

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 (Micro-
computer 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 Techni-
cian) (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 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.