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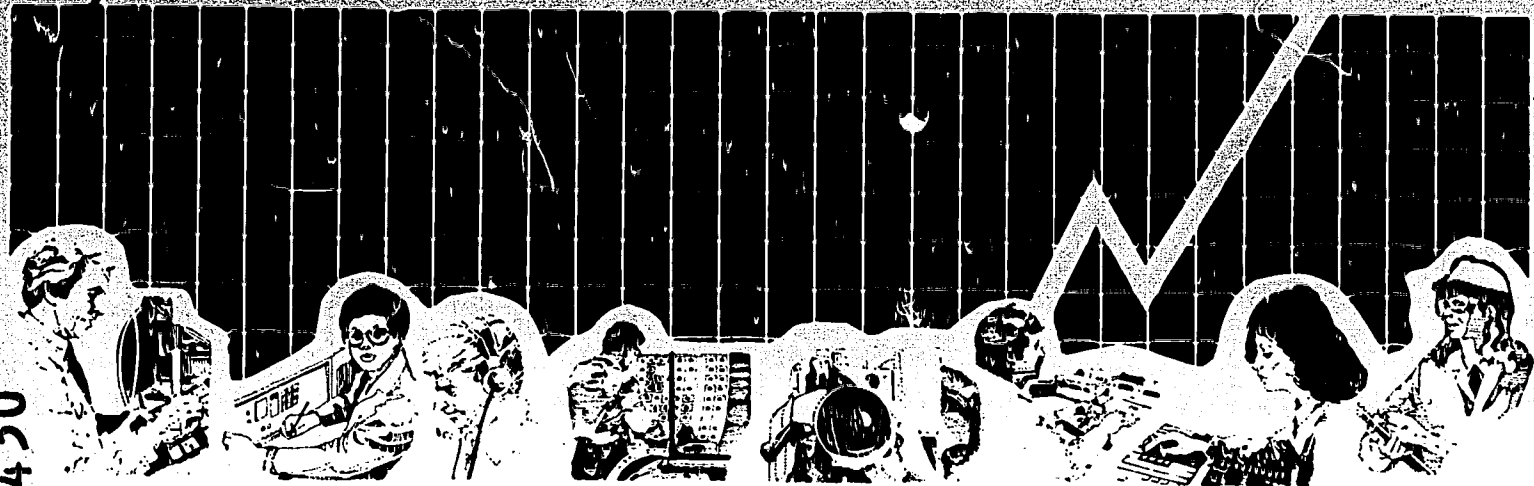
**ABSTRACT**

Designed to clarify the function of the Associate in Applied Science (AAS) degree, this report lists and explains criteria for the degree as a means of enhancing the potential of the AAS to serve as a national employment credential and as the curricular foundation for the occupational mission of the community, technical, and junior colleges. The criteria state: (1) associate degree programs designed primarily for immediate employment should be designated as AAS programs; (2) the AAS degree should be identified with a specialty designation, (3) AAS degree programs must be responsive to the employment needs of business, industry, public agencies, the military and entrepreneurship; (4) all components of the AAS degree requirements should be outcome oriented; (5) AAS degree requirements should be limited to 60 to 72 semester credit hours; (6) the technical specialty component of the AAS degree should constitute 50% to 75% of the credits; (7) general education requirements should constitute a minimum of 25% of course credits; (8) minimum admission criteria for AAS degree programs are essential; (9) AAS degree programs should be supported by student services designed for career-oriented students; (10) a curriculum structure with multiple exit/re-entry points is desirable; (11) credit should be awarded for prior experience; (12) curricula should be articulated with appropriate secondary schools; (13) articulation with appropriate and receptive four-year colleges should be gained through cooperative planning and transfer agreements; and (14) selected programs should be networked at local, state, and national levels. (AYC)

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# Council for Occupational Education

Volume II

## Monograph Series

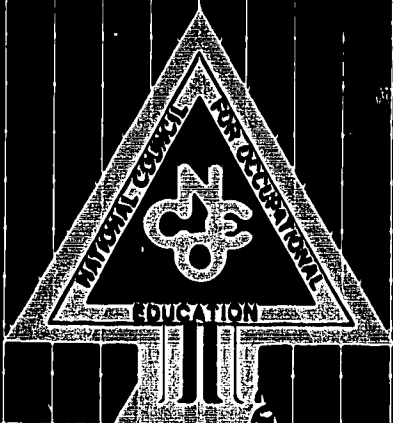
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**Criteria for Excellence  
in  
Associate in Applied Science  
Degree Programs**

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A Policy Statement  
of the  
National Council for Occupational Education  
prepared by the  
Task Force on the Associate in Applied Science Degree

July 15, 1985

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## Introduction

The quality of American education is a prime issue of national concern in this decade. The gulf between societal expectation and realization was first identified in the elementary and secondary schools with the label of mediocrity being liberally applied. Soon after, higher education also came under scrutiny. By the early 1980's, the American Association of Community and Junior Colleges (AACJC) had already begun a study of the Associate Degree which serves as the curriculum base for the 1,200 community, technical and junior colleges in the nation. The conclusions and recommendations of this study provided basic guidelines for the associate degree which were accepted as an **official** policy statement by the Board of Directors of AACJC in July of 1984.

The dialogue within the two-year college community generated by this statement has sparked a closer look at a specific type of associate degree - the Associate in Applied Science (AAS). This most recent and perhaps most promising variant is designed primarily to prepare students for immediate employment in a career field **without foregoing** the opportunity for **further education**. The AACJC Policy Statement included the following reference to the Associate in Applied Science Degree:

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The second type of degree program is designed to lead the individual directly to employment in a specific career. While the titles given these degrees vary considerably among community, technical, and junior colleges, the most common title is Associate in Applied Science. Other titles used are Associate in Business, Associate in Data Processing, or other specific occupations, and Associate in Applied Arts and Sciences. It should be noted that the number of degrees awarded in these occupational areas has been increasing in the last two decades. In some instances, particularly in the health-related fields, the degree is a prerequisite for taking a licensing examination. Some institutions belong to voluntary specialized accrediting agencies that set qualitative degree standards for their programs. Although the objective of the Associate in Applied Science degree is to enhance employment opportunities, some baccalaureate degree granting institutions have developed upper division programs to recognize this degree for transfer of credits. This trend is applauded and encouraged.

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Postsecondary occupational education, including AAS degree programs, increased dramatically between 1960 and 1970. According to the National Center for Educational Statistics, 43% of all associate degrees awarded in this decade were occupational in nature. By 1980, according to the preliminary presentation of the AACJC National Task Force to Redefine the Associate Degree, this figure had risen to 62.5%. The AAS degree, or similar occupational degrees, had become the choice of the majority of community, technical, and junior college graduates.

## Statement of Purpose

In response to this trend, the National Council for Occupational Education (NCOE), an affiliate of AACJC, saw an urgent need to identify criteria leading toward excellence in the AAS degree so that it may become the cornerstone for a national program of human resource development. It will then become more effective for a wide range of occupational education and as a national employment credential.

In the interest of brevity, as well as avoiding areas already dealt with in other recent reports of undergraduate education, this report is primarily concerned with the curriculum for the AAS degree. It concentrates on the scope, form, substance, and image of the degree - all in a national context.

As in the preceding work of the AACJC National Task Force to Redefine the Associate Degree, the overall objective of this report is to clarify the function of this specific associate degree and to recommend ways of strengthening it. In a word, to propose, with ample feedback from the field, criteria for excellence in AAS degree programs.

# Criteria for Excellence in AAS Degree Programs

1. **Associate degree programs designed primarily for immediate employment should be designated as an Associate in Applied Science Degree Program.**

## **Degree Designation**

Considerable variation in associate degree titles exists across the nation, particularly in occupational education. Although some states use the Associate in Science (AS) degree to designate two-year occupational programs, by far the more common usage is the AAS. Common degree terminology should improve national visibility, reduce confusion in our mobile economic society, increase the credibility of the AAS degree, and form the basis for a nationwide program of human resource development.

2. **The AAS degree should be identified with a specialty designation.**

## **Specialty Designation**

This identification of a specialty or major, currently common practice in many institutions, implies relevant preparation for employment in a specific area of work. Even though there are advantages in labeling the degree program as specifically as possible, this should not preclude designations that cover a field of study rather than a single specialty, e.g., Associate in Applied Science Degree in Health Occupations.

3. **AAS degree programs must be responsive to the employment needs of business, industry, public agencies, the military, and entrepreneurship.**

## **Employment Needs**

The single most important purpose of the AAS Degree is to prepare students to enter directly into specific occupations. For the degree to achieve greater acceptance as an employment credential, effective articulation must be developed between the educational institution and the employers of AAS degree graduates. The most important facet of the linkage with employers is the maintenance of a timely and effective curriculum reflecting current practices in the work world. This relationship with employers, however, breaks with academic tradition in that AAS degree curricula are not initiated and developed solely within the educational institution. This partnership between the institutions and the potential employer needs to be nurtured continuously.

4. **All components of the AAS degree requirements should become outcome oriented.**

## **Outcome Orientation**

Common practice in higher education is to define course and program requirements in terms of subject matter topics. Instead, faculty and academic officers from all components of the program should develop and disseminate a statement of the course and program outcomes that students must achieve. While not all of the course and program outcomes can easily be measured, there remains a responsibility to define the knowledge, skills and attitudes students are expected to attain. It is expected that this outcome orientation will apply to all components of the degree, including general education,

related studies and technical specialty courses. Evaluation measures and procedures should be **routinely utilized** to assess the adequacy of **each course in meeting stated outcomes**. Special attention should be given to measuring the **success of graduates on the job**.

5. **The AAS degree requirements should be limited to 60 to 72 semester credit hours or 90 to 108 quarter credit hours.**

### **Total Credit Hours**

There is a growing tendency to expand credit hour requirements for occupational programs to meet a variety of pressures including those from specialized accreditation and licensure agencies. Semester credit hours beyond 60 (90 quarter hours) lengthen and intensify the program beyond the normal academic load. Fifteen credit hours per term is a reasonable and challenging load for full-time students. Requirements beyond 60 semester hours (90 quarter hours) should be fully justified in terms of program outcomes. Remedial and developmental work should be in addition to the collegiate level requirements of the degree program but should, whenever possible, be pursued concurrently with skill training to enhance intent and relevance.

6. **The technical specialty component of the AAS degree should constitute 50% to 75% of the course credits.**

### **Technical Specialty**

Although general education is increasingly more important in an informational society, the credibility of occupational programs rests with the ability of the AAS degree graduate to function at the technical and mid-management level. The technical specialty component should emphasize an applications orientation through laboratory, clinical and work experiences sufficient to qualify for entry-level employment.

7. **The general education component of AAS degree programs should constitute a minimum of 25% of the course credits with the combination of general education and related studies constituting up to 50% of the course credits.**

### **General Education and Related Studies**

There is an increased recognition of the importance of general education and related studies as integral components of occupational education. Increasingly, the ability to think, reason, compute, communicate and adapt to change are essential if workers at all levels are to remain employable and cope with the expanding knowledge base. General education also includes human development in civic, consumer, environmental, and social responsibilities. Related studies typically achieve a dual purpose of enhancing general human development and providing a basic foundation for the pursuit of more advanced occupational goals. General education and related studies outcomes should be identified, implemented and measured by the institution.

## Admission Requirements

8. Although open admission to the institution for all adults is a cardinal characteristic of most community, technical, and junior colleges, minimum criteria for admission to AAS degree programs are essential.

Admission requirements should be established on an individual program basis to assure that the entering student has a reasonable probability for success and that course and program standards are maintained. Where appropriate, pre-assessment should be included in the admission requirements. Such requirements must be accompanied by maximum opportunities for access to programs by students who do not initially meet the requirements. Developmental or pre-technical certificate programs, tutoring, and/or special laboratory assistance are examples of how this may be accomplished.

9. AAS degree programs should be supported by student services designed systematically for the needs of career-oriented students.

## Student Services

As a result of the vigorous growth of occupational programs, student services now play a much larger and more important, even critical, role in student success than previously. Some colleges have even expanded the definition of "student" to include the entire community of the adult work force and now offer services to the currently employed and the unemployed. Occupational education has thus expanded horizons and markets of two-year institutions immeasurably but must now provide for success and promotability as well as entry into employment. Continuous interaction with students should begin with pre-admission testing, assessment, and counseling to assure a reasonable match of student aspirations and skills with programmatic requirements and expectations. These services should include career development activities which lead to successful placement and/or transfer.

10. A curriculum structure with multiple exit/re-entry points should be considered for the AAS degree whenever possible.

## Multiple Exit/Re-Entry

A multiple exit/re-entry structure for the AAS degree has distinct advantages for many students who because of work, family or other obligations do not complete the AAS degree in a continuous mode. Such students necessarily take advantage of convenient "stop-outs" where they can complete a segment of the program with some degree of closure before going further. One such common "building block" approach is a series of certificates which represent flexible components of the AAS degree program that may eventually be converted into the full degree. In this sense, the degree becomes a credential increasingly representative of technical and mid-management level employment; a natural step up from certificates generally identified with entry-level employment plateaus. The technical specialty component of the AAS degree should be provided as early in the program as possible. Exit/re-entry points at the end of the first term and/or first year of the program should be given particular consideration.



### **Experience Based Credit**

- 11. Credit toward the AAS degree should be awarded for knowledge and skills acquired through prior experiences.**

Increasingly, the concept that learning is learning, regardless of the source, is gaining acceptance. The ultimate determinant of what is creditable must, however, reside in college policy determined with substantial faculty involvement. Currently, credit is being awarded by many colleges for prior knowledge and skills acquired from many sources including proprietary schools, the military, labor unions, community based organizations, in-service programs of business and industry, work experience, independent study, and examinations. Care must be exercised to assure that the integrity of program outcomes is maintained when such experiences are assessed.

### **Secondary School Articulation**

- 12. AAS degree curricula should be articulated with appropriate general and vocational secondary schools.**

There is a trend toward increased articulation between secondary and postsecondary institutions. The advantages of such articulation are to encourage earlier goal orientation, provide possible advanced placement and avoid unnecessary duplication. The growing use of outcomes as a basis for instruction and learning should make program comparisons much easier than the previous use of course titles and catalog descriptions.

### **Baccalaureate Articulation**

- 13. AAS degree curricula should be articulated with receptive and appropriate four-year institutions through the cooperative planning and implementation of transfer agreements including two + two curricula.**

Although AAS degree programs are designed primarily to prepare students for employment, they can no longer be considered terminal. In addition to the necessity for lifelong learning in response to the knowledge explosion, students can expect to make several career changes during their lifetime. Further education, including work toward a baccalaureate degree, should be anticipated for AAS degree graduates. Therefore, articulation agreements should be initiated by two-year institutions in those programs with the greatest potential for transfer. However, the occupational outcomes of AAS degree programs should not be subverted to the transfer potential.

### **Institutional Networking**

- 14. Selected AAS degree programs should be networked among two-year institutions at the local, state and national levels.**

There is increasing interest in developing consistency and comparability among similar occupational programs on state and national levels. As the AAS degree becomes universally accepted as an employment credential, it will be feasible to develop selected programs with comparable outcomes across the nation without sacrificing local flexibility. Institutions developing or revising AAS degree programs should consider comparability and consistency with similar occupational programs. Further networking is encouraged and should be facilitated by educational institutions, state agencies, and other regional and national organizations.

## Summary

The criteria for excellence are essential for the AAS degree to achieve its potential both as a national employment credential and the curricular foundation for **the occupational mission** of community, technical, and junior colleges. **In highlighted form, these criteria would help to assure** that AAS degree programs are:

1. Clear and consistent in titles, length, components and outcomes - publicized and documented for all to see and know.
2. Articulated continuously with employers, four-year colleges, secondary **schools, and the non-collegiate** sector including specialized accreditation, **credentialing, certification, and** licensing agencies.
3. Flexible in structure for our varied adult clientele, with multiple exit/re-entry points which optionally may be compounded to attain the goal of technical and/or mid-management level employment equated with the AAS degree.
4. Open to students on a selective basis with **full opportunity** to remedy deficiencies in meeting admission **requirements**.
5. Supported by student services fitted to the occupationally oriented needs of AAS degree students.
6. Part of an expansive and universal definition and categorization of occupational education that conveys a positive image.
7. Part of a national network serving the comparable educational and training needs of the nation, **states and communities**.

Implicit in these criteria for excellence in the AAS degree is the assumption that community, technical, and junior colleges have taken on preparation for employment as a major function of their emerging identity. That identity will be strengthened by developing criteria for excellence in the AAS degree, the curricular cornerstone of community college occupationally oriented training and education. Concurrent with enhanced identity may come national acceptance of the 1,200 community, technical, and junior colleges as the preferred delivery system for a national program of human resource development embracing job and career-oriented training, education, and services for the entire adult community—pre-employed, employed, and unemployed. Such a goal is humanitarian. It is also central to the national self-interest to insure an educated and trained work force prepared for present and future manpower needs which, in turn, helps maintain a strong competitive position for our nation in the world economy. The AAS degree provides the curriculum base from which such a national program can be developed.

## Illustration

### AAS Degree Occupational Curriculum Guide Generalized Example in Credit Hours

It should be emphasized that the illustration shown is an example only and should not be interpreted as a requirement or as an ideal. Many variations are possible and differences will likely be based upon the specific needs of a particular occupational field. In particular, the distinction between General Education and Related Studies is not always obvious. Likewise, the listing of traditional disciplines is not intended to detract from the required occupational outcome orientation or possible interdisciplinary approaches that might be used to achieve these outcomes. They are intended to better **communicate the general scope, form and substance of the AAS degree criteria**. The Technical Specialty Component **would consist of those curriculum areas and outcomes, including supporting skills, that directly and immediately pertain to the specific occupational major.**

	<u>Semester Hours</u>	<u>Quarter Hours</u>	<u>Percent</u>
<b>1. TECHNICAL SPECIALTY COMPONENT</b>	<b>30-36</b>	<b>45-54</b>	<b>50%</b>
<b>2. GENERAL EDUCATION &amp; RELATED STUDIES COMPONENT</b>			
<b><u>General Education</u></b>			
Communications	6	9	
Behavioral or Social Sciences	6	9	
Humanities	3-6	4.5-9	
	<u>15-18</u>	<u>22.5-27</u>	<b>25%</b>
<b><u>Related Studies</u></b>			
Mathematics	6	9	
Business, Engineering, Science or Technology	6	9	
Computer Literacy	3-6	4.5-9	
	<u>15-18</u>	<u>22.5-27</u>	<b>25%</b>
<b>Sub-Total</b>	<b>30-36</b>	<b>45-54</b>	<b>50%</b>
<b>TOTAL</b>	<b>60-72</b>	<b>90-108</b>	<b>100%</b>

## The Process

The Task Force on the Associate in Applied Science Degree was appointed by the Board of Directors of the National Council for Occupational Education in July of 1984. Based upon data collected by the American Association of Community and Junior Colleges in their 1983 study of the Associate Degree, the Task Force began a dialogue on Criteria for Excellence in Associate Degree Programs at the annual NCOE conference in **October of 1984**. In addition, individual members of the Task Force began discussions on the criteria with various organizations and agencies in their regions. Utilizing this **input**, an **Interim Report** was drafted by the Task Force and circulated to the 1200 member colleges of the AACJC and to each member of NCOE in January of 1985 with a call for comments and suggestions.

Responses from over **one hundred** individuals in **sixty-four community, technical, and junior** colleges were incorporated into the **Revised Interim Report published** for a workshop on Criteria for Excellence in AAS Degree Programs at the Annual Convention of the AACJC in San Diego, California on **April 15, 1985**. Reactions to and suggestions for the criteria were presented by a panel consisting of Dr. John Grede, Vice-Chancellor **Emeritus**, City Colleges of Chicago; Dr. Dale Parnell, President, AACJC; **Dr. Henry Spille**, Director, American Council on Education, Office of Educational Credits and Credentials; Dr. Robert Childers, Executive Director, Southern Association of Schools and **Colleges**; and **Dr. Howard Bowen**, Professor, Claremont Graduate School and member NIE Panel on Conditions of **Excellence** in Undergraduate Education. Workshop participants from throughout the **nation** then reacted to the proposed criteria and the comments of the panelists.

The comments and reactions obtained from this year-long process were utilized by the Task Force in preparing this policy statement, adopted by the Board of Directors of the National Council for Occupational Education in July of 1985. It is, however, **recognized** by the Task Force and NCOE that these recommendations will require revision and expansion to keep pace with changes in the work place and in our colleges - consequently, it is viewed as a "living document" that will be reviewed regularly. **Comments continue to be welcome.**

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