

Minnesota Attorney General: Administrative Rules Proceedings

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Version 3
August 20, 2018

JAL

RULE REVIEW CHECKLIST

File No. 1579 Docket No. 05-0009,0831

DATE RECEIVED 3-24-89 ADOPTED W/O HEARING X

REVIEW DATE 4-3-89 EMERGENCY RULE _____

DUE DATE 4-7-89 REVISOR APPROVED _____

APPROVED X 4/3/89 REVISOR DISAPPROVED _____

DISAPPROVED _____ FILED W/SEC. OF STATE _____

WITHDRAWN _____ RETURNED TO AGENCY _____

✓ Rule as adopted (4 copies)

✓ Notice to Solicit Outside Information/Opinion (if applicable)
6/13/88 + 3/15/88 Date published in State Register
none Comments

~~Petition for Adoption of a Rule (if applicable)~~

✓ Board's Authorizing Resolution
6/14/88 Date adopted

✓ Proposed Rule
yes Revisor's Certificate

✓ Notice of Intent to Adopt Rule
13 CC 04 Statutory Authority
no Small Business Statement
no Expenditure of public money statement
yes Signature

✓ Statement of Need and Reasonableness (if applicable)
no Small Business Statement
~~n/a~~ Fees - § 16A.128

✓ Affidavit of Mailing Notice of Intent to Adopt Rule
2/3/89 Date (30/25 days before adoption)
JK Notice attached
_____ ~~Copy of rule or summary attached~~

✓ Publication in State Register
2/6/89 Date (30/25 days before adoption)

_____ 180-day deadline from:
n/a Effective date of law requiring rule (14.12) (both rules)
3/8/89 end of comment period (§ 14.26) (rules without hearing)
_____ ~~effective date of statutory authority (§ 14.29) (emergency rules)~~

✓ Resolution Adopting
3/14/89 Date adopted

✓ Findings of Fact, Conclusions & Order Adopting
3/14/89 Date

_____ ~~Written requests, submissions or comments~~

✓ Declaration of attorney
Cam Nelson Name of SAAG representing agency

_____ ~~Notice of Submission to Atty. Gen. (if applicable)~~

_____ ~~Aff. of Mailing Notice to Atty. Gen. (if applicable)~~

SF-00006-05 (4/86)

STATE OF MINNESOTA

Office Memorandum

DEPARTMENT : ATTORNEY GENERAL

DATE : April 5, 1989

TO : H. CAMILLA NELSON
Special Assistant Attorney General

FROM : JULIE A. LEPPINK
Special Assistant Attorney General

PHONE : 6-9422

SUBJECT : In the Matter of the Adopted Permanent Rules Relating to Vocational Teacher Licenses; Business and Office, and Emerging Occupations

The above-referenced rule has been approved as to its legality by the Attorney General on April 3, 1989.

Enclosed is the agency's copy of the approved rule. This office has already filed two copies with the Secretary of State who will forward one copy to the Revisor of Statutes. The fourth is being retained by this division of the Attorney General's Office for its records.

Also enclosed are any petitions, requests, submission or comments received by the agency and any extra copies of documents which the agency submitted to the Attorney General.

In order for a permanent rule without a hearing to become effective, your agency must publish a notice of adoption in the State Register in accoradance with Minn. Stat. § 14.27. An emergency rule becomes effective five working days after approval by the Attorney General; however, the agency must publish a notice in the State Register in accordance with Minn. Stat. § 14.34.

If you have any questions in this regard, please contact me.

MJC:klk
Enclosures

cc: Maryanne Hruby
Executive Director
Legislative Commission to Review
Administrative Rules

William Brown
Chief Administrative Law Judge
Office of Administrative Hearings

State Board of Vocational Technical Education

Adopted Permanent Rules Relating to Vocational Teacher Licenses; Business and Office, and Emerging Occupations

Rules as Adopted

3700.0376 FINANCIAL AID ASSISTANT.

Subpart 1. **May teach.** A teacher who has a financial aid assistant license may teach in the financial aid assistant program.

Subp. 2. **Other requirements.** The applicant must meet the requirements listed in part 3700.0100 and the requirements for a teacher in the business and office area under part 3700.0300.

Subp. 3. **Occupational experience requirement.** The applicant must have 8,000 hours of occupational experience with a minimum of 6,000 hours in a position that administers or assists with the administration of financial aid within a postsecondary institution. The recency listed in part 3700.0300, subpart 2, must be met with this experience. The remaining hours may be in an administrative support position.

Subp. 4. **Substitution for occupational experience.** The applicant may substitute the education described in items A to D for up to 4,000 hours of the occupational experience required in subpart 3. The education must be from an accredited postsecondary institution. If the substitution is made, the applicant must still comply with the recency requirements in part 3700.0300, subpart 2.

A. A bachelor's or higher degree in business, accounting, or financial aid administration may be substituted for 2,000 hours of experience in an administrative support position and a maximum of 2,000 hours of the experience in a financial aid position.

B. An associate degree in business, accounting, administrative support, or financial aid assistant may be substituted for 2,000 hours.

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C. A diploma in accounting, administrative support, or financial aid assistant may be substituted. A one-year program equals 1,050 hours. A two-year program equals 2,100 hours.

D. The completion of courses for credit or clock hours for credit in administrative support or financial aid may be substituted. One hour of instruction equals one hour of occupational experience. One quarter credit equals 20 hours of occupational experience. One semester credit equals 30 hours of occupational experience.

Subp. 5. **Substitution for recent occupational experience.** The applicant may substitute teaching experience at an accredited postsecondary institution in financial aid assistant for 1,500 hours of the 2,000 required in part 3700.0300, subpart 2. Two hours of teaching equal one hour of occupational experience required in part 3700.0300, subpart 2.

3700.0377 MICROCOMPUTER SUPPORT SPECIALIST.

Subpart 1. **May teach.** A teacher who has a microcomputer support specialist license may teach in the microcomputer support specialist program and may also teach courses in:

A. microcomputing operating system/concepts and skills; and

B. introduction to microcomputing.

Subp. 2. **Other requirements.** The applicant must meet the requirements listed in part 3700.0100 and the requirements for a teacher in the business and office area under part 3700.0300.

Subp. 3. **Occupational experience requirement.** The applicant must have 8,000 hours of business application occupational experience in two or more of the following areas with a minimum of 2,000 of the hours in microcomputers: installation of and troubleshooting computers, computer training in a business or industrial setting, or programming. The 8,000 hours may include the 2,000 hours required under part 3700.0300, subpart 2.

Subp. 4. **Substitution for occupational experience.** The

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applicant may substitute the education described in items A to D for up to 4,000 hours of the occupational experience required in subpart 3. The education must be from an accredited postsecondary institution. If the substitution is made, the applicant must still comply with the recency requirements in part 3700.0300, subpart 2.

A. A bachelor's or higher degree in management information systems, computer science, data processing, or telecommunications may be substituted for 4,000 hours.

B. An associate degree in computer science, data processing, microcomputer specialist, or advanced business communication may be substituted for 2,000 hours.

C. A diploma in business microcomputing, computer operator, or computer programmer may be substituted. A one-year program equals 1,050 hours. A two-year program equals 2,100 hours.

D. The completion of courses for credit or clock hours for credit in microcomputer or mainframe computer may be substituted. One hour of instruction equals one hour of occupational experience. One quarter credit equals 20 hours of occupational experience. One semester credit equals 30 hours of occupational experience.

Subp. 5. **Substitution for recent occupational experience.** The applicant may substitute teaching experience at an accredited postsecondary institution, or at an industrial or military setting in microcomputer specific training for 1,500 hours of the 2,000 required in part 3700.0300, subpart 2. Two hours of teaching equal one hour of the occupational experience required in part 3700.0300, subpart 2.

3700.0378 ADVANCED BUSINESS TECHNOLOGY.

Subpart 1. **May teach.** A teacher who has an advanced business technology license may teach in the advanced business technology program and may also teach courses in application and use of:

A. public switched networks;

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B. private switched networks;

C. private branch exchange;

D. integrated services digital network;

E. microcomputer system applications;

F. asynchronous/synchronous communications; and

G. modem technology.

Subp. 2. **Other requirements.** The applicant must meet the requirements listed in part 3700.0100 and the requirements for a teacher in the business and office area under part 3700.0300.

Subp. 3. **Occupational experience requirement.** The applicant must have 8,000 hours of occupational experience in planning, designing, networking, engineering, managing, or installation and maintenance in two or more of items A to C. The 8,000 hours may include the 2,000 hours required under part 3700.0300, subpart 2.

A. computer system analysis and operation in a business setting of mainframe, minicomputers, or microcomputers;

B. voice communications; and

C. data communications.

Subp. 4. **Substitution for occupational experience.** The applicant may substitute the education described in items A to D for up to 4,000 hours of the occupational experience required in subpart 3. The education must be from an accredited postsecondary institution. If the substitution is made, the applicant must still comply with the recency requirements in part 3700.0300, subpart 2.

A. A bachelor's or higher degree in computer science, management information systems, microcomputer studies, electrical engineering, or voice data telecommunications may be substituted for 4,000 hours.

B. An associate degree in advanced business communications, electronics, microcomputer support specialist, or office information processing specialist may be substituted for 2,000 hours.

C. A diploma in business microcomputing or electronics may be substituted. A one-year program equals 1,050

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hours. A two-year program equals 2,100 hours.

D. The completion of courses for credit or clock hours for credit in mainframe, microcomputers, or minicomputers; voice data or telecommunications; or electronics may be substituted. One hour of instruction equals one hour of occupational experience. One quarter credit equals 20 hours of occupational experience. One semester credit equals 30 hours of occupational experience.

Subp. 5. **Substitution for recent occupational experience.** An applicant may substitute teaching experience at an accredited postsecondary institution, or at an industrial or military setting in advanced business communications, microcomputer, telephony, data communications, or network design for 1,500 hours of the 2,000 required in part 3700.0300, subpart 2. Two hours of teaching equal one hour of occupational experience required in part 3700.0300, subpart 2.

3700.0379 OFFICE INFORMATION PROCESSING SPECIALIST.

Subpart 1. **May teach.** A teacher who has an office information processing specialist license may teach in the office information processing program and teach courses in:

A. word processing operations;

B. hardware evaluation;

C. software applications (WP/SS/DB);

D. application concepts/theory (SQ/SS/DB);

E. application design;

F. software evaluation; and

G. office desktop publishing.

Subp. 2. **Other requirements.** The applicant must meet the requirements listed in part 3700.0100 and the requirements for a teacher in the business and office area under part 3700.0300.

Subp. 3. **Occupational experience requirement.** The applicant must have 8,000 hours of occupational experience in word processing supervisory responsibilities in an end user environment where systems and technical staff interact with nontechnical employees. This experience must include

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applications design involvement from conception to implementation identifying office tasks, needs identification, development of software and hardware solutions, selection of staff who will use the system, and training of end users. The 8,000 hours may include the 2,000 hours required under part 3700.0300, subpart 2.

Subp. 4. **Substitution for occupational experience.** The applicant may substitute the education described in items A to D for up to 4,000 hours of the occupational experience required in subpart 3. The education must be from an accredited postsecondary institution. If the substitution is made, the applicant must still comply with the recency requirements in part 3700.0300, subpart 2.

A. A bachelor's or higher degree in business management, business education, business administration, office management, office administration, or information processing (MIS) may be substituted for 4,000 hours.

B. An associate degree in secretarial science, secretarial, office information processing, personnel assistant, office administration, or office management may be substituted for 2,000 hours.

C. A diploma in general, legal, medical, or word processing secretarial programs may substitute for 2,000 hours. A one-year program equals 1,050 hours. A two-year program equals 2,100 hours.

D. The completion of courses for credit or clock hours for credit in information processing, business, secretarial, or management may be substituted. One hour of instruction equals one hour of occupational experience. One quarter credit equals 20 hours of occupational experience. One semester credit equals 30 hours of occupational experience.

Subp. 5. **Substitution for recent occupational experience.** The applicant may substitute teaching experience at an accredited postsecondary institution, or in an industrial or military setting in general office typist, general secretarial office information processing specialist, or word processing for

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1,500 hours of the 2,000 required in part 3700.0300, subpart 2. Two hours of teaching equal one hour of occupational experience required in part 3700.0300, subpart 2.

3709.0280 TELECOMMUNICATIONS SYSTEMS TECHNICIAN.

Subpart 1. **May teach.** A teacher who has a telecommunications systems technician license may teach in the telecommunications systems technician program and may also teach courses in:

A. antennas/transmissions lines;

B. satellite/cable systems;

C. introduction to fiber optics (fiber optics I);

D. basic telecommunication security systems;

E. microwave communications;

F. basic telecommunications;

G. telecommunications test equipment; and

H. pole climbing.

Subp. 2. **Other requirements.** The applicant must meet the requirements in part 3709.0100.

Subp. 3. **Occupational experience requirement.** The applicant must have 8,000 hours of verified occupational experience in two or more of the following:

A. installation and maintenance of electronic private branch exchange (PBX);

B. underground and aerial construction of telecommunications equipment;

C. cable or optic fiber splicing;

D. central office telecommunications installation and maintenance;

E. repair of carrier systems including "T" carrier, microwave, satellite, or optic fiber;

F. cellular communications installation and maintenance;

G. data communications including installation and maintenance of network systems, interfacing and protocol of service, and maintenance of data terminals; and

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H. installation and maintenance of interactive television systems.

Subp. 4. **Substitution for occupational experience.** An applicant may substitute the education described in item A, B, C, or D for up to 4,000 hours of occupational experience required under subpart 3. The education must be from an accredited postsecondary institution.

A. A bachelor's or higher degree in electrical engineering, computer science, or telecommunications may be substituted for 4,000 hours.

B. A bachelor's degree in industrial technology, engineering (other than electrical), or an associate degree in electronics or telecommunications may be substituted for 2,000 hours.

C. A diploma in electronics or telecommunications may be substituted. A one-year program equals 1,050 hours. A two-year program equals 2,100 hours.

D. The completion of courses for credit or clock hours for credit in telecommunications hardware or systems may be substituted. One clock hour of instruction equals one hour of occupational experience. One quarter credit equals 20 hours of occupational experience. One semester credit equals 30 hours of occupational experience.

Subp. 5. **Occupational recency substitution.** Teaching experience at an accredited postsecondary institution, or at an industrial or military setting may be substituted for 1,500 of the 2,000 hours required in part 3709.0100, subpart 1, item A, if the teaching is done during the five-year period. The teaching must be in telecommunications. Two hours of teaching equal one hour of occupational experience.

3709.0290 NEON AND SIGN FABRICATIONS.

Subpart 1. **May teach.** A teacher who has a neon and sign fabrication license may teach in the neon and sign fabrication program and may also teach courses in:

A. sign and letter fabrication;

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B. sign erection and service; and

C. sign electricity.

Subp. 2. **Other requirements.** The applicant must meet the requirements in part 3709.0100.

Subp. 3. **Occupational experience requirement.** The applicant must have 8,000 hours of verified occupational experience in production and repair of neon signage, in neon bending and bombarding, or sign fabrication and installation.

Subp. 4. **Substitution for occupational experience.** An applicant may substitute the education described in item A or B for up to 2,100 hours of occupational experience required under subpart 3. The education must be from an accredited postsecondary institution.

A. A diploma or certificate in neon and sign fabrication. A one-year program equals 1,050 hours. A two-year program equals 2,100 hours.

B. The completion of courses for credit or clock hours for credit in neon patterns and layout, sign electricity, sign and letter fabrication, and sign erection and service. One hour of instruction equals one hour of occupational experience. One quarter credit equals 20 hours of occupational experience. One semester credit equals 30 hours of occupational experience.

Subp. 5. **Occupational recency substitution.** Teaching experience at an accredited postsecondary institution, or at an industrial or military setting may be substituted for 1,500 of the 2,000 hours required in part 3709.0100, subpart 1, item A, if the teaching is done during the five-year period. The teaching must be in neon and sign fabrications. Two hours of teaching equal one hour of occupational experience.

3709.0300 DIESEL FUEL INJECTION SPECIALIST.

Subpart 1. **May teach.** A teacher who has a diesel fuel injection specialist license may teach in the diesel fuel injection specialist program and may also teach courses in diesel pump operation, repair, rebuilding, and calibration.

Subp. 2. **Other requirements.** The applicant must meet the

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requirements in part 3709.0100.

Subp. 3. **Occupational experience requirement.** The applicant must have 8,000 hours of verified occupational experience in both:

A. diesel engine operation, repair, and maintenance; and

B. diesel fuel injection system operation, repair, and maintenance.

Subp. 4. **Substitution for occupational experience.** An applicant may substitute the education described in item A, B, C, or D for up to 4,000 hours of occupational experience required under subpart 3. The education must be from an accredited postsecondary institution.

A. A bachelor's or higher degree in automotive engineering may be substituted for 4,000 hours.

B. An associate degree in diesel technology, truck and diesel mechanics, agricultural equipment mechanics, heavy equipment mechanics, or diesel fuel injection may be substituted for 2,000 hours.

C. A diploma in diesel fuel injection, truck and diesel mechanics, agricultural equipment mechanics, or heavy equipment mechanics may be substituted. A two-year program equals 2,100 hours.

D. The completion of courses for credit or clock hours for credit in diesel fuel injection may be substituted. One clock hour of instruction equals one hour of occupational experience. One quarter credit equals 20 hours of occupational experience. One semester credit equals 30 hours of occupational experience.

Subp. 5. **Occupational recency substitution.** Teaching experience at an accredited postsecondary institution, or at an industrial or military setting may be substituted for 1,500 of the 2,000 hours required in part 3709.0100, subpart 1, item A, if the teaching is done during the five-year period. The teaching must be in diesel fuel injections. Two hours of teaching equal one hour of occupational experience.

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3709.0310 ELECTRONIC PUBLISHING/INFORMATION SPECIALIST.

Subpart 1. **May teach.** A teacher who has an electronic publishing/information specialist license may teach in the electronic publishing/information specialist program and may also teach courses in:

A. introduction to typography and publishing;

B. desktop publishing;

C. page makeup techniques; and

D. corporate electronic publishing.

Subp. 2. **Other requirements.** The applicant must meet the requirements in part 3709.0100.

Subp. 3. **Occupational experience requirement.** The applicant must have 8,000 hours of verified occupational experience in all of the following:

A. layout and design;

B. typography and electronic prepress; and

C. electronic desktop publishing that integrates text and graphics.

Subp. 4. **Occupational experience substitution.** The applicant may substitute the education described in item A, B, C, or D for up to 4,000 hours of occupational experience required in subpart 3. The education must be from an accredited postsecondary institution.

A. A bachelor's or higher degree in graphic arts, commercial art, advertising art, or data processing may be substituted for 4,000 hours.

B. An associate degree in graphic arts, commercial art, or data processing may be substituted for 2,000 hours.

C. A diploma in electronic publishing/information specialist, computer typesetting, graphic arts, commercial art, or data processing may be substituted. A one-year program equals 1,050 hours. A two-year program equals 2,100 hours.

D. The completion of courses for credit or clock hours for credit in computer typesetting, graphic arts, keylining, commercial art, desktop publishing, color separation,

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advertising art, printing, or data processing may be substituted. One clock hour of instruction equals one hour of occupational experience. One quarter credit equals 20 hours of occupational experience. One semester credit equals 30 hours of occupational experience.

Subp. 5. **Occupational recency substitution.** Teaching experience at an accredited postsecondary institution, or at an industrial or military setting may be substituted for 1,500 of the 2,000 hours required in part 3709.0100, subpart 1, item A, if the teaching is done during the five-year period. The teaching must be in typography, layout and design, electronic prepress, or desktop publishing that integrates text and design. Two hours of teaching equal one hour of occupational experience.

3709.0320 SUPERVISORY MANAGEMENT.

Subpart 1. **May teach.** A teacher who has a supervisory management license may teach in the supervisory management program and may also teach courses in:

A. principles of supervision and management;

B. human resource management;

C. labor relations;

D. productivity improvement;

E. employee training;

F. problem solving;

G. quality/participatory management;

H. statistical process control;

I. quality first;

J. production/inventory control;

K. appraisal and evaluation;

L. work habits and absenteeism;

M. leadership development;

N. supervising for results;

O. job coaching; and

P. negotiations.

Subp. 2. **Other requirements.** The applicant must meet the

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requirements in part 3709.0100.

Subp. 3. **Occupational experience requirement.** The applicant must have 8,000 hours of verified occupational experience in a managerial level position including but not limited to budget development or control, employee selection and supervision, employee performance appraisal and evaluation, and assessment of employee training needs.

Subp. 4. **Substitution for occupational experience.** The applicant may substitute the education described under item A, B, C, or D for up to 4,000 hours of the occupational experience required in subpart 3. The education must be from an accredited postsecondary institution.

A. A bachelor's or higher degree in business, marketing, or management may be substituted for 4,000 hours.

B. An associate degree in business, management, or marketing may be substituted for 2,000 hours.

C. A diploma in supervision or management programs. A one-year program equals 1,050 hours. A two-year program equals 2,100 hours.

D. The completion of courses for credit or clock hours for credit in business administration, business management, finance, human resource management, accounting, training and development, supervisory management, manufacturing management, and productivity and management. One clock hour of instruction equals one hour of occupational experience. One quarter credit equals 20 hours of occupational experience. One semester credit equals 30 hours of occupational experience.

Subp. 5. **Occupational recency substitution.** Teaching experience at an accredited postsecondary institution or at an industrial setting may be substituted for 1,500 of the 2,000 hours required in part 3709.0100, subpart 1, item A, if the teaching is done during this five-year period. The teaching must be in management programs or courses that include supervision or management content. Two hours of teaching equal one hour of occupational experience.

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3709.0330 COMPUTERIZING SMALL BUSINESS.

Subpart 1. **May teach.** A teacher who has a computerizing small business license may teach in the computerizing small business program and may also teach courses in:

A. integration of computer hardware and software to business;

B. introduction to personal computers; and

C. principles or business management.

Subp. 2. **Other requirements.** The applicant must meet the requirements in part 3709.0100.

Subp. 3. **Occupational experience requirement.** The applicant must have 8,000 hours of verified occupational experience as a working proprietor or managerial level employee responsible for, and making decisions based on, sources and use of capital. A minimum of 2,000 hours of this experience must be in developing a combination of microcomputer hardware and software processes for computerizing businesses. Computerizing a business means to do a feasibility study that includes analyzing, prioritizing, researching availability, evaluating, and reviewing computer needs.

Subp. 4. **Substitution for occupational experience.** The applicant may substitute the education described under item A, B, C, or D for up to 4,000 hours of the occupational experience required in subpart 3. The education must be from an accredited postsecondary institution. Notwithstanding this substitution, the applicant must not substitute for the 2,000 hours of experience in developing a combination of microcomputer hardware and software processes for computerizing small business.

A. A bachelor's or higher degree in business administration, business management, or accounting may be substituted for 4,000 hours.

B. An associate degree in accounting, business management, business entrepreneurship, or microcomputer sales and service may be substituted for 2,000 hours.

C. A diploma in business entrepreneurship, small business management, preparation for small business ownership,

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accounting, or computerizing small business may be substituted. A one-year program equals 1,050 hours. A two-year program equals 2,100 hours.

D. The completion of courses for credit or clock hours for credit in computer systems design, accounting, business management, and business computer applications may be substituted. One clock hour of instruction equals one hour of occupational experience. One quarter credit equals 20 hours of occupational experience. One semester credit equals 30 hours of occupational experience.

Subp. 5. **Occupational experience substitution.** Teaching experience at an accredited postsecondary institution or at an industrial setting may be substituted for 1,500 of the 2,000 hours required in part 3709.0100, subpart 1, item A, if the teaching is done during this five-year period. The teaching must be in computerizing small business, small business management, or preparation for small business ownership. Two hours of teaching equal one hour of occupational experience.

3709.0340 PRODUCTIVITY TECHNICIAN/PRODUCTIVITY AND INVENTORY MANAGEMENT.

Subpart 1. **May teach.** A teacher who has a productivity license may teach in the productivity technician program and the productivity and inventory management program and may also teach courses in:

A. human resource management;

B. productivity improvement;

C. problem solving/decision making;

D. quality systems;

E. statistical process control; and

F. production or inventory control.

Subp. 2. **Other requirements.** The applicant must meet the requirements in part 3709.0100.

Subp. 3. **Occupational experience requirement.** The applicant must have 8,000 hours of verified occupational experience as a manager, facilitator, or trainer in two or more

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of the following:

A. management/employee involvement (MEI);

B. statistical process control (SPC);

C. quality assurance or quality control systems (QAQC);

D. problem solving/decision making techniques;

E. just in time techniques (JIT); and

F. production and inventory control.

Subp. 4. **Substitution for occupational experience.** The applicant may substitute the education described under item A, B, C, or D for up to 4,000 hours of the occupational experience required in subpart 3. The education must be from an accredited postsecondary institution.

A. A bachelor's or higher degree in business administration or management, industrial engineering or management, economics, personnel management, organizational development, or marketing may be substituted for 4,000 hours.

B. An associate degree in production and inventory management, production technician, supervisory management, personnel management, manufacturing management, quality technician, business administration, or marketing management may be substituted for 2,000 hours.

C. A diploma in production and inventory management, productivity technician, supervisory management production technician, or marketing management may be substituted. A one-year program equals 1,050 hours. A two-year program equals 2,100 hours.

D. The completion of courses for credit or clock hours for credit or seminars and workshops by professional organizations in transformation of American industry, manufacturing process, production and inventory management techniques, engineering drawings, quality assurance product development, work simplifications, organizational structure of business, material requirements planning, industrial master planning, capacity management, production activity management, inventory management, employee involvement, statistical process,

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problem solving, or socio-economic systems may be substituted. One clock hour of instruction equals one hour of occupational experience. One quarter credit equals 20 hours of occupational experience. One semester credit equals 30 hours of occupational experience.

Subp. 5. **Occupational recency substitution.** Teaching experience at an accredited postsecondary institution, or at an industrial or military setting may be substituted for 1,500 of the 2,000 hours required in part 3709.0100, subpart 1, item A, if the teaching is done during this five-year period. The teaching must be in production and inventory management, productivity technician, supervisory management, statistical process control, quality assurance or quality control systems, participation management/employee involvement process, problem solving/decision making techniques, just in time techniques, or production/inventory control. Two hours of teaching equal one hour of occupational experience.

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STATE OF MINNESOTA
DEPARTMENT OF STATE
FILED

APR 5 1989

Joan Anderson Growe

Secretary of State

2:20 PM

APPROVED AS TO FORM AND LEGALITY

April 3, 1989

HUBERT H. HUMPHREY, III
ATTORNEY GENERAL

BY _____
SPECIAL ASSISTANT ATTORNEY GENERAL

SF-00006-05 (4/86)

STATE OF MINNESOTA

Office Memorandum

DEPARTMENT : ATTORNEY GENERAL

DATE : April 5, 1989

TO : H. CAMILLA NELSON
Special Assistant Attorney General

FROM : JULIE A. LEPPINK
Special Assistant Attorney General

PHONE : 6-9422

SUBJECT : In the Matter of the Adopted Permanent Rules Relating to Vocational Teacher Licenses; Business and Office, and Emerging Occupations

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If you have any questions in this regard, please contact me.

MJC:klk
Enclosures

cc: Maryanne Hruby
Executive Director
Legislative Commission to Review
Administrative Rules

William Brown
Chief Administrative Law Judge
Office of Administrative Hearings

Office of the Revisor of Statutes
Administrative Rules

Richard J. Sands
Senior Assistant Revisor
296-2798

700 State Office Building
100 Constitution Avenue
St. Paul, MN 55155-1297

March 15, 1989

Ms. Georgia Pomroy
State Board of Vocational Technical Education
520 Capitol Square Building
Saint Paul, Minnesota 55101

RE: File No. 1434A

Dear Ms. Pomroy:

Enclosed are four copies of your rule with the modifications you requested.

Please submit the rules to the Attorney General or the Office of Administrative Hearings, as appropriate.

If you have any questions or need further modifications, please call me.

Very truly yours,

Richard J. Sands

Georgia, see page 355

State of Minnesota

STATE REGISTER

Department of Administration—Documents Division



Published every Monday

15 August 1988

Volume 13, Number 7

Pages 331-378

Department of Transportation

Petition of the County of Beltrami for a Variance from State Aid Standards for Design Speed

NOTICE IS HEREBY GIVEN that the County Board of the County of Beltrami has made a written request to the Commissioner of Transportation pursuant to *Minnesota Rules* 8820.3300 for a variance from minimum standards for a resurfacing project on C.S.A.H. 32 between C.S.A.H. 31 and the junction of T.H. 72 2.0 miles north of the city of Blackduck (length 5.056 miles).

The request is for a variance from *Minnesota Rules* for State Aid Operations 8820.9914 adopted pursuant to *Minnesota Statutes* Chapter 161 and 162, so as to permit a design speed of 37 MPH on a sag vertical curve (Engineer's station 165 + 71 to 169 + 71) instead of the required minimum design speed of 40 MPH.

Any person may file a written objection to the variance request with the Commissioner of Transportation, Transportation Building, St. Paul, Minnesota, 55155.

If a written objection is received within 20 days from the date of this notice in the *State Register*, the variance can be granted only after a contested case hearing has been held on the request.

Dated: 8 August 1988

Leonard W. Levine
Commissioner

State Board of Vocational Technical Education

Notice of Solicitation of Outside Information or Opinions Regarding Proposed Rules Governing the Licensure of Postsecondary Vocational Technical Teachers in Marketing, Service, Agriculture, and Business and Office, Technical, and Trade and Industrial Occupations

NOTICE IS HEREBY GIVEN that the State Board of Vocational Technical Education is seeking information or opinions from outside the agency in preparing to amend Chapter Thirty Five Fifteen: Rules for licensure of postsecondary vocational technical education teachers and specifically Activity Director Assistant, Franchise Restaurant Management, Textile and Apparel Occupations, and Professional Nanny (Service occupations); Area Agriculture Coordinator (Agriculture occupations); Advanced Business Communications (Business and Office occupations); Productivity Technician, Supervisory Management, Electronic Service/Sales Representative, Computerizing Small Business, Business to Business Telemarketing, Quality and Productivity Management (Marketing occupations); Artificial Intelligence, Environmental Specialist, Laser Electro Optics Technology, Metallurgical Technology, Telecommunications Systems Technician, Vibracoustics Technology, Automated Systems Technology, Automated Manufacturing Technology, Computer Aided Printed Circuit Technician, Audio Recording Specialist (Technical occupations); Collision and Property Damage Appraisal, Electronic Desktop Publishing, Security Management, Locksmithing Technician, Diesel Fuel Injection Specialist, Neon and Sign Fabrication, Plastics Composite Technology, Electric Utility Technician (Trade and Industrial occupations); Fire Technology and Administration (Fire Service occupations). The promulgation of these rules is authorized by *Minnesota Statutes* 136C.04, subd. 9, and 125.185, subd. 4.

The State Board of Vocational Technical Education requests information and opinions concerning the subject matter of the rules. Interested persons or groups may submit data or views on the subject matter of concern in writing or orally.

Written statements should be addressed to:

Ms. Glenda Moyers
State Board of Vocational
Technical Education
522 Capitol Square Bldg.
550 Cedar Street
St. Paul, MN 55101
(612) 296-6517

Ms. Georgia Pomroy
State Board of Vocational
Technical Education
520 Capitol Square Bldg.
550 Cedar Street
St. Paul, MN 55101
(612) 296-0680

Oral statements will be received during regular business hours over the telephone at (612) 296-0680 and in person at the above address.

All statements of information and opinions shall be accepted until 4:30 p.m., Thursday, September 22, 1988. Any written material received by the State Board of Vocational Technical Education shall become part of the rulemaking record to be submitted to the Attorney General or administrative law judge in the event that the rule is adopted.

Deputy Director
State Board of Vocational
Technical Education

State Contracts and Advertised Bids

Pursuant to the provisions of Minn. Stat. § 14.10, an agency must make reasonable effort to publicize the availability of any services contract or professional and technical services contract which has an estimated cost of over $2,000.

Department of Administration procedures require that notice of any consultant services contract or professional and technical services contract which has an estimated cost of over $10,000 be printed in the *State Register*. These procedures also require that the following information be included in the notice: name of contact person, agency name and address, description of project and tasks, cost estimate, and final submission date of completed contract proposal. Certain quasi-state agencies are exempted from some of the provisions of this statute.

Commodities contracts with an estimated value of $15,000 or more are listed under the Procurement Division, Department of Administration. All bids are open for 7-10 days before bidding deadline. For bid specifics, time lines, and other general information, contact the appropriate buyers whose initials appear in parentheses next to the commodity for bid, by calling (612) 296-6152.

Department of Administration: Materials Management Division

Contracts and Requisitions Open for Bid

Call 296-2600 for information on a specific bid, or to request a specific bid.

Commodity: Reshape Judson Mine
Contact: Juanita Steffen 612-297-3830
Bid due date at 2pm: August 17
Agency: IRR&RB
Deliver to: Calumet
Requisition #: 43000 09852

Commodity: Microcomputer systems—rebid
Contact: Mary Jo Bruski 612-296-3772
Bid due date at 2pm: August 17
Agency: Community College
Deliver to: Fergus Falls
Requisition #: 27142 49036 01

Commodity: Bus
Contact: Bernie Vogel 612-296-3778
Bid due date at 2pm: August 17
Agency: Academy for the Blind
Deliver to: Faribault
Requisition #: 37001 90138 01

Commodity: Shoes, canvas, athletic & casual
Contact: Dale Meyer 612-296-3773
Bid due date at 2pm: August 17
Agency: Various
Deliver to: Various
Requisition #: Price Contract

Commodity: Uniform fabric
Contact: Linda Parkos 612-296-3725
Bid due date at 2pm: August 18
Agency: Public Safety
Deliver to: St. Paul
Requisition #: 07500 51624

Commodity: Purchase of Ricoh FT5590 or Pitney Bowes M750 only
Contact: Teresa Ryan 612-296-7556
Bid due date at 2pm: August 18
Agency: Agriculture
Deliver to: Minneapolis
Requisition #: 04133 91403

Commodity: Drug analyzer
Contact: Joseph Gibbs 612-296-3750
Bid due date at 2pm: August 18
Agency: Public Safety
Deliver to: St. Paul
Requisition #: 07300 50761

Commodity: Beverage concentrate & dispensing system
Contact: Ann Wefald 612-296-2546
Bid due date at 2pm: August 18
Agency: Oak Terrace Nursing Home
Deliver to: Minnetonka
Requisition #: Price contract

Commodity: Crushed rock salt
Contact: Jim R. Johnson 612-296-3779
Bid due date at 2pm: August 19
Agency: Transportation
Deliver to: Various
Requisition #: Price contract

Commodity: Laboratory analysis of air monitored & bulk samples
Contact: Jim R. Johnson 612-296-3779
Bid due date at 2pm: August 19
Agency: Transportation Employee Relations Departments
Deliver to: St. Paul
Requisition #: Price contract

Commodity: Xerox memorywriter maintenance contract
Contact: Don Olson 612-296-3771
Bid due date at 2pm: August 22
Agency: Various
Deliver to: Various
Requisition #: Price contract

Commodity: Packed columns
Contact: Brenda Thielen 612-296-9075
Bid due date at 2pm: August 22
Agency: Natural Resources
Deliver to: St. Paul
Requisition #: 26000 50524

Georgia Power
See pp 2718
+2719

State of Minnesota

STATE REGISTER

Department of Administration—Documents Division



Published every Monday

13 June 1988

Volume 12, Number 50

Pages 2685-2740

Office of Administrative Hearings
4th Fl. Summit Bank Bldg., 310 4th Ave. S., Mpls 55415. 612-341-7640. *Minnesota Statutes* 14.48.

APPOINTING AUTHORITY: Governor. Senate confirmation. COMPENSATION: $59,913 per year.

The office of administrative hearings shall conduct all hearings of state agencies as required by *Minnesota Statutes* chapter 14 and all compensation hearings as required by *Minnesota Statutes*, chapter 176. The chief administrative law judge must be learned in the law and is appointed by the governor with the advice and consent of the senate. This is a full time position with a six year term. The chief administrative law judge appoints other administrative law and compensation judges as necessary to fulfill the duties of the office.

MN State High School League
2621 Fairoak Ave., P.O. Box 309, Anoka 55303. 612-427-5250. *Minnesota Statutes* 129.121.

APPOINTING AUTHORITY: Governor. COMPENSATION: $35 per diem.

The league is empowered to exercise control, supervision, regulation of interscholastic athletics, and musical, dramatic and other contests between pupils of Minnesota high schools. Twenty members, including four public members who are parents, at least one must be American Indian, Asian, Black, or Hispanic. Eight regular meetings per year plus special meetings. Meetings take place in the metro area.

Department of Transportation

Petition of the County of Winona for a variance from State Aid Standards for Use of State Aid Funds

Notice is hereby given that the County Board of the County of Winona has made a written request to the Commissioner of Transportation pursuant to *Minnesota Rules* 8820.3300 for a variance from the requirement that a plan must be approved by the State Aid Engineer prior to the award of contract in order to finance the project with State Aid funds.

The request for a variance from *Minnesota Rules* for State Aid Operations 8820.2800, subpart 2 adopted pursuant to *Minnesota Statutes* Chapter 161 and 162, so as to permit the Office of State Aid, Minnesota Department of Transportation, the authority to authorize the use of State Aid monies to finance S.A.P. 85-631-11.

Any person may file a written objection to the variance request with the Commissioner of Transportation, Transportation Building, St. Paul, Minnesota, 55155.

If a written objection is received within 20 days from the date of this notice in the *State Register,* the variance can be granted only after a contested case hearing has been held on the request.

Dated: 2 June 1988

Leonard W. Levine
Commissioner

State Board of Vocational Technical Education

Notice of Intent to Solicit Outside Opinion Regarding Proposed Rules Governing the Rules for Licensure of Postsecondary Technical Education Personnel

Notice is hereby given that the State Board of Vocational Technical Education is seeking information or opinions from sources outside the agency in preparing to amend Chapter Thirty Five Fifteen. Rules for Licensure of Vocational Technical Education Personnel and specifically in emergency rules for Productivity Technician, Fire Technology and Administration, Physical Therapy Assistant. The promulgation of these rules is authorized by *Minnesota Statutes* 136C.04, subd.9. and 125.185 subd.4.

The State Board of Vocational Technical Education requests information and comments concerning the subject matter of these rules. Interested or affected persons may submit data or views on the subject matter or concern in writing or orally. Written statements should be addressed to:

Ms. Glenda Moyers
State Board of Vocational
Technical Education
522 Capitol Square Building
550 Cedar Street
St. Paul, MN 55101
(612) 296-6517

Ms. Georgia Pomroy
State Board of Vocational
Technical Education
520 Capitol Square Building
550 Cedar Street
St. Paul, MN 55101
(612) 296-0680

Oral statements will be received during regular business hours over the telephone at (612) 296-0680 and in person at the above address.

All statements of information and comments shall be accepted until 4:30 p.m., Wednesday, July 13, 1988. Any written material received by the State Board of Vocational Technical Education shall become part of the rulemaking record to be submitted to the Attorney General or administrative law judge in the event that the rule is adopted.

Helen Henrie, Deputy Director
State Board of Vocational
Technical Education

State Board of Vocational Technical Education

Notice of Solicitation of Outside Information or Opinions Regarding Proposed Rules Governing the Licensure of Postsecondary Vocational Technical Teachers in Marketing, Service, Agriculture, and Business and Office Occupations

Notice is hereby given that the State Board of Vocational Technical Education is seeking information or opinions from outside the agency in preparing to amend Chapter Thirty Five Fifteen: Rules for licensure of postsecondary vocational technical education teachers and specifically in Preparation for Small Business Ownership (Marketing occupations), Occupational Skills (Service occupations), Specialty Crop Management and Poultry Production (Agriculture occupations), Microcomputer Specialist and Office Information Processing Specialist and Student Financial Aid Assistant (Business and Office occupations), and Metrology Technology (Technical occupations). The promulgation of these rules is authorized by *Minnesota Statutes* 136C.04, subd.9, and 125.185, subd.4.

The State Board of Vocational Technical Education requests information and opinions concerning the subject matter of the rules. Interested persons or groups may submit data or views on the subject matter of concern in writing or orally.

Written statements should be addressed to:

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State Board of Vocational
Technical Education
522 Capitol Square Bldg.
550 Cedar Street
St. Paul, MN 55101
(612) 296-6517

Ms. Georgia Pomroy
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Deputy Director
State Board of Vocational
Technical Education

Copy

CERTIFICATE OF THE

STATE BOARD OF VOCATIONAL TECHNICAL EDUCATION

AUTHORIZING RESOLUTION

I, Donald Ingram, do hereby certify that I am a member and the president of the State Board of Vocational Technical Education, a board duly authorized under the laws of the State of Minnesota, and that the following is a true, complete and correct copy of a resolution adopted at a meeting of the State Board of Vocational Technical Education duly and properly called and held on the 14th day of June 1988, that a quorum was present, and that a majority of those present voted for the resolution which has not been rescinded or modified.

"RESOLVED, that Helen Henrie, Deputy State Director of the State Board of Vocational Technical Education is hereby granted the authority and directed to sign and to give the Notice of the Board's Intent to Adopt a rule without a public hearing governing licensure of postsecondary vocational technical education teachers and specifically Preparation for Small Business Ownership, Occupational Skills, Specialty Crop Management, Poultry Production, Microcomputer Specialist, Office Information Processing Specialist, Student Financial Aid Assistant, Metrology Technology to all persons who have registered their names with the Board for that purpose and publish the Notice and rule in the *State Register*, and to perform any and all acts incidental thereto."

IN WITNESS WHEREOF, I have hereunto subscribed my name this 14th day of June 1988.

Donald C. Ingram
(Officer of the Board)

Scott R. Morris
Attest by one other Board Member

20109910

==========

CERTIFICATE OF THE

STATE BOARD OF VOCATIONAL TECHNICAL EDUCATION

AUTHORIZING RESOLUTION

I, Donald Ingram, do hereby certify that I am a member and the president of the State Board of Vocational Technical Education, a board duly authorized under the laws of the State of Minnesota, and that the following is a true, complete and correct copy of a resolution adopted at a meeting of the State Board of Vocational Technical Education duly and properly called and held on the 14th day of June 1988, that a quorum was present, and that a majority of those present voted for the resolution which has not been rescinded or modified.

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IN WITNESS WHEREOF, I have hereunto subscribed my name this 14th day of June 1988.

Donald C. Ingram
(Officer of the Board)

Scott R. Morris
Attest by one other Board Member

20109910

Copy

CERTIFICATE OF THE

STATE BOARD OF VOCATIONAL TECHNICAL EDUCATION

AUTHORIZING RESOLUTION

I, Donald C. Ingram, do hereby certify that I am a member and the president of the State Board of Vocational Technical Education, a board duly authorized under the laws of the State of Minnesota, and that the following is a true, complete and correct copy of a resolution adopted at a meeting of the State Board of Vocational Technical Education duly and properly called and held on the 15 day of August 1988, that a quorum was present, and that a majority of those present voted for the resolution which has not been rescinded or modified.

"RESOLVED, that Helen Henrie, Deputy State Director of the State Board of Vocational Technical Education is hereby granted the authority and directed to sign and to give the Notice of the Board's Intent to Adopt a rule without a public hearing governing licensure of postsecondary vocational technical education teachers and specifically Activity Director Assistant, Franchise Restaurant Management, Textile and Apparel Occupations, and Professional Nanny (Service occupations); Area Agriculture Coordinator (Agriculture occupations); Advanced Business Communications (Business and Office occupations); Productivity Technician, Supervisory Management, Electronic Service/Sales Representative, Computerizing Small Business, Business to Business Telemarketing, Quality and Productivity Management (Marketing occupations); Artificial Intelligence, Environmental Specialist, Laser Electro Optics Technology, Metallurgical Technology, Telecommunications Systems Technician, Vibracoustics Technology, Automated Systems Technology, Automated Manufacturing Technology, Computer Aided Printed Circuit Technician, Audio Recording Specialist (Technical occupations); Collision and Property Damage Appraisal, Electronic Desktop Publishing, Security Management, Locksmithing Technician, Diesel Fuel Injection Specialist, Neon and Sign Fabrication, Plastics Composite Technology, Electric Utility Technician (Trade and Industrial occupations); Fire Technology and Administration (Fire Service occupations) to all persons who have registered their names with the Board for that purpose and publish the Notice and rule in the *State Register*, and to perform any and all acts incidental thereto."

IN WITNESS WHEREOF, I have hereunto subscribed my name this 15 day of August 1988.

Donald C. Ingram
(Officer of the Board)

Donna Anderson
Attest by one other Board Member

20109910

CERTIFICATE OF THE

STATE BOARD OF VOCATIONAL TECHNICAL EDUCATION

AUTHORIZING RESOLUTION

I, Donald C. Ingram, do hereby certify that I am a member and the president of the State Board of Vocational Technical Education, a board duly authorized under the laws of the State of Minnesota, and that the following is a true, complete and correct copy of a resolution adopted at a meeting of the State Board of Vocational Technical Education duly and properly called and held on the 15 day of August 1988, that a quorum was present, and that a majority of those present voted for the resolution which has not been rescinded or modified.

"RESOLVED, that Helen Henrie, Deputy State Director of the State Board of Vocational Technical Education is hereby granted the authority and directed to sign and to give the Notice of the Board's Intent to Adopt a rule without a public hearing governing licensure of postsecondary vocational technical education teachers and specifically Activity Director Assistant, Franchise Restaurant Management, Textile and Apparel Occupations, and Professional Nanny (Service occupations); Area Agriculture Coordinator (Agriculture occupations); Advanced Business Communications (Business and Office occupations); Productivity Technician, Supervisory Management, Electronic Service/Sales Representative, Computerizing Small Business, Business to Business Telemarketing, Quality and Productivity Management (Marketing occupations); Artificial Intelligence, Environmental Specialist, Laser Electro Optics Technology, Metallurgical Technology, Telecommunications Systems Technician, Vibracoustics Technology, Automated Systems Technology, Automated Manufacturing Technology, Computer Aided Printed Circuit Technician, Audio Recording Specialist (Technical occupations); Collision and Property Damage Appraisal, Electronic Desktop Publishing, Security Management, Locksmithing Technician, Diesel Fuel Injection Specialist, Neon and Sign Fabrication, Plastics Composite Technology, Electric Utility Technician (Trade and Industrial occupations); Fire Technology and Administration (Fire Service occupations) to all persons who have registered their names with the Board for that purpose and publish the Notice and rule in the *State Register*, and to perform any and all acts incidental thereto."

IN WITNESS WHEREOF, I have hereunto subscribed my name this 15 day of August 1988.

Donald C. Ingram
(Officer of the Board)

Donna Anderson
Attest by one other Board Member

20109910

Office of the Revisor of Statutes
Administrative Rules

Richard J. Sands
Senior Assistant Revisor
296-2798



700 State Office Building
100 Constitution Avenue
St. Paul, MN 55155-1297

January 18, 1989

Ms. Georgia Pomroy
State Board of Vocational Technical Education
520 Capitol Square Building
Saint Paul, Minnesota 55101

RE: File No. 1434

Dear Ms. Pomroy:

I am enclosing six copies of your rules, approved as to form. Please submit two copies to the State Register for publication.

If you have any questions, please call me.

Very truly yours,

Richard J. Sands

State Board of Vocational Technical Education

Proposed Permanent Rules Relating to Vocational Teacher Licenses; Business and Office, and Health Occupations

Rules as Proposed (all new material)

3700.0376 FINANCIAL AID ASSISTANT.

Subpart 1. **May teach.** A teacher who has a financial aid assistant license may teach in the financial aid assistant program.

Subp. 2. **Other requirements.** The applicant must meet the requirements listed in part 3700.0100 and the requirements for a teacher in the business and office area under part 3700.0300.

Subp. 3. **Occupational experience requirement.** The applicant must have 8,000 hours of occupational experience with a minimum of 6,000 hours in a position that administers or assists with the administration of financial aid within a postsecondary institution. The recency listed in part 3700.0300, subpart 2, must be met with this experience. The remaining hours may be in an administrative support position.

Subp. 4. **Substitution for occupational experience.** The applicant may substitute the education described in items A to D for up to 4,000 hours of the occupational experience required in subpart 3. The education must be from an accredited postsecondary institution. If the substitution is made, the applicant must still comply with the recency requirements in part 3700.0300, subpart 2.

A. A bachelor's or higher degree in business, accounting, or financial aid administration may be substituted for 2,000 hours of experience in an administrative support position and a maximum of 2,000 hours of the experience in a financial aid position.

B. An associate degree in business, accounting, administrative support, or financial aid assistant may be substituted for 2,000 hours.

C. A diploma in accounting, administrative support, or financial aid assistant may be substituted. A one-year program equals 1,050 hours. A two-year program equals 2,100 hours.

D. The completion of courses for credit or clock hours for credit in administrative support or financial aid may be substituted. One hour of instruction equals one hour of occupational experience. One quarter credit equals 20 hours of occupational experience. One semester credit equals 30 hours of occupational experience.

Subp. 5. **Substitution for recent occupational experience.** The applicant may substitute teaching experience at an accredited postsecondary institution in financial aid assistant for 1,500 hours of the 2,000 required in part 3700.0300, subpart 2. Two hours of teaching equal one hour of occupational experience required in part 3700.0300, subpart 2.

3700.0377 MICROCOMPUTER SUPPORT SPECIALIST.

Subpart 1. **May teach.** A teacher who has a microcomputer support specialist license may teach in the microcomputer support specialist program and may also teach courses in:

A. microcomputing operating system/concepts and skills; and

B. introduction to microcomputing.

Subp. 2. **Other requirements.** The applicant must meet the requirements listed in part 3700.0100 and the requirements for a teacher in the business and office area under part 3700.0300.

Subp. 3. **Occupational experience requirement.** The applicant must have 8,000 hours of business application occupational experience in two or more of the following areas with a minimum of 2,000 of the hours in microcomputers: installation of and troubleshooting computers, computer training in a business or industrial setting, or programming. The 8,000 hours may include the 2,000 hours required under part 3700.0300, subpart 2.

Subp. 4. **Substitution for occupational experience.** The

applicant may substitute the education described in items A to D for up to 4,000 hours of the occupational experience required in subpart 3. The education must be from an accredited postsecondary institution. If the substitution is made, the applicant must still comply with the recency requirements in part 3700.0300, subpart 2.

A. A bachelor's or higher degree in management information systems, computer science, data processing, or telecommunications may be substituted for 4,000 hours.

B. An associate degree in computer science, data processing, microcomputer specialist, or advanced business communication may be substituted for 2,000 hours.

C. A diploma in business microcomputing, computer operator, or computer programmer may be substituted. A one-year program equals 1,050 hours. A two-year program equals 2,100 hours.

D. The completion of courses for credit or clock hours for credit in microcomputer or mainframe computer may be substituted. One hour of instruction equals one hour of occupational experience. One quarter credit equals 20 hours of occupational experience. One semester credit equals 30 hours of occupational experience.

Subp. 5. **Substitution for recent occupational experience.** The applicant may substitute teaching experience at an accredited postsecondary institution, or at an industrial or military setting in microcomputer specific training for 1,500 hours of the 2,000 required in part 3700.0300, subpart 2. Two hours of teaching equal one hour of the occupational experience required in part 3700.0300, subpart 2.

3700.0378 ADVANCED BUSINESS TECHNOLOGY.

Subpart 1. **May teach.** A teacher who has an advanced business technology license may teach in the advanced business technology program and may also teach courses in application and use of:

A. public switched networks;

B. private switched networks;

C. private branch exchange;

D. integrated services digital network;

E. microcomputer system applications;

F. asynchronous/synchronous communications; and

G. modem technology.

Subp. 2. **Other requirements.** The applicant must meet the requirements listed in part 3700.0100 and the requirements for a teacher in the business and office area under part 3700.0300.

Subp. 3. **Occupational experience requirement.** The applicant must have 8,000 hours of occupational experience in planning, designing, networking, engineering, managing, or installation and maintenance in two or more of items A to C. The 8,000 hours may include the 2,000 hours required under part 3700.0300, subpart 2.

A. computer system analysis and operation in a business setting of mainframe, minicomputers, or microcomputers;

B. voice communications; and

C. data communications.

Subp. 4. **Substitution for occupational experience.** The applicant may substitute the education described in items A to D for up to 4,000 hours of the occupational experience required in subpart 3. The education must be from an accredited postsecondary institution. If the substitution is made, the applicant must still comply with the recency requirements in part 3700.0300, subpart 2.

A. A bachelor's or higher degree in computer science, management information systems, microcomputer studies, electrical engineering, or voice data telecommunications may be substituted for 4,000 hours.

B. An associate degree in advanced business communications, electronics, microcomputer support specialist, or office information processing specialist may be substituted for 2,000 hours.

C. A diploma in business microcomputing or electronics may be substituted. A one-year program equals 1,050

hours. A two-year program equals 2,100 hours.

D. The completion of courses for credit or clock hours for credit in mainframe, microcomputers, or minicomputers; voice data or telecommunications; or electronics may be substituted. One hour of instruction equals one hour of occupational experience. One quarter credit equals 20 hours of occupational experience. One semester credit equals 30 hours of occupational experience.

Subp. 5. **Substitution for recent occupational experience.** An applicant may substitute teaching experience at an accredited postsecondary institution, or at an industrial or military setting in advanced business communications, microcomputer, telephony, data communications, or network design for 1,500 hours of the 2,000 required in part 3700.0300, subpart 2. Two hours of teaching equal one hour of occupational experience required in part 3700.0300, subpart 2.

3700.0379 OFFICE INFORMATION PROCESSING SPECIALIST.

Subpart 1. **May teach.** A teacher who has an office information processing specialist license may teach in the office information processing program and teach courses in:

A. word processing operations;

B. hardware evaluation;

C. software applications (WP/SS/DB);

D. application concepts/theory (SQ/SS/DB);

E. application design;

F. software evaluation; and

G. office desktop publishing.

Subp. 2. **Other requirements.** The applicant must meet the requirements listed in part 3700.0100 and the requirements for a teacher in the business and office area under part 3700.0300.

Subp. 3. **Occupational experience requirement.** The applicant must have 8,000 hours of occupational experience in word processing supervisory responsibilities in an end user environment where systems and technical staff interact with nontechnical employees. This experience must include

applications design involvement from conception to implementation identifying office tasks, needs identification, development of software and hardware solutions, selection of staff who will use the system, and training of end users. The 8,000 hours may include the 2,000 hours required under part 3700.0300, subpart 2.

Subp. 4. **Substitution for occupational experience.** The applicant may substitute the education described in items A to D for up to 4,000 hours of the occupational experience required in subpart 3. The education must be from an accredited postsecondary institution. If the substitution is made, the applicant must still comply with the recency requirements in part 3700.0300, subpart 2.

A. A bachelor's or higher degree in business management, business education, business administration, office management, office administration, or information processing (MIS) may be substituted for 4,000 hours.

B. An associate degree in secretarial science, secretarial, office information processing, personnel assistant, office administration, or office management may be substituted for 2,000 hours.

C. A diploma in general, legal, medical, or word processing secretarial programs may substitute for 2,000 hours. A one-year program equals 1,050 hours. A two-year program equals 2,100 hours.

D. The completion of courses for credit or clock hours for credit in information processing, business, secretarial, or management may be substituted. One hour of instruction equals one hour of occupational experience. One quarter credit equals 20 hours of occupational experience. One semester credit equals 30 hours of occupational experience.

Subp. 5. **Substitution for recent occupational experience.** The applicant may substitute teaching experience at an accredited postsecondary institution, or in an industrial or military setting in general office typist, general secretarial office information processing specialist, or word processing for

1,500 hours of the 2,000 required in part 3700.0300, subpart 2. Two hours of teaching equal one hour of occupational experience required in part 3700.0300, subpart 2.

3709.0230 CHIROPRACTIC ASSISTANT.

Subpart 1. **May teach.** A teacher who has a chiropractic assistant license may teach in the chiropractic assistant program and may also teach courses in:

A. body mechanics in the workplace; and

B. therapeutic massage.

Subp. 2. **Other requirements.** The applicant must meet the requirements in part 3709.0100.

Subp. 3. **Educational and occupational experience requirement.** The applicant must have the educational and occupational experience described in item A, B, or C. The education must be from an accredited postsecondary institution.

A. Licensed chiropractor and 4,000 hours of verified occupational experience in a chiropractic office or chiropractic hospital. This experience must include office procedures, insurance coverage, physiotherapy application, X-ray, and examinations.

B. Diploma from a two-year chiropractic technician or chiropractic assistant program and 6,000 hours of verified occupational experience as a technician or assistant in a chiropractic office or chiropractic hospital. The experience must include office procedures, insurance coverage, physiotherapy application, and assisting the chiropractor with X-ray and examinations.

C. Diploma from a one-year chiropractic technician or chiropractic assistant program or American Chiropractic Registered Radiologist technician program and 7,000 hours of verified occupational experience as a technician or assistant in a chiropractic office or chiropractic hospital. The experience must include office procedures, insurance coverage, physiotherapy application, and assisting the chiropractor with X-ray and examinations.

Subp. 4. **Occupational recency substitution.** Teaching experience at an accredited postsecondary institution, or at an industrial or military setting may be substituted for 1,500 of the 2,000 hours required in part 3709.0100, subpart 1, item A, if the teaching is done during the five-year period. The teaching must be in chiropractic assisting, chiropractic technician, or chiropractic medicine. Two hours of teaching equal one hour of occupational experience.

3709.0240 EKG/CARDIAC TECHNICIAN.

Subpart 1. **May teach.** A teacher who has an EKG/cardiac technician license may teach in the EKG/cardiac technician program and may also teach cardiopulmonary resuscitation.

Subp. 2. **Other requirements.** The applicant must meet the requirements in part 3709.0100.

Subp. 3. **Occupational experience requirement.** The applicant must have current cardiopulmonary resuscitation instructor certification and 8,000 hours of verified occupational experience in one of the following:

A. registered nurse in critical care using 12 lead cardiograms, exercise stress testing of clients, care of clients with pacemakers, and interpreting basic and advanced cardiac rhythms; or

B. supervisory EKG/cardiac technician.

Subp. 4. **Substitution for occupational experience.** An applicant may substitute the education described under item A, B, C, or D for up to 4,000 hours of occupational experience required in subpart 3. The education must be from an accredited postsecondary institution.

A. A bachelor's or higher degree in medicine, nursing, or cardiac technology may be substituted for 4,000 hours.

B. An associate degree in nursing, perfusionist, echo cardiac sonographer, EKG/cardiac technician, cardiac technology, biomedical equipment, cardiopulmonary, medical laboratory, medical technology, medical imaging, or radiography, or a

bachelor's degree in biomedical science or medical technology may be substituted for 2,000 hours.

C. A diploma in nursing, perfusionist, EKG/cardiac technology, or cardiac technician may be substituted. A one-year program equals 1,050 hours. A two- or three-year program equals 2,100 hours.

D. The completion of courses for credit or clock hours for credit in cardiac care, cardiac conditions, or cardiac equipment use and maintenance may be substituted. One hour of instruction equals one hour of occupational experience. One quarter credit equals 20 hours of occupational experience. One semester credit equals 30 hours of occupational experience.

Subp. 5. **Occupational recency substitution.** Teaching experience at an accredited postsecondary institution, or at an industrial or military setting, or public safety agency may be substituted for 1,500 of the 2,000 hours required in part 3709.0100, subpart 1, item A, if the teaching is done during the five-year period. The teaching must be in cardiac technology. Two hours of teaching equal one hour of occupational experience.

3709.0250 PHYSICAL THERAPIST ASSISTANT.

Subpart 1. **May teach.** A teacher who has a physical instructor therapist assistant license may teach in the physical therapist assistant program and may also teach courses in anatomy and physiology, medical terminology, exercise physiology, kinesiology, neuroanatomy and neurophysiology, and physical disability/rehabilitation.

Subp. 2. **Other requirements.** The applicant must meet the requirements in part 3709.0100.

Subp. 3. **Occupational and educational experience requirement.** The applicant must have the following experiences:

A. a bachelor's or higher degree in physical therapy from an American Physical Therapy Association accredited institution;

B. physical therapist registration in the state of Minnesota; and

C. 4,000 hours of verified occupational experience as a registered physical therapist in at least two of the following: acute care setting, outpatient physical therapy, long-term care, or rehabilitation setting.

Subp. 4. **Occupational recency substitution.** Teaching experience at an American Physical Therapy Association accredited institution may be substituted for 1,500 of the 2,000 hours required in part 3709.0100, subpart 1, item A, if the teaching is done during the five-year period. The teaching must be in physical therapy or physical ~~therapy~~ 1ST assistant. Two hours of teaching equal one hour of occupational experience.

3709.0260 PUBLIC SAFETY COMMUNICATION (911).

Subpart 1. **May teach.** A teacher who has a public safety communication (911) license may teach in the public safety communication (911) program and may also teach emergency communications.

Subp. 2. **Other requirements.** The applicant must meet the requirements in part 3709.0100.

Subp. 3. **Occupational experience requirement.** The applicant must have 8,000 hours of verified occupational experience as an operator dispatcher or supervisor in a public safety communications center with a minimum of 6,000 of the 8,000 hours doing the job of an operator dispatcher. Operator dispatcher includes level III operator dispatcher or communication training operator (CTO). Supervisor includes lead dispatcher, head dispatcher, communications manager, assistant supervisor, or shift supervisor.

Subp. 4. **Substitution for occupational experience.** An applicant may substitute the education described under item A, B, C, or D for up to 4,000 hours of occupational experience required under subpart 3. The education must be from an accredited postsecondary institution.

A. A bachelor's or higher degree in law enforcement, criminal justice, or corrections may be substituted for 4,000 hours.

B. An associate degree in law enforcement or public safety communications, or a bachelor's degree or higher in public administration may be substituted for 2,000 hours.

C. A diploma in law enforcement or public safety communication may be substituted. A one-year program equals 1,050 hours. A two- or three-year program equals 2,100 hours.

D. The completion of courses for credit or clock hours for credit in the use of public safety emergency telecommunications equipment may be substituted. One hour of instruction equals one hour of occupational experience. One quarter credit equals 20 hours of occupational experience. One semester credit equals 30 hours of occupational experience.

Subp. 5. **Occupational recency substitution.** Teaching experience at an accredited postsecondary institution, or at an industrial or military setting, or public safety agency may be substituted for 1,500 of the 2,000 hours required in part 3709.0100, subpart 1, item A, if the teaching is done during the five-year period. The teaching must be in public safety communication. Two hours of teaching equal one hour of occupational experience.

3709.0270 RADIOLOGIC TECHNOLOGY.

Subpart 1. **May teach.** A teacher who has a radiologic technology license may teach in the radiologic technology program.

Subp. 2. **Other requirements.** The applicant must meet the requirements in part 3709.0100.

Subp. 3. **Occupational and educational experience requirement.** The applicant must:

A. have a two-year certificate, associate degree or above in radiologic technology;

B. be credentialed in radiography by the American Registry of Radiologic Technologists; and

C. have 6,000 hours of verified occupational experience as a certified radiographer in a medical setting.

Subp. 4. **Occupational recency substitution.** Teaching

experience at a postsecondary institution in an accredited program of radiographic technology may be substituted for 1,500 of the 2,000 hours required in part 3709.0100, subpart 1, item A, if the teaching is done during the five-year period. The teaching must be in radiologic technology. Two hours of teaching equal one hour of occupational experience.

3709.0280 TELECOMMUNICATIONS SYSTEMS TECHNICIAN.

Subpart 1. **May teach.** A teacher who has a telecommunications systems technician license may teach in the telecommunications systems technician program and may also teach courses in:

A. antennas/transmissions lines;

B. satellite/cable systems;

C. introduction to fiber optics (fiber optics I);

D. basic telecommunication security systems;

E. microwave communications;

F. basic telecommunications;

G. telecommunications test equipment; and

H. pole climbing.

Subp. 2. **Other requirements.** The applicant must meet the requirements in part 3709.0100.

Subp. 3. **Occupational experience requirement.** The applicant must have 8,000 hours of verified occupational experience in two or more of the following:

A. installation and maintenance of electronic private branch exchange (PBX);

B. underground and aerial construction of telecommunications equipment;

C. cable or optic fiber splicing;

D. central office telecommunications installation and maintenance;

E. repair of carrier systems including "T" carrier, microwave, satellite, or optic fiber;

F. cellular communications installation and maintenance;

G. data communications including installation and maintenance of network systems, interfacing and protocol of service, and maintenance of data terminals; and

H. installation and maintenance of interactive television systems.

Subp. 4. **Substitution for occupational experience.** An applicant may substitute the education described in item A, B, C, or D for up to 4,000 hours of occupational experience required under subpart 3. The education must be from an accredited postsecondary institution.

A. A bachelor's or higher degree in electrical engineering, computer science, or telecommunications may be substituted for 4,000 hours.

B. A bachelor's degree in industrial technology, engineering (other than electrical), or an associate degree in electronics or telecommunications may be substituted for 2,000 hours.

C. A diploma in electronics or telecommunications may be substituted. A one-year program equals 1,050 hours. A two-year program equals 2,100 hours.

D. The completion of courses for credit or clock hours for credit in telecommunications hardware or systems may be substituted. One clock hour of instruction equals one hour of occupational experience. One quarter credit equals 20 hours of occupational experience. One semester credit equals 30 hours of occupational experience.

Subp. 5. **Occupational recency substitution.** Teaching experience at an accredited postsecondary institution, or at an industrial or military setting may be substituted for 1,500 of the 2,000 hours required in part 3709.0100, subpart 1, item A, if the teaching is done during the five-year period. The teaching must be in telecommunications. Two hours of teaching equal one hour of occupational experience.

3709.0290 NEON AND SIGN FABRICATIONS.

Subpart 1. **May teach.** A teacher who has a neon and sign

fabrication license may teach in the neon and sign fabrication program and may also teach courses in:

A. sign and letter fabrication;

B. sign erection and service; and

C. sign electricity.

Subp. 2. **Other requirements.** The applicant must meet the requirements in part 3709.0100.

Subp. 3. **Occupational experience requirement.** The applicant must have 8,000 hours of verified occupational experience in production and repair of neon signage, in neon bending and bombarding, or sign fabrication and installation.

Subp. 4. **Substitution for occupational experience.** An applicant may substitute the education described in item A or B for up to 2,100 hours of occupational experience required under subpart 3. The education must be from an accredited postsecondary institution.

A. A diploma or certificate in neon and sign fabrication. A one-year program equals 1,050 hours. A two-year program equals 2,100 hours.

B. The completion of courses for credit or clock hours for credit in neon patterns and layout, sign electricity, sign and letter fabrication, and sign erection and service. One hour of instruction equals one hour of occupational experience. One quarter credit equals 20 hours of occupational experience. One semester credit equals 30 hours of occupational experience.

Subp. 5. **Occupational recency substitution.** Teaching experience at an accredited postsecondary institution, or at an industrial or military setting may be substituted for 1,500 of the 2,000 hours required in part 3709.0100, subpart 1, item A, if the teaching is done during the five-year period. The teaching must be in neon and sign fabrications. Two hours of teaching equal one hour of occupational experience.

3709.0300 DIESEL FUEL INJECTION SPECIALIST.

Subpart 1. **May teach.** A teacher who has a diesel fuel injection specialist license may teach in the diesel fuel

injection specialist program and may also teach courses in diesel pump operation, repair, rebuilding, and calibration.

Subp. 2. **Other requirements.** The applicant must meet the requirements in part 3709.0100.

Subp. 3. **Occupational experience requirement.** The applicant must have 8,000 hours of verified occupational experience in both:

A. diesel engine operation, repair, and maintenance; and

B. diesel fuel injection system operation, repair, and maintenance.

Subp. 4. **Substitution for occupational experience.** An applicant may substitute the education described in item A, B, C, or D for up to 4,000 hours of occupational experience required under subpart 3. The education must be from an accredited postsecondary institution.

A. A bachelor's or higher degree in automotive engineering may be substituted for 4,000 hours.

B. An associate degree in diesel technology, truck and diesel mechanics, agricultural equipment mechanics, heavy equipment mechanics, or diesel fuel injection may be substituted for 2,000 hours.

C. A diploma in diesel fuel injection, truck and diesel mechanics, agricultural equipment mechanics, or heavy equipment mechanics may be substituted. A two-year program equals 2,100 hours.

D. The completion of courses for credit or clock hours for credit in diesel fuel injection may be substituted. One clock hour of instruction equals one hour of occupational experience. One quarter credit equals 20 hours of occupational experience. One semester credit equals 30 hours of occupational experience.

Subp. 5. **Occupational recency substitution.** Teaching experience at an accredited postsecondary institution, or at an industrial or military setting may be substituted for 1,500 of the 2,000 hours required in part 3709.0100, subpart 1, item A,

if the teaching is done during the five-year period. The teaching must be in diesel fuel injections. Two hours of teaching equal one hour of occupational experience.

3709.0310 ELECTRONIC PUBLISHING/INFORMATION SPECIALIST.

Subpart 1. **May teach.** A teacher who has an electronic publishing/information specialist license may teach in the electronic publishing/information specialist program and may also teach courses in:

A. introduction to typography and publishing;

B. desktop publishing;

C. page makeup techniques; and

D. corporate electronic publishing.

Subp. 2. **Other requirements.** The applicant must meet the requirements in part 3709.0100.

Subp. 3. **Occupational experience requirement.** The applicant must have 8,000 hours of verified occupational experience in all of the following:

A. layout and design;

B. typography and electronic prepress; and

C. electronic desktop publishing that integrates text and graphics.

Subp. 4. **Occupational experience substitution.** The applicant may substitute the education described in item A, B, C, or D for up to 4,000 hours of occupational experience required in subpart 3. The education must be from an accredited postsecondary institution.

A. A bachelor's or higher degree in graphic arts, commercial art, advertising art, or data processing may be substituted for 4,000 hours.

B. An associate degree in graphic arts, commercial art, or data processing may be substituted for 2,000 hours.

C. A diploma in electronic publishing/information specialist, computer typesetting, graphic arts, commercial art, or data processing may be substituted. A one-year program equals 1,050 hours. A two-year program equals 2,100 hours.

D. The completion of courses for credit or clock hours for credit in computer typesetting, graphic arts, keylining, commercial art, desktop publishing, color separation, advertising art, printing, or data processing may be substituted. One clock hour of instruction equals one hour of occupational experience. One quarter credit equals 20 hours of occupational experience. One semester credit equals 30 hours of occupational experience.

Subp. 5. **Occupational recency substitution.** Teaching experience at an accredited postsecondary institution, or at an industrial or military setting may be substituted for 1,500 of the 2,000 hours required in part 3709.0100, subpart 1, item A, if the teaching is done during the five-year period. The teaching must be in typography, layout and design, electronic prepress, or desktop publishing that integrates text and design. Two hours of teaching equal one hour of occupational experience.

3709.0320 SUPERVISORY MANAGEMENT.

Subpart 1. **May teach.** A teacher who has a supervisory management license may teach in the supervisory management program and may also teach courses in:

A. principles of supervision and management;

B. human resource management;

C. labor relations;

D. productivity improvement;

E. employee training;

F. problem solving;

G. quality/participatory management;

H. statistical process control;

I. quality first;

J. production/inventory control;

K. appraisal and evaluation;

L. work habits and absenteeism;

M. leadership development;

N. supervising for results;

O. job coaching; and

P. negotiations.

Subp. 2. **Other requirements.** The applicant must meet the requirements in part 3709.0100.

Subp. 3. **Occupational experience requirement.** The applicant must have 8,000 hours of verified occupational experience in a managerial level position including but not limited to budget development or control, employee selection and supervision, employee performance appraisal and evaluation, and assessment of employee training needs.

Subp. 4. **Substitution for occupational experience.** The applicant may substitute the education described under item A, B, C, or D for up to 4,000 hours of the occupational experience required in subpart 3. The education must be from an accredited postsecondary institution.

A. A bachelor's or higher degree in business, marketing, or management may be substituted for 4,000 hours.

B. An associate degree in business, management, or marketing may be substituted for 2,000 hours.

C. A diploma in supervision or management programs. A one-year program equals 1,050 hours. A two-year program equals 2,100 hours.

D. The completion of courses for credit or clock hours for credit in business administration, business management, finance, human resource management, accounting, training and development, supervisory management, manufacturing management, and productivity and management. One clock hour of instruction equals one hour of occupational experience. One quarter credit equals 20 hours of occupational experience. One semester credit equals 30 hours of occupational experience.

Subp. 5. **Occupational recency substitution.** Teaching experience at an accredited postsecondary institution or at an industrial setting may be substituted for 1,500 of the 2,000 hours required in part 3709.0100, subpart 1, item A, if the teaching is done during this five-year period. The teaching must be in management programs or courses that include

supervision or management content. Two hours of teaching equal one hour of occupational experience.

3709.0330 COMPUTERIZING SMALL BUSINESS.

Subpart 1. **May teach.** A teacher who has a computerizing small business license may teach in the computerizing small business program and may also teach courses in:

A. integration of computer hardware and software to business;

B. introduction to personal computers; and

C. principles or business management.

Subp. 2. **Other requirements.** The applicant must meet the requirements in part 3709.0100.

Subp. 3. **Occupational experience requirement.** The applicant must have 8,000 hours of verified occupational experience as a working proprietor or managerial level employee responsible for, and making decisions based on, sources and use of capital. A minimum of 2,000 hours of this experience must be in developing a combination of microcomputer hardware and software processes for computerizing businesses. Computerizing a business means to do a feasibility study that includes analyzing, prioritizing, researching availability, evaluating, and reviewing computer needs.

Subp. 4. **Substitution for occupational experience.** The applicant may substitute the education described under item A, B, C, or D for up to 4,000 hours of the occupational experience required in subpart 3. The education must be from an accredited postsecondary institution. Notwithstanding this substitution, the applicant must not substitute for the 2,000 hours of experience in developing a combination of microcomputer hardware and software processes for computerizing small business.

A. A bachelor's or higher degree in business administration, business management, or accounting may be substituted for 4,000 hours.

B. An associate degree in accounting, business management, business entrepreneurship, or microcomputer sales

and service may be substituted for 2,000 hours.

C. A diploma in business entrepreneurship, small business management, preparation for small business ownership, accounting, or computerizing small business may be substituted. A one-year program equals 1,050 hours. A two-year program equals 2,100 hours.

D. The completion of courses for credit or clock hours for credit in computer systems design, accounting, business management, and business computer applications may be substituted. One clock hour of instruction equals one hour of occupational experience. One quarter credit equals 20 hours of occupational experience. One semester credit equals 30 hours of occupational experience.

Subp. 5. **Occupational experience substitution.** Teaching experience at an accredited postsecondary institution or at an industrial setting may be substituted for 1,500 of the 2,000 hours required in part 3709.0100, subpart 1, item A, if the teaching is done during this five-year period. The teaching must be in computerizing small business, small business management, or preparation for small business ownership. Two hours of teaching equal one hour of occupational experience.

3709.0340 PRODUCTIVITY TECHNICIAN/PRODUCTIVITY AND INVENTORY MANAGEMENT.

Subpart 1. **May teach.** A teacher who has a productivity license may teach in the productivity technician program and the productivity and inventory management program and may also teach courses in:

A. human resource management;

B. productivity improvement;

C. problem solving/decision making;

D. quality systems;

E. statistical process control; and

F. production or inventory control.

Subp. 2. **Other requirements.** The applicant must meet the requirements in part 3709.0100.

Subp. 3. **Occupational experience requirement.** The applicant must have 8,000 hours of verified occupational experience as a manager, facilitator, or trainer in two or more of the following:

A. management/employee involvement (MEI);

B. statistical process control (SPC);

C. quality assurance or quality control systems (QAQC);

D. problem solving/decision making techniques;

E. just in time techniques (JIT); and

F. production and inventory control.

Subp. 4. **Substitution for occupational experience.** The applicant may substitute the education described under item A, B, C, or D for up to 4,000 hours of the occupational experience required in subpart 3. The education must be from an accredited postsecondary institution.

A. A bachelor's or higher degree in business administration or management, industrial engineering or management, economics, personnel management, organizational development, or marketing may be substituted for 4,000 hours.

B. An associate degree in production and inventory management, production technician, supervisory management, personnel management, manufacturing management, quality technician, business administration, or marketing management may be substituted for 2,000 hours.

C. A diploma in production and inventory management, productivity technician, supervisory management production technician, or marketing management may be substituted. A one-year program equals 1,050 hours. A two-year program equals 2,100 hours.

D. The completion of courses for credit or clock hours for credit or seminars and workshops by professional organizations in transformation of American industry, manufacturing process, production and inventory management techniques, engineering drawings, quality assurance product development, work simplifications, organizational structure of

business, material requirements planning, industrial master planning, capacity management, production activity management, inventory management, employee involvement, statistical process, problem solving, or socio-economic systems may be substituted. One clock hour of instruction equals one hour of occupational experience. One quarter credit equals 20 hours of occupational experience. One semester credit equals 30 hours of occupational experience.

Subp. 5. **Occupational recency substitution.** Teaching experience at an accredited postsecondary institution, or at an industrial or military setting may be substituted for 1,500 of the 2,000 hours required in part 3709.0100, subpart 1, item A, if the teaching is done during this five-year period. The teaching must be in production and inventory management, productivity technician, supervisory management, statistical process control, quality assurance or quality control systems, participation management/employee involvement process, problem solving/decision making techniques, just in time techniques, or production/inventory control. Two hours of teaching equal one hour of occupational experience.

Office of the Revisor of Statutes

Administrative Rules

TITLE: Proposed Permanent Rules Relating to Vocational Teacher Licenses; Business and Office, and Health Occupations

AGENCY: State Board of Vocational Technical Education

MINNESOTA RULES: Chapters 3700 and 3709

The attached rules are approved for publication
in the State Register

Richard J. Sands
Senior Assistant Revisor

STATE OF MINNESOTA

MINNESOTA TECHNICAL INSTITUTE SYSTEM
Board of Vocational Technical Education
Capitol Square Building, 55O Cedar Street
St. Paul, Minnesota 55101

Office Memorandum

TO: Persons Registered with the State Board of Vocational Technical Education to Receive Notice of Any Rulemaking Proceedings

FROM: Joseph P. Graba, State Director

DATE: February 3, 1989

SUBJECT: Notice of Proposed Adoption of Permanent Rules

Enclosed you will find the Notice of Proposed Adoption of Rules relating to licensure criteria 3700.0376 to 3700.0379 and 3709.0230 to 3709.0340:

Postsecondary Vocational Technical Education Business and Office Occupations

Financial Aid Assistant
Microcomputer Support Specialist
Advanced Business Technology
Office Information Processing Specialist

Postsecondary Vocational Technical Education Emerging Occupations

Chiropractic Assistant
EKG/Cardiac Technician
Physical Therapist Assistant
Public Safety Communication (911)
Radiologic Technology
Telecommunications Systems Technician
Neon and Sign Fabrications
Diesel Fuel Injection Specialist
Electronic Publishing/Information Specialist
Supervisory Management
Computerizing Small Business
Productivity Technician/Productivity and Inventory Management

GP:lrv
B&OEMG.MEM

Enclosures

DEPARTMENT OF THE STATE BOARD OF VOCATIONAL TECHNICAL EDUCATION

In the Matter of the Proposed Adoption of the Rules of the State of Minnesota Governing Permanent Rules Relating to Instructor Licenses Emerging Occupations, 3709.0230 to 3709.0340.

NOTICE OF INTENT TO ADOPT A RULE WITHOUT A PUBLIC HEARING

Notice is hereby given that the State Board of Vocational Technical Education intends to adopt the above-entitled rule without a public hearing following the procedures set forth in the Administrative Procedure Act for adopting rules without a public hearing in Minnesota Statutes, Section 14.22 to 14.28. The statutory authority to adopt the rules is Minnesota Statutes 136C.04, Subdivision 9.

All persons have 30 days until 4:30 p.m., Tuesday, March 7, 1989, in which to submit comment in support of or in opposition to the proposed rule or any part or subpart of the rule. Comment is encouraged. Each comment should identify the portion of the proposed rule addressed, the reason for comment, and any change proposed.

Any person may make a written request for a public hearing on the rule within the 30-day comment period. If 25 or more persons submit a written request for a public hearing within the 30-day comment period, a public hearing will be held unless a sufficient number withdraw their request in writing. Any person requesting a public hearing should state his or her name and address, and is encouraged to identify the portion of the proposed rule addressed, the reason for the request, and any change proposed. If a public hearing is required, the agency will proceed pursuant to Minnesota Statutes, Sections 14.131 to 14.20.

Comments or written requests for a public hearing must be submitted to either:

Glenda Moyers, Supervisor
Minnesota Technical Institute System
100 Capitol Square Building
550 Cedar Street
St. Paul, MN 55101
Telephone: (612) 296-5707

Georgia Pomroy, License Revision Specialist
Minnesota Technical Institute System
100 Capitol Square Building
550 Cedar Street
St. Paul, MN 55101
Telephone: (612) 296-0680

The proposed rule may be modified if the modifications are supported by data and views submitted to the agency and do not result in a substantial change in the proposed rule as noticed.

A copy of the proposed rule is attached to this notice.

A Statement of Need and Reasonableness that describes the need for and reasonableness of each provision of the proposed rule and identifies the data and information relied upon to support the proposed rule has been prepared and is available from Glenda Moyers or Georgia Pomroy at the above address and phone, upon request.

If no hearing is required, upon adoption of the rule, the rule and the required supporting documents will be submitted to the Attorney General for review as to legality and form to the extent the form relates to legality. Any person may request notification of the date of submission to the Attorney General. Persons who wish to be advised of the submission of this material to the Attorney General, or wish to receive a copy of the adopted rule must submit the written request to either:

Glenda Moyers
Minnesota Technical Institute System
100 Capitol Square Building
550 Cedar Street
St. Paul, MN 55101
(612) 296-5707

Georgia Pomroy
Minnesota Technical Institute System
100 Capitol Square Building
550 Cedar Street
St. Paul, MN 55101
(612) 296-0680

January 25, 1989
(Date)

Helen Henrie
Helen Henrie, Deputy Director
Minnesota Technical Institute System

20109915.FRM

DEPARTMENT OF THE STATE BOARD OF VOCATIONAL TECHNICAL EDUCATION

In the Matter of the Proposed Adoption of the Rules of the State of Minnesota Governing Permanent Rules Relating to Instructor Licenses Business and Office, 3700.0376 to 3700.0379.

NOTICE OF INTENT TO ADOPT A RULE WITHOUT A PUBLIC HEARING

Notice is hereby given that the State Board of Vocational Technical Education intends to adopt the above-entitled rule without a public hearing following the procedures set forth in the Administrative Procedure Act for adopting rules without a public hearing in Minnesota Statutes, Section 14.22 to 14.28. The statutory authority to adopt the rules is Minnesota Statutes 136C.04, Subdivision 9.

All persons have 30 days until 4:30 p.m., Tuesday, March 7, 1989, in which to submit comment in support of or in opposition to the proposed rule or any part or subpart of the rule. Comment is encouraged. Each comment should identify the portion of the proposed rule addressed, the reason for comment, and any change proposed.

Any person may make a written request for a public hearing on the rule within the 30-day comment period. If 25 or more persons submit a written request for a public hearing within the 30-day comment period, a public hearing will be held unless a sufficient number withdraw their request in writing. Any person requesting a public hearing should state his or her name and address, and is encouraged to identify the portion of the proposed rule addressed, the reason for the request, and any change proposed. If a public hearing is required, the agency will proceed pursuant to Minnesota Statutes, Sections 14.131 to 14.20.

Comments or written requests for a public hearing must be submitted to either:

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Minnesota Technical Institute System
100 Capitol Square Building
550 Cedar Street
St. Paul, MN 55101
Telephone: (612) 296-5707

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550 Cedar Street
St. Paul, MN 55101
Telephone: (612) 296-0680

The proposed rule may be modified if the modifications are supported by data and views submitted to the agency and do not result in a substantial change in the proposed rule as noticed.

A copy of the proposed rule is attached to this notice.

A Statement of Need and Reasonableness that describes the need for and reasonableness of each provision of the proposed rule and identifies the data and information relied upon to support the proposed rule has been prepared and is available from Glenda Moyers or Georgia Pomroy at the above address and phone, upon request.

If no hearing is required, upon adoption of the rule, the rule and the required supporting documents will be submitted to the Attorney General for review as to legality and form to the extent the form relates to legality. Any person may request notification of the date of submission to the Attorney General. Persons who wish to be advised of the submission of this material to the Attorney General, or wish to receive a copy of the adopted rule must submit the written request to either:

Glenda Moyers
Minnesota Technical Institute System
100 Capitol Square Building
550 Cedar Street
St. Paul, MN 55101
(612) 296-5707

Georgia Pomroy
Minnesota Technical Institute System
100 Capitol Square Building
550 Cedar Street
St. Paul, MN 55101
(612) 296-0680

January 25, 1989
(Date)

Helen Henrie
Helen Henrie, Deputy Director
Minnesota Technical Institute System

20109915.FRM

State Board of Vocational Technical Education

Proposed Permanent Rules Relating to Vocational Teacher Licenses; Business and Office, and Health Occupations

Rules as Proposed (all new material)

3700.0376 FINANCIAL AID ASSISTANT.

Subpart 1. **May teach.** A teacher who has a financial aid assistant license may teach in the financial aid assistant program.

Subp. 2. **Other requirements.** The applicant must meet the requirements listed in part 3700.0100 and the requirements for a teacher in the business and office area under part 3700.0300.

Subp. 3. **Occupational experience requirement.** The applicant must have 8,000 hours of occupational experience with a minimum of 6,000 hours in a position that administers or assists with the administration of financial aid within a postsecondary institution. The recency listed in part 3700.0300, subpart 2, must be met with this experience. The remaining hours may be in an administrative support position.

Subp. 4. **Substitution for occupational experience.** The applicant may substitute the education described in items A to D for up to 4,000 hours of the occupational experience required in subpart 3. The education must be from an accredited postsecondary institution. If the substitution is made, the applicant must still comply with the recency requirements in part 3700.0300, subpart 2.

A. A bachelor's or higher degree in business, accounting, or financial aid administration may be substituted for 2,000 hours of experience in an administrative support position and a maximum of 2,000 hours of the experience in a financial aid position.

B. An associate degree in business, accounting, administrative support, or financial aid assistant may be substituted for 2,000 hours.

C. A diploma in accounting, administrative support, or financial aid assistant may be substituted. A one-year program equals 1,050 hours. A two-year program equals 2,100 hours.

D. The completion of courses for credit or clock hours for credit in administrative support or financial aid may be substituted. One hour of instruction equals one hour of occupational experience. One quarter credit equals 20 hours of occupational experience. One semester credit equals 30 hours of occupational experience.

Subp. 5. **Substitution for recent occupational experience.** The applicant may substitute teaching experience at an accredited postsecondary institution in financial aid assistant for 1,500 hours of the 2,000 required in part 3700.0300, subpart 2. Two hours of teaching equal one hour of occupational experience required in part 3700.0300, subpart 2.

3700.0377 MICROCOMPUTER SUPPORT SPECIALIST.

Subpart 1. **May teach.** A teacher who has a microcomputer support specialist license may teach in the microcomputer support specialist program and may also teach courses in:

A. microcomputing operating system/concepts and skills; and

B. introduction to microcomputing.

Subp. 2. **Other requirements.** The applicant must meet the requirements listed in part 3700.0100 and the requirements for a teacher in the business and office area under part 3700.0300.

Subp. 3. **Occupational experience requirement.** The applicant must have 8,000 hours of business application occupational experience in two or more of the following areas with a minimum of 2,000 of the hours in microcomputers: installation of and troubleshooting computers, computer training in a business or industrial setting, or programming. The 8,000 hours may include the 2,000 hours required under part 3700.0300, subpart 2.

Subp. 4. **Substitution for occupational experience.** The

applicant may substitute the education described in items A to D for up to 4,000 hours of the occupational experience required in subpart 3. The education must be from an accredited postsecondary institution. If the substitution is made, the applicant must still comply with the recency requirements in part 3700.0300, subpart 2.

A. A bachelor's or higher degree in management information systems, computer science, data processing, or telecommunications may be substituted for 4,000 hours.

B. An associate degree in computer science, data processing, microcomputer specialist, or advanced business communication may be substituted for 2,000 hours.

C. A diploma in business microcomputing, computer operator, or computer programmer may be substituted. A one-year program equals 1,050 hours. A two-year program equals 2,100 hours.

D. The completion of courses for credit or clock hours for credit in microcomputer or mainframe computer may be substituted. One hour of instruction equals one hour of occupational experience. One quarter credit equals 20 hours of occupational experience. One semester credit equals 30 hours of occupational experience.

Subp. 5. **Substitution for recent occupational experience.** The applicant may substitute teaching experience at an accredited postsecondary institution, or at an industrial or military setting in microcomputer specific training for 1,500 hours of the 2,000 required in part 3700.0300, subpart 2. Two hours of teaching equal one hour of the occupational experience required in part 3700.0300, subpart 2.

3700.0378 ADVANCED BUSINESS TECHNOLOGY.

Subpart 1. **May teach.** A teacher who has an advanced business technology license may teach in the advanced business technology program and may also teach courses in application and use of:

A. public switched networks;

B. private switched networks;

C. private branch exchange;

D. integrated services digital network;

E. microcomputer system applications;

F. asynchronous/synchronous communications; and

G. modem technology.

Subp. 2. **Other requirements.** The applicant must meet the requirements listed in part 3700.0100 and the requirements for a teacher in the business and office area under part 3700.0300.

Subp. 3. **Occupational experience requirement.** The applicant must have 8,000 hours of occupational experience in planning, designing, networking, engineering, managing, or installation and maintenance in two or more of items A to C. The 8,000 hours may include the 2,000 hours required under part 3700.0300, subpart 2.

A. computer system analysis and operation in a business setting of mainframe, minicomputers, or microcomputers;

B. voice communications; and

C. data communications.

Subp. 4. **Substitution for occupational experience.** The applicant may substitute the education described in items A to D for up to 4,000 hours of the occupational experience required in subpart 3. The education must be from an accredited postsecondary institution. If the substitution is made, the applicant must still comply with the recency requirements in part 3700.0300, subpart 2.

A. A bachelor's or higher degree in computer science, management information systems, microcomputer studies, electrical engineering, or voice data telecommunications may be substituted for 4,000 hours.

B. An associate degree in advanced business communications, electronics, microcomputer support specialist, or office information processing specialist may be substituted for 2,000 hours.

C. A diploma in business microcomputing or electronics may be substituted. A one-year program equals 1,050

hours. A two-year program equals 2,100 hours.

D. The completion of courses for credit or clock hours for credit in mainframe, microcomputers, or minicomputers; voice data or telecommunications; or electronics may be substituted. One hour of instruction equals one hour of occupational experience. One quarter credit equals 20 hours of occupational experience. One semester credit equals 30 hours of occupational experience.

Subp. 5. **Substitution for recent occupational experience.** An applicant may substitute teaching experience at an accredited postsecondary institution, or at an industrial or military setting in advanced business communications, microcomputer, telephony, data communications, or network design for 1,500 hours of the 2,000 required in part 3700.0300, subpart 2. Two hours of teaching equal one hour of occupational experience required in part 3700.0300, subpart 2.

3700.0379 OFFICE INFORMATION PROCESSING SPECIALIST.

Subpart 1. **May teach.** A teacher who has an office information processing specialist license may teach in the office information processing program and teach courses in:

A. word processing operations;

B. hardware evaluation;

C. software applications (WP/SS/DB);

D. application concepts/theory (SQ/SS/DB);

E. application design;

F. software evaluation; and

G. office desktop publishing.

Subp. 2. **Other requirements.** The applicant must meet the requirements listed in part 3700.0100 and the requirements for a teacher in the business and office area under part 3700.0300.

Subp. 3. **Occupational experience requirement.** The applicant must have 8,000 hours of occupational experience in word processing supervisory responsibilities in an end user environment where systems and technical staff interact with nontechnical employees. This experience must include

applications design involvement from conception to implementation identifying office tasks, needs identification, development of software and hardware solutions, selection of staff who will use the system, and training of end users. The 8,000 hours may include the 2,000 hours required under part 3700.0300, subpart 2.

Subp. 4. **Substitution for occupational experience.** The applicant may substitute the education described in items A to D for up to 4,000 hours of the occupational experience required in subpart 3. The education must be from an accredited postsecondary institution. If the substitution is made, the applicant must still comply with the recency requirements in part 3700.0300, subpart 2.

A. A bachelor's or higher degree in business management, business education, business administration, office management, office administration, or information processing (MIS) may be substituted for 4,000 hours.

B. An associate degree in secretarial science, secretarial, office information processing, personnel assistant, office administration, or office management may be substituted for 2,000 hours.

C. A diploma in general, legal, medical, or word processing secretarial programs may substitute for 2,000 hours. A one-year program equals 1,050 hours. A two-year program equals 2,100 hours.

D. The completion of courses for credit or clock hours for credit in information processing, business, secretarial, or management may be substituted. One hour of instruction equals one hour of occupational experience. One quarter credit equals 20 hours of occupational experience. One semester credit equals 30 hours of occupational experience.

Subp. 5. **Substitution for recent occupational experience.** The applicant may substitute teaching experience at an accredited postsecondary institution, or in an industrial or military setting in general office typist, general secretarial office information processing specialist, or word processing for

1,500 hours of the 2,000 required in part 3700.0300, subpart 2. Two hours of teaching equal one hour of occupational experience required in part 3700.0300, subpart 2.

3709.0230 CHIROPRACTIC ASSISTANT.

Subpart 1. **May teach.** A teacher who has a chiropractic assistant license may teach in the chiropractic assistant program and may also teach courses in:

A. body mechanics in the workplace; and

B. therapeutic massage.

Subp. 2. **Other requirements.** The applicant must meet the requirements in part 3709.0100.

Subp. 3. **Educational and occupational experience requirement.** The applicant must have the educational and occupational experience described in item A, B, or C. The education must be from an accredited postsecondary institution.

A. Licensed chiropractor and 4,000 hours of verified occupational experience in a chiropractic office or chiropractic hospital. This experience must include office procedures, insurance coverage, physiotherapy application, X-ray, and examinations.

B. Diploma from a two-year chiropractic technician or chiropractic assistant program and 6,000 hours of verified occupational experience as a technician or assistant in a chiropractic office or chiropractic hospital. The experience must include office procedures, insurance coverage, physiotherapy application, and assisting the chiropractor with X-ray and examinations.

C. Diploma from a one-year chiropractic technician or chiropractic assistant program or American Chiropractic Registered Radiologist technician program and 7,000 hours of verified occupational experience as a technician or assistant in a chiropractic office or chiropractic hospital. The experience must include office procedures, insurance coverage, physiotherapy application, and assisting the chiropractor with X-ray and examinations.

Subp. 4. **Occupational recency substitution.** Teaching experience at an accredited postsecondary institution, or at an industrial or military setting may be substituted for 1,500 of the 2,000 hours required in part 3709.0100, subpart 1, item A, if the teaching is done during the five-year period. The teaching must be in chiropractic assisting, chiropractic technician, or chiropractic medicine. Two hours of teaching equal one hour of occupational experience.

3709.0240 EKG/CARDIAC TECHNICIAN.

Subpart 1. **May teach.** A teacher who has an EKG/cardiac technician license may teach in the EKG/cardiac technician program and may also teach cardiopulmonary resuscitation.

Subp. 2. **Other requirements.** The applicant must meet the requirements in part 3709.0100.

Subp. 3. **Occupational experience requirement.** The applicant must have current cardiopulmonary resuscitation instructor certification and 8,000 hours of verified occupational experience in one of the following:

A. registered nurse in critical care using 12 lead cardiograms, exercise stress testing of clients, care of clients with pacemakers, and interpreting basic and advanced cardiac rhythms; or

B. supervisory EKG/cardiac technician.

Subp. 4. **Substitution for occupational experience.** An applicant may substitute the education described under item A, B, C, or D for up to 4,000 hours of occupational experience required in subpart 3. The education must be from an accredited postsecondary institution.

A. A bachelor's or higher degree in medicine, nursing, or cardiac technology may be substituted for 4,000 hours.

B. An associate degree in nursing, perfusionist, echo cardiac sonographer, EKG/cardiac technician, cardiac technology, biomedical equipment, cardiopulmonary, medical laboratory, medical technology, medical imaging, or radiography, or a

bachelor's degree in biomedical science or medical technology may be substituted for 2,000 hours.

C. A diploma in nursing, perfusionist, EKG/cardiac technology, or cardiac technician may be substituted. A one-year program equals 1,050 hours. A two- or three-year program equals 2,100 hours.

D. The completion of courses for credit or clock hours for credit in cardiac care, cardiac conditions, or cardiac equipment use and maintenance may be substituted. One hour of instruction equals one hour of occupational experience. One quarter credit equals 20 hours of occupational experience. One semester credit equals 30 hours of occupational experience.

Subp. 5. **Occupational recency substitution.** Teaching experience at an accredited postsecondary institution, or at an industrial or military setting, or public safety agency may be substituted for 1,500 of the 2,000 hours required in part 3709.0100, subpart 1, item A, if the teaching is done during the five-year period. The teaching must be in cardiac technology. Two hours of teaching equal one hour of occupational experience.

3709.0250 PHYSICAL THERAPIST ASSISTANT.

Subpart 1. **May teach.** A teacher who has a physical therapist assistant license may teach in the physical therapist assistant program and may also teach courses in anatomy and physiology, medical terminology, exercise physiology, kinesiology, neuroanatomy and neurophysiology, and physical disability/rehabilitation.

Subp. 2. **Other requirements.** The applicant must meet the requirements in part 3709.0100.

Subp. 3. **Occupational and educational experience requirement.** The applicant must have the following experiences:

A. a bachelor's or higher degree in physical therapy from an American Physical Therapy Association accredited institution;

B. physical therapist registration in the state of Minnesota; and

C. 4,000 hours of verified occupational experience as a registered physical therapist in at least two of the following: acute care setting, outpatient physical therapy, long-term care, or rehabilitation setting.

Subp. 4. **Occupational recency substitution.** Teaching experience at an American Physical Therapy Association accredited institution may be substituted for 1,500 of the 2,000 hours required in part 3709.0100, subpart 1, item A, if the teaching is done during the five-year period. The teaching must be in physical therapy or physical ~~therapy~~ assistant. Two hours of teaching equal one hour of occupational experience.

3709.0260 PUBLIC SAFETY COMMUNICATION (911).

Subpart 1. **May teach.** A teacher who has a public safety communication (911) license may teach in the public safety communication (911) program and may also teach emergency communications.

Subp. 2. **Other requirements.** The applicant must meet the requirements in part 3709.0100.

Subp. 3. **Occupational experience requirement.** The applicant must have 8,000 hours of verified occupational experience as an operator dispatcher or supervisor in a public safety communications center with a minimum of 6,000 of the 8,000 hours doing the job of an operator dispatcher. Operator dispatcher includes level III operator dispatcher or communication training operator (CTO). Supervisor includes lead dispatcher, head dispatcher, communications manager, assistant supervisor, or shift supervisor.

Subp. 4. **Substitution for occupational experience.** An applicant may substitute the education described under item A, B, C, or D for up to 4,000 hours of occupational experience required under subpart 3. The education must be from an accredited postsecondary institution.

A. A bachelor's or higher degree in law enforcement, criminal justice, or corrections may be substituted for 4,000 hours.

B. An associate degree in law enforcement or public safety communications, or a bachelor's degree or higher in public administration may be substituted for 2,000 hours.

C. A diploma in law enforcement or public safety communication may be substituted. A one-year program equals 1,050 hours. A two- or three-year program equals 2,100 hours.

D. The completion of courses for credit or clock hours for credit in the use of public safety emergency telecommunications equipment may be substituted. One hour of instruction equals one hour of occupational experience. One quarter credit equals 20 hours of occupational experience. One semester credit equals 30 hours of occupational experience.

Subp. 5. **Occupational recency substitution.** Teaching experience at an accredited postsecondary institution, or at an industrial or military setting, or public safety agency may be substituted for 1,500 of the 2,000 hours required in part 3709.0100, subpart 1, item A, if the teaching is done during the five-year period. The teaching must be in public safety communication. Two hours of teaching equal one hour of occupational experience.

3709.0270 RADIOLOGIC TECHNOLOGY.

Subpart 1. **May teach.** A teacher who has a radiologic technology license may teach in the radiologic technology program.

Subp. 2. **Other requirements.** The applicant must meet the requirements in part 3709.0100.

Subp. 3. **Occupational and educational experience requirement.** The applicant must:

A. have a two-year certificate, associate degree or above in radiologic technology;

B. be credentialed in radiography by the American Registry of Radiologic Technologists; and

C. have 6,000 hours of verified occupational experience as a certified radiographer in a medical setting.

Subp. 4. **Occupational recency substitution.** Teaching

experience at a postsecondary institution in an accredited program of radiographic technology may be substituted for 1,500 of the 2,000 hours required in part 3709.0100, subpart 1, item A, if the teaching is done during the five-year period. The teaching must be in radiologic technology. Two hours of teaching equal one hour of occupational experience.

3709.0280 TELECOMMUNICATIONS SYSTEMS TECHNICIAN.

Subpart 1. **May teach.** A teacher who has a telecommunications systems technician license may teach in the telecommunications systems technician program and may also teach courses in:

A. antennas/transmissions lines;

B. satellite/cable systems;

C. introduction to fiber optics (fiber optics I);

D. basic telecommunication security systems;

E. microwave communications;

F. basic telecommunications;

G. telecommunications test equipment; and

H. pole climbing.

Subp. 2. **Other requirements.** The applicant must meet the requirements in part 3709.0100.

Subp. 3. **Occupational experience requirement.** The applicant must have 8,000 hours of verified occupational experience in two or more of the following:

A. installation and maintenance of electronic private branch exchange (PBX);

B. underground and aerial construction of telecommunications equipment;

C. cable or optic fiber splicing;

D. central office telecommunications installation and maintenance;

E. repair of carrier systems including "T" carrier, microwave, satellite, or optic fiber;

F. cellular communications installation and maintenance;

G. data communications including installation and maintenance of network systems, interfacing and protocol of service, and maintenance of data terminals; and

H. installation and maintenance of interactive television systems.

Subp. 4. **Substitution for occupational experience.** An applicant may substitute the education described in item A, B, C, or D for up to 4,000 hours of occupational experience required under subpart 3. The education must be from an accredited postsecondary institution.

A. A bachelor's or higher degree in electrical engineering, computer science, or telecommunications may be substituted for 4,000 hours.

B. A bachelor's degree in industrial technology, engineering (other than electrical), or an associate degree in electronics or telecommunications may be substituted for 2,000 hours.

C. A diploma in electronics or telecommunications may be substituted. A one-year program equals 1,050 hours. A two-year program equals 2,100 hours.

D. The completion of courses for credit or clock hours for credit in telecommunications hardware or systems may be substituted. One clock hour of instruction equals one hour of occupational experience. One quarter credit equals 20 hours of occupational experience. One semester credit equals 30 hours of occupational experience.

Subp. 5. **Occupational recency substitution.** Teaching experience at an accredited postsecondary institution, or at an industrial or military setting may be substituted for 1,500 of the 2,000 hours required in part 3709.0100, subpart 1, item A, if the teaching is done during the five-year period. The teaching must be in telecommunications. Two hours of teaching equal one hour of occupational experience.

3709.0290 NEON AND SIGN FABRICATIONS.

Subpart 1. **May teach.** A teacher who has a neon and sign

fabrication license may teach in the neon and sign fabrication program and may also teach courses in:

A. sign and letter fabrication;

B. sign erection and service; and

C. sign electricity.

Subp. 2. **Other requirements.** The applicant must meet the requirements in part 3709.0100.

Subp. 3. **Occupational experience requirement.** The applicant must have 8,000 hours of verified occupational experience in production and repair of neon signage, in neon bending and bombarding, or sign fabrication and installation.

Subp. 4. **Substitution for occupational experience.** An applicant may substitute the education described in item A or B for up to 2,100 hours of occupational experience required under subpart 3. The education must be from an accredited postsecondary institution.

A. A diploma or certificate in neon and sign fabrication. A one-year program equals 1,050 hours. A two-year program equals 2,100 hours.

B. The completion of courses for credit or clock hours for credit in neon patterns and layout, sign electricity, sign and letter fabrication, and sign erection and service. One hour of instruction equals one hour of occupational experience. One quarter credit equals 20 hours of occupational experience. One semester credit equals 30 hours of occupational experience.

Subp. 5. **Occupational recency substitution.** Teaching experience at an accredited postsecondary institution, or at an industrial or military setting may be substituted for 1,500 of the 2,000 hours required in part 3709.0100, subpart 1, item A, if the teaching is done during the five-year period. The teaching must be in neon and sign fabrications. Two hours of teaching equal one hour of occupational experience.

3709.0300 DIESEL FUEL INJECTION SPECIALIST.

Subpart 1. **May teach.** A teacher who has a diesel fuel injection specialist license may teach in the diesel fuel

injection specialist program and may also teach courses in diesel pump operation, repair, rebuilding, and calibration.

Subp. 2. **Other requirements.** The applicant must meet the requirements in part 3709.0100.

Subp. 3. **Occupational experience requirement.** The applicant must have 8,000 hours of verified occupational experience in both:

A. diesel engine operation, repair, and maintenance; and

B. diesel fuel injection system operation, repair, and maintenance.

Subp. 4. **Substitution for occupational experience.** An applicant may substitute the education described in item A, B, C, or D for up to 4,000 hours of occupational experience required under subpart 3. The education must be from an accredited postsecondary institution.

A. A bachelor's or higher degree in automotive engineering may be substituted for 4,000 hours.

B. An associate degree in diesel technology, truck and diesel mechanics, agricultural equipment mechanics, heavy equipment mechanics, or diesel fuel injection may be substituted for 2,000 hours.

C. A diploma in diesel fuel injection, truck and diesel mechanics, agricultural equipment mechanics, or heavy equipment mechanics may be substituted. A two-year program equals 2,100 hours.

D. The completion of courses for credit or clock hours for credit in diesel fuel injection may be substituted. One clock hour of instruction equals one hour of occupational experience. One quarter credit equals 20 hours of occupational experience. One semester credit equals 30 hours of occupational experience.

Subp. 5. **Occupational recency substitution.** Teaching experience at an accredited postsecondary institution, or at an industrial or military setting may be substituted for 1,500 of the 2,000 hours required in part 3709.0100, subpart 1, item A,

if the teaching is done during the five-year period. The teaching must be in diesel fuel injections. Two hours of teaching equal one hour of occupational experience.

3709.0310 ELECTRONIC PUBLISHING/INFORMATION SPECIALIST.

Subpart 1. **May teach.** A teacher who has an electronic publishing/information specialist license may teach in the electronic publishing/information specialist program and may also teach courses in:

A. introduction to typography and publishing;

B. desktop publishing;

C. page makeup techniques; and

D. corporate electronic publishing.

Subp. 2. **Other requirements.** The applicant must meet the requirements in part 3709.0100.

Subp. 3. **Occupational experience requirement.** The applicant must have 8,000 hours of verified occupational experience in all of the following:

A. layout and design;

B. typography and electronic prepress; and

C. electronic desktop publishing that integrates text and graphics.

Subp. 4. **Occupational experience substitution.** The applicant may substitute the education described in item A, B, C, or D for up to 4,000 hours of occupational experience required in subpart 3. The education must be from an accredited postsecondary institution.

A. A bachelor's or higher degree in graphic arts, commercial art, advertising art, or data processing may be substituted for 4,000 hours.

B. An associate degree in graphic arts, commercial art, or data processing may be substituted for 2,000 hours.

C. A diploma in electronic publishing/information specialist, computer typesetting, graphic arts, commercial art, or data processing may be substituted. A one-year program equals 1,050 hours. A two-year program equals 2,100 hours.

D. The completion of courses for credit or clock hours for credit in computer typesetting, graphic arts, keylining, commercial art, desktop publishing, color separation, advertising art, printing, or data processing may be substituted. One clock hour of instruction equals one hour of occupational experience. One quarter credit equals 20 hours of occupational experience. One semester credit equals 30 hours of occupational experience.

Subp. 5. **Occupational recency substitution.** Teaching experience at an accredited postsecondary institution, or at an industrial or military setting may be substituted for 1,500 of the 2,000 hours required in part 3709.0100, subpart 1, item A, if the teaching is done during the five-year period. The teaching must be in typography, layout and design, electronic prepress, or desktop publishing that integrates text and design. Two hours of teaching equal one hour of occupational experience.

3709.0320 SUPERVISORY MANAGEMENT.

Subpart 1. **May teach.** A teacher who has a supervisory management license may teach in the supervisory management program and may also teach courses in:

A. principles of supervision and management;

B. human resource management;

C. labor relations;

D. productivity improvement;

E. employee training;

F. problem solving;

G. quality/participatory management;

H. statistical process control;

I. quality first;

J. production/inventory control;

K. appraisal and evaluation;

L. work habits and absenteeism;

M. leadership development;

N. supervising for results;

O. job coaching; and

P. negotiations.

Subp. 2. **Other requirements.** The applicant must meet the requirements in part 3709.0100.

Subp. 3. **Occupational experience requirement.** The applicant must have 8,000 hours of verified occupational experience in a managerial level position including but not limited to budget development or control, employee selection and supervision, employee performance appraisal and evaluation, and assessment of employee training needs.

Subp. 4. **Substitution for occupational experience.** The applicant may substitute the education described under item A, B, C, or D for up to 4,000 hours of the occupational experience required in subpart 3. The education must be from an accredited postsecondary institution.

A. A bachelor's or higher degree in business, marketing, or management may be substituted for 4,000 hours.

B. An associate degree in business, management, or marketing may be substituted for 2,000 hours.

C. A diploma in supervision or management programs. A one-year program equals 1,050 hours. A two-year program equals 2,100 hours.

D. The completion of courses for credit or clock hours for credit in business administration, business management, finance, human resource management, accounting, training and development, supervisory management, manufacturing management, and productivity and management. One clock hour of instruction equals one hour of occupational experience. One quarter credit equals 20 hours of occupational experience. One semester credit equals 30 hours of occupational experience.

Subp. 5. **Occupational recency substitution.** Teaching experience at an accredited postsecondary institution or at an industrial setting may be substituted for 1,500 of the 2,000 hours required in part 3709.0100, subpart 1, item A, if the teaching is done during this five-year period. The teaching must be in management programs or courses that include

supervision or management content. Two hours of teaching equal one hour of occupational experience.

3709.0330 COMPUTERIZING SMALL BUSINESS.

Subpart 1. **May teach.** A teacher who has a computerizing small business license may teach in the computerizing small business program and may also teach courses in:

A. integration of computer hardware and software to business;

B. introduction to personal computers; and

C. principles or business management.

Subp. 2. **Other requirements.** The applicant must meet the requirements in part 3709.0100.

Subp. 3. **Occupational experience requirement.** The applicant must have 8,000 hours of verified occupational experience as a working proprietor or managerial level employee responsible for, and making decisions based on, sources and use of capital. A minimum of 2,000 hours of this experience must be in developing a combination of microcomputer hardware and software processes for computerizing businesses. Computerizing a business means to do a feasibility study that includes analyzing, prioritizing, researching availability, evaluating, and reviewing computer needs.

Subp. 4. **Substitution for occupational experience.** The applicant may substitute the education described under item A, B, C, or D for up to 4,000 hours of the occupational experience required in subpart 3. The education must be from an accredited postsecondary institution. Notwithstanding this substitution, the applicant must not substitute for the 2,000 hours of experience in developing a combination of microcomputer hardware and software processes for computerizing small business.

A. A bachelor's or higher degree in business administration, business management, or accounting may be substituted for 4,000 hours.

B. An associate degree in accounting, business management, business entrepreneurship, or microcomputer sales

and service may be substituted for 2,000 hours.

C. A diploma in business entrepreneurship, small business management, preparation for small business ownership, accounting, or computerizing small business may be substituted. A one-year program equals 1,050 hours. A two-year program equals 2,100 hours.

D. The completion of courses for credit or clock hours for credit in computer systems design, accounting, business management, and business computer applications may be substituted. One clock hour of instruction equals one hour of occupational experience. One quarter credit equals 20 hours of occupational experience. One semester credit equals 30 hours of occupational experience.

Subp. 5. **Occupational experience substitution.** Teaching experience at an accredited postsecondary institution or at an industrial setting may be substituted for 1,500 of the 2,000 hours required in part 3709.0100, subpart 1, item A, if the teaching is done during this five-year period. The teaching must be in computerizing small business, small business management, or preparation for small business ownership. Two hours of teaching equal one hour of occupational experience.

3709.0340 PRODUCTIVITY TECHNICIAN/PRODUCTIVITY AND INVENTORY MANAGEMENT.

Subpart 1. **May teach.** A teacher who has a productivity license may teach in the productivity technician program and the productivity and inventory management program and may also teach courses in:

A. human resource management;

B. productivity improvement;

C. problem solving/decision making;

D. quality systems;

E. statistical process control; and

F. production or inventory control.

Subp. 2. **Other requirements.** The applicant must meet the requirements in part 3709.0100.

Subp. 3. **Occupational experience requirement.** The applicant must have 8,000 hours of verified occupational experience as a manager, facilitator, or trainer in two or more of the following:

A. management/employee involvement (MEI);

B. statistical process control (SPC);

C. quality assurance or quality control systems (QAQC);

D. problem solving/decision making techniques;

E. just in time techniques (JIT); and

F. production and inventory control.

Subp. 4. **Substitution for occupational experience.** The applicant may substitute the education described under item A, B, C, or D for up to 4,000 hours of the occupational experience required in subpart 3. The education must be from an accredited postsecondary institution.

A. A bachelor's or higher degree in business administration or management, industrial engineering or management, economics, personnel management, organizational development, or marketing may be substituted for 4,000 hours.

B. An associate degree in production and inventory management, production technician, supervisory management, personnel management, manufacturing management, quality technician, business administration, or marketing management may be substituted for 2,000 hours.

C. A diploma in production and inventory management, productivity technician, supervisory management production technician, or marketing management may be substituted. A one-year program equals 1,050 hours. A two-year program equals 2,100 hours.

D. The completion of courses for credit or clock hours for credit or seminars and workshops by professional organizations in transformation of American industry, manufacturing process, production and inventory management techniques, engineering drawings, quality assurance product development, work simplifications, organizational structure of

business, material requirements planning, industrial master planning, capacity management, production activity management, inventory management, employee involvement, statistical process, problem solving, or socio-economic systems may be substituted. One clock hour of instruction equals one hour of occupational experience. One quarter credit equals 20 hours of occupational experience. One semester credit equals 30 hours of occupational experience.

Subp. 5. **Occupational recency substitution.** Teaching experience at an accredited postsecondary institution, or at an industrial or military setting may be substituted for 1,500 of the 2,000 hours required in part 3709.0100, subpart 1, item A, if the teaching is done during this five-year period. The teaching must be in production and inventory management, productivity technician, supervisory management, statistical process control, quality assurance or quality control systems, participation management/employee involvement process, problem solving/decision making techniques, just in time techniques, or production/inventory control. Two hours of teaching equal one hour of occupational experience.

February 3, 1989

Mailing List for Emerging Occupations 3709.0230 to 3709.0340
and Business and Office 3700.0376 to 3700.0379

Mailing list for both rules:

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Assistant Directors

Adult Extension Directors

General Advisory Committee (see attached list)

Rule Making Mailing List (see attached list)

SBVTE specialists (see attached list)

Mailing list for just Business and Office rules:

Business & Office Mailing List (see attached list)

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MINNESOTA STATE BOARD OF VOCATIONAL TECHNICAL EDUCATION

Statement of Need and Reasonableness
for Permanent Rules 3700.0376 to
3700.0379 and 3709.0280 to 3709.0340
Covering the Licensure of Postsecondary
Vocational Technical Education

Rules as Proposed:

Business and Office

3700.0376 Financial Aid Assistant (Student Financial Aid Assistant)
3700.0377 Microcomputer Support Specialist (Microcomputer Specialist)
3700.0378 Advanced Business Technology Advanced Business Communications)
3700.0379 Office Information Processing Specialist

Other

3709.0280 Telecommunications Systems Technician
3709.0290 Neon and Sign Fabrication
3709.0300 Diesel Fuel Injection Specialist
3709.0310 Electronic Publishing/Information Specialist (Electronic Desktop Publishing)
3709.0320 Supervisory Management
3709.0330 Computerizing Small Business
3709.0340 Productivity Technician/Productivity and Inventory Management (Productivity Technician) (Quality and Productivity Management)

The statutory authority for the State Board of Vocational Technical Education to promulgate these rules is contained in Minnesota Statutes section 136C.04, subd. 9 which states:

Licensure. The State Board may promulgate rules, according to the provisions of Chapter 14, for licensure of teaching, support, and supervisory personnel in postsecondary and adult vocational education. The State Board may adopt licensure rules according to Sections 14.29 to 14.36 when necessary for continuous programs approved by the Board and when the Board determines appropriate licensure standards do not exist.

* Notation

The background information presented here first appeared in a Need and Reasonableness statement for proposed permanent rules 3709.0100 to 3709.0200 published in the State Register on November 7, 1988, Vol. 13, No. 19. The rules listed in this statement are a continuation of the process of development of instructor licensure for new venture programs. For the purpose of clarity the information is repeated in this part.

BACKGROUND INFORMATION

The State Board of Vocational Technical Education evaluates and approves initial and annual program applications according to State Board of Education rules 3505.6100 to 3505.6400. Approximately ten to fifteen new venture programs receive approval annually. A new venture program is one which has not been previously offered within the technical institute system and represents an entirely new program to be delivered. The Office of the Attorney General advised the State Board of Vocational Technical Education that the emergency rulemaking power of the board according to sections 14.29 to 14.36 no longer was in effect. The Board, therefore, is using the permanent rule process for new venture programs since no appropriate licenses for these categories exist. Individual committees were formed for each occupational license. The committees consisted of the State Specialist of the occupational program area, the State License Revision Specialist, representatives of industry, program coordinators, and related program instructors.

GENERAL INFORMATION

The proposed permanent rules follow the format established by the revised agricultural instructor requirements adopted September 12, 1987, and the revised business and office rules adopted February 6, 1988. There are four major changes within the previous revisions and reflected within these licenses.

1. Crossover areas. The crossover areas compliment the Technical Institute systems program restructuring which began in 1986. This effort converts programs to courses and then courses to credits. Thus the license allows the holder to teach a particular program and specified courses in any program throughout the institute. The courses listed as crossovers are reasonable since they are a result of the expertise acquired via the occupational and/or educational experiences specifically required of the license holder. This is needed to remove an artificial barrier which, in the past, allowed the individual to teach only in a program. The new rules make it possible to implement the restructured programs with appropriate credentialed staff, allowing an instructor to teach specific courses anywhere within an institute.

2. Occupational experience requirements. The occupational experience requirement identifies the job titles which will be accepted to meet the licensure requirements. This specificity is needed to provide both the applicants and the hiring authority with information which will be used in making application for the license. The occupational experience requirements are reasonable because they are conceptually and functionally represented in the educational programs and in the occupations for which the programs

prepare individuals. There is also an increase in the total number of occupational hours from current rule of 6000 hours to revised rule of 8000 hours. This is reasonable since credit is given for educational experiences which relate directly to the occupation in question. In addition, credit will be given for teaching experience as it relates directly to the occupation being taught. Since these substitutions allow for a total of 4000 hours of occupational experience, the increase to 8000 hours is reasonable. In addition, the increase to 8000 hours represents total increase of only one year. Since the crossover areas require more specificity which is necessary to teach individual courses throughout the institute, a greater depth and breadth of knowledge is required and is represented in the additional year of experience.

3. Recent occupational experience. There is an increase in recent occupational experience from "500 to 1000 hours in the last five years" to "2000 hours in the last five years". This increase is necessary so that individuals teaching programs and courses are knowledgeable about technical, economic and industrial changes as they relate to their specific occupational field. It is reasonable since it allows a five year time frame in which to acquire one year or 2000 hours of experience, as well as a teaching substitution of up to 1500 hours of the 2000 required. It would be possible, therefore, to obtain the 2000 hours of occupational experience by working only four summers, or with a teaching substitution of 1500 hours acquire the remaining 500 hours in only one summer.

4. Substitution for occupational experience. This subpart is necessary as a means of allowing teachers to expand into new, modified, or restructured programs which reflect both new content area and existing content. The utilization of teaching experience in specified programs assures that only teaching experience which is conceptually related to the new, modified, or restructured program is allowed as a substitute for recent occupational experience. This recognizes specific knowledge in current programs as applicable to new programs which contain a portion of the same or similar content. 500 hours of recent occupational experience is still retained for the new licensure area to assure up to date industrial exposure to the occupation. This amount is reasonable because it can be obtained over five years and is only 12 1/2 weeks.

BUSINESS AND OFFICE RULES 3700.0376 To 3700.0377

These rules will be added to the current revised rules in Business and Office 3700.0300 to 3700.0375. The 3700.0376 to 3700.0379 represent new venture programs for which no appropriate license exists. 3700.0376 to 3700.0379 specifies requirements for each individual license as follows:

Subpart 1. May teach. Lists programs and courses which license holder may teach.

Subpart 2. Other requirements. Refers to the other requirements as listed in 3700.0100 for all instructors and 3700.0300 for Business and Office instructors.

Subpart 3. Occupational area requirements. Specifies number of hours and specific occupational areas acceptable for instructor licensure in each occupational program.

Subpart 4. Substitution for occupational experience. Degrees, diplomas, or coursework is identified which enable the applicant to substitute specific educational experience for designated number of occupational hours.

Subpart 5. Substitution for recent occupational experience. Identifies relevant current teaching experience which can substitute for a portion of the recency requirements of 3709.0100, subp. 1, item A.

3700.0376 FINANCIAL AID ASSISTANT

Financial Aid Assistant is a new venture program for which no appropriate licensure exists.

Subpart 1. May Teach. There is no crossover area allowed for this license since it is a unique one of a kind program. There is no other program area which would utilize financial aid specific content. Therefore it is reasonable not to list any crossover area.

Subpart 2. Other requirements. This refers to the general requirements as specified in 3700.0200 for all instructors and 3700.0300 for Business and Office instructors. There are no changes in this part.

Subpart 3. Occupational experience requirements. The experience is specific to the area of content within the financial aid program. The majority of the experience is in financial aid. This is necessary to assure the applicant is cognizant of the job skills and knowledge to function in this area. This is reasonable since there is a pool of candidates from which to acquire staff in educational institutions who administer financial aid and whose jobs contain the base of knowledge required in this program. Administrative support experience is allowed for up to 2000 hours of experience and is reasonable since financial aid individuals may start from a clerical position incorporating the skills required at that level and expanding the knowledge base through experience in a financial aid setting. Basic clerical skills are taught within this program.

Subpart 4. Substitution for occupational experience. The bachelor degrees as listed contain content which is applicable to the financial aid program. Business, accounting or financial aid

administration all deal with finance and records which constitute a major portion of the program. These are reasonable substitutions. The same categories are referred to at the associate degree and diploma level. Administrative support is listed in both of these areas as an appropriate substitution for the 2000 hours of experience only for the administrative support experience allowed in subpart 3. The courses indicate administrative support areas and financial aid areas. Some of the coursework found within these educational experiences are contained within the financial aid program and are, therefore, reasonable substitutions.

Subpart 5. Occupational recency substitution. Teaching experience substitution is allowed only within the financial aid area which is specific to the content and, therefore, reasonable.

3700.0377 MICROCOMPUTER SUPPORT SPECIALIST.

Microcomputer Specialist is a new venture program for which no appropriate license exists.

Subpart 1. May teach. The crossover courses as listed represent microcomputer expertise only and are, therefore, reasonable for an an applicant with the experience in computers and microcomputers as described in subpart 3.

Subpart 2. Other requirements. This refers to the general requirements as specified in 3700.0100 for all instructors and 3700.0300 for Business and Office instructors. There are no changes.

Subpart 3. Occupational experience requirement. The experience is listed as troubleshooting computers, computer training, installation or programming. The experience must be in two or more areas to assure the breadth required to teach in this program as the graduate will be interfacing hardware, software applications and/or systems. The graduates will also need to analyze hardware and software needs and either implement or train others to do so. Therefore, the required experience is reasonable.

Subpart 4. Substitution for occupational experience. The educational substitutions are reasonable since they stay within the computer and information management areas. The content in these areas of study is the same or similar to the program's content, and is reasonable.

Subpart 5. Occupational recency substitution. Teaching experience is allowed only if it is microcomputer specific. This is reasonable since the program is to train microcomputer support specialists. The instructor would have "up-to-date" skills and knowledge since it is reasonable to assume contact with industry and technicians in the microcomputer field which allows an instructor to remain current in microcomputers and computer technology.

3700.0378 ADVANCED BUSINESS TECHNOLOGY

Advanced business technology is a new venture program for which there is no appropriate license.

Subpart 1. May teach. The crossover areas as listed are direct program content which the applicant should have as a result of the combination of experience as listed in subpart 3. Since the program consists of integrated technology it is reasonable to require the applicants to have experience in more than one area.

Subpart 2. Other requirements. This refers to the general requirements as specified in 3700.0100 for all instructors and 3700.0300 for Business and Office instructors. There are no changes in this part.

Subpart 3. Occupational experience requirements. The experience is specific to the area of content within advanced business communications technology. The listed experiences must be in two or more areas to assure the candidate will have knowledge and skills in the area of both voice and data communications. The level of experience is listed to assure the appropriate depth of knowledge required of this particular program. The communications technology inherent in the particular occupational areas include integrated voice/data communications, cabling requirements, asynchronous and bisynchronous communications, as well as the market place technological offerings and relative pricing structure. Since this program prepares individuals to assist firms currently using this technology or planning to implement this technology in the future, the listed criteria for instructor licensure is both necessary and reasonable.

Subpart 4. Substitution for occupational experience. The bachelor degrees as listed contain content which is applicable to the advanced business communication program. The bachelors or associate degree, diploma and coursework all involve computer technology and/or data telecommunications and are reasonable since these are the base of the program. Electronics is included as an appropriate educational substitution since electronics involves key components within this program, which include installation and cabling.

Subpart 5. Occupational recency substitution. Teaching experience substitution is allowed only within the advanced business communication content, of telephony, data communications or network design. This is reasonable since this technology is state of the art and new, and represent the key components of the program. An individual in this area would be interfacing with current industrial needs and advisory committees of individuals within communications technology.

3700.0379 OFFICE INFORMATION PROCESSING SPECIALIST

This is a new venture program for which no appropriate license exists.

Subpart 1. May teach. The crossover areas as listed include the crossovers which fit the restructured format for programs in business and office. The experience required in subpart 3 includes office experience which requires a working knowledge of secretarial duties, as well as application of office information processing equipment to perform those tasks. Individual crossover coursework as listed are specific to the use and application of the office equipment and are taken directly from the program content, therefore being reasonable.

Subpart 2. Other requirements. This refers to the general requirements as specified in 3700.0100 for all instructors and 3700.0300 for Business and Office instructors. There are no changes in this subpart.

Subpart 3. Occupational experience requirements. The occupational experiences as described are on the supervisory level to assure the applicant has the discriminatory skills needed to determine appropriate use of the processing equipment taught in this program. This individual will be making determinations regarding use of the information processing equipment and, therefore, this experience is reasonable. The types of experiences as listed are to assure the individual will have the exposure to the office processing equipment at the level to be taught in the program. The equipment used within the program is at a level not duplicated in any other office program within the system and, therefore, the breadth of the experience is reasonable.

Subpart 4. Substitution for occupational experience. The degrees, diplomas and course content were selected for their direct application to the program content and are, therefore, reasonable. The education as described is restricted to the business and secretarial knowledge and skill categories. Both are a portion of the core content in this program.

Subpart 5. Occupational recency substitution. The teaching experience as listed remains within the clerical area. This is reasonable since this allows the applicant exposure to the most recent office equipment in use by virtue of industrial visits, advisory committees and classroom information processing equipment used in this program.

3709.0280 To 3709.0340 SPECIFIC LICENSURE REQUIREMENTS FOR OTHER NEW VENTURE PROGRAMS

Subpart 1. May teach. Lists programs and courses which license holder may teach.

Subpart 3. Other requirements. Refers to the other

requirements as listed in 3709.0100, subpart 1 and subpart 3. There are no changes in this subpart.

Subpart 3. Occupational area requirements. Specifies number of hours and specific occupational areas acceptable for instructor licensure in the specific occupational program.

Subpart 4. Substitution for occupational experience. Degrees, diplomas, or coursework is identified which enable the applicant to substitute specific educational experience for a designated number of occupational hours.

Subpart 5. Substitution for recent occupational experience. Identifies relevant current teaching experience which can substitute for a portion of the recency requirement of 3709.0100, subpart 1, item A.

3709.0280 TELECOMMUNICATIONS TECHNICIAN

Subpart 1. May teach. Lists the authorization provided by the telecommunication technician license. The courses as listed are areas of skill and knowledge which would be an expected result of any combination of experience as listed in subpart 3 and, therefore, are reasonable.

Subpart 2. Other requirements. This refers to the general requirements as listed in 3709.0100. There are no changes in this subpart.

Subpart 3. Occupational experience requirement. The experiences as listed represent both analog and digital telecommunications. The experiences are in two-way communication since this is the core of the telecommunication technician program. To allow for the breadth and depth of skill and knowledge to teach this core at least two separate types of experiences are required.

Subpart 4. Substitution of occupational experience. This subpart follows the precedent established by previously revised licenses at the ratio allowed, as well as the specificity required. The degrees in electrical engineering and telecommunications are specific in knowledge content which appears within the telecommunications program. This area is repair of systems, installation and maintenance, and telecommunications. The same same content is in the associate degrees and diploma substitutions. 2000 hours of substitution is allowed for engineering degrees other than electronic since there is less electrical system content yet technical theory which is applicable.

Subpart 5. Occupational recency substitution. Teaching experience substitution follows the precedent established by the revised licenses and is only allowed for telecommunication teaching experience. This is reasonable since it contains specific skills and knowledge related to the occupation.

3709.0290 NEON AND SIGN FABRICATION

Subpart 1. May teach. The three crossover courses as listed represent the area a technician in neon and sign fabrication would have expertise due to the criteria as listed in subpart 3. The areas are specific to the minimum level of knowledge which would be acquired either in neon signage or sign fabrication.

Subpart 2. Other requirements. This refers to the general requirements as specified in 3709.0100. There are no changes in this subpart.

Subpart 3. Occupational experience requirement. The experience is listed in production and repair of neon signage in bending and bombarding and/or sign fabrication and installation. Both of these areas are core components of the neon and sign fabrication program. It is reasonable to allow either/or as experience to allow flexibility in the teaching assignment and to assure that both key areas of the program have individuals competent in that portion of the program.

Subpart 4. Substitution for occupational experience. There are no related degrees in neon and sign fabrication. Therefore, it is reasonable not to list degrees as substitutions. The diploma and courses are specific to neon and sign fabrication. It is reasonable to allow these substitutions as the content is in the neon and sign fabrication program.

Subpart 5. Occupational recency substitution. Teaching experience is allowed only if in neon and sign fabrication. There is no current corresponding program which has the content which allowing an instructor up to date skills and knowledge within the field. It is reasonable to assume contact with industry as well as technicians in practice would keep an instructor current.

3709.0300 DIESEL FUEL INJECTION SPECIALIST

Subpart 1. May teach. The crossovers in this section pertain specifically to diesel injection pumps. Since the background of experience is only in diesel fuel injection systems, it is necessary to set strict parameters on the subjects this individual can teach. The credits in the program relate directly to diesel fuel injection systems.

Subpart 2. Other requirements. This refers to the general requirements as specified in 3709.0100. There are no changes in this subpart.

Subpart 3. Occupational experience requirement. The hours of experience are consistent with previously revised licenses. There is no change in the total required. The experience is limited to diesel fuel injection systems since that is the entire

focus of the program. In addition, an individual with this background would have had experience with diesel engines prior to moving on to the fuel injection area.

Subpart 4. Substitution for occupational experience. The substitutions allowed remain within automotive, heavy equipment, agricultural equipment, truck mechanics, and diesel injection. Mechanics is a necessary prerequisite to diesel fuel injection and is, therefore, reasonable as an educational substitution. The ratio of substitution is consistent with previously revised licenses.

Subpart 5. Occupational recency substitution. The teaching experiences allowed are specifically in the course content within diesel fuel injection systems. An instructor must supervise and repair systems and, therefore, has a need to be cognizant of the most recent diesel technology.

3709.0310 ELECTRONIC PUBLISHING/INFORMATION SPECIALIST

Subpart 1. May teach. The three levels of experience listed in subpart 3 as a requirement for licensure require the knowledge and skills which are needed to teach each of the courses as listed. It is reasonable to assume, therefore, the applicant would have the knowledge base applicable to their content.

Subpart 2. Other requirements. This refers to the general requirements as specified in 3709.0100. There are no changes in this subpart.

Subpart 3. Occupational experience requirement. It is necessary to require all three levels of experience to achieve the pedagogy required to teach this program. Typography experience is required as the base component of the program, the rough draft or outline of the published product. Layout and design is the use of white space for the product while the actual blueprint or pattern is integrating text and graphics via electronic prepress or electronic publishing. The program comprises all three, thereby making all the experiences necessary. It is reasonable to require all three areas of experience since typography and design and layout have been available approximately four years and is now widely used. It is reasonable to assume an applicant would have exposure to all levels.

Subpart 4. Substitution for occupational experience. The educational experiences as listed have courses or content which are essentially the same as the program content. It is reasonable to assume that this knowledge and attitude base combined with a minimum of 4000 hours of specific occupational experience would assure a skill level and knowledge appropriate to teach this program.

Subpart 5. Occupational recency substitution. The

substitutions as listed are reasonable since the teaching content allowed as substitutions are only in the three areas of required occupational experience. The instructor's continued contact with the advisory committee and industry allows for up to date knowledge in the three components.

3709.0320 SUPERVISORY MANAGEMENT

Subpart 1. May teach. The items listed as crossovers are courses from the actual program offered. The occupational experience listed in subpart 3 requires managerial level experience and defines the activities the applicant must have experienced at this level. The combination would allow the instructor an opportunity to acquire the knowledge skills and attitudes necessary to teach the content and is, therefore, reasonable.

Subpart 2. Other requirements. This refers to the general requirements as specified in 3709.0100. There are no changes in this subpart.

Subpart 3. Occupational experience requirement. Since this program is supervision and management, it is reasonable to require management level experience. The activities listed are necessary to assure the breadth and depth of skills and knowledge required to teach productivity and inventory management, key components of the program.

Subpart 4. Substitution for occupational experience. The educational substitutions are in business, marketing, or management. They are reasonable because of their content in industrial methods, competitive economics, manufacturing, employees and capital. This is the same type of exposure assumed in the occupational requirements.

Subpart 5. Occupational recency substitution. The substitutions allowed are only from management programs. This is reasonable since this is the central focus of supervisory management.

3709.0330 COMPUTERIZING SMALL BUSINESS

Subpart 1. May teach. The crossovers in this subpart are restricted to the knowledge acquired as a result of the criteria listed in subpart 3. This subpart combines experience of business management and systems development. It is reasonable to assume an applicant with this background could teach business management, introduction to personal computers and integration of computer hardware and software to business.

Subpart 2. Other requirements. This refers to the general requirements as specified in 3709.0100. There are no changes in this subpart.

Subpart 3. Occupational experience requirement. The content of this program is to enable a small business owner to make decisions to assist in evaluation and selection of a computerized system appropriate to their need. It is reasonable to expect the instructor to have had experience in both managing a business and systems development.

Subpart 4. Substitution for occupational experience. The substitutional hours are the same as for previously adopted rules. The substitutions are in business, accounting and computers. Business is reasonable since the content of the program is targeted to business. Accounting represents a considerable portion of the computer application. Computer experience is reasonable since system application is the outcome of computerizing of small business.

Subpart 5. Occupational recency substitution. This substitution follows previous adopted rule. The substitutions are limited to small business and computer applications. As a substitution for recency this is reasonable since only the three programs as listed contain the content of the program. An individual teaching any of the three programs listed would have up to date knowledge of systems development by way of industrial contact and advisory committees.

3709.0340 PRODUCTIVITY TECHNICIAN/PRODUCTIVITY AND INVENTORY MANAGEMENT

Subpart 1. May teach. The crossover areas are reasonable since the knowledge base is a direct result of the occupational experience as specific in subpart 3.

Subpart 2. Other requirements. This refers to the general requirements as specified in 3709.0100. There are no changes in this subpart.

Subpart 3. Occupational experience requirement. The experience is as a trainer, manager, or facilitator in the quality-productivity areas as listed. The program focuses on management system use and the process of utilizing such systems. It is reasonable, therefore, that the instructor of such a program would have experience in the described systems.

Subpart 4. Substitution for occupational experience. The education as described in business-industry, personnel, manufacturing and marketing contains content which involves management, production, organization, space utilization, promotion and many other components which are part of this program and are, therefore, reasonable.

Subpart 5. Occupational recency substitution. The substitutions follow previously adopted rule. The substitutions allowed are only within the area of teaching which contains quality and/or production. This individual would be cognizant of current trends due to the association with business, industry and advisory committees and is, therefore, reasonable.

In the Matter of the Proposed Adoption of the Rule of the State of Minnesota, State Board of Vocational Technical Education Governing Licensure Criteria: Postsecondary Vocational Technical Education Minnesota Rules 3700.0376 TO 3700.0379 (Business and Office) and 3709.0230 to 3709.0340 (Emerging Occupations)

AFFIDAVIT OF MAILING THE NOTICE OF INTENT TO ADOPT A RULE WITHOUT A PUBLIC HEARING AND CERTIFICATE OF MAILING LIST

STATE OF MINNESOTA]
] **ss.**
COUNTY OF RAMSEY]

LeAnn R. VanDorsten, being sworn says:

I hereby certify that the list of persons and associations who have requested, pursuant to Minnesota Statutes, sections 14.14, subdivision 1a and 14.22 or 14.30, that their names be placed on the State Board of Vocational Technical Education rulemaking mailing list is accurate, complete and current as of this 3rd th day of February, 1989.

That on the 3rd th day of February, 1989, at the City of St. Paul, County of Ramsey, State of Minnesota, I mailed the attached Notice of Intent to Adopt A Rule Without a Public Hearing for Business and Office rules 3700.0376 to 3700.0379 and Emerging Occupations rules 3709.0230 to 3709.0340 by depositing in the State of Minnesota Central Mail System for United States mailing, a copy thereof, with postage prepaid, to all persons and associations on the aforementioned mailing list.

LeAnn R. VanDorsten
[Name]

Executive I
[Title]

Subscribed and sworn to before me
this 3rd day of February, 1989.

Caroline E. Wisniewski

20109920.FRM

CAROLINE E. WISNIEWSKI
NOTARY PUBLIC-MINNESOTA
DAKOTA COUNTY
MY COMMISSION EXPIRES MARCH 28, 1991

Florida. Please see pg 1902

State of Minnesota

STATE REGISTER

Department of Administration—Print Communications Division



Published every Monday

6 February 1989

Volume 13, Number 32

Pages 1891-1954

Rules as Proposed

6900.0250 FEES.

Subpart 1. **Amounts.** Fees for podiatrists are as follows:

A. licensure, $200;

B. reexamination by the board under an original application for licensure, $200;

C. renewal of a license, ~~$75~~ $225;

D. late renewal of a license, an additional $50;

E. temporary permit, $200; and

F. replacement of an original license or renewal certificate, $10.

Subp. 2. [Unchanged.]

State Board of Vocational Technical Education

Proposed Permanent Rules Relating to Vocational Teacher Licenses; Business and Office, and Health Occupations

Notice of Intent to Adopt a Rule Without a Public Hearing

NOTICE IS HEREBY GIVEN that the State Board of Vocational Technical Education intends to adopt the above-entitled rule without a public hearing following the procedures set forth in the Administrative Procedure Act for adopting rules without a public hearing in *Minnesota Statutes,* Section 14.22 to 14.28. The statutory authority to adopt the rules is *Minnesota Statutes* 136C.04, Subdivision 9.

All persons have 30 days until 4:30 p.m., Tuesday, March 7, 1989, in which to submit comment in support of or in opposition to the proposed rule or any part or subpart of the rule. Comment is encouraged. Each comment should identify the portion of the proposed rule addressed, the reason for comment, and any change proposed.

Any person may make a written request for a public hearing on the rule within the 30-day comment period. If 25 or more persons submit a written request for a public hearing within the 30-day comment period, a public hearing will be held unless a sufficient number withdraw their request in writing. Any person requesting a public hearing should state his or her name and address, and is encouraged to identify the portion of the proposed rule addressed, the reason for the request, and any change proposed. If a public hearing is required, the agency will proceed pursuant to *Minnesota Statutes,* Sections 14.131 to 14.20.

Comments or written requests for a public hearing must be submitted to either:

Glenda Moyers, Supervisor
Minnesota Technical Institute System
100 Capitol Square Building
550 Cedar Street
St. Paul, MN 55101
Telephone: (612) 296-5707

Georgia Pomroy, License Revision Specialist
Minnesota Technical Institute System
100 Capitol Square Building
550 Cedar Street
St. Paul, MN 55101
Telephone: (612) 296-0680

The proposed rule may be modified if the modifications are supported by data and views submitted to the agency and do not result in a substantial change in the proposed rule as noticed.

A copy of the proposed rule is attached to this notice.

A Statement of Need and Reasonableness that describes the need for and reasonableness of each provision of the proposed rule and identifies the data and information relied upon to support the proposed rule has been prepared and is available from Glenda Moyers or Georgia Pomroy at the above address and phone, upon request.

If no hearing is required, upon adoption of the rule, the rule and the required supporting documents will be submitted to the Attorney General for review as to legality and form to the extent the form relates to legality. Any person may request notification of the date of submission to the Attorney General. Persons who wish to be advised of the submission of this material to the Attorney General, or who wish to receive a copy of the adopted rule must submit the written request to either:

Glenda Moyers
Minnesota Technical Institute System
100 Capitol Square Building
550 Cedar Street
St. Paul, MN 55101
(612) 296-5707

Georgia Pomroy
Minnesota Technical Institute System
100 Capitol Square Building
550 Cedar Street
St. Paul, MN 55101
(612) 296-0680

Helen Henrie, Deputy Director
Minnesota Technical Institute System

Rules as Proposed (all new material)

3700.0376 FINANCIAL AID ASSISTANT.

Subpart 1. **May teach.** A teacher who has a financial aid assistant license may teach in the financial aid assistant program.

Subp. 2. **Other requirements.** The applicant must meet the requirements listed in part 3700.0100 and the requirements for a teacher in the business and office area under part 3700.0300.

Subp. 3. **Occupational experience requirement.** The applicant must have 8,000 hours of occupational experience with a minimum of 6,000 hours in a position that administers or assists with the administration of financial aid within a postsecondary institution. The recency listed in part 3700.0300, subpart 2, must be met with this experience. The remaining hours may be in an administrative support position.

Subp. 4. **Substitution for occupational experience.** The applicant may substitute the education described in items A to D for up to 4,000 hours of the occupational experience required in subpart 3. The education must be from an accredited postsecondary institution. If the substitution is made, the applicant must still comply with the recency requirements in part 3700.0300, subpart 2.

A. A bachelor's or higher degree in business, accounting, or financial aid administration may be substituted for 2,000 hours of experience in an administrative support position and a maximum of 2,000 hours of the experience in a financial aid position.

B. An associate degree in business, accounting, administrative support, or financial aid assistant may be substituted for 2,000 hours.

C. A diploma in accounting, administrative support, or financial aid assistant may be substituted. A one-year program equals 1,050 hours. A two-year program equals 2,100 hours.

D. The completion of courses for credit or clock hours for credit in administrative support or financial aid may be substituted. One hour of instruction equals one hour of occupational experience. One quarter credit equals 20 hours of occupational experience. One semester credit equals 30 hours of occupational experience.

Subp. 5. **Substitution for recent occupational experience.** The applicant may substitute teaching experience at an accredited postsecondary institution in financial aid assistant for 1,500 hours of the 2,000 required in part 3700.0300, subpart 2. Two hours of teaching equal one hour of occupational experience required in part 3700.0300, subpart 2.

3700.0377 MICROCOMPUTER SUPPORT SPECIALIST.

Subpart 1. **May teach.** A teacher who has a microcomputer support specialist license may teach in the microcomputer support specialist program and may also teach courses in:

A. microcomputing operating system/concepts and skills; and

B. introduction to microcomputing.

Subp. 2. **Other requirements.** The applicant must meet the requirements listed in part 3700.0100 and the requirements for a teacher in the business and office area under part 3700.0300.

Subp. 3. **Occupational experience requirement.** The applicant must have 8,000 hours of business application occupational experience in two or more of the following areas with a minimum of 2,000 of the hours in microcomputers: installation of and troubleshooting computers, computer training in a business or industrial setting, or programming. The 8,000 hours may include the 2,000 hours required under part 3700.0300, subpart 2.

KEY: PROPOSED RULES SECTION — Underlining indicates additions to existing rule language. ~~Strike outs~~ indicate deletions from existing rule language. If a proposed rule is totally new, it is designated "all new material." ADOPTED RULES SECTION — Underlining indicates additions to proposed rule language. ~~Strike outs~~ indicate deletions from proposed rule language.

Subp. 4. **Substitution for occupational experience.** The applicant may substitute the education described in items A to D for up to 4,000 hours of the occupational experience required in subpart 3. The education must be from an accredited postsecondary institution. If the substitution is made, the applicant must still comply with the recency requirements in part 3700.0300, subpart 2.

A. A bachelor's or higher degree in management information systems, computer science, data processing, or telecommunications may be substituted for 4,000 hours.

B. An associate degree in computer science, data processing, microcomputer specialist, or advanced business communication may be substituted for 2,000 hours.

C. A diploma in business microcomputing, computer operator, or computer programmer may be substituted. A one-year program equals 1,050 hours. A two-year program equals 2,100 hours.

D. The completion of courses for credit or clock hours for credit in microcomputer or mainframe computer may be substituted. One hour of instruction equals one hour of occupational experience. One quarter credit equals 20 hours of occupational experience. One semester credit equals 30 hours of occupational experience.

Subp. 5. **Substitution for recent occupational experience.** The applicant may substitute teaching experience at an accredited postsecondary institution, or at an industrial or military setting in microcomputer specific training for 1,500 hours of the 2,000 required in part 3700.0300, subpart 2. Two hours of teaching equal one hour of the occupational experience required in part 3700.0300, subpart 2.

3700.0378 ADVANCED BUSINESS TECHNOLOGY.

Subpart 1. **May teach.** A teacher who has an advanced business technology license may teach in the advanced business technology program and may also teach courses in application and use of:

A. public switched networks;

B. private switched networks;

C. private branch exchange;

D. integrated services digital network;

E. microcomputer system applications;

F. asynchronous/synchronous communications; and

G. modem technology.

Subp. 2. **Other requirements.** The applicant must meet the requirements listed in part 3700.0100 and the requirements for a teacher in the business and office area under part 3700.0300.

Subp. 3. **Occupational experience requirement.** The applicant must have 8,000 hours of occupational experience in planning, designing, networking, engineering, managing, or installation and maintenance in two or more of items A to C. The 8,000 hours may include the 2,000 hours required under part 3700.0300, subpart 2.

A. computer system analysis and operation in a business setting of mainframe, minicomputers, or microcomputers;

B. voice communications; and

C. data communications.

Subp. 4. **Substitution for occupational experience.** The applicant may substitute the education described in items A to D for up to 4,000 hours of the occupational experience required in subpart 3. The education must be from an accredited postsecondary institution. If the substitution is made, the applicant must still comply with the recency requirements in part 3700.0300, subpart 2.

A. A bachelor's or higher degree in computer science, management information systems, microcomputer studies, electrical engineering, or voice data telecommunications may be substituted for 4,000 hours.

B. An associate degree in advanced business communications, electronics, microcomputer support specialist, or office information processing specialist may be substituted for 2,000 hours.

C. A diploma in business microcomputing or electronics may be substituted. A one-year program equals 1,050 hours. A two-year program equals 2,100 hours.

D. The completion of courses for credit or clock hours for credit in mainframe, microcomputers, or minicomputers; voice data or telecommunications; or electronics may be substituted. One hour of instruction equals one hour of occupational experience. One quarter credit equals 20 hours of occupational experience. One semester credit equals 30 hours of occupational experience.

Subp. 5. **Substitution for recent occupational experience.** An applicant may substitute teaching experience at an accredited postsecondary institution, or at an industrial or military setting in advanced business communications, microcomputer, telephony, data communications, or network design for 1,500 hours of the 2,000 required in part 3700.0300, subpart 2. Two hours of teaching equal one hour of occupational experience required in part 3700.0300, subpart 2.

3700.0379 OFFICE INFORMATION PROCESSING SPECIALIST.

Subpart 1. **May teach.** A teacher who has an office information processing specialist license may teach in the office information processing program and teach courses in:

A. word processing operations;

B. hardware evaluation;

C. software applications (WP/SS/DB);

D. application concepts/theory (SQ/SS/DB);

E. application design;

F. software evaluation; and

G. office desktop publishing.

Subp. 2. **Other requirements.** The applicant must meet the requirements listed in part 3700.0100 and the requirements for a teacher in the business and office area under part 3700.0300.

Subp. 3. **Occupational experience requirement.** The applicant must have 8,000 hours of occupational experience in word processing supervisory responsibilities in an end user environment where systems and technical staff interact with nontechnical employees. This experience must include applications design involvement from conception to implementation identifying office tasks, needs identification, development of software and hardware solutions, selection of staff who will use the system, and training of end users. The 8,000 hours may include the 2,000 hours required under part 3700.0300, subpart 2.

Subp. 4. **Substitution for occupational experience.** The applicant may substitute the education described in items A to D for up to 4,000 hours of the occupational experience required in subpart 3. The education must be from an accredited postsecondary institution. If the substitution is made, the applicant must still comply with the recency requirements in part 3700.0300, subpart 2.

A. A bachelor's or higher degree in business management, business education, business administration, office management, office administration, or information processing (MIS) may be substituted for 4,000 hours.

B. An associate degree in secretarial science, secretarial, office information processing, personnel assistant, office administration, or office management may be substituted for 2,000 hours.

C. A diploma in general, legal, medical, or word processing secretarial programs may substitute for 2,000 hours. A one-year program equals 1,050 hours. A two-year program equals 2,100 hours.

D. The completion of courses for credit or clock hours for credit in information processing, business, secretarial, or management may be substituted. One hour of instruction equals one hour of occupational experience. One quarter credit equals 20 hours of occupational experience. One semester credit equals 30 hours of occupational experience.

Subp. 5. **Substitution for recent occupational experience.** The applicant may substitute teaching experience at an accredited postsecondary institution, or in an industrial or military setting in general office typist, general secretarial office information processing specialist, or word processing for 1,500 hours of the 2,000 required in part 3700.0300, subpart 2. Two hours of teaching equal one hour of occupational experience required in part 3700.0300, subpart 2.

3709.0230 CHIROPRACTIC ASSISTANT.

Subpart 1. **May teach.** A teacher who has a chiropractic assistant license may teach in the chiropractic assistant program and may also teach courses in:

A. body mechanics in the workplace; and

B. therapeutic massage.

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Subp. 2. **Other requirements.** The applicant must meet the requirements in part 3709.0100.

Subp. 3. **Educational and occupational experience requirement.** The applicant must have the educational and occupational experience described in item A, B, or C. The education must be from an accredited postsecondary institution.

A. Licensed chiropractor and 4,000 hours of verified occupational experience in a chiropractic office or chiropractic hospital. This experience must include office procedures, insurance coverage, physiotherapy application, X-ray, and examinations.

B. Diploma from a two-year chiropractic technician or chiropractic assistant program and 6,000 hours of verified occupational experience as a technician or assistant in a chiropractic office or chiropractic hospital. The experience must include office procedures, insurance coverage, physiotherapy application, and assisting the chiropractor with X-ray and examinations.

C. Diploma from a one-year chiropractic technician or chiropractic assistant program or American Chiropractic Registered Radiologist technician program and 7,000 hours of verified occupational experience as a technician or assistant in a chiropractic office or chiropractic hospital. The experience must include office procedures, insurance coverage, physiotherapy application, and assisting the chiropractor with X-ray and examinations.

Subp. 4. **Occupational recency substitution.** Teaching experience at an accredited postsecondary institution, or at an industrial or military setting may be substituted for 1,500 of the 2,000 hours required in part 3709.0100, subpart 1, item A, if the teaching is done during the five-year period. The teaching must be in chiropractic assisting, chiropractic technician, or chiropractic medicine. Two hours of teaching equal one hour of occupational experience.

3709.0240 EKG/CARDIAC TECHNICIAN.

Subpart 1. **May teach.** A teacher who has an EKG/cardiac technician license may teach in the EKG/cardiac technician program and may also teach cardiopulmonary resuscitation.

Subp. 2. **Other requirements.** The applicant must meet the requirements in part 3709.0100.

Subp. 3. **Occupational experience requirement.** The applicant must have current cardiopulmonary resuscitation instructor certification and 8,000 hours of verified occupational experience in one of the following:

A. registered nurse in critical care using 12 lead cardiograms, exercise stress testing of clients, care of clients with pacemakers, and interpreting basic and advanced cardiac rhythms; or

B. supervisory EKG/cardiac technician.

Subp. 4. **Substitution for occupational experience.** An applicant may substitute the education described under item A, B, C, or D for up to 4,000 hours of occupational experience required in subpart 3. The education must be from an accredited postsecondary institution.

A. A bachelor's or higher degree in medicine, nursing, or cardiac technology may be substituted for 4,000 hours.

B. An associate degree in nursing, perfusionist, echo cardiac sonographer, EKG/cardiac technician, cardiac technology, biomedical equipment, cardiopulmonary, medical laboratory, medical technology, medical imaging, or radiography, or a bachelor's degree in biomedical science or medical technology may be substituted for 2,000 hours.

C. A diploma in nursing, perfusionist, EKG/cardiac technology, or cardiac technician may be substituted. A one-year program equals 1,050 hours. A two- or three-year program equals 2,100 hours.

D. The completion of courses for credit or clock hours for credit in cardiac care, cardiac conditions, or cardiac equipment use and maintenance may be substituted. One hour of instruction equals one hour of occupational experience. One quarter credit equals 20 hours of occupational experience. One semester credit equals 30 hours of occupational experience.

Subp. 5. **Occupational recency substitution.** Teaching experience at an accredited postsecondary institution, or at an industrial or military setting, or public safety agency may be substituted for 1,500 of the 2,000 hours required in part 3709.0100, subpart 1, item A, if the teaching is done during the five-year period. The teaching must be in cardiac technology. Two hours of teaching equal one hour of occupational experience.

3709.0250 PHYSICAL THERAPIST ASSISTANT.

Subpart 1. **May teach.** A teacher who has a physical therapist assistant license may teach in the physical therapist assistant program and may also teach courses in anatomy and physiology, medical terminology, exercise physiology, kinesiology, neuroanatomy and neurophysiology, and physical disability/rehabilitation.

Subp. 2. **Other requirements.** The applicant must meet the requirements in part 3709.0100.

Subp. 3. **Occupational and educational experience requirement.** The applicant must have the following experiences:

A. a bachelor's or higher degree in physical therapy from an American Physical Therapy Association accredited institution;

B. physical therapist registration in the state of Minnesota; and

C. 4,000 hours of verified occupational experience as a registered physical therapist in at least two of the following: acute care setting, outpatient physical therapy, long-term care, or rehabilitation setting.

Subp. 4. **Occupational recency substitution.** Teaching experience at an American Physical Therapy Association accredited institution may be substituted for 1,500 of the 2,000 hours required in part 3709.0100, subpart 1, item A, if the teaching is done during the five-year period. The teaching must be in physical therapy or physical therapy assistant. Two hours of teaching equal one hour of occupational experience.

3709.0260 PUBLIC SAFETY COMMUNICATION (911).

Subpart 1. **May teach.** A teacher who has a public safety communication (911) license may teach in the public safety communication (911) program and may also teach emergency communications.

Subp. 2. **Other requirements.** The applicant must meet the requirements in part 3709.0100.

Subp. 3. **Occupational experience requirement.** The applicant must have 8,000 hours of verified occupational experience as an operator dispatcher or supervisor in a public safety communications center with a minimum of 6,000 of the 8,000 hours doing the job of an operator dispatcher. Operator dispatcher includes level III operator dispatcher or communication training operator (CTO). Supervisor includes lead dispatcher, head dispatcher, communications manager, assistant supervisor, or shift supervisor.

Subp. 4. **Substitution for occupational experience.** An applicant may substitute the education described under item A, B, C, or D for up to 4,000 hours of occupational experience required under subpart 3. The education must be from an accredited postsecondary institution.

A. A bachelor's or higher degree in law enforcement, criminal justice, or corrections may be substituted for 4,000 hours.

B. An associate degree in law enforcement or public safety communications, or a bachelor's degree or higher in public administration may be substituted for 2,000 hours.

C. A diploma in law enforcement or public safety communication may be substituted. A one-year program equals 1,050 hours. A two- or three-year program equals 2,100 hours.

D. The completion of courses for credit or clock hours for credit in the use of public safety emergency telecommunications equipment may be substituted. One hour of instruction equals one hour of occupational experience. One quarter credit equals 20 hours of occupational experience. One semester credit equals 30 hours of occupational experience.

Subp. 5. **Occupational recency substitution.** Teaching experience at an accredited postsecondary institution, or at an industrial or military setting, or public safety agency may be substituted for 1,500 of the 2,000 hours required in part 3709.0100, subpart 1, item A, if the teaching is done during the five-year period. The teaching must be in public safety communication. Two hours of teaching equal one hour of occupational experience.

3709.0270 RADIOLOGIC TECHNOLOGY.

Subpart 1. **May teach.** A teacher who has a radiologic technology license may teach in the radiologic technology program.

Subp. 2. **Other requirements.** The applicant must meet the requirements in part 3709.0100.

Subp. 3. **Occupational and educational experience requirement.** The applicant must:

A. have a two-year certificate, associate degree or above in radiologic technology;

B. be credentialed in radiography by the American Registry of Radiologic Technologists; and

C. have 6,000 hours of verified occupational experience as a certified radiographer in a medical setting.

Subp. 4. **Occupational recency substitution.** Teaching experience at a postsecondary institution in an accredited program of radiographic technology may be substituted for 1,500 of the 2,000 hours required in part 3709.0100, subpart 1, item A, if the teaching is done during the five-year period. The teaching must be in radiologic technology. Two hours of teaching equal one hour of occupational experience.

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3709.0280 TELECOMMUNICATIONS SYSTEMS TECHNICIAN.

Subpart 1. **May teach.** A teacher who has a telecommunications systems technician license may teach in the telecommunications systems technician program and may also teach courses in:

A. antennas/transmissions lines;

B. satellite/cable systems;

C. introduction to fiber optics (fiber optics I);

D. basic telecommunication security systems;

E. microwave communications;

F. basic telecommunications;

G. telecommunications test equipment; and

H. pole climbing.

Subp. 2. **Other requirements.** The applicant must meet the requirements in part 3709.0100.

Subp. 3. **Occupational experience requirement.** The applicant must have 8,000 hours of verified occupational experience in two or more of the following:

A. installation and maintenance of electronic private branch exchange (PBX);

B. underground and aerial construction of telecommunications equipment;

C. cable or optic fiber splicing;

D. central office telecommunications installation and maintenance;

E. repair of carrier systems including "T" carrier, microwave, satellite, or optic fiber;

F. cellular communications installation and maintenance;

G. data communications including installation and maintenance of network systems, interfacing and protocol of service, and maintenance of data terminals; and

H. installation and maintenance of interactive television systems.

Subp. 4. **Substitution for occupational experience.** An applicant may substitute the education described in item A, B, C, or D for up to 4,000 hours of occupational experience required under subpart 3. The education must be from an accredited postsecondary institution.

A. A bachelor's or higher degree in electrical engineering, computer science, or telecommunications may be substituted for 4,000 hours.

B. A bachelor's degree in industrial technology, engineering (other than electrical), or an associate degree in electronics or telecommunications may be substituted for 2,000 hours.

C. A diploma in electronics or telecommunications may be substituted. A one-year program equals 1,050 hours. A two-year program equals 2,100 hours.

D. The completion of courses for credit or clock hours for credit in telecommunications hardware or systems may be substituted. One clock hour of instruction equals one hour of occupational experience. One quarter credit equals 20 hours of occupational experience. One semester credit equals 30 hours of occupational experience.

Subp. 5. **Occupational recency substitution.** Teaching experience at an accredited postsecondary institution, or at an industrial or military setting may be substituted for 1,500 of the 2,000 hours required in part 3709.0100, subpart 1, item A, if the teaching is done during the five-year period. The teaching must be in telecommunications. Two hours of teaching equal one hour of occupational experience.

3709.0290 NEON AND SIGN FABRICATIONS.

Subpart 1. **May teach.** A teacher who has a neon and sign fabrication license may teach in the neon and sign fabrication program and may also teach courses in:

A. sign and letter fabrication;

B. sign erection and service; and

C. sign electricity.

Subp. 2. **Other requirements.** The applicant must meet the requirements in part 3709.0100.

Subp. 3. **Occupational experience requirement.** The applicant must have 8,000 hours of verified occupational experience in production and repair of neon signage, in neon bending and bombarding, or sign fabrication and installation.

Subp. 4. **Substitution for occupational experience.** An applicant may substitute the education described in item A or B for up to 2,100 hours of occupational experience required under subpart 3. The education must be from an accredited postsecondary institution.

A. A diploma or certificate in neon and sign fabrication. A one-year program equals 1,050 hours. A two-year program equals 2,100 hours.

B. The completion of courses for credit or clock hours for credit in neon patterns and layout, sign electricity, sign and letter fabrication, and sign erection and service. One hour of instruction equals one hour of occupational experience. One quarter credit equals 20 hours of occupational experience. One semester credit equals 30 hours of occupational experience.

Subp. 5. **Occupational recency substitution.** Teaching experience at an accredited postsecondary institution, or at an industrial or military setting may be substituted for 1,500 of the 2,000 hours required in part 3709.0100, subpart 1, item A, if the teaching is done during the five-year period. The teaching must be in neon and sign fabrications. Two hours of teaching equal one hour of occupational experience.

3709.0300 DIESEL FUEL INJECTION SPECIALIST.

Subpart 1. **May teach.** A teacher who has a diesel fuel injection specialist license may teach in the diesel fuel injection specialist program and may also teach courses in diesel pump operation, repair, rebuilding, and calibration.

Subp. 2. **Other requirements.** The applicant must meet the requirements in part 3709.0100.

Subp. 3. **Occupational experience requirement.** The applicant must have 8,000 hours of verified occupational experience in both:

A. diesel engine operation, repair, and maintenance; and

B. diesel fuel injection system operation, repair, and maintenance.

Subp. 4. **Substitution for occupational experience.** An applicant may substitute the education described in item A, B, C, or D for up to 4,000 hours of occupational experience required under subpart 3. The education must be from an accredited postsecondary institution.

A. A bachelor's or higher degree in automotive engineering may be substituted for 4,000 hours.

B. An associate degree in diesel technology, truck and diesel mechanics, agricultural equipment mechanics, heavy equipment mechanics, or diesel fuel injection may be substituted for 2,000 hours.

C. A diploma in diesel fuel injection, truck and diesel mechanics, agricultural equipment mechanics, or heavy equipment mechanics may be substituted. A two-year program equals 2,100 hours.

D. The completion of courses for credit or clock hours for credit in diesel fuel injection may be substituted. One clock hour of instruction equals one hour of occupational experience. One quarter credit equals 20 hours of occupational experience. One semester credit equals 30 hours of occupational experience.

Subp. 5. **Occupational recency substitution.** Teaching experience at an accredited postsecondary institution, or at an industrial or military setting may be substituted for 1,500 of the 2,000 hours required in part 3709.0100, subpart 1, item A, if the teaching is done during the five-year period. The teaching must be in diesel fuel injections. Two hours of teaching equal one hour of occupational experience.

3709.0310 ELECTRONIC PUBLISHING/INFORMATION SPECIALIST.

Subpart 1. **May teach.** A teacher who has an electronic publishing/information specialist license may teach in the electronic publishing/information specialist program and may also teach courses in:

A. introduction to typography and publishing;

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B. desktop publishing;

C. page makeup techniques; and

D. corporate electronic publishing.

Subp. 2. **Other requirements.** The applicant must meet the requirements in part 3709.0100.

Subp. 3. **Occupational experience requirement.** The applicant must have 8,000 hours of verified occupational experience in all of the following:

A. layout and design;

B. typography and electronic prepress; and

C. electronic desktop publishing that integrates text and graphics.

Subp. 4. **Occupational experience substitution.** The applicant may substitute the education described in item A, B, C, or D for up to 4,000 hours of occupational experience required in subpart 3. The education must be from an accredited postsecondary institution.

A. A bachelor's or higher degree in graphic arts, commercial art, advertising art, or data processing may be substituted for 4,000 hours.

B. An associate degree in graphic arts, commercial art, or data processing may be substituted for 2,000 hours.

C. A diploma in electronic publishing/information specialist, computer typesetting, graphic arts, commercial art, or data processing may be substituted. A one-year program equals 1,050 hours. A two-year program equals 2,100 hours.

D. The completion of courses for credit or clock hours for credit in computer typesetting, graphic arts, keylining, commercial art, desktop publishing, color separation, advertising art, printing, or data processing may be substituted. One clock hour of instruction equals one hour of occupational experience. One quarter credit equals 20 hours of occupational experience. One semester credit equals 30 hours of occupational experience.

Subp. 5. **Occupational recency substitution.** Teaching experience at an accredited postsecondary institution, or at an industrial or military setting may be substituted for 1,500 of the 2,000 hours required in part 3709.0100, subpart 1, item A, if the teaching is done during the five-year period. The teaching must be in typography, layout and design, electronic prepress, or desktop publishing that integrates text and design. Two hours of teaching equal one hour of occupational experience.

3709.0320 SUPERVISORY MANAGEMENT.

Subpart 1. **May teach.** A teacher who has a supervisory management license may teach in the supervisory management program and may also teach courses in:

A. principles of supervision and management;

B. human resource management;

C. labor relations;

D. productivity improvement;

E. employee training;

F. problem solving;

G. quality/participatory management;

H. statistical process control;

I. quality first;

J. production/inventory control;

K. appraisal and evaluation;

L. work habits and absenteeism;

M. leadership development;

N. supervising for results;

O. job coaching; and

P. negotiations.

Subp. 2. **Other requirements.** The applicant must meet the requirements in part 3709.0100.

Subp. 3. **Occupational experience requirement.** The applicant must have 8,000 hours of verified occupational experience in a managerial level position including but not limited to budget development or control, employee selection and supervision, employee performance appraisal and evaluation, and assessment of employee training needs.

Subp. 4. **Substitution for occupational experience.** The applicant may substitute the education described under item A, B, C, or D for up to 4,000 hours of the occupational experience required in subpart 3. The education must be from an accredited postsecondary institution.

A. A bachelor's or higher degree in business, marketing, or management may be substituted for 4,000 hours.

B. An associate degree in business, management, or marketing may be substituted for 2,000 hours.

C. A diploma in supervision or management programs. A one-year program equals 1,050 hours. A two-year program equals 2,100 hours.

D. The completion of courses for credit or clock hours for credit in business administration, business management, finance, human resource management, accounting, training and development, supervisory management, manufacturing management, and productivity and management. One clock hour of instruction equals one hour of occupational experience. One quarter credit equals 20 hours of occupational experience. One semester credit equals 30 hours of occupational experience.

Subp. 5. **Occupational recency substitution.** Teaching experience at an accredited postsecondary institution or at an industrial setting may be substituted for 1,500 of the 2,000 hours required in part 3709.0100, subpart 1, item A, if the teaching is done during this five-year period. The teaching must be in management programs or courses that include supervision or management content. Two hours of teaching equal one hour of occupational experience.

3709.0330 COMPUTERIZING SMALL BUSINESS.

Subpart 1. **May teach.** A teacher who has a computerizing small business license may teach in the computerizing small business program and may also teach courses in:

A. integration of computer hardware and software to business;

B. introduction to personal computers; and

C. principles or business management.

Subp. 2. **Other requirements.** The applicant must meet the requirements in part 3709.0100.

Subp. 3. **Occupational experience requirement.** The applicant must have 8,000 hours of verified occupational experience as a working proprietor or managerial level employee responsible for, and making decisions based on, sources and use of capital. A minimum of 2,000 hours of this experience must be in developing a combination of microcomputer hardware and software processes for computerizing businesses. Computerizing a business means to do a feasibility study that includes analyzing, prioritizing, researching availability, evaluating, and reviewing computer needs.

Subp. 4. **Substitution for occupational experience.** The applicant may substitute the education described under item A, B, C, or D for up to 4,000 hours of the occupational experience required in subpart 3. The education must be from an accredited postsecondary institution. Notwithstanding this substitution, the applicant must not substitute for the 2,000 hours of experience in developing a combination of microcomputer hardware and software processes for computerizing small business.

A. A bachelor's or higher degree in business administration, business management, or accounting may be substituted for 4,000 hours.

B. An associate degree in accounting, business management, business entrepreneurship, or microcomputer sales and service may be substituted for 2,000 hours.

C. A diploma in business entrepreneurship, small business management, preparation for small business ownership, accounting, or computerizing small business may be substituted. A one-year program equals 1,050 hours. A two-year program equals 2,100 hours.

D. The completion of courses for credit or clock hours for credit in computer systems design, accounting, business management, and business computer applications may be substituted. One clock hour of instruction equals one hour of occupational experience. One quarter credit equals 20 hours of occupational experience. One semester credit equals 30 hours of occupational experience.

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Subp. 5. **Occupational experience substitution.** Teaching experience at an accredited postsecondary institution or at an industrial setting may be substituted for 1,500 of the 2,000 hours required in part 3709.0100, subpart 1, item A, if the teaching is done during this five-year period. The teaching must be in computerizing small business, small business management, or preparation for small business ownership. Two hours of teaching equal one hour of occupational experience.

3709.0340 PRODUCTIVITY TECHNICIAN/PRODUCTIVITY AND INVENTORY MANAGEMENT.

Subpart 1. **May teach.** A teacher who has a productivity license may teach in the productivity technician program and the productivity and inventory management program and may also teach courses in:

A. human resource management;

B. productivity improvement;

C. problem solving/decision making;

D. quality systems;

E. statistical process control; and

F. production or inventory control.

Subp. 2. **Other requirements.** The applicant must meet the requirements in part 3709.0100.

Subp. 3. **Occupational experience requirement.** The applicant must have 8,000 hours of verified occupational experience as a manager, facilitator, or trainer in two or more of the following:

A. management/employee involvement (MEI);

B. statistical process control (SPC);

C. quality assurance or quality control systems (QAQC);

D. problem solving/decision making techniques;

E. just in time techniques (JIT); and

F. production and inventory control.

Subp. 4. **Substitution for occupational experience.** The applicant may substitute the education described under item A, B, C, or D for up to 4,000 hours of the occupational experience required in subpart 3. The education must be from an accredited postsecondary institution.

A. A bachelor's or higher degree in business administration or management, industrial engineering or management, economics, personnel management, organizational development, or marketing may be substituted for 4,000 hours.

B. An associate degree in production and inventory management, production technician, supervisory management, personnel management, manufacturing management, quality technician, business administration, or marketing management may be substituted for 2,000 hours.

C. A diploma in production and inventory management, productivity technician, supervisory management production technician, or marketing management may be substituted. A one-year program equals 1,050 hours. A two-year program equals 2,100 hours.

D. The completion of courses for credit or clock hours for credit or seminars and workshops by professional organizations in transformation of American industry, manufacturing process, production and inventory management techniques, engineering drawings, quality assurance product development, work simplifications, organizational structure of business, material requirements planning, industrial master planning, capacity management, production activity management, inventory management, employee involvement, statistical process, problem solving, or socio-economic systems may be substituted. One clock hour of instruction equals one hour of occupational experience. One quarter credit equals 20 hours of occupational experience. One semester credit equals 30 hours of occupational experience.

Subp. 5. **Occupational recency substitution.** Teaching experience at an accredited postsecondary institution, or at an industrial or military setting may be substituted for 1,500 of the 2,000 hours required in part 3709.0100, subpart 1, item A, if the teaching is done during this five-year period. The teaching must be in production and inventory management, productivity technician, supervisory management, statistical process control, quality assurance or quality control systems, participation management/employee involvement process, problem solving/decision making techniques, just in time techniques, or production/inventory control. Two hours of teaching equal one hour of occupational experience.

CERTIFICATE OF THE STATE OF MINNESOTA
STATE BOARD OF VOCATIONAL TECHNICAL EDUCATION

AUTHORIZING RESOLUTION FOR ADOPTION OF A RULE WITHOUT A PUBLIC HEARING

I, JoAnn Cardenos Enos, do hereby certify that I am a member and the President of the State Board of Vocational Technical Education, a Board duly authorized under the laws of the State of Minnesota, and that the following is a true, complete, and correct copy of a resolution adopted at a meeting of the State Board of Vocational Technical Education, duly and properly called and held on the 14th day of March, 1989, that a quorum was present, and that a majority of those present voted for the resolution which has not been rescinded or modified.

"RESOLVED, that the rules relating to Postsecondary Licensure Criteria, for business and office occupation rules 3700.0376 to 3700.0379 and rules for emerging occupations 3709.0280 to 3709.0340, are approved and adopted, pursuant to authority vested in the State Board of Vocational Technical Education by Minnesota Statutes 136C.04, Subdivision 9. Helen Henrie, the Deputy Director of the State Board of Vocational Technical Education, is authorized to sign the Findings of Fact, conclusions and order adopting the rule and further is authorized to modify the rule if necessary to obtain the approval of the rule by the Attorney General and to perform the necessary acts to provide that the rule shall have the force and effect of law."

IN WITNESS WHEREOF, I have hereunto subscribed my name this 14th day of March, 1989.

JoAnn Cardenos Enos

Officer of the Board

Allan F. Olson

Attest by one other Board member

STATE OF MINNESOTA
DEPARTMENT OF VOCATIONAL TECHNICAL EDUCATION

In the Matter of the Proposed Adoption of the Rule of the State of Minnesota Governing Postsecondary Vocational Teaching Licensure, rules for Business and Office Occupations 3700.0376 to 3700.0379 and rules for emerging occupations 3709.0280 to 3709.0340

FINDINGS OF FACT, CONCLUSIONS, AND ORDER ADOPTING RULE WITHOUT PUBLIC HEARING

Notice of the State Board of Vocational Technical Education intent to adopt the above-entitled rule was published in the *State Register* on February 6, 1989, and was sent by United States mail to all persons on the list maintained by the agency pursuant to Minnesota Statutes, sections 14.14, subdivision 1a and 14.22 on February 3, 1989. The statement of need and reasonableness was prepared before the notice of intent to adopt a rule without a public hearing was mailed to all persons on the rulemaking mailing list and published in the *State Register* and was available to the public.

All persons were given the opportunity to submit comment on the rule for 30 days after notice of the proposed rulemaking. No requests for a public hearing on the rule were received by the agency.

No comments on the rule were received by the agency. No requests for submission to the Attorney General were received by the agency.

Based on the comments and evidence in the record before the agency, I find the following:

The above-captioned rule is needed and reasonable.

NOW, THEREFORE, IT IS ORDERED that the rules identified as 3700.0376 to 3700.0379 and 3709.0280 to 3709.0340 Postsecondary Vocational Teaching Licenses, Business and Office and Emerging Occupations are adopted this 14th day of March, 1989, pursuant to authority vested in the State Board of Vocational Technical Education by Minnesota Statutes, section 136C.04, Subdivision 9.

Helen Henrie 3/14/89

Helen Henrie Date
Deputy Director
State Board of Vocational Technical Education

20109930.FRM

In the Matter of the Adoption of the Rule of the State Board of Vocational Technical Education Governing 3700.0340 Postsecondary Vocational Licensure, Business and Office Occupations and Emerging Occupations

DECLARATION OF COUNSEL

I, H. CAMILLA NELSON, Special Assistant Attorney General, do hereby declare that I have examined the above captioned rule, and the supporting rulemaking record, and that, based on my examination, the Administrative Procedure Act and Minnesota Rules, chapter 2010 have been followed. Any exceptions are listed below. For Attorney General billing purposes, the four-digit docket client code is 0831.

H. Camilla Nelson
Special Assistant Attorney General

Dated: March 17, 1989

20109935.FRM

In the Matter of the Adoption of the Rule of the State Board of Vocational Technical Education Governing 3700.0376 to 3700.0379 and 3709.0280 to 3709.0340 Postsecondary Vocational Licensure, Business and Office Occupations and Emerging Occupations

DECLARATION OF COUNSEL

I _____, Assistant Attorney General, do hereby declare that I have examined the above captioned rule, and the supporting rulemaking record, and that, based on my examination, the Administrative Procedure Act and Minnesota Rules, chapter 2010 have been followed. Any exceptions are listed below. For Attorney General billing purposes, the four-digit docket client code is _____.

_____
Assistant Attorney General

Dated: _____

20109935.FRM

STATE OF MINNESOTA

MINNESOTA TECHNICAL INSTITUTE SYSTEM
Board of Vocational Technical Education
Capitol Square Building, 55O Cedar Street
St. Paul, Minnesota 55101

Office Memorandum

RECEIVED
MAR 24 89
ATTORNEY GENERAL'S OFFICE
515 TRANSPORTATION BLDG.
ST. PAUL, MN 55155

TO: Marti Casserly
Office of the Attorney General

FROM: Georgia Pomroy, License Revision Specialist

DATE: March 24, 1989

PHONE: 296-3929

SUBJECT: Document Review

The documents for the following rules are enclosed for your review. In some instances the license titles were changed by committees. The original intent and resolution titles appear underlined and bracketed for clarification in the listing.

3700.0376 Financial Aid Assistant
3700.0377 Microcomputer Specialist (Microcomputer Support Specialist)
3700.0378 Advanced Business Communications (Advanced Business Technology)
3700.0379 Office Information Processing Specialist
3709.0230 to 3709.0270 are withdrawn
3709.0280 Telecommunications Systems Technician
3709.0290 Neon and Sign Fabrications
3709.0300 Diesel Fuel Injection Specialist
3709.0310 Electronic Publishing/Information Specialist (Electronic Desktop Publishing)
3709.0320 Supervisory Management
3709.0330 Computerizing Small Business
3709.0340 Productivity Technician/Productivity and Inventory Management
(Quality and Productivity Management and Productivity Technician)

1. Authorizing Resolutions - June 14, 1988, and August 15, 1988

2. Copy of Solicitation of Outside Opinion as published in the *State Register*
June 13, 1988, Volume 12, Number 50, page 2719
August 13, 1988, Volume 13, Number 7, page 355

3. Copy of Proposed Rule as approved by Revisor of Statutes (3709.0230 to 3709.0270 are withdrawn)

4. Notice of Intent to Adopt a Rule Without a Public Hearing as mailed
January 25, 1989, 3700.0376 to 3700.0379 and
January 25, 1989, 3700.0230 to 3709.0340

5. Need and Reasonableness - 3700.0376 to 3700.0379 and 3700.0280 to 3709.0340

6. Affidavit of Mailing - February 3, 1989

7. Notice of Intent to Adopt a Rule Without a Public Hearing as published in the *State Register* (3700.0230 to 3709.0270 withdrawn)

8. Four copies of the rule as adopted

9. Board's resolution adopting the rules - March 14, 1989

10. Findings of Fact - Conclusions of Law - March 14, 1989

11. Declaration by Attorney General

GP:lrv
MOTTL.316

Enclosures