the time was 215,267 less than 50% coverage. Since then, demand for child care has risen dramatically and, despite some increase in child care funds, estimates indicate that only 50-55% of children under six needing full-time child care can find it in licensed settings.

Education has long been honored in our society as a route to social mobility and material security. In the past, policymakers gave opportunities for post-secondary education to such disadvantaged groups as minorities and war veterans. Millions of Americans continue to take advantage of educational welfare in the form of government scholarships, student loans, GI bills, work-study programs, and work-based continuing education programs. Tax benefits support parents who can set up college trusts for their children . . . yet POLICYMAKERS HAVE CONTINUED TO IGNORE THE POTENTIAL EDUCATION HAS TO HELP WELFARE RECIPIENTS ACHIEVE SIMILAR GOALS

American Psychological Association, *Welfare to What?*, n.p.

WHAT IS THE EFFECT ON EDUCATIONAL OPPORTUNITY OF WELFARE REFORM?

Educational opportunity has greatly increased during the last half-century in the United States, fueling economic expansion and enhancing well-being. However, recent welfare policy changes are cutting off poor women, who most need advanced education to improve their families' economic prospects, from that opportunity. In 1996, the Personal Responsibility and Work Opportunity Reconciliation Act made dramatic changes in the U.S. welfare system. It abolished the long-standing federal commitment to provide cash assistance to low-income families solely on the basis of need, through the Aid to Families with Dependent Children program. In particular, it abolished the federal commitment to assist welfare recipients to achieve higher education that had been enacted in the Family Support Act of 1988.

The 1996 law set up block grants (Temporary Assistance to Needy Families) for state programs, which generally move clients into low-skilled, low-paid jobs. In order for states to receive full TANF funding, an increasing percentage of their caseload must be in the workforce: 35% in 1999 rising to 50% in 2002. In order for single parents to receive benefits, they must comply with escalating work requirements, now 30 hours per week for those with no child under six. State policy de-emphasizes job training and restricts post-secondary and vocational education. Michigan

does not have a five-year limit on welfare benefits, although it emphasizes to clients that federal benefits are limited to five years.

A 1997 survey of financial aid officers at seven Michigan institutions found that welfare reform policies have severely reduced the ability of welfare recipients to advance their education:

- All institutions reported that reform policies negatively affected student enrollment.
- Lansing Community College saw enrollment of independent students receiving public assistance drop from 1,062 in 1994-95 and 1,161 in 1995-96 to 603 in 1997-98. At Schoolcraft College, there were 71 single parents receiving public assistance in 1989-90, 88 in 1994-95, and 17 in 1998-99.
- Student welfare recipients who were employed outside of the college were more likely to drop out of school; students able to find work-study positions on campus (70% of those who tried) were less apt to leave.²⁷

Non-skilled employment is fostered by the state's current policy of using a labor market attachment model versus a human capital model.

Carter and Kirk, *Effects of Welfare Reform on Community College Students in Michigan*, p. 7

EDUCATIONAL OPPORTUNITIES UNDER WELFARE REFORM

After the first years of welfare reform, “legislators in many states have become more open to finding new ways to help lift people out of poverty” according to an article in the Chronicle of Higher Education. “They also are less wedded to an approach to welfare that focuses almost exclusively on getting people into jobs.” In several states, these new approaches include allowing welfare recipients to pursue degrees full time or as part of their required hours. “The shift in thinking is driven by a belief that most welfare recipients lack the education or skills to earn enough to support a family comfortably.”²⁸

However, Michigan has been slow to change. According to the Michigan Jobs Commission, between October 1996 and May 1997 only 2% of Michigan welfare recipients assigned to Work First received education or job training.²⁹ In February 1999 only 1.6% of Work First participants were in an educational activity. The Tufts University Center on Hunger and Poverty report, *Are States Improving the Lives of Poor Families?* noted in 1998 that Michigan ranked as the worst of all states in its use of exemptions for work activity requirements.

Students pursuing post-secondary education are unlikely to be exempted from work requirements and sanctions, though other states are using these exemptions to move students through post-secondary settings faster so that these individuals can gain the skills to earn higher and thus more self-sustaining wages. The Center also noted that Michigan scored low on its assistance to individuals in obtaining and keeping work. Caseworkers were not found to use support resources to help families overcome barriers, or take advantage of additional education and training which could significantly improve their economic security.³⁰

In 1999, Michigan adopted a new provision, known as 10/10/10, for students in the second year of a two-year undergraduate degree or the final year of a four-year degree. Students in certificate programs that can be completed in twelve months or less also qualify. Eligible

single parents with no child under six may fulfill the work requirement by working at least 10 hours, attending class or a laboratory for up to 10 hours, and studying for up to 10 hours, for a total of 30. Single parents with a child under six who are in the final year of a degree program may meet the 20-hour work requirement by working 10 hours and engaging in 10 hours of educational activity. However,

As one former welfare recipient who recently graduated from the University of Michigan observed, Welfare reform is the death of higher education for women like me.

If we are to achieve THE GOAL OF WELFARE REFORM BREAKING THE CYCLE OF POVERTY and welfare dependency we must resist the temptation to indulge in quick-fix job training that prepares women for nothing but more poverty. Instead, we must acknowledge that education is the key.

American Association of University Women,
Education and Training: The Path Out of Poverty for Women, p. 6

students in all cases must be in educational programs designed to lead directly upon completion to a specific job that is currently in demand, as determined by local Workforce Development Boards. There are no guidelines for the boards to use in determining which jobs are in demand.

Work requirements can also be deferred so that students can participate in internships or clinical experiences required for completion of a degree, and students are theoretically able to take advantage of that possibility in addition to the 10/10/10 provision. However, since most internships or field placements occur at the end of the course of study, students are generally unable to do both.

The 10/10/10 program is most likely to be of practical use to students in certificate programs leading to relatively low-wage jobs. Other students must weather one to three years of working 20 or 30 hours per week, raising one or more children, and attending classes at least half time. (Full-time attendance is necessary in order to qualify for most financial aid, though some is available at half time.) Unless they are in an educational program approved by a Work First case manager, students do not get child care subsidies for time spent in class or

To the extent that education and training is ignored in welfare-to-work initiatives, the likelihood that large numbers of public assistance recipients will simply cycle back and forth between the low-wage job market and the welfare system is increased.

Parks, *Michigan's Families: Poor, Despite Work*, pp.29-30

studying and can be forced to drop out of school in mid-semester if they are offered a 40-hour a week job, even if it pays minimum wage and offers no opportunity for advancement. Few students, as evidenced by continuing attrition, will be able to sustain such a load in order to qualify for a reduced work requirement in the final year. National research on attrition rates indicates that students who attend college full time and work more than 20 hours a week are spread too thin to keep up with their studies and are likely to drop out.

You take away school, and you might as well put me in a psych ward. When my daughter was ill and after she died, I knew that I was still going forward, because I was still in school. I want to make my dreams happen. I want to be in the nursing program, because I have some things to do with my life and career, and I am doing it!

Helen is the single mother of 3 young adolescent boys working on her nursing degree at a Michigan community college. Her oldest child, a daughter, died approximately three years ago after a lengthy illness. Helen is completing her degree despite the difficulties of attending college while receiving welfare benefits.

According to the Tufts Center on Hunger and Poverty, flexibility in accommodating education, training, and job search needs of low-skilled recipients often CAN MAKE THE DIFFERENCE between repeated JOB FAILURES THAT LEAD BACK TO WELFARE AND SUCCESS THAT LEADS TO ECONOMIC INDEPENDENCE.³¹

A number of other states have taken more comprehensive steps than Michigan has to broaden access to education for welfare recipients.

¥ Illinois permits welfare recipients to count full-time post-secondary education as their work requirement for 36 months—long enough to complete a four-year degree by attending year-round. Child care is provided, and the time clock is stopped while participants earn their degree, so long as they maintain a 2.5 average.

¥ Using state “maintenance of effort” funds, Maine has reserved 2,000 slots in its “Parents as Scholars” program, ALLOWING RECIPIENTS TO MEET THEIR WORK REQUIREMENT COMPLETELY THROUGH EDUCATION, provided they finish within one and a half times the amount of time expected for a full-time student. Child care and other support services are provided. After two years in school, recipients are required to work 20 hours per week.

¥ Kentucky allows welfare recipients to engage in 24 months of post-secondary education WITHOUT ANY ADDITIONAL WORK REQUIREMENTS. Child care is guaranteed for time spent in education.

education

Welfare

Although many Michigan women are able to take full advantage of educational opportunities, CHALLENGES REMAIN to be addressed by changes in policy and practice.

¥ Advanced education is crucial to overcoming the bias women experience in the labor market.

¥ Making higher education more affordable for low- and moderate-income students would benefit both women and men, but it would have greater impact on women's long-term financial success and on the stability and prosperity of families.

¥ Taking steps to make child care more available and affordable benefits both student mothers and fathers, but it is mothers for whom such services are critically important. They carry more of the daily burden of child care even in two-parent families, and they are more likely to be single parents.

¥ Allowing welfare recipients to earn two-year and four-year degrees is the most certain mechanism for moving them and their families out of poverty and welfare dependence.

policy

recommendations

EDUCATION.....

¥ Increase the priority given to appropriating funds for higher education in Michigan.

¥ Maintain the recent trend to keep tuition increases as small as possible.

¥ Aggressively disseminate information about the staffing needs of business to prospective post-secondary students, in order to encourage Michigan citizens to develop necessary skills.

FINANCIAL AID.....

¥ Significantly increase the amount students can receive from Michigan Competitive Scholarships, Tuition Grants, and the Tuition Incentive Program.

¥ Allow students who are eligible to use Tuition Incentive Program money, regardless of whether they apply for this money before they apply to college. Use the money as an incentive for students to be able to complete college, not just an incentive to finish high school.

¥ Add a sliding scale to the Michigan Merit Award Scholarship, so that students with little or no financial need receive a token amount and students with high need receive more than \$2,500 or \$3,000.

¥ Create state financial aid programs for part-time students and student parents, who often face additional barriers to degree completion.

¥ Restore the purchasing power of Pell Grants.

¥ Make Pell Grants available to students who attend college less than half-time.

CHILD CARE.....

¥ Increase campus funding through the Child Care Access Means Parents in School act to assist higher education institutions in providing campus-based child-care services to low-income students, extend to cover graduate students.

¥ Improve child care availability on college campuses, especially by extending services into the evening when many women take classes because of daytime work or child-rearing responsibilities, and when typically no child care is offered.

¥ Provide consistent support through TANF for child care during hours welfare recipients spend in class.

¥ Designate a financial aid officer on each campus who specializes in assisting single parents and welfare recipients by becoming expert in TANF and other programs that can assist them.

¥ Improve payment rates and mechanisms for child-care providers serving TANF recipients. Currently, payment is so slow, and so far below market rate, that many providers refuse to accept it.

WELFARE.....

¥ De-emphasize Work First, with its emphasis on rapid labor force attachment rather than long-term self-sufficiency, as the exclusive focus of the state welfare program.

¥ Keep the 10/10/10 program but expand it to include all years of a two- or four-year degree program; adjust as work requirements increase.

¥ Encourage inclusion of post-secondary education in individual service strategies for welfare recipients.

¥ Under federal welfare law, states are required to maintain state welfare-related spending at historical minimum levels. Spend state maintenance of effort dollars to meet families' education-related needs, including child care and more work-study job slots.

¥ Increase state and federal work-study funding to colleges and universities so that they can increase work-study awards, enabling welfare recipients to meet their full work requirement with on-campus jobs.

¥ Use Department of Labor Welfare-to-Work funds to provide education and training to long-term welfare recipients and non-custodial parents, freeing up TANF funds for other, innovative programs to encourage and support education.

¥ Revoke the 5-year federal lifetime limit on welfare assistance, which limits the ability of those on assistance to pursue part-time study.

- 1) Bianchi, Suzanne M. & Spain, Daphne (1996, December). Women, Work and Family in America. Population Bulletin 51(3), 1-48.
- 2) Institute for Women's Policy Research (1996). The Status of Women in Michigan: Politics, Economics, Health, Demographics. Washington, DC: IWPR, p. 24.
- 3) Institute for Women's Policy Research (1996). The Status of Women in Michigan: Politics, Economics, Health, Demographics. Washington, DC: IWPR; and AFL-CIO and Institute for Women's Policy Research (1999). Equal Pay for Working Families (A joint research project by the AFL-CIO and IWPR) Washington, DC: IWPR.
- 4) Bianchi, Suzanne M. & Spain, Daphne (1996, December). Women, Work and Family in America. Population Bulletin 51(3), 1-48.
- 5) Braddock, Douglas. (1999, November). Occupational Employment Projections to 2008. Monthly Labor Review 122(11), p. 55.
- 6) American Association of State Colleges and Universities (1998). Higher Education and the Labor Market. Washington, DC: AASCU. [www.aascu.nche.edu]
- 7) Kellogg, Sarah (1998, May 12). Employees are Hottest New Imports. The Ann Arbor News, p. A1; also Morgan, Mary (1998, March 23). High-Tech Employee Search Goes West. The Ann Arbor News, p. A1.
- 8) Statistical Handbook on Women in America (1996) 2nd Edition. Phoenix, AZ: Oryx Press.
- 9) U. S. Department of Labor. Bureau of Labor Statistics (1997, December). A Profile of the Working Poor, 1996. Washington, DC: USGPO.
- 10) Reeves, Angela (1999, January). An Analysis of Economic Achievement Experienced by Graduates of a Perkins Funded Single parent and Displaced Homemakers Program. Flint, Michigan: Mott Community College.
- 11) Center for Women Policy Studies (1998, July). Getting Smart About Welfare. Washington, DC: CWPS, p. 4.
- 12) Campbell, Frances A. (1996, June). Family Factors Associated with High and Low Reading and Mathematics Scores in Children from Low Income Families. Paper presented at the Head Start National Research Conference, Washington, DC.; Gittell, Marilyn, Schehl, Margaret, & Fareri, Camille (1990, March). From Welfare to Independence: The College Option. A Report to the Ford Foundation. New York, NY: City University of New York. Howard Samuels State Management and Policy Center; and Hill, M. Anne and King, Elizabeth M. (1995). Women's Education and Economic Well-Being. Feminist Economics, 1(2), 21-46.
- 13) National Center for Education Statistics (1998). Digest of Education Statistics 1997. (NCES 98-015). Washington, DC: U.S. Department of Education, Office of Educational Research and Improvement.
- 14) Chronicle of Higher Education (1998). The Almanac of Higher Education 1997. Chicago: University of Chicago Press.
- 15) Institute for Women's Policy Research (1996). The Status of Women in Michigan: Politics, Economics, Health, Demographics. Washington, DC: IWPR, Appendix III.
- 16) National Center for Education Statistics (1996). Indicator 10, Persistence Toward a Bachelor's Degree. The Condition of Education 1996. [http://nces.ed.gov/pubsworld/ce96/c9610a01.html]
- 17) U. S. General Accounting Office (1996, August). Tuition Increasing Faster than Household Income and Public Colleges' Costs (GAO/HEHS-96-154) Washington, DC: General Accounting Office, pp. 15-16, 21-22.
- 18) U. S. General Accounting Office (1996, August). Tuition Increasing Faster than Household Income and Public Colleges' Costs (GAO/HEHS-96-154) Washington, DC: General Accounting Office, p. 18.

- 19) Eligibility for the Tuition Incentive Program is based on students having received Medicaid at some point in their lives, being under the age of 20, and applying to the program before they graduate from high school.
- 20) National Association of State Student Grant and Aid Programs (1999). 29th Annual NASSGAP Survey Report [www.nassgap.org/researchsurveys/].
- 21) Michigan. Senate Fiscal Agency (1995, October) Table 5: Growth in Adjusted State Spending from State Resources Appropriations. Michigan State Budget: Priorities Since FY 1989-90. Lansing, MI: Michigan SFA. Data have been adjusted so that data can be viewed on a comparable basis over time.
- 22) Michigan. Senate Fiscal Agency (1998, January). 1998-99 Fiscal Digest. [www.state.mi.us/sfa/pubs.html]
- 23)) U. S. General Accounting Office (1996, August). Tuition Increasing Faster than Household Income and Public Colleges' Costs (GAO/HEHS-96-154) Washington, DC: General Accounting Office.
- 24)) U. S. General Accounting Office (1996, August). Tuition Increasing Faster than Household Income and Public Colleges' Costs (GAO/HEHS-96-154) Washington, DC: General Accounting Office *and* Michigan. Senate Fiscal Agency (1998, January). 1998-99 Fiscal Digest. [www.state.mi.us/sfa/pubs.html]
- 25) Halstead, Kent (1997). State Profiles: Financing Public Higher Education 1997 Rankings. Washington, DC: Research Associates of Washington.
- 26) Cost, Quality, and Child Outcomes Study Team (1995). Cost, Quality, and Child Outcomes in Child Care Centers. Executive Summary. Denver: University of Colorado at Denver. Economics Department.
- 27) Carter, Sandra & Kirk, Arthur (1997, July). Effects of Welfare Reform on Community College Students in Michigan. Report Prepared for the State Board for Public Community Colleges.
- 28) Schmidt, Peter (1999, April 23). A New Wrinkle in Welfare Reform: Allowing Recipients to Earn Degrees. Chronicle of Higher Education 45(33), p. A42.
- 29) Michigan Jobs Commission (1997). Report-WF-Comp-Period Covered: 10/01/96 — 4/30/97 (as cited in Women Matter, 1999).
- 30) Tufts University. Center on Hunger and Poverty (1998, February). Are States Improving the Lives of Poor Families: A Scale Measure of State Welfare Policies. Medford, Massachusetts: Tufts University.
- 31) Tufts University. Center on Hunger and Poverty (1998, February). Are States Improving the Lives of Poor Families: A Scale Measure of State Welfare Policies. Medford, Massachusetts: Tufts University, p. 16.

- AFL-CIO and Institute for Women's Policy Research (1999). Equal Pay for Working Families (A joint research project by the AFL-CIO and IWPR). Washington, DC: IWPR.
- American Association of State Colleges and Universities (1997). State Fiscal Conditions. Washington, DC: AASCU. [www.aascu.nche.edu]
- American Association of State Colleges and Universities (1998a). Higher Education and the Labor Market. Washington, DC: AASCU. [www.aascu.nche.edu]
- American Association of State Colleges and Universities (1998b). Student Charges. Washington, DC: AASCU. [www.aascu.nche.edu]
- American Association of University Women (1995, April). Education and Training: The Path Out of Poverty for Women. Washington, DC: AAUW.
- American Council on Education (1998). ACE Fact Sheet on Higher Education. Percent of Persons Participating in Various Activities, or Possessing Various Characteristics, by Educational Attainment. [www.acenet.edu/programs/DGR/general/nonfin.HTML]
- American Psychological Association (1998). Making 'Welfare to Work' Really Work: Education and Training. The Double Message About Education. [www.apa.org/pi/wop/edu.html]
- Bianchi, Suzanne M. & Spain, Daphne (1996, December). Women, Work and Family in America. Population Bulletin 51(3), 1-48.
- Braddock, Douglas (1999, November). Occupational Employment Projections to 2008. Monthly Labor Review 122(11), 51-77.
- Campbell, Frances A. (1996, June). Family Factors Associated with High and Low Reading and Mathematics Scores in Children from Low Income Families. Paper presented at the Head Start National Research Conference, Washington, DC.
- Carter, Sandra & Kirk, Arthur (1997, July). Effects of Welfare Reform on Community College Students in Michigan. Report Prepared for the State Board for Public Community Colleges.
- Center for Women Policy Studies (1998, July). Getting Smart About Welfare. Washington, DC: CWPS.
- Chronicle of Higher Education (1998). The Almanac of Higher Education 1997. Chicago: University of Chicago Press.
- Conway, M. Margaret, Ahern, David W., & Steuernagel, Gertrude A. (1995). Women and Public Policy: A Revolution in Progress. Washington, DC: CQ Press.
- Cost, Quality, and Child Outcomes Study Team (1995). Cost, Quality, and Child Outcomes in Child Care Centers. Executive Summary. Denver: University of Colorado at Denver. Economics Department.
- Engler, John (1999, January 28). Michigan — the "Smart State" — First in the 21st Century. 1999 Michigan State of the State Address.
- Gendreau, Gisgic (1998, June 3). A Degree Isn't the Only Path to a Good Job, Study Says. The Ann Arbor News, p. F4.
- Gittell, Marilyn, Schehl, Margaret, & Fareri, Camille (1990, March). From Welfare to Independence: The College Option. A Report to the Ford Foundation. New York, NY: City University of New York. Howard Samuels State Management and Policy Center.
- Gladioux, Lawrence E. (1996). College Opportunities and the Poor: Getting National Policies Back on Track. Washington, DC: The College Board.
- Gruber, Andrew S. (1998). Promoting Long-Term Self-Sufficiency for Welfare Recipients: Post-Secondary Education and the Welfare Work Requirement. Northwestern University Law Review 93 Nw. U.L. Rev. 247.
- Halstead, Kent (1997). State Profiles: Financing Public Higher Education 1997 Rankings. Washington, DC: Research Associates of Washington.
- Hill, M. Anne & King, Elizabeth M. (1995). Women's Education and Economic Well-Being. Feminist Economics, 1(2), 21-46.
- Institute for Higher Education Policy (1998, March). Reaping the Benefits: Defining the Public and Private Value of Going to College. (The New Millennium Project on Higher Education Costs, Pricing, and Productivity). Washington, DC: The Institute of Higher Education Policy.
- Institute for Women's Policy Research (1996). The Status of Women in Michigan: Politics, Economics, Health, Demographics. Washington, DC: IWPR.
- Institute for Women's Policy Research (1997). The Wage Gap: Women's and Men's Earnings — Briefing Paper. Washington, DC: IWPR.
- Kane, Thomas J. & Rouse, Cecilia Elena (1995, June). Labor-Market Returns to Two- and Four-Year College. The American Economic Review 85(3), 600-614.
- Kellogg, Sarah (1998, May 12). Employees are Hottest New Imports. The Ann Arbor News, p. A1.
- Kids Count in Michigan (1993). Child Care and Early Education in Michigan: A Status Report. Lansing, MI: Kids Count in Michigan.
- Michigan House. Standing Committee on Colleges and Universities (1998, December). The Impact of State Programs and Policies on Higher Education. Final Report. Lansing, MI: Michigan House. The Committee.
- Michigan. Senate Fiscal Agency (1995, October). Table 5: Growth in Adjusted State Spending from State Resources Appropriations. Michigan State Budget: Priorities Since FY 1989-90. Lansing, MI: Michigan SFA.

Michigan. Senate Fiscal Agency (1998, January). 1998-99 Fiscal Digest. [www.state.mi.us/sfa/pubs.html]

Michigan. Senate Fiscal Agency (1999). HB4302: Higher Education Budget: Detail by Institution. [www.state.mi.us/sfa/]

Michigan Jobs Commission (1997). Report-WF-Comp-Period Covered: 10/01/96 — 4/30/97 (as cited in Women Matter, 1999).

Morgan, Mary (1998, March 23). High-Tech Employee Search Goes West. The Ann Arbor News, p. A1.

Murnane, R. (1994). Education and the Well-Being of the Next Generation. In S. Danziger, G. Sandefur, & D. Weinberg (Eds.), Confronting Poverty: Prescriptions for Change, (pp. 289-307). Cambridge, MA: Harvard University Press.

National Association of State Student Grant and Aid Programs (1999). 29th Annual NASSGAP Survey Report. [www.nassgap.org/researchsurveys/]

National Center for Education Statistics (1996). Indicator 10, Persistence Toward a Bachelor's Degree. The Condition of Education 1996. [http://nces.ed.gov/pubsold/ce96/c9610a01.html]

National Center for Education Statistics (1998). Digest of Education Statistics 1997. (NCES 98-015). Washington, DC: U.S. Department of Education. Office of Educational Research and Improvement.

National Commission on Excellence in Education (1983). A Nation at Risk: The Imperative for Educational Reform. Washington, DC: USGPO.

National Governors' Association. Center for Best Practices (1998, July). Strategies to Promote Education, Skill Development, and Career Advancement Opportunities for Low-Skilled Workers. (NGA Issue Briefs). [www.nga.org/Pubs/IssueBriefs/1998/980728Career.asp]

National Partnership for Women and Families (1999). Detours on the Road to Employment: Obstacles Facing Low-Income Women. Washington, DC: National Partnership for Women and Families.

National University Continuing Education Association (1996). The Knowledge Connection: The Role of Colleges and Universities in Workforce Development. Washington, DC: NUCEA.

Nicosia, Patrick Carmelo (1990). The Patterns of Higher Education Funding in Michigan: Its Implications for Institutional Resource Allocation. (Doctoral Dissertation, University of Michigan, 1990) UMI# 9116250.

Parks, Sharon (1998, November). Michigan's Families: Poor, Despite Work. Lansing, MI: League for Human Services.

Pavetti, LaDonna & Acs, Gregory (1997, July). Moving Up, Moving Out or Going Nowhere? A Study of the Employment Patterns of Young Women.

Washington, DC: The Urban Institute.

Reeves, Angela (1999, January). An Analysis of Economic Achievement Experienced by Graduates of a Perkins Funded Single Parent and Displaced Homemakers Program. Flint, Michigan: Mott Community College.

Schmidt, Peter (1999, April 23). A New Wrinkle in Welfare Reform: Allowing Recipients to Earn Degrees. Chronicle of Higher Education 45(33), p. A42.

Seefeld, Karen, Paretto, La Donna, Maguire, Karen & Kirby, Gretchen (1998). Income Support and Social Services for Low-Income People in Michigan. Washington, DC: The Urban Institute.

Sherman, Arloc, Amey, Cheryl, Duffield, Barbara, Ebb, Nancy, & Weinstein, Deborah (1998). Welfare to What: Early Findings on Family Hardship and Well-Being. Washington, DC: Children's Defense Fund and National Coalition for the Homeless.

Statistical Handbook on Women in America (1996). 2nd Edition. Phoenix, AZ: Oryx Press.

The Education Resources Institute and The Institute for Higher Education Policy (1995). College Debt and the American Family. Boston, MA: TERI.

The Education Research Institute and the Institute for Higher Education Policy (1998, November). Do Grants Matter? Student Grant Aid and College Affordability. Boston, MA: TERI.

The Education Resources Institute and The Institute for Higher Education Policy (1997). Missed Opportunities: A New Look at Disadvantaged College Aspirants. Boston, MA: TERI.

Tufts University. Center on Hunger and Poverty (1998, February). Are States Improving the Lives of Poor Families: A Scale Measure of State Welfare Policies. Medford, MA: Tufts University.

U. S. Department of Labor. Bureau of Labor Statistics (1997, December). A Profile of the Working Poor, 1996. Washington, DC: USGPO.

U. S. General Accounting Office (1996, August). Tuition Increasing Faster than Household Income and Public Colleges' Costs (GAO/HEHS-96-154) Washington, DC: General Accounting Office.

Williams, Edith & Radin, Norma (1992, May). Predictors of Academic Achievement and Expectations: An 11-Year Followup. Paper presented at the meeting of the American Orthopsychiatric Association, New York, NY.

Wittman, Laura (1998, March). In Our Own Words: Mothers' Needs for Successful Welfare Reform. (A Project of the Women and Poverty Public Education Initiative). Parkside, WI: University of Wisconsin - Parkside.

Women Matter (1999). 1998-99 Women's Agenda. Grand Rapids, MI: Women Matter.

۷۳