

# HOUSE BILL No. 5852

June 5, 1990, Introduced by Rep. DeBeaussaert and referred to the Committee on Appropriations.

A bill to provide for technology education demonstration projects; to prescribe the powers and duties of certain state agencies and officials; and to provide for an appropriation.

## THE PEOPLE OF THE STATE OF MICHIGAN ENACT:

1       Sec. 1. This act shall be known and may be cited as the  
2 "technology literacy act".

3       Sec. 3. As used in this act:

4       (a) "Institution of higher education" has the meaning pre-  
5 scribed in section 1201 of title XII of the higher education act  
6 of 1965, Public Law 89-329, 20 U.S.C. 1141.

7       (b) "Local education agency" means a local school district,  
8 an intermediate school district, or any combination of local or  
9 intermediate school districts.

10       (c) "Project" means a technology education demonstration  
11 project.

1 (d) "Superintendent" means the superintendent of public  
2 instruction or his or her designee.

3 (e) "Technology education" means a comprehensive educational  
4 process designed to develop a population that is knowledgeable  
5 about technology and its evolution, systems, techniques, problem  
6 solving, utilization in industry and other fields, and cultural  
7 significance.

8 Sec. 5. (1) The superintendent shall establish a technology  
9 education demonstration grants program. Grants made under this  
10 program shall be available to local education agencies and insti-  
11 tutions of higher education for the establishment of technology  
12 education demonstration projects for secondary schools.

13 (2) In establishing the technology education demonstration  
14 grants program provided in subsection (1), the superintendent  
15 shall consult with the Michigan industrial and technology educa-  
16 tion society and its technology education committee.

17 (3) The superintendent shall establish at least 10 technol-  
18 ogy education demonstration projects under this act.

19 (4) In making grants for projects under this act, the super-  
20 intendent shall consider the equitable geographic distribution of  
21 these grants.

22 Sec. 7. (1) A local education agency or an institution of  
23 higher education may submit an application to the superintendent  
24 for a grant under this act. An application shall be submitted at  
25 the time and in the form prescribed by the superintendent and  
26 shall contain all of the following information:

1 (a) A description of the proposed project.

2 (b) An estimate of the cost of the proposed project.

3 (c) A description of the policies and procedures that will  
4 be undertaken to ensure adequate evaluation of the proposed  
5 project.

6 (d) A description of other sources of funding for the  
7 project and assurances that grants made under this act will be  
8 used to supplement and, to the extent practicable, increase the  
9 amount of local or other funds that will be committed to the  
10 project.

11 (e) A description of a curriculum development plan that pro-  
12 vides transition from industrial arts education curricula to  
13 technology education and implementation of technology education.

14 (f) Other information as required by the superintendent.

15 (2) An amendment to an application submitted under this sec-  
16 tion shall be made in the manner prescribed by the  
17 superintendent.

18 Sec. 9. A project funded under this act shall provide, to  
19 the extent practicable, for all of the following:

20 (a) Educational course content based on all of the  
21 following:

22 (i) An organized set of concepts, processes, and systems  
23 that are uniquely technological.

24 (ii) A fundamental knowledge about the development of tech-  
25 nology and its effect on people, the environment, and culture.

26 (iii) A value system reflecting a productive society,  
27 craftsmanship, quality, pride in one's work, positive work ethic,

1 teamwork, enthusiasm, honesty and integrity, respect for others,  
2 punctuality, and good attendance.

3 (b) Instructional content drawn from technology education  
4 courses in, but not limited to, all of the following areas:

5 (i) Communication and information technology; including the  
6 use of a device or method to collect, process, store, or deliver  
7 information using electronic, graphic, photographic, or mechan-  
8 cal means, or a combination of those means.

9 (ii) Physical technology; including construction systems to  
10 build structures on a site; manufacturing systems; production of  
11 tangible goods; energy, power, and transportation; the ability to  
12 do work and the combination of tools, machines, resources,  
13 energy, and procedures used to move objects, tangible goods,  
14 people, and information.

15 (iii) Bio-related technology; including ergonomics and  
16 interfacing of human developed processes or components, or both,  
17 with a biological system such as agriculture, medical technology,  
18 or food processing and preservation.

19 (c) Assistance to teachers and students in developing  
20 insight, understanding, and application of technical concepts,  
21 processes, and systems.

22 (d) Education of teachers and students in the safe and effi-  
23 cient utilization of tools, materials, machines, processes, and  
24 technical concepts.

25 (e) Development of teacher and student skills, creative  
26 abilities, confidence, and individual potential in utilizing and  
27 applying technology.

1 (f) Development of teacher and student problem-solving and  
2 decision-making abilities involving human and material resources,  
3 processes, and technological systems.

4 (g) Preparation of teachers and students for lifelong learn-  
5 ing in a technological society.

6 (h) Activity-oriented laboratory instruction that reinforces  
7 abstract concepts with concrete experiences.

8 (i) Emphasis on the practical application of technology.

9 (j) Start-up funding for local education agencies to update  
10 equipment and curriculum materials and supplies and for travel to  
11 attend workshops, seminars, or in-service meetings on implement-  
12 ing technology and technology education.

13 Sec. 11. A project funded under this act shall include all  
14 of the following:

15 (a) Development of a program for the purpose of improving  
16 teacher capability in the area of technology education.

17 (b) Research and development of curriculum materials for use  
18 in technology education programs.

19 (c) Development of a statewide plan for disseminating exem-  
20 plary materials and implementing practices, such as publishing  
21 reports of results, activities, and progress in professional and  
22 trade publications.

23 (d) Employment of a curriculum specialist to provide techni-  
24 cal assistance for the project.

25 (e) Establishment of business and industry partnerships.

26 (f) Development of articulation programs between secondary  
27 schools and institutions of higher education, including, but not

1 limited to, institutions offering baccalaureate degrees in the  
2 technologies and engineering. The grant recipient shall cooper-  
3 ate with the department of education in developing those  
4 programs.

5       Sec. 13. (1) The recipient of a grant under this act shall  
6 use at least 10% of the grant funds to establish teacher  
7 fellowships. The fellowships may be used to pay teachers for  
8 curriculum evaluation and development, including, but not limited  
9 to, personal visits by teachers to various industries, or to pay  
10 expenses necessary to release a teacher from his or her regular  
11 duties to allow the teacher time to engage in those activities.

12       (2) The recipient of a grant under this act shall use at  
13 least 2% of the grant funds to provide technology scholarships  
14 for students enrolled in secondary industrial arts, technology,  
15 or vocational education programs. The scholarships may be used  
16 to pay for students to participate in unique or extracurricular  
17 educational activities or programs that are related to those  
18 areas of technology and are not available to the students as part  
19 of their regular curriculum.

20       Sec. 15. The superintendent shall disseminate the results  
21 of the projects funded under this act in a manner designed to  
22 improve the training of industrial arts education, technology  
23 education, and vocational education teachers, other instructional  
24 personnel, counselors, and administrators.

25       Sec. 17. The legislature shall appropriate \$4,000,000.00  
26 for fiscal year 1990-91 and for each of the succeeding fiscal  
27 years through the 1992-93 fiscal year to implement this act.

1       Sec. 19.   This act shall take effect September 1, 1990.