The major purpose of the Higher Education Survey (25 statements rated 1=very well to 5=very poor) was to determine if there is agreement between higher educators ratings, those of employers, and graduates themselves in terms of Saginaw (Michigan) Schools' "graduate standards" which are: (1) academic achiever; (2) self-directed learner; (3) complex thinker; (4) effective communicator; (5) individual/group problem solver; (6) strong interpersonal relator; (7) collaborative worker; (8) creative quality producer; (9) community contributor; and (10) health conscious individual. Sixteen of 45 of the institutions of higher education responded to the survey via mail. The small size of the respondent group allows one to take a look at a select sample of respondents who chose to respond to the survey. Employers gave higher marks to graduates than graduates gave themselves. In addition, employers saw the graduate standards, which seem essential to graduates becoming productive workers, as being rated lower relatively speaking than others. Overall, graduates, higher educators, and employers graded the school's performance relative to the graduate standards in approximately the "good=2" range. (JBJ)
EVALUATION REPORT

1995 HIGHER EDUCATION SURVEY

DEPARTMENT OF EVALUATION SERVICES
- PROVIDING ASSESSMENT, PROGRAM EVALUATION AND RESEARCH SERVICES -

Saginaw, Michigan

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R. Claus
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."
1995 HIGHER EDUCATION SURVEY

An Approved Report of the
Department of Evaluation, Testing and Research

Richard N. Claus, Ph.D.
Manager, Program Evaluation

Barry E. Quimper, Director
Evaluation, Testing and Research

Dr. Foster B. Gibbs, Superintendent
School District of the City of Saginaw

December, 1995
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Introduction

The Higher Education Survey is an extension of the 1994 Graduate Follow-Up Study. This study, which appears under a separate cover, was undertaken for a number of reasons, but the most primary was to serve as one of the "success indicators" related to the District's Strategic Plan. Employer and higher education surveys related to the 1994 graduates were two other "success indicators". The primary question related to both was "How well did our graduates measure up to the District's ten 'graduate standards' through the eyes of our customers?"

Those "graduate standards" (see Appendix A for the complete description) are represented in a set of statements of the adult roles, skills and education all students' needs in order to be successful in the world after graduation from the Saginaw Schools. It represents a consensus of the best knowledge and expertise of the schools' customers, both inside and outside the school system. It comes from people who live, work, and prosper in the world around us. The Saginaw Schools envision all students achieving the "graduate standards". They are concisely stated in the following conceptual categories: 1) academic achiever, 2) self-directed learner, 3) complex thinker, 4) effective communicator, 5) individual/group problem solver, 6) strong interpersonal relator, 7) collaborative worker, 8) creative quality producer, 9) community contributor, and 10) health conscious individual.

The Higher Education Survey attempted to measure each "graduate standard" by using two or three key statements related to each (see Appendix B for a copy of the survey and the cover letter). Since it is only approximately nine months past graduation, most institutions of higher education may not completely know their new
students. In addition, a large percent of our graduates are going back for further education as well as being employed on a part- or full-time basis. Thus, the higher education bound graduates may be trying to support themselves as well as further their post-secondary education.

Before proceeding into the Higher Education Survey results, a review of the 1994 Graduate Follow-Up Study results seems necessary to set the stage for the higher educators' evaluation of their new students relative to the ten "graduate standards" and other issues.
Graduate Follow-Up Study Results

The 1994 Saginaw Public Schools' graduate follow-up survey was mailed or phoned in March, 1995 to 491 graduates (317 from Arthur Hill and 174 from Saginaw High). A total of 370 of the 491 (75.4%) graduates completed the survey. The responding graduates (a total of 370) were proportionally representative of the racial/ethnic and gender groups of the entire graduating class. Of the responding graduates, 219 or approximately 62.8% were in college, school, training or apprentice programs at 45 different post-secondary schools (see Appendix C for a listing of these post-secondary schools, programs, colleges and/or universities). Of these graduates furthering their education, most attended either a four-year college or university (50.0%), a two-year liberal arts college (26.6%), or a two-year vocational/technical college (19.7%). A total of 90.7% attended Michigan schools and the remaining 9.3% attended what appeared to be out-of-state schools and training programs. The graduates ranked (high to low) in terms of the major areas they chose to study as follows: education and social services (20.6%); general courses/undecided (19.6%); business (16.7%); engineering and architecture (13.4%); medicine and health services (11.5%); science and agriculture (5.2%); law and government (4.3%); commerical arts and communications (2.4%); services (2.4%); fine arts and letters (1.9%); construction, industrial, and skilled trades (1.0%); and transportation (1.0%).

When graduates were asked how useful their high school education was in terms of their current major area of study, a majority (92.3%) indicated "a lot" or "some" and the remainder (7.7%) indicated "hardly any" or "none".

A short description of the study procedures used in the Higher Education Survey is presented below.
Procedures

The 219 graduates who responded to the graduate follow-up study, provided the names of the college, university, training or apprentice program. A cover letter (Appendix B) was written that allowed for a listing of students enrolled by the same institution of higher education along with a rationale for the study and directions to the responding educators. Also drafted was a set of 25 statements of behavior (approximately three each for the ten “graduate standards”) which were to be rated on a five-point scale from 1 = Very Well to 5 = Very Poor. These statements plus two other questions (one relating to characteristics lacking in the enrolled graduate and the other relating to how the survey could be improved in the future) comprised the 27 items posed to the educators (see Appendix B for a copy of the survey).

On Wednesday, June 7, 1995 the Higher Education Survey was mailed to 45 institutions of higher education. The cover letter requested that the survey instrument be returned in the stamped, self-addressed envelope on or before Friday, June 16, 1995. A series of phone calls were made to non-respondent institutions of higher education in June/July/August, 1995. As of September 12, 1995 a total 16 of 45 (35.5%) institutions of higher education had been returned.¹ These returned Higher Education Surveys were coded, tabulated, and summarized.

The findings of the Higher Education Survey follow on the next page but the completed set of tabulated results were presented in Appendix D.

¹The two largest recipients of higher education institutions (Delta Community College [first] and Saginaw Valley State University [second]) were unable to return their completed surveys. However, steps are being planned such that information relative to our 1995 graduates can be obtained.
Findings

The reader is again reminded that the complete results from the educators to each survey question are given in Appendix D.

Highlights

A total of 16 of 45 (35.5%) institutions of higher education responded to the survey. Most respondents responded to an average of 8 of 27 (29.6%) of the survey items, especially the first 25 items related to the "graduate standards".

These issues are: "graduates standards", characteristics not found but desired, and suggestions to improve future studies. Three major issues will serve as organizing concepts for the review of responses given below.

"Graduate standards". The ten "graduate standards" (see Appendix A for a complete description of each) that relate to the "success indicators" of the District's new Strategic Plan were measured in part by the Higher Education Survey. The survey asked educators to rate our graduates on 25 statements using a 5-point scale (1 = Very Well to 5 = Very Poor). The results related to each statement can be found in Appendix D. The 25 statements were each related back to a "graduate standard" (see Appendix E for a key to this matching). The ratings for matching statements were averaged to determine the rating for each "graduate standard". The chart below displays the overall average rating of each "graduate standard" on a 5-point scale (1 through 5) or a course grade scale of A through E.
As can be seen from a review of the chart above, all ten “graduate standards” were given a grade of “B” on a scale from A thru E, or points 2.0 thru 2.4 on a 5-point scale (where 1 = Very Good, 2 = Good, 3 = Undecided, 4 = Poor, and 5 = Very Poor). The district appears to have done the best according to higher educators when it came to producing Interpersonal Relators, Individual/Group Problem Solvers, and Health Conscious Individuals which were given a solid “B” (or 2.0 average rating each). Complex Thinker, Community Contributor, Creative Quality Producer, Collaborative Worker, Self-Directed Learner, Academic Achiever, and Effective Communicator were given weaker “B’s” (or average ratings of 2.1, 2.1, 2.1, 2.2, 2.3, 2.4, and 2.4 respectively). Thus, from the standpoint of those responding from higher education, it is clear that, on average, our district’s outcomes in terms of the “graduate standards” are graded as either solid “B’s” or middle range “B’s” (or an average rating from 2.0 to 2.4).

**Characteristics not found, but desired.** Post-secondary educators were asked what, if any, characteristics did they expect to find in our graduates, but did not find in them? Two educators each believed that graduates needed to display more of the following:

<table>
<thead>
<tr>
<th>“Graduate Standard”</th>
<th>Average Rating of Institutions of Higher Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interpersonal Relator</td>
<td>2.0 (or B)</td>
</tr>
<tr>
<td>Individual/Group Problem Solver</td>
<td>2.0 (or B)</td>
</tr>
<tr>
<td>Health Conscious Individual</td>
<td>2.0 (or B)</td>
</tr>
<tr>
<td>Complex Thinker</td>
<td>2.1 (or B)</td>
</tr>
<tr>
<td>Community Contributor</td>
<td>2.1 (or B)</td>
</tr>
<tr>
<td>Creative Quality Producer</td>
<td>2.1 (or B)</td>
</tr>
<tr>
<td>Collaborative Worker</td>
<td>2.2 (or B)</td>
</tr>
<tr>
<td>Self-Directed Learner</td>
<td>2.3 (or B)</td>
</tr>
<tr>
<td>Academic Achiever</td>
<td>2.4 (or B)</td>
</tr>
<tr>
<td>Effective Communicator</td>
<td>2.4 (or B)</td>
</tr>
</tbody>
</table>
• Higher grade point average; and

• Ability to use facilities/resources of institutions of higher education.

A single institution felt our graduates need to show more ambition/hard work.

**Suggestions to improve future studies.** More than one institution of higher education offered the following suggestions:

• Address survey to the faculty, advisor, or work study coordinator rather than registrar, admissions, or dean of students; and

• A list of individual courses or programs of study and grades attained by each student may provide the information sought.
Summary

The most significant results of the Higher Education Survey which took a look at Saginaw’s Class of 1994 (ten months after graduation) through the eyes of their post-secondary educators have been presented. Data relative to the “graduate standards,” characteristics not found but desired, and suggestions to improve the survey were sought.

Some 16 of the 45 (35.5%) of the institutions of higher education responded to the survey via mail. The number of responding post-secondary schools was less than hoped. The small size of the respondent group allows one to take a look at a select sample of respondents who chose to respond to the survey. The reader is reminded that a Employer Survey was also undertaken prior to the Higher Education Survey and appears under a separate cover.

“Graduate Standards”

The major purpose of the Higher Education Survey was to determine if there is agreement between higher educators ratings and those of employers and the graduates themselves in terms of the “graduate standards”. The chart below displays the results of the higher educators, employers, and the graduates related to each standard. The items used to determine the “graduate standard” for each group differed greatly.
### Average Ratings*

<table>
<thead>
<tr>
<th>&quot;Graduate Standard&quot;</th>
<th>Educators</th>
<th>Employers</th>
<th>Graduates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interpersonal Relator</td>
<td>2.0 (or B)</td>
<td>2.0 (or B)</td>
<td>2.2 (or B)</td>
</tr>
<tr>
<td>Health Conscious Individual</td>
<td>2.0 (or B)</td>
<td>2.0 (or B)</td>
<td>2.2 (or B)</td>
</tr>
<tr>
<td>Individual/Group Problem</td>
<td>2.0 (or B)</td>
<td>2.1 (or B)</td>
<td>2.2 (or B)</td>
</tr>
<tr>
<td>Complex Thinker</td>
<td>2.1 (or B)</td>
<td>1.7 (or A)</td>
<td>2.1 (or B)</td>
</tr>
<tr>
<td>Community Contributor</td>
<td>2.1 (or B)</td>
<td>1.9 (or A)</td>
<td>2.2 (or B)</td>
</tr>
<tr>
<td>Creative Quality Producer</td>
<td>2.1 (or B)</td>
<td>2.0 (or B)</td>
<td>2.2 (or B)</td>
</tr>
<tr>
<td>Collaborative Worker</td>
<td>2.2 (or B)</td>
<td>2.1 (or B)</td>
<td>2.0 (or B)</td>
</tr>
<tr>
<td>Self-Directed Learner</td>
<td>2.3 (or B)</td>
<td>2.1 (or B)</td>
<td>2.1 (or B)</td>
</tr>
<tr>
<td>Academic Achiever</td>
<td>2.4 (or B)</td>
<td>1.8 (or A)</td>
<td>2.2 (or B)</td>
</tr>
<tr>
<td>Effective Communicator</td>
<td>2.4 (or B)</td>
<td>1.8 (or A)</td>
<td>2.2 (or B)</td>
</tr>
</tbody>
</table>

*Ratings were on a 5-point scale where (1 = Very Good, 2 = Good, 3 = Undecided, 4 = Poor, and 5 = Very Poor).

As can be seen from the chart above, educators gave ten "B" (or average ratings ranging from 2.0 to 2.4), employers gave four "A" (or average ratings ranging from 1.7 to 1.9 over the four standards) and six "B" (or average ratings ranging from 2.0 to 2.1 over the six remaining standards) while graduates gave themselves ten "B" (or average ratings from 2.0 to 2.2). Thus, employers give higher marks to graduates than graduates gave themselves. In addition, employers saw the "graduate standards", (self-directed learner, individual/group problem solver, and collaborative worker) which seem essential to graduates becoming productive workers as being rated lower relatively speaking than others. Overall, graduates, higher educators, and employers graded the school's performance relative to the "graduate standards" in approximately the "Good = 2" range (higher educators ranging from 2.0 to 2.4, employers ranging from 1.7 to 2.1, and graduates 2.0 to 2.2).
Overall, many insightful responses have been provided through this Higher Education Survey, the Employer Study, and the earlier Graduate Follow-Up Study. A review of the graduate standard ratings and the ratings of specific items that make up a graduate standard (Appendix D for ratings and Appendix E for key to items representing a standard) should provide some insight into the areas of strength and weakness in the curriculum.
The Graduate Standards are a statement of the adult roles, skills and education all students need in order to be successful in the world after graduation from Saginaw Schools. It represents a consensus of the best knowledge and expertise of our customers, both inside and outside the school system. It comes from people who live, work, and prosper in the world around us. We envision all students achieving the Standards; our Mission is to ensure that vision becomes reality.

**ACADEMIC ACHIEVERS**

- Demonstrate achievement of academic core curriculum content standards in science, mathematics, language arts, and social studies.
- Demonstrate proficiency on MEAP and high school proficiency assessments in science, mathematics, language arts, and social studies.
- Read, write, speak and listen effectively and appropriately in a variety of settings, and for a variety of audiences.
- Understand and use basic mathematics skills to reason and communicate mathematically to solve real world problems.
- Make connections between and among subject areas.
- Learn and use scientific knowledge and ways of thinking, through the study of the life and physical sciences and technological systems.
- Demonstrate effective, responsible citizenship through the study of history, geography, economics, civics and humanities.
- Examine and make career choices and plan educational programs to meet these goals.

**SELF-DIRECTED LEARNERS**

- Seek and use information with or without direction.
- Use tools, technology, and resources appropriately.
- Conceptualize, theorize, and apply knowledge.
- Synthesize, evaluate, and select plans of action.
- Display responsibility, self-motivation, self-esteem, curiosity, persistence, and are goal-oriented.
- Seek and set standards, by which they evaluate their own work.

**COMPLEX THINKERS**

- Analyze, synthesize, and evaluate available resources and information in a logical, flexible, and innovative manner to make decisions and solve problems in a variety of situations.
- Make connections between learning and real life.
- Express creativity.
- Understand many points of view.
EFFECTIVE COMMUNICATORS, who:

- Speak and write English with clarity and purpose, through various styles and forms of communication.
- Know and understand non-verbal communication.
- Share, elicit, and actively listen to ideas, logic, and different points of view.
- Interpret and communicate data from text, graphs, charts, and other sources.

INDIVIDUAL/GROUP PROBLEM SOLVERS, who:

- Evaluate situations and problems appropriately.
- Hypothesize, associate, and predict.
- Use problem-solving skills.
- Construct and verbalize solutions.
- Identify, organize, plan, and allocate resources.
- Choose ethical courses of action.
- Understand group dynamics and leadership skills, apply negotiation skills, and facilitate consensus.
- Apply technology to solve problems.
- Listen to, share, and accept different opinions.

STRONG INTERPERSONAL RELATERS, who:

- Respect the feelings and ideas of others.
- Achieve consensus and exhibit a willingness to compromise.
- Perform with reliability and tenacity.
- Accept responsibility and understand consequences of actions.
- Understand when to lead and when to follow.
- Constructively manage conflict within themselves and between and among others.

COLLABORATIVE WORKERS, who:

- Demonstrate group skills, integrate interpersonal relationships and are effective in multiple roles to accomplish goals within a multicultural diverse setting.
- Practice basic communication skills to encourage and motivate members to work to their potential.
- Recognize and use techniques to achieve consensus and compromise in making appropriate decisions.
- Interact in a positive manner and maintain a sense of humor in sharing praise and criticism.
- Demonstrate flexibility and innovation.
- Express and manage critical thinking skills in sharing and considering ideas.
CREATIVE QUALITY PRODUCERS, who:

- Are able to work individually and collaboratively in culturally diverse groups, creating intellectual, artistic, and practical products.
- Foster, develop, and sustain supportive, productive relationships.
- Support their own and others' originality, high standards, and the application of problem-appropriate technologies, resources, and information.
- Anticipate, assess, and work toward resolution of challenges and problems faced in a rapidly changing global society.
- Seek and set standards by which they evaluate their own work.

COMMUNITY CONTRIBUTORS, who:

- Contribute their knowledge, time, and talents to making their neighborhood and community a better place to live.
- Participate in community projects.
- Relate to others and possess respect and tolerance for cultural, racial, and political differences.
- Possess a willingness and ability to work with others.
- Express self-assurance and good communication skills.

HEALTH CONSCIOUS INDIVIDUALS, who:

- Practice and exhibit a healthy lifestyle.
- Understand and value proper nutrition.
- Recognize and practice physical fitness activities.
- Display the ability to handle stress in responsible ways.
June 7, 1995

Address

Dear Sir or Madam:

In line with our district's Strategic Plan, we in the School District of the City of Saginaw are dedicated to improving the quality of services we provide to our customers. We consider our customers to be not only the students themselves, but also the employers who receive our students once they graduate from our high schools.

To help us to determine the quality of our educational program, we are conducting a survey of our customers. We are asking for your participation and input. Through a survey of 1994 graduates, the following former student(s) have reported to us that they attend your university, college, or training program: [student(s) name(s)].

We realize some of these graduates may no longer attend or have incorrectly identified your facility, however, this is the best information we currently have. If any have been or currently are in attendance, please rate them as a group.

On the enclosed survey form, please indicate how well those students were prepared in terms of our Graduate Standards, which accompany this letter. These standards were developed with input from employers, educators in colleges and universities, parents, school employees, and community members. All of your responses will be kept confidential; only grouped information will be reported.

For your convenience, a stamped, self-addressed, return envelope has been enclosed. Please complete and return the survey by Friday, June 16, 1995.

Thank you in advance for your participation. This is an important step in our efforts to continually improve the quality of our educational program.

Sincerely,

Foster B. Gibbs, Ph.D.
Superintendent

Enclosure
1995 UNIVERSITY/COLLEGE/TRAINING PROGRAM SURVEY

Date: ______________________

Directions: Below are 25 statements describing student characteristics the Saginaw Public School District considers necessary for success after graduation (graduate standards). Please think of those opportunities you have had to observe our 1994 graduates in your University/College/Training Program and describe them using these statements on a five point scale. Circle VW for Very Well, G for Good, U for Undecided, P for Poor, and VP for Very Poor; circle N/O if you have had No Opportunity to observe the characteristics. Again, we do not intend to evaluate individual students; wherever possible, answer in collective or general terms.

1. Demonstrates achievement in science, mathematics, language arts, and social studies. VW G U P VP N/O
2. Reads, writes, speaks, and listens effectively in a variety of settings. VW G U P VP N/O
3. Uses mathematics skills effectively to solve problems. VW G U P VP N/O
4. Uses information effectively with or without direction. VW G U P VP N/O
5. Evaluates and selects plans of action to arrive at a solution. VW G U P VP N/O
6. Uses standards by which to evaluate work. VW G U P VP N/O
7. Speaks and writes with clarity and purpose through various styles and forms of communication. VW G U P VP N/O
8. Shares, elicits, and actively listens to ideas, logic, and different points of view. VW G U P VP N/O
9. Interprets and communicates information contained in text, graphs, charts, and other sources. VW G U P VP N/O
<table>
<thead>
<tr>
<th></th>
<th>Description</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>10.</td>
<td>Allocates time and other resources to accomplish goal or task.</td>
<td>VW G U P VP N/O</td>
</tr>
<tr>
<td>11.</td>
<td>Follows an ethical course of action.</td>
<td>VW G U P VP N/O</td>
</tr>
<tr>
<td>12.</td>
<td>Applies leadership and negotiation skills to facilitate consensus.</td>
<td>VW G U P VP N/O</td>
</tr>
<tr>
<td>13.</td>
<td>Accepts responsibility and understands consequences of actions.</td>
<td>VW G U P VP N/O</td>
</tr>
<tr>
<td>14.</td>
<td>Understands when to lead and when to follow.</td>
<td>VW G U P VP N/O</td>
</tr>
<tr>
<td>15.</td>
<td>Constructively manages conflict within themselves and between and among others.</td>
<td>VW G U P VP N/O</td>
</tr>
<tr>
<td>16.</td>
<td>Demonstrates group skills to accomplish goals.</td>
<td>VW G U P VP N/O</td>
</tr>
<tr>
<td>17.</td>
<td>Practices basic communication skills to encourage and motivate colleagues to work to their potential.</td>
<td>VW G U P VP N/O</td>
</tr>
<tr>
<td>18.</td>
<td>Demonstrates flexibility and innovation.</td>
<td>VW G U P VP N/O</td>
</tr>
<tr>
<td>19.</td>
<td>Uses available technologies effectively (e.g., computers, telecommunication, etc.).</td>
<td>VW G U P VP N/O</td>
</tr>
<tr>
<td>20.</td>
<td>Works effectively toward the resolution of challenges and problems.</td>
<td>VW G U P VP N/O</td>
</tr>
<tr>
<td>21.</td>
<td>Participates in voluntary community/corporate projects.</td>
<td>VW G U P VP N/O</td>
</tr>
<tr>
<td>22.</td>
<td>Displays a tolerance and respect for cultural, racial, and political points of view.</td>
<td>VW G U P VP N/O</td>
</tr>
<tr>
<td>23.</td>
<td>Possesses an ability to work with others.</td>
<td>VW G U P VP N/O</td>
</tr>
<tr>
<td>24.</td>
<td>Exhibits a healthy lifestyle.</td>
<td>VW G U P VP N/O</td>
</tr>
<tr>
<td>25.</td>
<td>Displays the ability to handle stress in responsible ways.</td>
<td>VW G U P VP N/O</td>
</tr>
</tbody>
</table>
APPENDIX B

1995 UNIVERSITY/COLLEGE/TRAINING PROGRAM SURVEY

Directions: Read each question and provide a concise response. If necessary, the back of either page can be used to continue your answer.

26. What, if any, characteristics did you expect to find in our graduates, but did not find in them?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

27. How could this instrument be structured/presented/timed differently so your organization could better provide the needed information?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

Please use the stamped, addressed, return envelope to send back the completed survey.

Thank you for your participation.

School District of the City of Saginaw
Attention: Evaluation, Testing & Research Department
550 Millard St.
Saginaw, MI 48607
APPENDIX C

HIGHER EDUCATION INSTITUTIONS USED IN 1995 SURVEY

Delta Community College
Saginaw Valley State University
Michigan State University
University of Michigan
Western Michigan University
Oakland University
Florida Junior College at Jacksonville
Alma College
Beloit College
Richland College (Texas)
Richland Community College (Illinois)
A.T.I. Career Training Center
Central Michigan University
Grambling State University
University of Detroit Mercy
The Boyd School
Grand Valley State University
Ferris State University
Michigan Technology University
Savannah College of Art and Design
Carrollton Public Schools
   (Secondary/Learning Disabled)
Northwest Missouri State University
Northeast Missouri State University
Great Lakes Junior College

Hope College
Georgia State University
Wayne County Community College
M.J. Murphy Beauty School
Lansing Community College
Eastern Michigan University
Trinity Junior College
Averill Career Opportunities Center (COC)
Northern Michigan University
Opportunities Industrialization Center
   of Metropolitan Saginaw (OICMS)
Aquinas College
Central State University (Ohio)
University of Toledo
DeKalb Technology University
Rochester Business Institute
Rochester Institute of Technology
Grand Rapids Community College
Southern University and Agricultural
   and Mechanical College
North Carolina Agricultural and
   Technical State University
Oakland Community College
University of Missouri
DIRECTIONS: Below are 25 statements describing student characteristics the Saginaw Public School District considers necessary for success after graduation (graduate standards). Please think of those opportunities you have had to observe our 1994 graduates in your employ and describe them using these statements on a five-point scale. Circle VW for Very Well, G for Good, U for Undecided, P for Poor, and VP for Very Poor; circle N/O if you have had No Opportunity to observe the characteristics. Again, we do not intend to evaluate individual students; wherever possible, answer in collective or general terms.

<table>
<thead>
<tr>
<th>Very Well</th>
<th>Good</th>
<th>Undecided</th>
<th>Poor</th>
<th>Very Poor</th>
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</thead>
<tbody>
<tr>
<td>2.7</td>
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<td>2.4</td>
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<tr>
<td>2.1</td>
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<tr>
<td>2.4</td>
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</table>

1. Demonstrates achievement in science, mathematics, language arts, and social studies. (N = 12)

2. Reads, writes, speaks, and listens effectively in a variety of settings. (N = 9)

3. Uses mathematics skills effectively to solve problems. (N = 7)

4. Uses information effectively with or without direction. (N = 10)

5. Evaluates and selects plans of action to arrive at a solution. (N = 6)

6. Uses standards by which to evaluate work. (N = 7)

7. Speaks and writes with clarity and purpose through various styles and forms of communication. (N = 9)

8. Shares, elicits, and actively listens to ideas, logic, and different points of view. (N = 9)

9. Interprets and communicates information contained in text, graphs, charts, and other sources. (N = 7)

10. Allocates time and other resources to accomplish goal or task. (N = 7)

11. Follows an ethical course of action. (N = 7)

12. Applies leadership and negotiation skills to facilitate consensus. (N = 6)
## APPENDIX D

### 1995 UNIVERSITY/COLLEGE/TRAINING PROGRAM SURVEY

*(N = 16)*

<table>
<thead>
<tr>
<th>Skill Description</th>
<th>Rating</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accepts responsibility and understands consequences of actions. <em>(N = 9)</em></td>
<td>1.7</td>
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<tr>
<td>Understands when to lead and when to follow. <em>(N = 5)</em></td>
<td>2.2</td>
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<tr>
<td>Constructively manages conflict within themselves and between and among others. <em>(N = 6)</em></td>
<td>2.1</td>
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<tr>
<td>Demonstrates group skills to accomplish goals. <em>(N = 8)</em></td>
<td>2.1</td>
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<tr>
<td>Practices basic communication skills to encourage and motivate colleagues to work to their potential. <em>(N = 5)</em></td>
<td>2.4</td>
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<tr>
<td>Demonstrates flexibility and innovation. <em>(N = 7)</em></td>
<td>2.1</td>
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<tr>
<td>Uses available technologies effectively (e.g., computers, telecommunications, etc.) <em>(N = 6)</em></td>
<td>2.1</td>
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<tr>
<td>Works effectively toward the resolution of challenges and problems. <em>(N = 7)</em></td>
<td>2.7</td>
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<tr>
<td>Participates in voluntary community/corporate projects. <em>(N = 4)</em></td>
<td>2.1</td>
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<tr>
<td>Displays a tolerance and respect for cultural, racial, and political points of view. <em>(N = 6)</em></td>
<td>2.1</td>
<td></td>
</tr>
<tr>
<td>Possesses an ability to work with others. <em>(N = 9)</em></td>
<td>1.8</td>
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<tr>
<td>Exhibits a healthy lifestyle. <em>(N = 6)</em></td>
<td>2.0</td>
<td></td>
</tr>
<tr>
<td>Displays the ability to handle stress in responsible ways. <em>(N = 7)</em></td>
<td>2.0</td>
<td></td>
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</table>
DIRECTIONS: Read each question and provide a concise response. If necessary, the back of either page can be used to continue your answer.

26. What, if any, characteristics did you expect to find in our graduates, but did not find in them?
   - Have higher grade point average for group/individuals enrolled. (2)*
   - Make full use of resources and facilities. (2)
   - Show ambition/hard work. (1)

27. How could this instrument be structured/presented/timed differently so your organization could better provide the needed information?
   - Address questionnaire to faculty, advisor, or work study coordinator rather than registrar, admissions, or dean of students. (4)
   - A list of individual courses or programs of study may provide the information you seek. (3)
   - Convert the 5-point scale to a 4-point scale, like higher education grading scale, so ratings would be easier. (1)
   - Send out instrument earlier in the year. (1)
   - Send instrument to student rather than institution of higher education. (1)
   - Send instrument to registrar’s office so we can forward it to the advisor. (1)
   - Would be easier to rate a sophomore or junior rather than a freshman. (1)

*The number in parentheses indicates the number of institutions of higher education responding to the open-ended question with this response.
<table>
<thead>
<tr>
<th>Graduate Standard</th>
<th>Statement Number Used To Measure Standard</th>
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<tbody>
<tr>
<td>Academic Achiever</td>
<td>1, 2, 3</td>
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<tr>
<td>Self-Directed Learner</td>
<td>4, 5, 6</td>
</tr>
<tr>
<td>Complex Thinker</td>
<td>8</td>
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<tr>
<td>Effective Communicator</td>
<td>7, 9</td>
</tr>
<tr>
<td>Individual/Group Problem Solver</td>
<td>10, 11, 12</td>
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<tr>
<td>Strong Interpersonal Relator</td>
<td>13, 14, 15</td>
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<tr>
<td>Collaborative Worker</td>
<td>16, 17, 18</td>
</tr>
<tr>
<td>Creative Quality Producer</td>
<td>19, 20</td>
</tr>
<tr>
<td>Community Contributor</td>
<td>21, 22, 23</td>
</tr>
<tr>
<td>Health Conscious Individual</td>
<td>24, 25</td>
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</tbody>
</table>