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ABSTRACT
                The 1972 edition of the Program Classification
Structure (PCS) is revised, using essentially the same framework but
with additional categories and more detailed definitions. The PCS is
a framework that permits the classification of a postsecondary
education institution's resources and programs/activities as they
relate to the accomplishment of institutional objectives. Programs
may be assigned to eight categories: instruction, research, public
service, academic support, student services, institutional support,
independent operations, and student access. In each category,
specific activities are categorized by subprograms. The PCS was
intended as an instrument for organizing information, but has been
used for objective-oriented planning and management at several
institutional levels. (Author/MSE)

PROGRAM CLASSIFICATION STRUCTURE:

SECOND EDITION

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. . . to increase educational opportunities for westerners.

. . . to expand the supply of specialized manpower in the West.

. . . to help universities and colleges improve both their programs and their management.

. . . to inform the public about the needs of higher education.

The Program of the National Center for Higher Education Management Systems at WICHE was proposed by state coordinating agencies and colleges and universities in the West to be under the aegis of the Western Interstate Commission for Higher Education. The National Center for Higher Education Management Systems at WICHE proposes in summary:

To design, develop, and encourage the implementation of management information systems and data bases including common data elements in institutions and agencies of higher education that will:

● provide improved information to higher education administration at all levels.

● facilitate exchange of comparable data among institutions.

● facilitate reporting of comparable information at the state and national levels.

PROGRAM CLASSIFICATION STRUCTURE: SECOND EDITION

Review Edition
Technical Report 101

PROGRAM CLASSIFICATION

STRUCTURE:

Second Edition

Review Edition
Technical Report 101

DOUGLAS J. COLLIER

AUGUST 1976

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PREFACE

Many educational institutions and state- and national-level agencies have used the first edition of the Program Classification Structure (PCS) since it was published in 1971. However, since 1971 both the nature of planning and management in colleges and universities (for example, planning in a steady-state rather than a growth climate) and the introduction of the much broader concept of postsecondary education (which includes traditional as well as nontraditional programs and colleges as well as churches, businesses, labor unions, and other noneducational sponsors of educational programs) have combined to require that a second edition of the PCS be developed. This document is a field review edition of the *Program Classification Structure: Second Edition.* As such, it is intended that readers will critically review the revised PCS in order to assess both its strengths and weaknesses in serving their current planning and management needs. This field review edition will then be revised and a final edition published. It is anticipated that a final edition will be completed by mid-1977. It is hoped that all readers will provide the NCHEMS staff with feedback concerning their assessment of the field review edition of the structure. All comments, criticisms, and suggestions should be forwarded to:

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INTRODUCTION

In January 1972, the National Center for Higher Education Management Systems (NCHEMS) published the first edition of the *Program Classification Structure.** It represented the culmination of more than two years of effort in which representatives of all sectors of higher education worked to develop a programmatic framework for looking at higher education activities. The first edition of the Program Classification Structure (PCS) represented somewhat of a landmark in higher education planning and management in that it served as both a common language and as a starting point for "program-oriented" planning and management. Since its introduction, the PCS has been either adopted directly or adapted for specific purposes by hundreds of higher education institutions, by many state level planning agencies, by most federal level educational planning agencies and by several foreign countries.

It is safe to say, however, that the first edition of the PCS and the structure it described reflected the realities of planning and management in 1972, realities that have changed since that time. The original PCS represented a fair approximation of a programmatic framework, but it was not a conceptually consistent program structure. The developers of the original PCS were forced to make certain compromises in the interests of feasibility, acceptability, and the state-of-the-art in higher education planning and management at that time. However, both the level of acceptability and the understanding of program-oriented planning and management have changed significantly since 1972. Therefore it is important that the PCS reflect these changes in the understanding and acceptability of program-oriented planning and management.

A second, and just as important, rationale for revising the PCS, is that the higher education enterprise has changed markedly since 1972. Planners and managers today are focusing more and more

on educational programs within a much broader concept called postsecondary education rather than restricting themselves to the more limited "collegiate" concept of higher education.

To improve the utility of the PCS for planning and management in a postsecondary education context and to adapt to the changes that have occurred in people's understanding and acceptance of programmatic planning and management, the PCS has been revised. Once again, an extensive effort involving persons throughout postsecondary education was carried out to determine what revisions were needed and how they could best be implemented. In many ways, the effort to revise the PCS has formally involved even more organizations than were involved in the development of the original PCS. For example, the American Association of Medical Colleges (AAMC) worked with the NCHEMS staff for more than a year to develop definitions and categories for classifying medical care activities. The Coalition of Adult Education Organizations (CAEO), a coalition representing fifteen different adult/continuing education associations, appointed a task force that spent almost a year expanding the classification scheme within the Instruction program to serve adult/ continuing education needs. Finally, input from such organizations as the American Association of College Registrars and Admissions Officers, the Association for Educational Communications and Technology, and National Collegiate Athletic Association was solicited and used extensively in developing the revised PCS categories and definitions.

While the revised PCS is essentially the same framework as the one set forth in the original PCS, it is hoped that this revised structure, the additional categories, and the more detailed definitions, will better serve today's educational planners and managers. It is recognized that postsecondary education as an entity will continue to evolve and change as will the state-of-the-art in the "science" of educational planning and management. This

edition of the Program Classification Structure reflects an attempt to incorporate the changed nature of the PSE entity, the existing state-of-the-art in educational planning and management, and the current attitudes and needs of the practitioners in 1976 and the foreseeable future.

What is the PCS?

The Program Classification Structure is a framework that allows for the classification of a post-secondary education institution's resources and programs/activities in accordance with their relationship to the accomplishment of institutional objectives. It was developed to allow planners and managers in colleges and universities to relate information to the programs and activities institutions carry out to achieve their objectives. Specifically, the PCS is a logical framework that allows an institution to array information in a hierarchical dis-aggregation of programs, in which a "program" is defined as an aggregation of activities serving a common set of objectives. There are eight major categories called "programs" at the highest level of aggregation in the PCS, each of which can be further disaggregated into subprograms (see Figure 1). The eight "programs" in the PCS are the following:

    1.0   Instruction
    2.0   Research
    3.0   Public Service
    4.0   Academic Support
    5.0   Student Services
    6.0   Institutional Support
    7.0   Independent Operations
    8.0   Student Access

These eight "program categories" do not represent institutional objectives; rather they are a prototype list of the "programs" an institution would undertake to attain its objectives. Also the PCS categories may or may not relate directly to an institution's organizational units, depending upon how closely organizational units correspond to objective-oriented programs.

The conceptual building block for the PCS is the "program element." A program element is a discrete management unit composed of a collection of resources, technologies, and policies that

through integrated operation produce goods or services (an output) that is of value to the organization because it contributes to the achievement of an institutional objective. The program element is the building block because it represents the smallest, unique collection of resources that are output-producing activities; that is, a set of resources and activities integrated in such a manner that no one activity or resource, without the contribution or support of the others, can contribute to the objective in a measurable fashion. An instructional course is an example of a program element. For instance, an introductory physics course is:

a. a collection of resources and technologies (such as faculty, technicians, labs, and equipment);
b. integrated through a series of activities (for example, lectures, labs, discussion sessions);
c. in a manner defined by a set of guidelines and policies (section size, class size, and the like);
d. to produce a specific output (such as an increased level of knowledge of the basic principles of physics for one or more students);
e. that which contributes to an institutional objective (for example, the provision of knowledge and learning).*

The assignment of program elements to programs should be based on the *primary intent* of the program element, that is, the basic purpose or major reason for establishing and maintaining the program element. Moreover, programs should be structured so that program elements that produce similar outputs are included within the same program.

Although the program element is the conceptual building block for the PCS, the lowest level of aggregation in the structure itself represents a classification of "types of activity." In some instances the program element and the type of activity may be synonymous, but they are often different. For example, in subprogram 6.3, General Administration and Logistical Services, one of the subcategories is "Transportation Services (585)." Transportation services are a type of activity but the institution may be organized in such a way that this type of activity is synonymous with a program

*Program Classification Structure, Technical Report 27, p. 14.

REVISED
PROGRAM CLASSIFICATION
STRUCTURE

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                        │ POSTSECONDARY  EDUCATION  ORGANIZATIONAL  ENTITY       │
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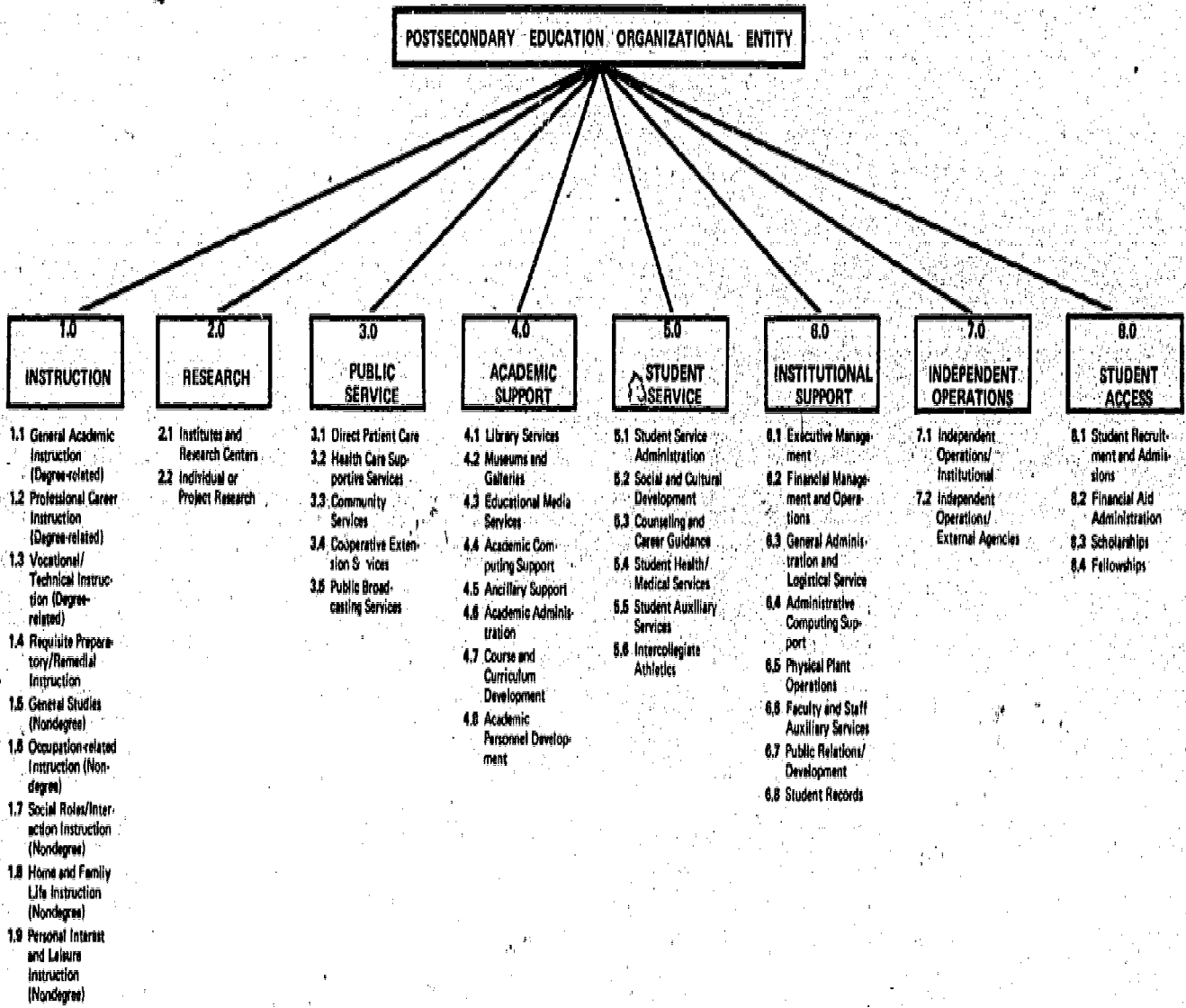| 1.0 INSTRUCTION	2.0 RESEARCH	3.0 PUBLIC SERVICE	4.0 ACADEMIC SUPPORT	5.0 STUDENT SERVICE	6.0 INSTITUTIONAL SUPPORT	7.0 INDEPENDENT OPERATIONS	8.0 STUDENT ACCESS
1.1 General Academic Instruction (Degree-related)	2.1 Institutes and Research Centers	3.1 Direct Patient Care	4.1 Library Services	5.1 Student Service Administration	6.1 Executive Management	7.1 Independent Operations/ Institutional	8.1 Student Recruitment and Admissions
1.2 Professional Career Instruction (Degree-related)	2.2 Individual or Project Research	3.2 Health Care Supportive Services	4.2 Museums and Galleries	5.2 Social and Cultural Development	6.2 Financial Management and Operations	7.2 Independent Operations/ External Agencies	8.2 Financial Aid Administration
1.3 Vocational/ Technical Instruction (Degree-related)		3.3 Community Services	4.3 Educational Media Services	5.3 Counseling and Career Guidance	6.3 General Administration and Logistical Service		8.3 Scholarships
1.4 Requisite Preparatory/Remedial Instruction		3.4 Cooperative Extension S vices	4.4 Academic Computing Support	5.4 Student Health/ Medical Services	6.4 Administrative Computing Support		8.4 Fellowships
1.5 General Studies (Nondegree)		3.5 Public Broadcasting Services	4.5 Ancillary Support	5.5 Student Auxiliary Services	6.5 Physical Plant Operations		
1.6 Occupation-related Instruction (Nondegree)			4.6 Academic Administration	5.6 Intercollegiate Athletics	6.6 Faculty and Staff Auxiliary Services		
1.7 Social Roles/Interaction Instruction (Nondegree)			4.7 Course and Curriculum Development		6.7 Public Relations/ Development		
1.8 Home and Family Life Instruction (Nondegree)			4.8 Academic Personnel Development		6.8 Student Records		
1.9 Personal Interest and Leisure Instruction (Nondegree)							

element (an organizational unit). However, there will obviously be instances in which such a relationship between type of activity and program element does not exist. In those instances the PCS categories will be based upon types of activities rather than program elements at the lowest level of aggregation.

What is the Role of the PCS in Planning and Management?

The Program Classification Structure was designed to allow its users to relate resource and activity/program information to the achievement of objectives. It does this by providing for the classification of an institution's activities in a framework based on the programs institutions use to accomplish their objectives. However, the uses of the PCS have evolved to the point that it is now being used for many different purposes. The characteristics of the PCS itself have had more to do with the roles it plays than did any preconceived notion about what those roles should be when the original PCS was developed. The focus of the PCS on programs has made it a useful organizing structure for many different kinds of data; its programmatic classification criteria have made it an often-used starting point for objective-oriented planning and management; the hierarchical disaggregation of programs into subprograms has provided users with a programmatic framework that could be used at several levels within the institution; its comprehensiveness, compatibility across institutional lines, and use of detailed definitions have made it useful as a common language throughout postsecondary education. The following paragraphs describe in more detail the basic characteristics of the PCS and the relationship of those characteristics to the planning and management roles it has assumed.

Focus on programs: The fact that the PCS focuses on programs has made it useful for analyses involving different kinds of data. Most data formats are "data specific" in that they are designed to serve the unique characteristics of one particular type of information (for example, personnel data, financial data) and therefore they have limited utility for analyses that require the integration of several different kinds of data. This ability to classify many different kinds of data in the same structure

is particularly important when one wants to link different kinds of data. For example, a cost analysis requires linking and integrating information about people, finances, facilities, time, and so forth. To determine the "cost" of a particular level of instructional output, one must link faculty time to faculty salaries, and to the costs of facilities, equipment, and so forth. Such a linking process would be impossible without a single data framework that accommodated all of the different kinds of information. The PCS, by focusing on programs, allows the analyst to use the PCS as a format for conducting cost analyses and other analyses involving different kinds of data.

The programmatic focus built into the PCS has also made it an important starting point (or prototype model) for program planning, program budgeting, and other types of objective-oriented planning and management in postsecondary education. Use of the PCS, for whatever purpose, encourages one to look at institutional objectives and to consider how one goes about combining resources to attain those objectives—something that is especially important in a postsecondary education enterprise characterized by scarce or limited resources. For example, since programs often cut across organizational lines, the process of classifying an institution's operational records in the PCS format generally requires some sort of program analysis. This process, generally referred to as the "cross-over process," often results in as much valuable information as subsequent analyses of the data.

Hierarchical structure: The PCS represents a prototypical set of programs disaggregated into intermediate levels called subprograms. This disaggregated "hierarchy" gives users a format that can be used to classify activities programmatically at levels below the institution-wide level. Therefore not only can a programmatic approach be used at the institutional level but also it can be used for organizational units within the institution.

Common language and framework: Closely related to the programmatic nature of the PCS is the fact that it provides a common language and a comprehensive and compatible framework for postsecondary education. Since the PCS focuses on programs (which are in turn related to objectives),

the PCS is a compatible data framework regardless of differences in the organizational structures among institutions. The PCS has often served as an important tool, or at least a necessary first step, in obtaining compatible information. Therefore it has often been used in collecting data from multiple institutions as well as for comparing data across institutional boundaries.

In summary, the primary roles that the PCS generally assume are:
1. A framework that, since it focuses on programs, can be used for the classification of many different kinds of data. This in turn, allows the user to link different kinds of data in the conduct of analysis.
2. A structure that can serve as a common starting point for programmatic planning and management within postsecondary education.
3. A framework that allows the user to look at the activities of an institution, as well as activities below the institutional level, in a programmatic manner.
4. A common language and framework that allows persons in different kinds of institutions and at various levels of postsecondary education to communicate more effectively.

Why Was the PCS Revised?

The PCS was revised to increase its value and utility in the planning and management roles described above.

Focus on programs: When the original PCS was developed, the state-of-the-art in higher education data collection and the level of acceptability of the program concept did not permit the feasible introduction of a "pure" programmatic structure. Its developers were often forced to make compromises in the design of the original PCS, causing the structure to deviate from the program concept. However, the state-of-the-art, as well as the acceptance of program planning and management, have improved considerably since that time. In recognition of these developments, and in response to an expressed need on the part of the NCHEMS constituency for a better "program" structure, the following philosophical statement regarding the programmatic role of the PCS was adopted as a guide for revising the PCS:

The PCS originally was developed as a tool for program planning and analysis and subsequently has been used increasingly as a program budgeting tool. It is essential that the PCS's usefulness as a program planning and analysis tool be maintained. Therefore, any revisions that might be made in the PCS should add to, not detract from, its value as a tool for program planning and analysis. It is quite obvious that, given this philosophy, "crossovers" never will be totally eliminated as long as institutions are *organized* along lines other than the "programs" set forth in the PCS. However, crossovers can be simplified considerably (1) if operational data can be collected, as much as possible, along program lines and (2) if program structures can be designed so that "matches" exist between program data and operational data. Since the printing of the first edition of the PCS, tremendous strides have been made in bringing operational data structures closer to program structures. For example, the Joint Accounting Group (a cooperative effort of NCHEMS, the National Association of College and University Business Officers, and the American Institute of Certified Public Accountants) designed an operational structure for expenditure data that is very close to the PCS format. This structure for expenditure data has been adopted, and is being used, throughout much of postsecondary education. Therefore, identifying those matches where operational data can be moved easily into a program structure is a much more feasible task than it used to be.

The diagram shown below illustrates the role the PCS should play in operational data collection and program data analysis.

Operational Data Structures (e.g., JAG)	→	Crossover Mapping Procedures	→	Program-Oriented Data Structures (PCS)
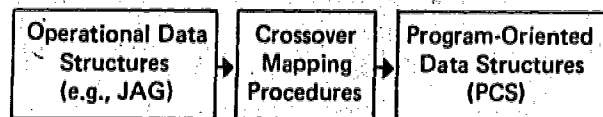
This diagram points to the role the PCS should play as a structure for programmatically displaying analytical data. It also points out that analytical data and operational data are, by definition, different. Operational data are collected on an ongoing basis for the institution's operations (such as the accounting system or a student data system) and are usually classified in categories that relate directly to organizational units within the institution. Analytical (program-oriented) data usually are obtained after certain analytical procedures (such as crossover or mapping procedures) are performed on the operational data (for example, a faculty activity analysis can be used to further explain resources used in various academic departments). The PCS often is used to display operational data, but it should be viewed primarily as a format for the display of program data obtained through the use of analytical procedures.

Hierarchical structure: A more detailed classification of activities below the subprogram level was desired by those concerned with the planning and management of organizational units within the institution. Therefore as part of the revision process, those professional associations and special interest groups that represent constituencies directly related to the PCS subprogram areas were asked to work with NCHEMS in developing a more detailed classification scheme within each of the various subprograms. (Note: This additional detail is reflected in the categories outlined for "type of activity".) For example, the American Association of Medical Colleges (AAMC) worked directly with NCHEMS in developing type of activity categories within subprograms 3.1, Direct Patient Care and 3.2, Health Care Support Services. Although the type of activity categories will not be needed by all users of the PCS (especially those concerned with a broad institutional overview), these categories should prove useful for persons who must plan or manage for a single subprogram area.

Common language: One of the more important uses of the original PCS was in the comparison of information about higher education programs. However, since the original PCS was developed, the concept of "postsecondary education" (PSE) has supplanted higher education as the planning and management focus at many levels. Widespread acceptance of the PSE concept followed the recognition that the "postsecondary learner" could no longer be limited to the 18-22 year old college student and that educational opportunity, particularly for the adult learner, could be provided through channels other than those represented by colleges and universities (such as proprietary institutions, business and industry, labor unions, churches, and community groups). Therefore, NCHEMS felt that if the PCS is to continue to be useful as a common language and data format for "postsecondary education" it needed to be revised so that all of the educational activities encompassed by PSE could be described. Most of the results of the effort to expand the PCS for postsecondary education can be seen in the revisions that were made in the Instruction program (see the discussion section for program 1.0, Instruction). However, other areas of the PCS have also been revised to meet this need (for example, the recognition of

a proprietary school's sales force in the new Student Access program, the inclusion of the instructional "facilitating" function within the Instruction program.)

How Has the Coding Changed in the Second Edition of the PCS?

The coding structure used in the second edition of the PCS essentially consists of one set of codes for "programs and subprograms" (which closely parallel the codes used in the first edition) and a second set of codes for "type of activity" categories, which can be used to further describe activities within programs and subprograms. Program codes are used to classify activities/resources as Instruction, Research, Public Service, and so forth. Subprogram codes represent a second level of disaggregation within each of the various programs. "Type of activity" codes, however, are used to provide a functional description of the kinds of activities being carried out within a program or subprogram. Since it is conceivable (although not probable) that different kinds of activities can be carried out with several different "primary intents" (thereby resulting in classification within different programs and subprograms), type of activity codes are independent of program/subprogram codes. This means that any one "type of activity" category can be used to describe any single subprogram (although in most cases particular type of activity categories are applicable only to a single subprogram). For example, the type of activity category "Retail Services and Concessions (485)" is a recommended type of activity category within three different PCS subprograms: Health Care Supportive Services (3.2), Student Auxiliary Services (5.5), and Faculty and Staff Auxiliary Services (6.6).

To emphasize the fact that type of activity categories are independent of programs and subprograms, the type of activity categories were coded by first arraying them in an alphabetical sequence and then assigning the categories in that list every fourth number beginning with 001. The resulting codes for various type of activity categories appear to be almost randomly assigned when they are viewed in relation to the corresponding subprogram. The codes do not convey any hierarchy or

structured classification scheme but are intended merely to serve as numerical identifiers.

The total coding scheme for the PCS therefore consists of a field of at least twelve digits arrayed in the following way:

xx	xxxx	xx	x,	xxx
Program/ Subprogram	Subject Areas Classification (HEGIS Taxonomy)	Level	Credit/ Noncredit Status	Type of Activity

Program/Subprogram—the first two digits are used to designate the programs (and a second level of aggregation within each program called "subprograms") an institution carries out to achieve its objectives. A complete diagram of program/subprogram codes is provided in Figure 1 on page 3.

Subject Area Classification—digits 3-6 should be used to classify the subject area with which a particular activity can be associated. Subject area classification is used most in the description of activities within the Instruction program but it can also be used in describing activities within the

Research, Public Service, and Academic Support programs. Only four digits are provided in the field shown above, but it should be noted that the HEGIS Taxonomy is now in the process of being revised. A discussion of that revision process and its implications for the PCS is provided in Appendix I of this document.

Level—digits 7-8 are assigned for the description of either student level or instructional offering level. As such, these two digits will be used only for the classification of activities/resources in the Instruction (1.0) program.

Credit/Noncredit Status—the ninth digit in the field should be used to describe whether or not activities/resources in the Instruction program are associated with instructional offerings that are "for credit" or "not-for-credit" toward a postsecondary degree or certificate. Therefore, this digit will not be used in describing activities/resources within any of the programs other than Instruction.

Type of Activity—digits 10-12 in the field are used to provide a functional description of the kinds of activities being carried out within a program or subprogram. Appendix V outlines the codes assigned to each of the type of activity categories.

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INSTRUCTION PROGRAM
(1.0)

Definition

The Instruction program includes those activities carried out for the express purpose of eliciting some measure of "educational change" in a learner or group of learners. "Educational change" is defined to include (1) the acquisition or improved understanding of some portion of a body of knowledge; (2) the adoption of new or different attitudes, and (3) the acquisition or increased mastery of a skill or set of skills. The activities that may be carried out to elicit these educational changes include both "teaching" activities and "facilitating" activities (which are more commonly associated with the design and guidance of a learning experience rather than with teaching something to a learner). Facilitating is an integral part of the design and conduct of an instructional program; academic advising is generally carried out in support of an instructional program (for example, clarifying requirements, describing alternatives). The Instruction program includes both credit and noncredit instructional offerings.

Discussion

The first edition of the PCS defined the Instruction program to include only "those program elements whose outputs are primarily eligible for credit in meeting specified formal curricular requirements, leading toward a particular postsecondary degree or certificate granted by the institution." There are significant differences between this definition and the definition of the revised Instruction program described above. In addition to differences in the definition of the Instruction program, the revised classification of subprograms within the Instruction program is also quite different. The following discussion first will address the definitional differences and then will outline the revised classification structure and differences from the original one. Finally, it will describe some of the implications of these differences in using the new Instruction program to classify instructional offerings.

Definitional Differences: The most obvious definitional difference is that the original definition of the Instruction program included only those instructional offerings that were given for credit towards a postsecondary degree or certificate. The revised definition includes both credit and noncredit instructional offerings. Two more subtle differences in the revised definition are the explicit inclusion of "facilitating" and the focus on the instructional offerings rather than on the students enrolled in those offerings.

Since the first edition of the PCS was developed in 1972 (as discussed in the Introduction), the educational planning horizon has broadened to incorporate the concept of postsecondary education. Educational planners now must concern themselves not only with courses that are offered for credit toward degrees, but also with courses that are not offered for credit. A consideration of noncredit courses in the context of postsecondary education must include not only those of the traditional educational institutions but the instructional offerings of community groups, businesses, libraries, and labor unions as well. Using this much broader definition of the educational enterprise, one cannot define instruction as being only those credit-bearing courses offered to matriculated students on a college campus. The PSE concept requires that the Instruction program be defined so that "instruction is instruction is instruction" regardless of the constituency being served or the credit or noncredit status of the various offerings. (Note: See the definition of the Public Service program 3.0 for a discussion of the differences between Instruction and the limited set of instructional activities that may be classified as Public Service.)

Second, the mechanisms used to deliver instruction to the learner have been expended since the first PCS document was developed. Educational planners today should not assume that instruction includes only those activities offered by a teacher to students in a classroom or lecture hall. Educational planning must be able to incorporate both the teaching and the "facilitating" functions into

the definition of instruction if it is to truly reflect what is currently happening in education.

Finally, in the original PCS, the Instruction program was defined to consist of "all formal educational activities in which a student engages to earn credit toward a degree or certificate at the institution." The phrase "in which a student engages to earn credit" suggested that instructional offerings were to be distributed among PCS credit and non-credit categories in the same proportion as the proportion of students who were taking the offering for credit or not for credit. In the revised PCS, the classification of instructional offerings should be completed *independent of* the students enrolled in the offerings. Therefore, if an offering *can be* applied toward a degree or certificate it should be classified in the appropriate degree-related PCS category regardless of the degree aspirations of the students enrolled in the offering. The same principle should be followed in classifying offerings in the non-degree-related categories.

The Classification Structure: The restatement of the definition of the Instruction program was not the sole reason for restructuring the subprograms within Instruction. In fact, a restructuring of the subprograms probably would have been undertaken even if the definition of Instruction had not been changed. The original Instruction subprograms used a variety of different classification criteria, ranging from differences in subject matter (the distinction between General Academic Instruction and Occupational and Vocational Instruction), to differences in when the courses were offered (Special Session Instruction), to differences in the organizational unit responsible for the courses (Extension Instruction). Therefore a single, consistent criterion was needed as the basis for differentiating subprograms within Instruction.

The primary criteria used in developing subprogram within Instruction in the second edition of the PCS was the distinction between those instructional offerings that are part of one of the institution's formal degree or certificate programs and those that are not.* It was agreed that offerings that are part of a degree/certificate program typically have different objectives, and may even be

taught differently, from those that are not part of such a formal program. A third category of instructional offerings (in addition to degree-related and non-degree-related) can be thought of as those offerings that are "required preparation" for participation in a PSE degree or certificate program.

Within the broad category of "degree-related" offerings, three subprograms are defined:
● General Academic Instruction
● Professional Career Instruction
● Vocational/Technical Instruction

These subprograms were designed to allow the user to separate those degree programs that prepare the learner for immediate entry into a *specific* occupation or career from those programs that prepare learners for further study in the academic arena or in a more generalized sense for different occupations. These objective-oriented distinctions were considered to be important because of the linkages that exist between education and career entry and the importance of those linkages to postsecondary education planning.

Within the general category of "nondegree" offerings, five subprograms have been specified.**
● General Studies Instruction
● Occupation-Related Instruction
● Social/Roles/Interaction Instruction
● Home and Family Life Instruction
● Personal Interest and Leisure Instruction

These five subprograms reflect one of the more widely used ways of looking at most nondegree programs in this country. Therefore, they should be consistent, for the most part, with the way in

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*It should be noted that the distinction in the second edition is between offerings that are part of "degree programs" and those that are not, rather than using "for credit" or "not for credit" as the criteria. Due to the wide divergence among institutions regarding what they consider to constitute "for credit," it was determined that PCS programs should be differentiated on the basis of their relationship to degree or certificate programs. However, credit/non-credit status can be used to describe further instructional offerings within any of the subprograms of Instruction. A more detailed discussion of the distinctions between "degree-related" offerings and "for credit" offerings is in Appendix II.

**These subprogram categories were developed as a joint effort of NCHEMS and an advisory group representing the Coalition of Adult Education Organizations (CAEO). A detailed description of that effort, and its results, is documented in "A Framework and Language for Postsecondary Education," Collier and Roberts, NCHEMS, 1976.

which information about nondegree programs has traditionally been collected, maintained, and used.

Implications for Implementation: From an implementation standpoint, one of the most significant changes in the revised Instruction program is that it now provides the user with a series of mutually exclusive and consistent "dimensions" for describing instructional offerings. For example, unlike the original PCS, the revised subprogram 1.1—General Academic Studies—relates to the objectives of the institution rather than to any particular subject area and it can be used to classify offerings provided as either for-credit or not-for-credit. This increased flexibility is provided by assigning a particular digit (or set of digits) within the Instruction program coding field to each of the five "dimensions" of objective, subject area, level, credit/noncredit status, and delivery mechanism. The following designation within the coding field is recommended for the Instruction program:

| xx | xxxx | xx | x | xxx |

| Objective (Subprogram) | Subject | Level | Credit/ Noncredit | Type of Activity (Delivery Mechanism) |

Digits 1-2 (Objective)—the first two digits in the field should be used to designate the objective of the institution in providing the instructional offering(s). This designation can be accomplished by using the subprograms defined within the Instruction program.

Digits 3-6 (Subject Area Classification)—these four digits should be used to describe the subject area of the instructional offering. Although only four digits are provided in the coding scheme shown above, it should be noted that the HEGIS taxonomy is now in the process of being revised. Current indications are that the revised HEGIS taxonomy, when completed, might require more than four digits.* The current HEGIS taxonomy of subject classifications is included as Appendix I.

Digits 7-8 (Level)—these two digits should be used to describe the level of either the instructional offering/program being provided or the students

*A discussion of the work to date on the revised HEGIS Taxonomy is included in the Introduction to Appendix I.

enrolled in the instructional offering/program. In those instances where the PCS is being used to classify the activities and resources associated with the conduct of an instructional offering, the focus will be on "course" level. A discussion of the uses of both course level and student level, categories of level, and definitions for each category is provided in Appendix III.

Digit 9 (Credit/Noncredit Status)—the ninth digit should be used to describe whether or not the instructional offering is being provided for credit toward a postsecondary degree or certificate. As mentioned earlier, whether an offering is provided "for-credit" or "not-for-credit", and whether it is part of a formal degree program are separate issues. Therefore, credit/noncredit status can be used to further describe offerings in *any* of the subprograms within Instruction. A further discussion of credit and noncredit distinction and definitions is provided in Appendix II.

Digits 10-12 (Delivery Mechanism)—in revising the Instruction program to accommodate the needs of postsecondary education, it was necessary to recognize that instruction is "delivered" to learners through mechanisms other than classroom/laboratory instruction. Therefore, within the Instruction program, "type of activity" categories refer to categories of delivery mechanism. Although the use of a variety of "delivery mechanisms" (for example, correspondence courses, apprenticeships) is nothing new, planning and managing in the context of PSE increases the need for, and the importance of, a dimension for describing delivery mechanisms for instructional programs. For those institutions that want to include this dimension as part of the description of instructional offerings, categories and definitions of "delivery mechanism" are described in Appendix IV.

1.1 General Academic Instruction (Degree-Related)

Definition: This subprogram includes those instructional offerings intended both to prepare learners, in a generalized sense, to function in a number of different occupations and to prepare them for further academic study. Instructional offerings of this "general academic" nature should be classified in this subprogram only if they are offered as part of one of the institution's formal

degree or certificate programs. Therefore, it does not include offerings that are part of programs leading toward degrees or certificates offered by someone other than the institution, such as adult basic education programs (see subprogram 1.5). In determining whether or not a particular offering should be classified in this subprogram, the user should look at both the *level* and the *subject area* of the degree program the offering is part of. Most offerings at the baccalaureate level and below in subject areas typically referred to as "liberal arts" (mathematics, literature, languages, and so forth) should be classified in this subprogram. Categories related to subject area, credit/noncredit status, course level, and delivery mechanism can be used to describe further the instructional offerings within this subprogram.

Examples: Baccalaureate programs in liberal arts at a college or university

Academic associate-degree programs at a community college

1.2 Professional Career Instruction (Degree-Related)

Definition: This subprogram includes those instructional offerings intended to prepare learners for immediate entry into a specific profession or career that requires educational attainment at the baccalaureate level or above. Instructional offerings should be classified in this subprogram only if they are offered as part of one of the institution's formal degree or certificate programs. In deciding whether or not a particular degree-related offering(s) should be classified in this subprogram, the user should determine (1) whether there is a direct match between the field of study and a particular occupation or career and (2) whether entry into that occupation or career typically requires a baccalaureate or post-baccalaureate degree. This subprogram, therefore, would include undergraduate programs in engineering and nursing as well as doctoral programs in the liberal arts (doctoral programs that typically prepare learners for a specific career as a teacher or researcher in that particular field of study). Categories related to subject area, course level, credit/noncredit status, and delivery mechanism can be used to describe further the instructional offerings within this subprogram.

Examples: Baccalaureate programs in nursing, engineering, elementary education

Programs in ROTC

Professional programs in law, medicine, business, library science

Doctoral programs in all subject areas

1.3 Vocational/Technical Instruction (Degree-Related)

Definition: This subprogram includes those instructional offerings intended to prepare learners for immediate entry into a specific occupation or career requiring educational attainment at a level below the baccalaureate level. Instructional offerings should be classified in this subprogram only if they are offered as part of one of the institution's formal degree or certificate programs. If the instructional offering is occupationally related, but is not part of a formal degree or certificate program, it should be classified in subprogram 1.6, Occupation-Related Instruction (Nondegree). In determining whether or not a particular degree-related offering(s) should be classified in this subprogram, the user should determine (1) whether there is a direct match between the field of study and a particular occupation or career and (2) whether entry into that occupation or career typically requires a degree or certificate at a level below the baccalaureate level. Categories related to subject area, course level, credit/noncredit status, and delivery mechanism can be used to describe further the instructional offerings within this subprogram.

Examples: Degree/certificate programs of vocational and technical schools

Occupationally related certificate programs of proprietary schools

1.4 Requisite Preparatory/Remedial Instruction

Definition: This category includes those instructional offerings carried out to provide the learner with the skills or knowledge required by the institution to undertake course work leading to a postsecondary degree or certificate. These offerings, supplemental to the normal academic program, typically are designed as preparatory, remedial, developmental, or special education services. They may be taken prior to, or along with, the course work leading to the degree or certificate. They are

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generally noncredit offerings, although in some cases credit may be given and the credit requirements for the degree or certificate increased accordingly. Only those offerings that are provided specifically for the purposes of teaching required preparatory or remedial skills or knowledge should be included in this category. If students may satisfy the preparatory requirements by taking offerings provided primarily for other than remedial or preparatory purposes, those offerings should be classified appropriately elsewhere.

Examples: Preparatory/remedial summer program offered for students accepted under a conditional admission agreement

1.5 General Studies (Nondegree)

Definition: This subprogram includes those instructional offerings that are not part of one of the institution's formal postsecondary degree or certificate programs and that are intended to provide the learner with knowledge, skills, and attitudes typically associated with an "academic discipline" (such as literature, mathematics, philosophy). In classifying offerings in this subprogram, the user should determine whether they lend themselves to classification in one of the traditional academic disciplines typically grouped together as the "liberal arts." If they can be classified in such a discipline category and if they are not part of a formal degree or certificate program, they should be included in this subprogram. This subprogram should be used for the classification of adult basic education programs. Adult basic education is nondegree because it does not lead to a postsecondary education degree or certificate (that is, it leads to a secondary school certificate) and its instructional offerings are most appropriately associated with the "academic disciplines." Categories related to subject area, course level, credit/noncredit status, and delivery mechanism can be used to describe further the instructional offerings within this subprogram.

Examples: Nondegree offerings in:
Great books
Painting and sculpture
Fine arts
Foreign languages for travel
Adult basic education programs
General education development programs

1.6 Occupation-Related Instruction (Nondegree)

Definition: This subprogram includes those instructional offerings that are not carried out as part of a formal certificate or degree program but that are offered to provide the learner with knowledge, skills, and background related to a specific occupation or career. The instructional offerings classified in this category focus on the role of the individual as a worker rather than upon his or her role as a member of society, part of the family, or as a user of leisure time. Categories related to subject area, course level, credit/noncredit status, and delivery mechanism can be used to describe further the instructional offerings within this subprogram.

Examples: Non-degree-related continuing education offerings for physicians, nurses, teachers
Non-degree-related career/vocational courses
Corporate programs designed to teach the sales force about new products

1.7 Social Roles/Interaction Instruction (Nondegree)

Definition: This subprogram includes those instructional offerings that are not carried out as part of a certificate or degree program but that are offered to provide the learner with knowledge, skills, and background needed to function as a member of society or to interact with the variety of social institutions. It also includes those offerings that deal with the person as a member of a particular social organization or institution. Such social institutions include, but are not limited to, the church, the community, and organizations associated with the various levels of government. Categories related to subject area, level, credit/noncredit status, and delivery mechanism can be used to describe further the instructional offerings within this category.

Examples: Civil defense orientation program
Nondegree offerings in:
Citizenship
Current events/community problems
Consumerism
Community action
Environmental issues
Church-sponsored program dealing with its religious teachings

Languages program for persons seeking U.S. citizenship

1.8 Home and Family Life Instruction (Nondegree)

Definition: This category includes those instructional offerings that are not offered as part of a certificate or degree program but that are carried out to provide the learner with knowledge, skills, and capabilities related to the establishment, maintenance, and improvement of a home, to the carrying out of those functions typically associated with the conduct of a household, or to the person's responsibilities as a member of the family unit. This category includes those offerings that focus on the person's role as a member of a family or household rather than upon his or her role as a worker, member of a social organization, or user of leisure time. Categories related to subject area, level, credit/noncredit status, and delivery mechanism can be used to describe further the instructional offerings within this subprogram.

Examples: Child care and development
  Gardening
  Do-it-yourself building and repair skills
  Household budgeting
  Home making
  Sewing and cooking (if not offered as a recreational pursuit such as gourmet cooking)

1.9 Personal Interest and Leisure Instruction (Nondegree)

Definition: This category includes those instructional activities that are not offered as part of a certificate or degree program but that are carried out to support an individual's recreational or avocational pursuits or to improve his or her day-to-day living skills. The activities included in this category focus on the individual as a user of leisure time rather than upon the individual as a member of a social institution or upon occupational and career-related needs. However, if the offering can be classified within a traditional academic discipline even if it is a leisure time pursuit (for example, art appreciation, great books), it should be classified in subprogram 1.5, General Studies. Categories related to subject area, level, credit/noncredit status, and delivery mechanism can be used to describe further the instructional offering within this category.

Examples: Training of pets
  Physical fitness
  Speed reading
  Driver training
  Personality development
  Public speaking
  Folk dancing
  Leadership development

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RESEARCH PROGRAM
(2.0)

Definition

The Research program includes those activities intended to produce one or more research outcomes including the creation of knowledge, the reorganization of knowledge, and the application of knowledge. It includes both those activities carried out with institutional funds and those carried out under the terms of agreement with agencies external to the institution. Research activities may be conducted by any number of organizational entities including research divisions, bureaus, institutes, and experimental stations. Instructional activities, such as workshops, short courses, and training grants, should not be classified within the Research program but should be classified as part of Instruction unless they satisfy the specific criteria outlined for inclusion within the Public Service program.

Discussion

In the first edition of the PCS, the program used to classify research-related activities was called "Organized Research." It was felt that the word "organized" was too restrictive and tended to eliminate many activities that, while not rigidly organized, are carried out primarily to produce research outcomes. The implications of this change go beyond the simple name change. For example, it is intended that when individual or departmental research is conducted with the primary objective being "to produce research outcomes that include the creation of knowledge, the reorganization of knowledge, and the application of knowledge," those departmental research activities should be classified in the Research program. The criterion used in classifying departmental research activities in the PCS should be the purpose of those activities rather than the sources of funding for those activities.

The other significant change that has been made in the Research program was to exclude those research activities that have been formally designed as "federally funded research centers." (Note: A list of those centers included in this group is pro-

vided in the definition of Independent Operations, 7.0.) It is felt that these research centers are independent operations rather than part of the institution's research program and therefore they should be classified in subprogram 7.2, Independent Operations/Outside Agencies. It can be noted that this procedure for classifying these particular research centers is consistent with the procedure used in classifying them at the federal level.

2.1 Institutes and Research Centers

Definition: This subprogram includes those research activities conducted within the framework of a formal research organization. This subprogram, while using "organizational" criteria as the rationale for classifying program elements, includes only those activities carried out for the purposes of creating knowledge or reorganizing or applying existing knowledge. Therefore, while an agricultural experiment station is used as an example in this subprogram, only those "research" activities carried out within an agricultural experiment station should be classified in this subprogram. The criteria described in the Public Service program (3.0) should be used in differentiating research activities from public service within an agricultural experiment station. Most institutes and research centers will not have a "dual objective" like agricultural experiment stations, and can therefore be classified totally within a single subprogram. Excluded from this category are the 21 federally funded research centers (for example, Argonne National Laboratories) that should be classified in subprogram 7.2, Independent Operations/Outside Agencies.

Examples: Agricultural Experiment Station
  Center for Behavioral Science
  Center for Opinion Research
  Center for Study of the Aging
  Center for Study of Democratic Institutions
  Divisional Research Centers
  Institute for Behavioral Science
  Social Science Research Center

2.2 Individual or Project Research

Definition: This subprogram includes those research activities that normally are managed within the academic departments. These research activities usually have a stated goal or purpose, have projected outcomes, and generally are created for specified time periods as a result of a contract, grant, or specific allocation of institutional resources. Departmental research activities should be included in this subprogram when they are conducted for the express purpose of producing research outcomes. However, if departmental research is carried out as an instructional activity, it should be classified in the appropriate subprogram in 1.0, Instruction. If departmental research is carried out as primarily a personnel development activity, it should be classified in subprogram 4.8, Academic Personnel Development. Excluded from this subprogram are those research activities carried out in the framework of a formal research organization, which should be classified in 2.1, Institutes and Research Centers. Additional detail within this subprogram would normally be provided using the HEGIS subject matter taxonomy to classify those academic departments in which individual or project research activities are being carried out. Unique codes describing individual projects also may be used.

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PUBLIC SERVICE PROGRAM
(3.0)

Definition

The Public Service program includes those program elements established to make available to the public the various unique resources and capabilities of the institution for the specific purpose of responding to a community need or solving a community problem. Included in this program are the provision of institutional facilities as well as those services of the faculty and staff that are made available outside the context of the institution's regular instruction and research programs. In determining whether to classify activities in the Public Service program, answers to the following questions can be used as guidelines:

1. Who identified the need for the activities?
2. Who initiated the activities?
3. Who funded the activities and who controls the nature and content of those activities?
4. Are the activities restricted to the benefit of a particular target group or are they available to anyone served by the institution?
5. Would the activities be carried out by the institution as part of its normal instruction or research program if funding were not provided specifically for that purpose?

If the need for a particular set of activities was identified by a person, group, or agency outside the institution and if those activities were initiated and funded by an external group or agency apart from the institution's normal instruction or research programs, those activities generally should be included in the Public Service program. They should be classified as part of Public Service because, under the described circumstances, the institution would be carrying them out primarily because it is uniquely qualified to do so. This scenario suggests that the institution is making available its particular unique resources, services, and expertise in order to either serve a community need or solve a community problem; therefore, the activities should be classified as such in accordance with the definition of the Public Service program.

The following examples of Public Service program elements can be used as guidelines:

1. Consulting activities (which are to be distinguished from instructional activities) should be classified in the Public Service program. Consulting activities are not instructional activities because consulting involves the application of knowledge or skills to a specific concern or problem generally identified and/or defined by the client. In consulting, the primary objective is the solution of the problem, with education being either a secondary motive or a tool for accomplishing the primary objective. Instruction may use a problem-solving approach, but its primary objective is the transmission of knowledge rather than the solution of problems. In distinguishing between consulting and instruction, one should ask whether the primary intent of the activity is the transmission of knowledge, and if so, the activity should be classified as Instruction. If the primary purpose of the activity is the solution of a problem for the benefit of someone external to the institution, then the activity is probably consulting and should be classified as Public Service.

2. Instructional activities should be classified in the Public Service program only if they can be shown to meet the criteria of "making available institutional resources and expertise outside the context of the instruction program" rather than simply "extending" the instruction program. Once again answers to the questions posed in the definition of the Public Service program should be used in determining how to classify those instructional activities that are on the border between instruction and public service. For example, short courses and seminars carried out as the result of a request by an external agency and restricted for the benefit of a specific audience other than the institution's student body should be classified in the Public Service program. However, most instructional activities (including most institutionally initiated conferences and seminars) are "extensions" of the institution's instructional program rather than

activities carried on outside of that program and should be classified in Instruction.

3. Activities should be classified in the Public Service program only if they are carried out for the *specific purpose* of making available institutional resources, services, and expertise. Therefore, if a particular activity only *incidentally* makes an institutional resource available it should be classified elsewhere (for example, social and cultural events may be staged as part of the Student Service program but if they are open to the general public they may incidentally benefit the community as well).

Discussion

In the first edition of the PCS, the Public Service program included those activities that were intended to benefit "groups external to the institution." External groups were defined as those persons who were not degree-seeking, matriculated, on-campus students. Furthermore, the first edition of the PCS defined "Instruction" as those instructional activities carried out for persons *internal* to the institution—the instructional activities carried out for persons *external* to the institution were classified as Public Service. This internal/external distinction has been eliminated in the revised edition of the PCS and the criterion now being used is the objective of the institution in carrying out the activities—are they being carried out to make the institution's resources, services, and expertise available to meet a community need?

This objective-oriented criterion is somewhat different from the earlier internal/external distinction. In the first place, the concept of postsecondary education has expanded the constituences of most institutions so that *external* constituencies are almost impossible to identify; institutions now serve adults as well as the youth, full-time and part-time students, and degree-seeking students as well as students not seeking degrees. The only activities that can still be considered *external* from a postsecondary education standpoint are those activities initiated by, and carried out for the specific benefit of, someone who is not a participant (in the broadest sense) in the institution's instruction or research programs. These activities are still considered part of the Public Service program because

they involve making the institution's services, resources, and expertise available to persons or groups in a context outside the normal instruction, research, and support programs.

In keeping with this revised concept of "public service" the only activities that are classified in the Public Service program are (1) those patient care activities and health care support activities conducted as part of a teaching hospital or health sciences center, (2) faculty and staff consulting services, (3) the provision of services or facilities/equipment to the community or to groups external to the institution, (4) those social and cultural events conducted outside the context of the student service program, and (5) those public broadcasting services that are neither part of the instructional program nor carried out in conjunction with a student broadcasting club. In recognition of the continuing need to differentiate between public service extension activities and those public service activities that are institutionally sponsored, the distinction between these two different organizational arrangements has been retained in the second edition of the PCS. Finally, instructional activities may be classified within the Public Service program *only* if they represent activities conducted outside the context of the institution's instructional program rather than simply an extension of that program.

3.1 Direct Patient Care

Definition: This subprogram includes those activities carried out for the specific purpose of providing direct patient care (prevention, diagnosis, treatment, education, rehabilitation, and so forth). The provision of such care may be for the benefit of either humans or animals (veterinary care). In the postsecondary education setting, these services are typically rendered under the auspices of a teaching hospital or health sciences center for the benefit of a clientele in the community-at-large rather than for the institution's own student body or faculty and staff. Patient care activities carried out solely for the benefit of the institution's students should be classified in subprogram 5.4, Student Health/Medical Services; patient care activities carried out solely for faculty and staff should be classified in 6.6, Faculty and Staff Services.

This subprogram includes only those activities directly related to the provision of patient care. Therefore, activities that are carried out within the setting of a teaching hospital but that cannot legitimately be considered part of direct patient care (such as instruction, research, and administration) should be appropriately classified elsewhere. Instructional activities should be classified in the appropriate subprograms in the Instruction program, 1.0; research activities should be classified in the Research program, 2.0; administrative activities should be classified in the appropriate subprograms in the Institutional Support program 6.0. Those health care support services that are carried out in direct support of the provision of patient care, but that are not a part of direct patient care, should be classified in subprogram 3.2, Health Care Support Services.

Within the Direct Patient Care subprogram, two ways of further classifying activities can be used, each mutually exclusive of the other. One way of further classifying these activities is to focus on the "setting" in which the patient care functions are carried out (for example, inpatient, ambulatory, outreach, emergency). A second way is to look at the "type" of care being provided (such as medical/surgical care, rehabilitative, dental care, veterinary care). In fact, within each of these "types" of patient care a further disaggregation can be made by "medical specialty" (for example, pediatrics, obstetrics, gynecology). The independence of these two dimensions has been shown in the coding by defining "x's" in the code where the other dimension category should be shown. Therefore, the setting categories are coded 1xx, 2xx, 3xx, and so forth, signifying that the x's should be filled in with "type of care" codes. By the same token, type of care codes are x02, x03, x04, and so forth, signifying places where "setting" codes should be used.

The following categories should be used for a more detailed classification of activities by "setting" within this subprogram:

1xx *Inpatient*—those activities designed to provide direct patient care within the confines of the care setting to persons who are residing at least overnight on the premises. Typically, inpatient clients are considered those persons who are assigned a bed at the care facility.

2xx *Ambulatory*—those activities designed to provide direct patient care within the confines of the care setting to persons who are resident neither overnight nor beyond the time required to provide the care. Excluded from this category is emergency patient care that is delivered in an ambulatory setting.

3xx *Outreach*—those activities in which the patient-care provider goes to the patient to deliver the care (such as a home-care program). Excluded from this third category is emergency patient care in which the care provider goes to the patient.

4xx *Emergency*—those activities designed to provide direct patient care to persons requiring immediate attention due to the acute nature of their health-care problem.

5xx *Mixed Function*—those activities that include a combination of several of the activities described above so that the individual activities cannot be separated out and classified in the appropriate categories. However, if the individual component parts can be separately identified, they should be classified in the appropriate categories.

The following categories should be used for a more detailed classification of activities by "type of care" within this subprogram:

x02 *Medical/Surgical Care*—those activities related to preventing, caring for, and assisting in the cure of disease and the care of the injured as well as surgical functions.

x03 *Behavioral*—those activities related to the treatment of psychological and behavioral problems as well as to the promotion of psychological well being.

x04 *Rehabilitative Care*—those activities related to the restoration of bodily functions and structures in order to regain patient self-sufficiency.

x06 *Public/Community Medicine*—those activities related to the health and illness of populations.

x07 *Patient Education*—those activities carried out to provide patients with the knowledge and attitudes needed to effectively cope with their own health problems.

x08 *Dental Care*—those activities related to care and treatment of human teeth and structures.

x10 *Veterinary Care*—those activities pertaining to the care and treatment of animals and their diseases.

x11 *Supportive Care*—those activities related to conducting prescribed treatment plans and to supporting the implementation of those plans (for example, patient hygiene, observation of patient status).

x12 *Other Patient Care*

3.2 Health Care Supportive Services

Definition: This subprogram includes those activities that are unique to a teaching hospital, health sciences center, or clinic and that support the provision of health care but that cannot legitimately be considered part of the provision of direct patient care. Excluded from this subprogram are those nursing services that are an integral part of the provision of patient care and that should be classified in subprogram 3.1, Direct Patient Care. The following categories should be used for a more detailed classification of activities within this subprogram:

369 *Medical Support Services*—those activities that are medical in nature and that indirectly support patient care, but that are not actually part of the provision of direct patient care.

Examples: Blood bank
  Dietary and nutritional services (unless part of the patient's treatment)
  EEG
  EKG
  Opthalmic Services
  Pharmacy
  Physiological instrumentation and monitoring
  X-ray services
  Orthodontic services

229 *General Hospital/Clinic Support*—those administrative and support activities that are unique to the operation of a hospital or medical clinic. Excluded from this category would be those administrative activities that can be classified appropriately within the various subprograms of the Institutional Support program (6.0).

Examples: Admitting and
Examples: Admitting and credit
  Forensic medicine

  Medical records
  Patient charging and accounts
  Inpatient reception desk

485 *Retail Services and Concessions*—those activities provided as a comfort or convenience to the visitors and clientele of the hospital or clinic. These activities are often operated as income-generating or self-supporting enterprises.

Examples: Gift shop
  Social services
  Television rental services

3.3 Community Services

Definition: This subprogram includes those resources, services, and expertise made available to persons and groups outside the context of the institution's Instruction, Research, and Support programs (excluding those defined as part of subprograms 3.1, 3.2, 3.4, 3.5). Community Service (3.3) activities differ from Cooperative Extension Services (3.4) in that they are generally sponsored and controlled by the institution; extension services involve a sharing of programmatic and fiscal control with an outside agency.

457 *Provision of Faculty/Staff Services*—those activities designed to make faculty/staff/student knowledge and skills available to the community or to groups external to the institution. The activities that should be classified in this category involve the use of the institution's own staff's skills and expertise for purposes that are not part of the institution's own regular instruction, research, or support programs (including institutionally sponsored consulting services). This category also includes those instructional activities that represent the provision of faculty/staff services rather than an "extension" of the instructional program.

Examples: Consulting with small businesses, public school system, and so forth
  Provision of coaches for community summer camp
  Faculty/staff participation on community action committees

Services related to the use of special equipment and facilities

Public-service-related instructional activities

453 *Provision of Facilities/Equipment*—includes providing the institution's physical facilities and/or equipment for community activities.

Examples: Community meetings and events held in institutional facilities

Community use of institution's gymnasium and recreation facilities for a summer camp

449 *Provision of Cultural and Recreational Services*—those cultural and recreational programs arranged and sponsored outside the context of the Student Service program. Cultural and recreational activities conducted primarily for students as part of the Student Service program should be classified in subprogram 5.2, Social and Cultural Development.

Examples: Lecture and fine arts series

Concerts and recitals (visiting artists)

3.4 Cooperative Extension Services

Definition: This subprogram includes those activities that make resources, services, and expertise available outside the Instruction, Research, and Support programs and that are conducted as cooperative efforts with outside agencies. Excluded from this subprogram are those instructional and research activities offered through an extension division. A distinguishing feature of the activities included in this subprogram is that programmatic and fiscal control are usually shared with one or more external agencies or governmental units.

The categories shown below are related to the categories used by the U.S. Department of Agriculture's Extension Management Information System (EMIS) and may be used as one alternative in the development of a more detailed classification of activities within this subprogram. However, if a more detailed "type of activity" classification of activities is desired within this subprogram, the user may want to refer to the classification structure outlined for the Community Services (3.3) subprogram.

009 *Agriculture and Related Industries*—activities

outside the instructional and research programs established to make resources, services, and expertise available to the agricultural industry.

Examples: Consulting and advisory services

Provision of institutional facilities/equipment

Soil testing

497 *Rural Social and Economic Development*—activities outside the instructional and research programs established to make resources, services, and expertise available for social and economic development in rural areas.

Examples: Consulting and advisory services

Provision of institutional facilities/equipment

Provision of services

301 *International Extension*—those activities outside the instructional and research programs established to make resources, services, and expertise available as they relate to international activities.

Examples: Consulting and advisory services

Provision of institutional facilities/equipment

Provision of services

597 *Urban Extension Service*—those activities outside the instructional and research programs established to make resources, services, and expertise available within the urban areas.

3.5 Public Broadcasting Services

Definition: This subprogram includes the operation and maintenance of those broadcasting services operated outside the context of the institution's Instruction, Research, and Support programs. Excluded from this category are broadcasting services that are conducted primarily in support of instruction (such programs should be classified in subprogram 4.5, Ancillary Support), broadcasting services that are primarily operated as a student service activity (such programs should be classified in subprogram 5.2, Social and Cultural Development), and broadcasting activities that are independent operations (such programs should be classified in subprogram 7.1, Institutional Operations).

The following categories should be used for a more detailed classification of activities within this subprogram.

061 *Broadcast Programming*—those activities related to planning, scheduling, and development of the programs to be broadcast.

057 *Broadcast Production*—those activities related to the actual on-the-air broadcast of programs. This subcategory includes the activities of announcers, broadcast personnel, and sound engineers, as well as the related facilities and equipment needed to conduct a broadcast.

389 *News Acquisition and Preparation*—those activities related to the acquisition, preparation, and reporting of news, for example, wire service, news rewriting, interviewing and reporting.

065 *Broadcast Sales*—those activities related to the solicitation of sponsors for commercial messages, political announcements, and so forth.

285 *Information Dissemination/Promotion*—those activities related to obtaining public support for the broadcasting station and its programs (that is, increasing the audience of radio listeners or television viewers) as well as those activities carried out to provide general information about the broadcasting station and its operations to the public.

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ACADEMIC SUPPORT PROGRAM
(4.0)

Definition

The Academic Support program includes those activities carried out in direct support of one or more of the three primary programs (Instruction, Research, Public Service). The activities that should be classified in this program include (1) activities related to the preservation, maintenance, and display of both the stock of knowledge and educational materials (for example, library services and museums), (2) activities that directly contribute to the way in which instruction is delivered or research is conducted (such as educational media services, academic computing support, ancillary support), (3) activities directly related to the administration of academic programs, and (4) activities related to the professional development of academic personnel.

The activities that should be classified in the Academic Support program differ from those classified in the other support programs in that they are carried out in *direct* support of one or more of the three primary programs. While the activities of the Student Service program may indirectly contribute to the institution's instructional objectives (such as social and cultural events), they are generally considered to be a supplement to the instruction program rather than a direct contributor to the objectives of the instruction program. The Institutional Support program, on the other hand, is primarily concerned with the institution as an operating entity and tends to focus on the institution as a whole rather than upon individual programs.

Discussion

Only a few changes from the first edition of the PCS have been made in the Academic Support program. The subprogram Educational Media Services (4.3) reflects a title change from the original PCS in which it was called Audio-visual Services. This change was made to reflect the new technologies emerging in this area as well as the expanded role of these kinds of activities in the delivery of instruction.

A more significant change involved the separation of the subprogram Academic Administration and Personnel Development (4.6) in the first edition of the PCS into two distinct subprograms called Academic Administration (4.6) and Academic Personnel Development (4.8). This change was made to reflect the fact that there are significant programmatic differences between academic administration and academic personnel development. It was agreed that sabbatical leaves and faculty development programs (both of which are part of Academic Personnel Development) constituted major resource commitments at many institutions and should not be mingled with other activities. Furthermore, the second edition of the PCS stipulates that when "departmental research" activities (or when some portion of those activities) are considered to contribute to academic personnel development they should be classified as such. The new Academic Personnel Development subprogram provides an easily identifiable category for such departmental research activities.

4.1 Library Services

Definition: This subprogram includes those activities that directly support the collection, cataloging, storage, and distribution of published materials in support of one or more of the institution's primary programs. To be included in this subprogram, these library services should serve multiple academic programs or departments within the institution. Library services that are restricted to the support of individual programs or departments should not be included in this subprogram, but should be attributed directly to the individual departments they serve (within either the Instruction, Research, or Public Service programs). The HEGIS codes can be used in classifying activities when the library is serving a single specific academic program or department. The "type of activity" classification for activities in this subprogram is described below.

349 *Materials Acquisition*—those activities concerned with the determination of acquisition policy, screening and evaluation of available materials, and with acquiring materials for the

libraries. Also included in this subcategory would be the periodic re-evaluation of materials.

Examples: Setting acquisition policy
Selection of materials for acquisition
Acquisition process

361 *Materials Preparation*—those activities related to the preparation and maintenance of materials for general use and distribution.

Examples: Searching
Cataloging
Recording
Shelving
Binding
Repair

357 *Materials Identification/Access Services*—those activities related to the provision of services and aids for the identification and location of documents or materials.

Examples: Information desk
Indexes
Visual aids (posters, signs, and so forth)
Reference services

353 *Materials Distribution*—those activities related to the control and distribution of library materials.

Examples: Circulation services
Reserve services
Loan and rental services

297 *Interinstitutional Exchange and Loan Services*—those activities related to borrowing or lending materials to other libraries.

Examples: Messenger services
Interlibrary loan office

285 *Information Dissemination/Promotion*—those activities related to providing general information about the library and its activities, as well as with the promotion of library use.

Examples: Publications
Advertisements and exhibits
Personal communication

4.2 Museums and Galleries

Definition: This subprogram includes those activities related to the collection, preservation, and exhibition of historical materials, art objects,
scientific displays, and so forth that support one or more of the institution's primary programs. Only activities serving multiple academic programs or departments or the entire institution should be included in this subprogram. Museums and galleries that support a single academic department should be charged directly to the activities of that department. This subprogram is not restricted to the collection, preservation, and exhibition of inanimate objects. For example, it is appropriate to include in this subprogram the activities associated with an arboretum. Research activities associated with the museum should be classified under 2.2, Individual or Project Research. The HEGIS codes can be used in classifying activities when the museum or gallery is serving a single specific academic program or department. The "type of activity" classification for activities in this subprogram is described below.

349 *Materials Acquisition*—activities involving the selection and acquisition of new exhibits or specimens.

Examples: Selection
Purchasing
Expeditions

361 *Materials Preparation*—activities related to the preparation and maintenance of materials for general use of exhibition.

Examples: Cataloging
Repairing
Cleaning specimens
Identification of specimens
Describing and photographing specimens

357 *Materials Identification/Access Services*—activities related to providing services and aids for the identification and location of museum materials.

Examples: Museum exhibits
Teaching collection
Tours
Guidebooks
Reference services

377 *Museum Specimen Identification Services*—activities carried out as a service to the institution's students, faculty, and staff, as well as the activities concerned with the identification of specimens not belonging to the museum.

297 *Interinstitutional Exchange and Loan Service—* activities related to the borrowing of specimens from or the lending of specimens to *other institutions.*

285 *Information Dissemination/Promotion* — activities related to providing general information, as well as the promotion of museum use.

Examples: Traveling exhibits
Public lectures
Off-campus exhibits
Advertisements
Publications

4.3 Educational Media Services

Definition: This subprogram includes those audio, visual, and other technological services that have been established to provide direct support for the institution's instruction, research, and public service programs. Those support services related to the use of "dial-access" centers, learning resource centers, computer-aided instruction, and closed circuit television facilities would be included here. However, those instructional activities that use computer aids, closed circuit television facilities, and so forth rather than contributing to the provision of those services should be classified appropriately in the Instruction (1.0) program. This subprogram includes only those activities intended to "provide" or "make available" media services. Those educational media services that support a single academic program, such as a German language laboratory, should be classified as one of the activities associated with that program. The HEGIS category codes can be used in classifying activities when they are serving a single specific academic program or department. The "type of activity" classification for activities in this subprogram is described below.

349 *Materials Acquisition—*those activities related to the acquisition of materials or devices.

Examples: Selection
Purchasing
Processing

445 *Production Services—*those activities involving the creation and/or manufacture of educational resources (often to the predetermined specifications set by the faculty).

Examples: Graphic materials production

Audio production
Still photography production
Motion picture production
Television production
Computer-assisted instruction production

353 *Materials Distribution—*those activities related to the distribution of educational media resources for institutional use.

Examples: Storage
Scheduling
Delivery
Maintenance
Inventory

169 *Educational Media Research—*those activities related to the generation and testing of the knowledge, theory, and research methodology used in delivering instruction through various materials, devices, or techniques.

Examples: Research on materials
Research on devices
Research on techniques

285 *Information Dissemination/Promotion—*those activities related to providing general information about the available media services and the promotion of the use of those services.

4.4 Academic Computing Support

This subprogram includes those computer services that have been established to provide direct support for one or more of the institution's primary programs. Administrative data processing services and computing support should be included in subprogram 6.4, Administrative Computing Support. The HEGIS category codes should be used when the academic computing support is serving a single specific academic program or department. The "type of activity" classification for activities in this subprogram is described below and can be shown using the fifth digit in the field.

093 *Computer Operations/Production—*those activities related to the operation of the computing system.

Examples: Data entry
Production control
Computer operations
Data librarian

097 *Computer Systems Support—*those activities

related to software design, including support of the operating system and other related software.

Examples: Development of the operating system

Development of language compilers (FORTRAN, COBOL, and so forth)

Development of generalized software packages (SPSS, BMD, and so forth)

Development of special systems for general usage

601 *User Services*—those activities related to specific user projects. This category differs from the previous one in that it includes those activities directed toward specific users and user needs rather than toward the system in general and general systems support.

Examples: Programming
Special systems
- Advising

285 *Information Dissemination/Promotion*—those activities related to maintaining and distributing general information about the institution's computer services to users, as well as those activities designed to promote the use of the institution's computer services.

Examples: Library
Newsletter

4.5 Ancillary Support

Definition: This subprogram includes those activities that directly contribute to the way in which instruction is delivered or research is conducted but that cannot be appropriately classified as educational media services or academic computing support. Ancillary support services are generally unique to a particular academic program or department and are so numerous and varied that individual PCS subprograms were not developed for each one. HEGIS categories can be used in classifying these activities in accordance with the related academic department.

Examples: Demonstration school, glass blowing shop, laboratory school, nuclear reactor, planetarium, vivarium, radio station, television station, university press, electronics design facility, animal laboratory facilities

4.6 Academic Administration

Definition: This subprogram includes those activities that provide administrative and management support specifically for the institution's academic programs. This subprogram includes the activities of the college deans, the administrative activities of departmental chairpersons, and the activities of their associated support staff. The activities of those administrative officers whose responsibilities are institution-wide and include responsibilities outside the "academic" realm (such as Vice-Presidents and Vice-Chancellors of Academic Affairs) should be included in 6.1, Executive Management. When the academic administration activities serve a single academic program or department the HEGIS category codes can be used for further description.

The following categories may be used for a more detailed "type of activity" classification of activities within this subprogram.

001 *Academic Administration/Governance*—those activities related to the management and governance of the institution's academic programs (excluding program advising) that are carried out by either members of the faculty or the administrative staff. These activities include committee work, the academic senate, and such departmental administrative functions as interviewing prospective faculty members, assisting in the development of departmental policies, tenure review, and so forth.

005 *Academic Program Advising*—those activities that involve providing assistance and advice to students about the courses they should take, describing course requirements for particular programs, scheduling necessary courses, describing program standards, and so forth. Academic program advising differs from "facilitating" activities (which should be classified within the Instruction program). Facilitating activities are an integral part of instruction because they are involved in the actual design of the student's instructional program. Academic advising, on the other hand, is generally more informational in nature and is designed to describe or clarify existing programs rather than to modify those programs to meet a particular student's needs.

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4.7 Course and Curriculum Development

Definition: This subprogram includes those planning and development activities established either to significantly improve or to add to the institution's curricula of instructional offerings. The activities that should be included in this subprogram are only those that result in significant changes in current course offerings or in the addition of a new course or curriculum offering. Those activities that individual faculty members carry out to update and improve their current course offerings (independent of any formalized set of activities having a course and curriculum development objective) should be considered part of the instructional program and classified appropriately in that program. The HEGIS category codes should be used if additional detail is desired. The "type of activity" classification for activities in this subprogram is described below.

109 *Course and Curriculum Planning*—those activities related to the planning for, or conceptualization of, new academic programs and curriculum offerings.

113 *Course and Curriculum Research*—those activities related to research or inquiries into new methods, theories, or concepts in course and curriculum development.

141 *Development/Modification of Curriculum*—those activities related to actually developing, testing, and modifying academic programs or curriculum offerings prior to their introduction and use.

121 *Curriculum Evaluation*—those activities related to the evaluation of the effectiveness and worthiness of academic programs or curriculum offerings after they have been introduced and used for a period of time. These evaluation activities can be related to either new or existing academic programs.

4.8 Academic Personnel Development

Definition: This subprogram includes those activities that provide the faculty with opportunities for personal and professional growth and development as well as those activities intended to evaluate and reward the professional performance of the faculty. This subprogram should include "departmental research" activities (or some appropriate portion of those activities) when they are carried out for the express purpose of the professional and personnel development of the academic personnel. If additional detail is desired, HEGIS categories can be used for differentiation by academic department. Appropriate type of activity classifications are outlined below.

529 *Staff Development*—those activities relating to the growth and enhancement of the faculty member's professional abilities.

Examples: Departmental research (if considered as primarily a faculty development program)
Professional meetings
Publishing
Recitals
In-service faculty education programs
Sabbaticals
Faculty development programs

193 *Faculty Recognition Programs*—those activities carried out to provide recognition to faculty members for their achievements.

Examples: Monetary awards
Faculty awards
Awards banquets

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Administrative activities related to the needs of special students, such as:
Coordinator of the deaf program
Disadvantaged student services
Foreign student services
Minority affairs
Physically handicapped student services
Veteran services
Women's programs
International services

5.2 Social and Cultural Development

Definition: This subprogram includes those activities established to provide for the social and cultural development of the student outside of the formal academic program. It includes those activities primarily supported and controlled by the student body, those activities outside the student's educational experience, and general recreation activities for the student body. Excluded from this category are intercollegiate athletics, which should be classified in 5.6. Also excluded are those Equal Opportunity Program activities providing financial assistance to minority groups, which should be classified within 5.4, Financial Aid Administration.

The following categories should be used for a more detailed type of activity classification within this subprogram:

545 *Student Interest Groups*—those activities intended to promote, and provide support for, formally recognized student groups and organizations.

   Examples: Institutional administrative support for such organizations as:
   Fraternities and sororities
   Student associations
   Student clubs
   Student religious organizations
   Student political groups
   Student cooperatives
   Student magazines
   Student newspapers
   Student yearbook
   Student publications

233 *General Student Recreation*—those activities carried out to provide the general student body with opportunities to participate in sports and recreational activities. This cate-

gory does not include intercollegiate athletic programs in which participation is more restricted and in which competition is between institutions rather than "intra-institutional" in nature.

   Examples: Intramural athletics
   Recreation programs
   Game tournaments (chess, bridge, and so forth)

117 *Cultural Events*—those activities intended to provide intellectual and cultural experiences for the students outside of, and supplementary to, the experiences they receive as part of the formal instructional program.

   Examples: Visiting artist/concert series
   Lecture series
   Music activities
   Art exhibitions
   Concerts
   Films

541 *Student Governance*—those activities intended to provide students with the opportunity to plan and direct student programs and to become involved with the management and operation of the institution.

   Examples: Student government
   Student-faculty assembly
   National student lobby

5.3 Counseling and Career Guidance

Definition: This subprogram includes those formal placement, career guidance, and personal counseling services provided for the benefit of students. Activities to be included are those related to personal and disciplinary counseling, and vocational testing and counseling, as well as those activities carried out to assist students in obtaining employment upon leaving the institution. Specifically excluded from this subprogram are faculty academic advising and counseling (which should be classified in 4.6, Academic Administration) and student employment services provided as part of the financial aid program (which should be classified in 8.2, Financial Aid Administration).

The following categories should be used for a more detailed classification of activities within this subprogram:

533 *Student Career Guidance and Placement Services*—those activities intended to assist students in understanding and evaluating their career alternatives, as well as in obtaining full-time employment upon leaving the institution. It does not include those activities intended to assist students in obtaining part-time employment as a means for deferring part of the cost of their education. These employment-related activities should be classified in subprogram 8.2, Financial Aid Administration.

 Examples: Career counseling and guidance
  Career days
  Career placement services
  Placement seminars
  Teacher placement
  Vocational counseling
  Vocational testing service

549 *Student Personal Counseling*—those activities intended to assist·students in dealing with their personal problems, including inter-personal relationships, marriage, and behavioral problems. This category also includes counseling related to student conduct. It does not include those psychiatric or psychological counseling services carried out as part of the student health program; those activities should be classified in subprogram 5.4, Student Health/Medical Services.

 Examples: Student counseling service
  Student counseling center
  Student counseling groups
  Counseling workshops
  Psychological testing

5.4 Student Health/Medical Services

Definition: This subprogram includes those activities carried out for the specific purpose of providing health and medical services for the student body. The activities included in this category are generally associated with a student infirmary rather than a teaching hospital. If health and medical services are provided for the institution's faculty or staff, they should also be included in this subprogram. Those activities related to providing medical services for individuals external to the institution should be classified in subprogram 3.1, Direct Patient Care.

As described in subprogram 3.1, there are two ways of further classifying activities within this subprogram. One way focuses on the "setting" in which the patient care services are carried out (such as inpatient, ambulatory, outreach, emergency), while the second way focuses on the "type" of care being provided (for example, medical/surgical care, rehabilitative care, behavioral). The "independence" of these two dimensions has been shown in the coding by defining "x's" in the code where the other dimension category should be shown. Therefore, the *setting* categories are coded 1xx, 2xx, 3xx, and so forth, signifying that the x's should be filled in with "type of care" codes. By the same token, *type of care* codes are x02, x03, x04, and so forth, signifying places where "setting" codes should be used.

The following categories should be used for a more detailed classification of activities by "setting" within this subprogram:

1xx *Inpatient*—those activiti:... .... ..d to provide direct patient care within tha confines of the care setting to persons who are residing at least overnight on the premises. Typically, inpatient clients are considered those persons who are assigned a bed at the care facility.

2xx *Ambulatory*—those activities designed to provide direct patient care within the confines of the care setting to persons who are resident neither overnight nor beyond the time required to provide the care. Excluded from this category is emergency patient care that is delivered in an ambulatory setting.

3xx *Outreach*—those activities in which the patient care provider goes to the patient to deliver the care, (for example, home care program). Excluded from this third category is emergency patient care in which the care provider goes to the patient.

4xx *Emergency*—those activities designed to provide direct patient care to persons requiring immediate attention due to the acute nature of their health care problem.

5xx *Mixed Function*—those activities that include a combination of several of the activities described above so that the individual activities cannot be separated out and classified in the appropriate categories. However, if the

individual component parts can be separately identified, they should be classified in the appropriate categories.

The following categories should be used for a more detailed classification of activities by "type of care" within this subprogram:

x02 *Medical/Surgical Care*—those activities related to preventing, caring for, and assisting in the cure of disease and the care of the injured as well as surgical functions.

x03 *Behavioral*—those activities related to the treatment of psychological and behavioral problems as well as to the promotion of psychological well being.

x04 *Rehabilitative Care*—those activities related to the restoration of bodily functions and structures in order to regain patient self-sufficiency.

x06 *Public/Community Medicine*—those activities related to the health and illness of populations.

x07 *Patient Education*—those activities carried out to provide patients with the knowledge and attitudes needed to effectively cope with their own health problems.

x08 *Dental Care*—those activities related to care and treatment of human teeth and structures.

x10 *Veterinary Care*—those activities pertaining to the care and treatment of animals and their diseases.

x11 *Supportive Care*—those activities related to conducting prescribed treatment plans and to supporting implementation of those plans (for example, patient hygiene, observation of patient status).

x12 *Other Patient Care*

5.5 Student Auxiliary Services

Definition: This subprogram includes those conveniences and services needed to maintain an on-campus, resident student body. A fee normally is charged for these services, which is related to, but not necessarily equal to, the cost of the service rendered. The various categories within this subprogram relate to the types of activities or services carried out as part of an auxiliary service program. A particular organization, such as a "student union" or "student center," will generally represent a combination of several of these auxiliary services and will, therefore, need to be classified appropriately in the various service categories. When several groups (students, staff, faculty, and so forth) benefit from the same auxiliary service, such as a central cafeteria or food service, a determination of the *primary* group for which the service is intended should be made and the service classified accordingly.

The following categories should be used for a more detailed classification of activities within this subprogram:

265 *Housing Services*—those activities related to providing residential facilities for students. This category includes those activities associated with securing off-campus housing as well as on-campus housing. Food services conducted within residential facilities should be classified in the Food Services category.

213 *Food Services*—those activities related to the provision of food and eating facilities for students. This category includes the services provided by dining halls, cafeterias, snack bars, and restaurants (including such services when they are carried out in residence halls).

485 *Retail Services and Concessions*—those activities related to the sale of products or services to students. This category includes the services provided by bookstores, school supply stores, art supply stores, movie houses, and vending machines for snacks.

521 *Specialized Services*—those functions that have the objective of providing special student services that cannot be appropriately classified in one of the other categories. This category includes such activities as child care services.

5.6 Intercollegiate Athletics

Definition: This subprogram includes those team and individual sports activities that involve competition between two or more educational institutions. Those activities that relate to intramural athletics should be classified within 5.2, Social and Cultural Development. Also excluded from this subprogram are the scholarships and financial aid administration activities provided in conjunction

with conducting intercollegiate athletics, which should be classified appropriately within 8.0, Student Access.

Within this subprogram there are two ways of further classifying activities, each mutually exclusive of the other. One way of further classifying activities is to focus on the "sport" (for example, baseball, basketball, football); the other way is to classify activities by "function" (for example, coaching, recruitment, athlete/team support).

The following categories can be used for a more detailed classification of activities by "sport" within this subprogram:

041	Baseball	493	Rugby
045	Basketball	513	Skiing
053	Boxing	517	Soccer
157	Diving	561	Swimming
197	Fencing	577	Tennis
217	Football	581	Track and Field
237	Golf	629	Wrestling
249	Gymnastics		Unassigned
277	Ice Hockey		●
281	Ice Skating		●
321	Lacrosse		●
489	Rowing		Unassigned

The following categories can be used for a more detailed classification of activities by "function" within this subprogram:

085 *Coaching*—those activities related to the coaching and instruction of individual players and teams. These activities are intended to promote the development of skills and techniques needed to achieve proficiency in sports competition.

029 *Athlete/Team Support*—those activities related to the physical health, condition, and day-to-day care and support of individual athletes and teams. It does not include those support

activities carried out in conjunction with conducting of athletic events.

Examples: Trainers' activities
Training table (dining facilities)
Residential facilities

477 *Recruitment*—those activities related to the recruitment and enrollment of student athletes.

Examples: Travel for purposes of identifying potential student athletes (scouting)
Cooperative efforts with the admissions office

101 *Conduct of Events*—those activities carried out in conjunction with the conduct of athletic events.

Examples: Athlete/team travel
Lodging at off-campus events
Cheerleading activities
Concessions
Ticket and program printing

285 *Information Dissemination/Promotion*—those activities related to providing general information about the intercollegiate athletic program, as well as those activities related to promoting the intercollegiate athletic program.

Examples: Advertising
Complimentary tickets
Sports information series
Publicity programs

409 *Operation and Maintenance of Athletic Facilities*—those activities related to the operation and maintenance of all sports arenas and facilities that are used in support of the intercollegiate athletics program. However, if the maintenance of such athletic facilities is part of the institution-wide maintenance program, these activities should be classified within subprogram 6.5, Physical Plant Operations.

INSTITUTIONAL SUPPORT PROGRAM
(6.0)

Definition

The Institutional Support program consists of those activities carried out to provide for both the day-to-day functioning as well as the long-range viability of the institution as an operating organization. The overall objective of the Institutional Support program is to provide for the institution's organizational effectiveness and continuity. It does this by (a) providing for planning and executive direction; (b) providing for administrative and logistical services; (c) maintaining the quality of the physical environment; (d) enhancing relationships with the institution's constituencies; and (e) providing services and conveniences for the employees of the institution.

Discussion

Several significant changes have been made in the Institutional Support program in the second edition of the PCS. One was to combine the two subprograms from the original PCS (General Administrative Services, 6.3 and Logistical Services, 6.4) into a single subprogram called General Administration and Logistics, 6.3. These two subprograms were combined because it was felt that they reflected similar objectives. A second major change was to remove administrative computing support, student records, and student admissions from the original 6.3, General Administrative Services subprograms. Administrative computing support and student records were made subprograms within Institutional Support (subprograms 6.4 and 6.8, respectively); student admissions and recruiting were made a subprogram (8.1) in the new Student Access (8.0) program.

6.1 Executive Management

Definition: This subprogram consists of those executive-level activities concerned with the overall management of, and long-range planning for, the entire institution. Included within this subprogram are the activities of the various "actors" involved in policy formulation and executive direction, including the activities of the governing board, the chief executive officer, and the senior executive officers.

Legal activities conducted on behalf of the institution are also included here. Those administrative activities that do not have an institution-wide focus should be excluded.

177 *Executive Direction*—those activities performed by or involving either the senior executive officers or executive boards.

Examples: The activities typically associated with:
  Board of Trustees
  Governing Board
  Chancellor
  Legislative Liaison
  Provost
  President/Vice-President Emeritus
  Vice-Chancellors
  Vice-Presidents/Provosts
  Executive Special Committee
  Executive Special Projects

433 *Planning and Program Development*—those activities related to the institution-wide planning and design functions carried out in support of the activities of the executive officers or governing boards.

Examples: Analytical studies
  Institutional research
  Academic senate
  Budget planning
  Long-range planning committee
  Policy committees

329 *Legal Services*—those legal activities conducted on behalf of the institution.

Examples: Activities typically associated with:
  General counsel
  Patent attorney

6.2 Financial Management and Operations

Definition: This subprogram consists of those activities related to the day-to-day financial management and fiscal operations of the institution. Activities related to long-range financial planning and policy formulations should be included in 6.1, Executive Management.

205 *Financial Management and Control*—those activities related to the day-to-day management, control, and accounting for the finances of the institution.

   Examples: Activities typically associated with:
   Treasurer
   Comptroller
   Business Officer (financial duties)
   Internal auditing
   Administration of the budget

209 *Financial Operations*—those activities involving the actual collection, processing, and disbursement of institutional funds.

   Examples: Debt collection
   Payroll operations
   Bursar
   Cashier
   Disbursement

305 *Investment Management*—those activities related to the control and administration of the institution's investment and endowments.

   Examples: Cash flow management
   Endowment management

245 *Grants and Contracts Financial Management*—those activities related to the financial management and administration of grants and contracts. Excluded from this category are those activities that involve the preparation and submission of grants and contracts, which should be classified as 6.7, Public Relations and Development.

   Examples: Contracts management
   Grants accounting

6.3 General Administration and Logistical Services

Definition: This subprogram consists of those activities related to the general administrative operations and services of the institution (with the exception of those activities related to financial operations, to administrative data processing, and to student records). Included in this subprogram are those activities related to (1) the administration of personnel programs, (2) the management of the institution's facilities, (3) the purchasing and maintenance of supplies and materials, (4) campus-wide communication and transportation services, and

(5) the health and safety of the campus population. Those activities relating to financial operations should be classified within subprogram 6.2, Financial Management and Operations; activities involving student records should be classified within subprogram 6.8, Student Records; and activities related to administrative computing services should be classified in subprogram 6.4, Administrative Computing Support.

429 *Personnel Management and Support*—those activities involving the recruiting and hiring of faculty and staff, those activities related to the administration of employee programs, and those activities related to the development of administrative personnel.

   Examples: Affirmative Action Officer
   Personnel Administration
   Equal Opportunity Office
   Labor Relations Office
   Administrative staff development programs
   Recruiting
   Staff insurance programs
   Retirement programs
   Faculty records

189 *Facilities Management*—those activities related to the management, allocation, and scheduling of rooms and other institutional facilities as well as the maintenance of records concerning institutional facilities.

   Examples: Room scheduling
   Space allocation
   Facilities records
   Facilities reporting

261 *Health and Safety Services*—those activities carried out to provide for the environmental well-being and security of the campus and its residents.

   Examples: Police protection
   Campus security
   Fire protection
   Trash collection
   Traffic control

437 *Procurement and Materials Handling*—those activities involving the acquisition, storage, and movement of materials.

   Examples: Purchasing
   Receiving/Shipping

Freight management
Inventory control
Warehousing

585 *Transportation Services* — those activities involving campus transportation systems and services.

Examples: Motor pool services
Car pool services
Operation of buses
Parking services

089 *Communication Services* — those campus communication services that are directly related to the operation of the institution. Excluded are on-campus broadcasting activities.

Examples: Campus mail services
Copying services
Duplicating services
Printing services
Telephone and telegraph services

6.4 Administrative Computing Support

Definition: This subprogram includes those computer services that have been established to provide support for institution-wide administrative functions. Academic-related data processing services and computing support should be included in subprogram 4.4, Academic Computing Support. The "type of activity" classification for this subprogram is described below and can be shown using the fifth digit in the field.

441 *Production Operations* — those activities related to the operation of the computing system.

Examples: Data entry
Production control
Computer operations
Data librarian

565 *Systems Support* — those activities related to software design, including support of the operating system and other related software.

Examples: Development of the operating system
Development of language compilers (COBOL, FORTRAN, and so forth)
Development of generalized software packages (SPSS, BMD, and so forth)
Development of special systems for general usage

021 *Applications* — those activities related to specific user projects. This category differs from the previous one in that it includes those activities that are directed toward specific users and user needs rather than toward the system in general and general systems support.

Examples: Programming
Special systems
Advising

285 *Information Dissemination/Promotion* — those activities related to maintaining and distributing information of interest to users of the computer services.

Examples: Library
Newsletter

6.5 Physical Plant Operations

Definition: This subprogram consists of those activities related to maintaining existing grounds and facilities, providing utility services, and planning and designing future plant expansions and modifications (campus architects, construction engineers, and so forth). The actual capital expenditures used for plant expansion and modification should be excluded since they represent expenditures of the Plant Fund rather than the Current Fund and would, therefore, not be classified in the PCS.

069 *Building Maintenance* — those activities related to routine repair and maintenance of buildings and structures, including both normally recurring repairs and preventive maintenance.

Examples: Maintenance of the interior and exterior of buildings; maintenance of classroom furniture not inventoried to a department; operating and replacement costs for equipment and material used in connection with building maintenance.

125 *Custodial Services* — those activities related to custodial services in institutional buildings.

Examples: Cleaning activities
Elevator operation

605 *Utilities* — those activities related to heating, cooling, light and power, gas, water, and any other utilities necessary for the operation of the physical plant.

Examples: Power plant equipment
Sewage disposal
Central air conditioning

325 *Landscape and Ground Maintenance*—those activities related to the operation and maintenance of campus landscape and grounds.

Examples: Maintenance of trees, grass, shrubs
Maintenance of roads and walks
Snow removal

341 *Major Repairs and Renovation*—those activities related to major repairs, maintenance, and renovations. Major projects are defined as those costing in excess of $10,000.

105 *Construction Planning*—those activities related to the development of plans and designs for plant expansion or modification. Those planning activities related to the process of deciding whether to initiate a major construction project are more appropriately classified within subprogram 6.1, Executive Management. The actual capital expenditures for plant expansion or modification are excluded.

6.6 Faculty and Staff Auxiliary Services

Definition: This subprogram includes those support services that have been established primarily to serve the faculty and staff. The various categories within this subprogram relate to the types of activities or services carried out as part of an auxiliary service program. A particular organization, such as a "faculty club," will generally represent a combination of several of these auxiliary services and will, therefore, need to be classified appropriately in the various service categories. A fee normally is charged for these services, often directly related to, but not necessarily equal to, the cost of the service rendered. Auxiliary services that benefit several groups (for example, a food service benefitting students, faculty, and staff) should be classified according to the primary group for which the service is intended. If health and medical services are provided for the faculty or staff they should be classified in subprogram 5.4, Student Health/Medical Services. Excluded from this subprogram are those activities related to the administration of personnel programs, which should be included in 6.3, General Administrative Services.

265 *Housing Services*—those activities that have the objective of providing residential facilities for faculty and staff. This category includes those activities associated with securing off-campus housing as well as on-campus housing.

213 *Food Services*—those activities that have the objective of providing food and eating facilities specifically for faculty and staff. This category includes dining halls, cafeterias, snack bars, and restaurants.

485 *Retail Services and Concessions*—those activities related to the sale of products or services primarily to faculty and staff rather than to students.

521 *Specialized Services*—those activities that have the objective of providing special services specifically for faculty and staff. This category includes such activities as child care services and faculty recreational activities.

6.7 Public Relations/Development

Definition: This subprogram consists of those institutional activities established to maintain relations with the local community, the institution's alumni, governmental entities, and the public in general, as well as those activities carried out to support institution-wide fund raising and development efforts. Those activities that involve the use of alumni in recruiting students should be classified in subprogram 8.1, Student Recruitment and Admissions. Also excluded from this subprogram are those activities carried out as a public service (see definition of the Public Service program) rather than with a public relations objective.

285 *Information Dissemination/Promotion*—those activities designed to communicate *general* information about the activities, goals, and objectives of the institution to various audiences, both internal and external to the institution. Many of the communication activities in this category are carried out through the mass media.

Examples: Internal newsletters
Audiovisual presentations
News releases
Community affairs programs
Public opinion surveys

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241 *Governmental Relations*—those activities related to maintaining and cultivating relationships with governmental entities, as well as those activities designed to obtain governmental financial support.

Examples: Governmental relations activities
Development of proposals for governmental grants and contracts
Governmental lobbying efforts

013 *Alumni and Constituency Relations*—those activities related to maintaining and cultivating relationships with the alumni and other constituents who might have an interest in the institution. Constituents include donors, governing board members, prospective supporters, parents, foundations, corporations, church groups, and so forth. The activities included in this category differ from those classified as "Information Services" in that they are specifically targeted toward and intended to impact particular interest groups rather than being generally informative in nature.

Examples: Alumni publications
Alumni events
Publications and events for non-governmental constituents

397 *Nongovernmental Fund Solicitation*—those activities related to the actual solicitation of gifts or grants and contracts from private sources, such as individuals, corporations, and foundations.

Examples: Development of proposals for grants
Alumni fund raising activities
Gifts solicitation

6.8 Student Records

Definition: This subprogram includes those activities the institution carries out to maintain, handle, and up-date records for currently enrolled students as well as for those who were previously enrolled. This subprogram does not include the activities related to record-keeping for those seeking admission to the institution; these activities should be classified in subprogram 8.1, Student Recruitment and Admissions.

Examples: Activities typically associated with the registrar's office, such as:
Student records maintenance and upkeep
Correspondence related to student records
Maintenance of records for previously enrolled students

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INDEPENDENT OPERATIONS PROGRAM
(7.0)

Definition

The Independent Operations program makes it possible to classify those program elements that are independent of, or unrelated to, the primary missions of the institution. The Independent Operations program includes those operations that are owned or controlled by the institution as investments, but *only* if they are financed as part of the institution's current operations. Operations that represent investments of the institution's endowment funds should be accounted for in the Endowment Fund Group and therefore should not be classified in the PCS (which is used to classify only current operations and accounts).

Discussion

No major changes were made in the definition of this program from the first edition of the PCS to the revised PCS.

7.1 Independent Operations/Institutional

Definition: This subprogram includes those activities that are operations owned or controlled by the institution but that are unrelated to or independent of the institution's mission. Excluded from this subprogram are those operations managed as investments of the institution's endowment funds.

Examples: Airport
   Bowling alley
   Commerical rental property
   Conference center
   Hotel
   Radio station
   Restaurant
   Television station

7.2 Independent Operations/External Agencies

Definition: This subprogram includes those activities that are controlled or operated by outside agencies, but that are housed or otherwise supported in some way by the institution. Specifically included here are the 21 federally funded research centers listed below; all institutionally operated research centers should be classified within subprogram 2.1, Institutes and Research Centers.

Federally Funded Research Centers:
   Ames Laboratory
   Applied Physics Laboratory
   Argonne National Laboratory
   Brookhaven National Laboratory
   Center for Naval Analysis
   Cervo Tololo Inter-American Observatory
   E.O. Lawrence Berkeley Laboratory
   E.O. Lawrence Livermore Laboratory
   Jet Propulsion Laboratory
   Kitt Peak National Laboratory
   Lincoln Laboratory
   Los Alamos Scientific Laboratory
   National Accelerator Laboratory
   National Astronomy and Ionosphere Center
   National Center for Atmospheric Research
   National Radio Astronomy Observatory
   Oak Ridge Associate Universities
   Ordanance Research Laboratory
   Plasma Research Laboratory
   Space Radiation Effects Laboratory
   Stanford Linear Accelerator Center

STUDENT ACCESS PROGRAM
(8.0)

Definition

The Student Access program includes those activities carried out with the objective of obtaining a student body having those characteristics the institution desires (such as academic qualifications and capabilities, socioeconomic status, racial/ethnic background, athletic abilities). Included in this program are those activities carried out (1) to identify prospective students, (2) to promote attendance at the institution, (3) to provide prospective students with incentives to attend the institution (including financial assistance), and (4) to process the admissions applications of potential students. It does not include promotional activities designed to create a favorable image of the institution with the general public (these activities should be classified in subprogram 6.7, Public Relations/Development), but it does include those activities specifically intended to influence the attendance decisions of prospective students (for example, participation in high school "college fairs").

Discussion

The introduction of the Student Access program represents the recognition that one of the most important objectives of any educational institution is to provide itself a student body that satisfies the criteria it considers important in carrying out its educational mission. Historically, the "student access program" concerned itself primarily with obtaining a student body that possessed either particular academic capabilities or particular athletic abilities. More recently, the list of desired student body characteristics has been expanded to include socioeconomic status and racial/ethnic characteristics.

Quite obviously, because the kind of "educational experience" provided in any institution depends in large part upon the kinds of students involved in its programs and the interactions among those students, obtaining a student body with a particular mix of characteristics represents a very important set of institutional objectives. This PCS program category has been developed to allow the institution to address those objectives directly.

Obtaining a particular kind of student body not only requires that the institution identify and admit acceptable applicants, but in many cases also requires that the institution provide incentives designed to ensure their application and subsequent attendance. Incentives may take the form of direct financial assistance (such as scholarships and fellowships) or they may simply involve persuasion and active recruitment. Therefore, the concepts of recruitment and financial aid (both the stipends and the administration of the financial aid program) have been built into the Student Access program along with activities carried out to process applications for admission.

8.1 Student Recruitment and Admissions

Definition: This subprogram consists of those activities carried out by an institution related to (1) the identification of prospective students, (2) the promotion of attendance at the institution, and (3) the processing of applications for admission to the institution. In addition, for the proprietary sector of postsecondary education, this subprogram includes activities related to sales operations, advertising, and marketing.

The following categories can be used for a more detailed functional classification of activities with this subprogram:

447 *Recruitment*—those activities related to the identification of potential students and to the active recruitment of students for admission to the institution. The focus of these activities is on influencing the decision of a particular student or target group either to apply for admission or to attend once admission has been granted.

Examples: Recruiting trips
Providing information for prospective students (for example, admissions catalog)
Communication with high schools
Conducting high school career nights
Recruiting/sales commissions

Advertising campaigns
Marketing activities

525 *Student Admissions*—those activities carried out in interviewing and evaluating potential students, processing applications for admission, and admitting students to the institution.

Examples: Interviewing student applicants
Evaluation of student applicants
Administrative admissions procedures

8.2 Financial Aid Administration

Definition: This subprogram includes those administrative activities carried out in support of the institution's financial aid program. Excluded from this subprogram are the actual financial aid grants and stipends, which should be classified in 8.3, Scholarships and 8.4, Fellowships.

The following categories should be used for a more detailed classification of activities within this subprogram:

201 *Financial Aid Counseling and Evaluation*— this category includes financial aid counseling with students and parents to provide information about educational costs, eligibility for aid programs, and the types of financial aid available. It also includes those activities related to the review and evaluation of an applicant's eligibility for financial aid, the determination of the award, and the notification of applicants.

473 *Records Maintenance and Reporting*—includes those activities related to maintaining, updating, and storing financial aid records. This category also includes those activities related to reporting on the conduct and impact of the institution's financial aid program to institutional planners, governmental agencies, and private donors.

537 *Student Employment Services*—those activities that are part of the institution's financial aid program and that are intended to assist students, their spouses, and dependents in finding full- or part-time work, through employment opportunities both on and off campus. This category includes the activities associated with work/study programs but does not include those activities related to "job placement" for the institution's graduates.

8.3 Scholarships

Definition: This subprogram includes all financial assistance provided to undergraduate students in the form of outright grants, trainee stipends, and prizes, either awarded by and/or administered through the institution.

Included in this subprogram would be tuition and fees, waivers and remissions, and all gifts and prizes to students that are outright grants and not contingent upon the student rendering services to the institution (with the exception of intercollegiate athletic scholarships, which should be classified in this subprogram).

This subprogram excludes waivers or remissions of tuition and fees granted as a result of either faculty or staff status or family relationship of students to faculty or staff. Such waivers and remissions should be recorded as staff fringe benefit expenses and categorized in the appropriate subprogram in the PCS (for example, if the staff member is primarily involved in providing instruction, those expenses would be classified appropriately within the Instruction program). Also excluded from this program are loans (which represent conversion of assets) and work/study assistance (which is a payment for services rendered).

The following criteria were developed by the Joint Accounting Group (JAG)* to determine which monies should be included as "scholarships:"

1. The monies must represent expenditures of the Current Funds group.

2. The institution must have fiscal control of the funds used to make the grant.

3. The recipients should not be formally required to render services to the institution as consideration for the grant (with the exception of intercollegiate athletic scholarships), nor should they be expected to repay the amount of the grant to the funding source.

4. The institution must have selected the recipient of the grant. If the institution is given control of the monies, but is not allowed to select the recipient of the grant (for example, the federal Basic Educational Opportunity Grants program),

the funds should be reported in the Agency Funds group rather than in the Current Funds group.

Examples: Grants-in-aid (undergraduate)
   Prizes
   Trainee stipends (undergraduate)
   Tuition/fee waivers
   Intercollegiate athletic scholarships

8.4 Fellowships

Definition: This subprogram includes all financial assistance provided to graduate level students as outright grants-in-aid and trainee stipends. Excluded from this category are funds for which services to the institution must be rendered (for example, teaching assistants, research assistants). Student loans also are excluded. The same criteria outlined in subprogram 8.3 should be used in determining those types of assistance that are to be considered "fellowships."

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APPENDICES

Appendix I
TAXONOMY OF SUBJECT AREAS

The first edition of the PCS incorporated the HEGIS Taxonomy as the structure to be used for a more detailed classification of activities and resources within the Instruction program (1.0). The HEGIS Taxonomy was developed in 1970 by the National Center for Educational Statistics and documented in *A Taxonomy of Instructional Programs in Higher Education*.

While the HEGIS Taxonomy was a highly useful structure in the first edition of the PCS, it also had some significant drawbacks. The HEGIS Taxonomy was originally intended to be used for the classification of student programs, but has subsequently been used to classify both student programs and academic disciplines. The reason it was possible to use it for both the classification of academic disciplines and student programs is that since the HEGIS Taxonomy does not include definitions as part of the structure, it is primarily a list of "labels." For example, it is possible to use the label "English," because it is not defined, to classify either an English discipline or an English student major. While the flexibility afforded by a lack of definitions may be an advantage of sorts, it also severely limits the utility of the HEGIS Taxonomy as a tool for obtaining compatible information (regardless of whether it is discipline or program information).

In addition to the lack of definitions, a second major drawback of the HEGIS Taxonomy is its limited applicability across all of postsecondary education. Since the time of its introduction, both community colleges and occupational/vocational schools have been forced to supplement the HEGIS Taxonomy categories with the classification structure described in Handbook VI[**] of the State Educational Records and Report Series; in fact, the Handbook VI structure was designed to serve elementary-secondary and vocational-technical education. However, as Adult Basic Education, Adult/Continuing Education, multi-disciplinary

[*]Robert A. Huff and Marjorie O. Chandler, *A Taxonomy of Instructional Programs in Higher Education*, Section 1: "Conventional Academic Subdivisions of Knowledge and Training" (Washington, D.C.: National Center for Educational Statistics, 1971).

[**]Handbook VI, *Standard Terminology for Curriculum and Instruction in Local and State School Systems* (Washington, D.C.: National Center for Educational Statistics, 1970).

programs, and nontraditional programs have become an increasingly important part of planning within postsecondary education, both the HEGIS Taxonomy and the Handbook VI structures have been found to be insufficient for the needs they were expected to serve.

In recognition both of the shortcomings in the two existing structures (Handbook VI and the HEGIS Taxonomy) and of the increased need for a single classification scheme for all subject areas, the National Center for Education Statistics recently funded a project, "Classification of Educational Subject Matter." This project is attempting to devise a single classification structure that, when completed (1) will be applicable to those subject areas taught in elementary/secondary education, in postsecondary education, and in adult/continuing education programs, (2) will be sufficiently comprehensive to encompass all of postsecondary education, and (3) will include definitions for each category in the structure. It is anticipated that this project will result in a single, comprehensive structure some time in 1977.

It should be pointed out that the new comprehensive structure, in its current form (as outlined in the review edition of the structure document), incorporates an eight-digit hierarchical coding scheme. An example of the hierarchical array used in the new classification structure is shown below:

20. Social Sciences (Level I—major category)
20.02 Economics (Level II—subcategory)
20.02.11 Principles and Theory of Economics (Level III)
20.02.11.01 Macroeconomic Economics (Level IV)

Since the HEGIS Taxonomy uses only a four-digit coding scheme, this longer coding field may create problems for some institutions. However, it is difficult to assess the degree of potential difficulties that will be encountered in using the new structure because there are significant differences between the old Taxonomy and the new classification structure. In fact, the hierarchical nature of the new structure may allow many organizations to continue to use only four digits of the new eight-digit field and still have as much detail as they need.

Because the new classification structure is still in the development stages and no decision has yet been made concerning a structure for "student programs" (the new classification structure is applicable to subject areas only), the Review Edition of the *Program Classification Structure: Second Edition* is continuing to incorporate the original HEGIS Taxonomy. However, before the final edition of the revised PCS is published, NCHEMS will decide which classification structure will be used (either the Classification of Educational Subject Matter or the HEGIS Taxonomy). While the final edition of the revised PCS will probably choose to incorporate the new comprehensive subject matter classification structure, NCHEMS will want to see a final version of that structure prior to making that decision.

This Appendix in the review edition of the revised PCS, therefore, outlines the *original* HEGIS Taxonomy for the time being. If it is ultimately decided that the new comprehensive structure is to be incorporated in the revised PCS, that structure will be included in the final edition document.

The HEGIS Taxonomy*

Section I:

CONVENTIONAL ACADEMIC SUBDIVISIONS OF KNOWLEDGE AND TRAINING

Title	Code
Accounting	0502
Administration, business	0506
Administration, educational	0827
Administration, public	2102
Administration, special education	0809
Adult education	0807
Advertising	0604
Aeronautical engineering	0902
Aerospace engineering	0902
Aerospace science	1803
African languages (non-Semitic)	1116
African studies	0305
Afro-American studies	2211
Agricultural business	0112
Agricultural economics	0111
Agricultural engineering	0903
Agricultural management	0110
Agriculture, general	0101
Agriculture technologies	0116
Agronomy	0102
American Indian cultural studies	2212
American studies	0313
Analytical chemistry	1909
Anatomy	0412
Animal science	0104

Anthropology	2202
Applied design	1009
Applied mathematics	1703
Arabic	1112
Archeology	2203
Architectural engineering	0904
Architecture	0202
Architecture, naval	0923
Art	1002
Art appreciation	1003
Art, commercial	1009
Art education	0831
Art history	1003
Asian studies, general	0301
Astronautical engineering	0902
Astronomy	1911
Astrophysics	1912
Atmospheric sciences	1913
Audiology	1220
Bacteriology	0403
Banking	0504
Biblical languages	2303
Biochemistry	0414
Bioengineering	0905
Biological and physical sciences (interdisciplinary)	4902
Biology, cellular	0417
Biology, general	0401
Biology, marine	0418
Biology, molecular	0416
Biomedical communication	1217
Biomedical engineering	0995
Biometrics	0419
Biophysics	0415
Biostatistics	0419
Black culture studies	2211
Botany, general	0402
Business administration	0506
Business, agricultural	0112
Business economics	0517
Business education	0838
Business, general	0501
Business, international	0513
Business management	0506
Business statistics	0503
Cafeteria management	1307
Catalan	1199
Cell biology	0417
Cell physiology	0417
Ceramic engineering	0916
Ceramics	1009
Chemical engineering	0906
Chemistry, general	1905
Child development	1305
Chinese	1107
Chiropractic	1221
Cinematography	1010
City planning	0206
Civil engineering	0908
Classics	1504
Clinical psychology	2003
Clinical social work	1222
Clothing	1303
Commerce education	0838
Commerce, general	0501
Commercial art	1009
Communication media	0605
Communications, general	0601
Communications engineering	0909
Community college education	0806

Section II:

TECHNOLOGICAL AND OCCUPATIONAL CURRICULUMS LEADING TO ASSOCIATE DEGREES AND OTHER AWARDS BELOW THE BACCALAUREATE

Appendix II
CREDIT/NONCREDIT STATUS

Many users of the Program Classification Structure will want to further modify instructional offerings by describing the appropriate credit/noncredit status of those offerings. Historically, the credit/noncredit status of an offering was synonymous with the relationship of the offering to a formal degree/certificate program. However, institutions are increasingly beginning to grant "credit" for offerings— credit that is not, however, applicable toward a formal institutionally backed degree or certificate. Therefore, the entire concept of credit has become blurred and it is no longer clear when offerings are described as being "for credit" that they are also degree-related. Therefore, the PCS is making a distinction between an offering's "credit/non-credit status" and the relationship of that offering to a formal degree program. Offerings that are part of a formal degree program are almost always "for credit," but offerings "for credit" often are *not* part of a formal degree program. Therefore, to allow institutions to distinguish offerings that carry credit but that are not recognized as progress toward the completion of a formal degree or certificate, the PCS has included the two distinctions in its classification scheme.

Distinctions regarding formal degree programs may be made by classifying offerings appropriately within the subprograms of the Instruction program. Distinctions regarding credit or noncredit status can then be made independent of the relationship of the offering to a degree program. By

separating the concept of "credit" from the relationship of an instructional offering to a formal degree program, credit becomes essentially a measure of the "amount" of instruction provided. This "amount of instruction" measure can subsequently be used to measure progress towards completion of a degree program (when the degree requirements are based in part on the amount of instruction required) or it can be used by the institution to obtain financial reimbursement for the amount of instruction provided. However, the granting of credit does not signify that quality controls are being exercised. If anything can be used to signify the quality of an offering, it is not its credit status, but rather that it is part of a degree or certificate program.

In the PCS, therefore, two categories are used to describe credit/noncredit status.
1. *For credit:* those offerings for which the institution grants credit, presumably because it is necessary to maintain a record of the amount of instruction associated with those offerings. "For credit" does not imply that the credit granted is applicable toward a postsecondary degree or certificate.
2. *Not-for-credit:* those offerings for which no credit is awarded by the institution, presumably because no records are needed about the amount of instruction associated with these offerings. Certificates of completion, however, may be awarded for "not-for-credit" offerings.

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Appendix III
LEVEL

The term "level" is typically used in the PCS to represent two different concepts. When users are classifying instructional offerings from the "provider" perspective, they use the concept of "course level." *Course level* refers to the intended degree of complexity of the material associated with the instructional offering, the level of comprehension required of students who undertake the instructional offering, or some measure of the sequential position of the offering within a predetermined degree/diploma/certificate program. On the other hand, when users are looking at the instruction program and instructional offerings from the "clientele" perspective they employ the concept of "student level." *Student level* relates to the proportion of total requirements the student has obtained toward the completion of the degree/diploma/certificate program in which he or she is enrolled.

When the PCS is being used to classify the activities and resources associated with an instructional offering, the focus is on the provider perspective and "course level" is used as the appropriate modifier. When the PCS is being used to look at student programs (for example, in an Induced Course Load matrix analysis and its study of student programs and their relative "draw" on various disciplines or departments), the clientele perspective is used and "student level" is the appropriate modifier. The following categories and definitions associated with these two concepts should be used.

Course Level

Definition: The intended level of complexity of the material associated with an instructional offering or the level of comprehension required of the students who undertake the instructional offering. However, it is not based on the student level (that is, progress towards a degree/certificate/diploma) of the students enrolled in the instructional offering. For example, an elementary algebra course that happens to have an unusually large proportion of seniors enrolled does not become an advanced course by virtue of the student level of the participants.

Two sets of categories are recommended for use in describing course level. One set of course level categories should be used in describing those offerings that are part of a formal degree/diploma/certificate program. These programs generally consist of a series of interrelated instructional offerings all related to the attainment of a predetermined set of objectives. Course level in the context of such a defined program usually implies both its position within the program sequence and the presumed levels of prior knowledge and experience for the students enrolled in those

offerings. The second set of course level categories should be used in describing course level when the offerings are not part of a formal degree/diploma/certificate program. For these offerings, course level signifies only to the level of complexity of the material and indicates the level of competence expected of prospective students.

The following categories are recommended for those offerings that are part of a formal degree/diploma/certificate program:

10 *Preparatory*—refers typically to instructional offerings or substitutes thereof (such as examinations) that may be part of the curricular requirements or preparation for degree work.

20 *Lower Division*—refers to instructional offerings at a level of comprehension usually associated with freshman and sophomore students.

30 *Upper Division*—refers to instructional offerings at a level of comprehension usually associated with junior and senior students.

40 *Combined Upper Division and Graduate or Professional*—refers to those cases where no distinction is made between undergraduate and graduate courses.

50 *Graduate I courses*—this category represents instructional offerings at a level of comprehension usually associated with post baccalaureate students at the master's level or first year doctoral level.

60 *Graduate II courses*—this category represents instructional offerings at a level of comprehension usually associated with post baccalaureate students at the second year doctoral level.

70 *Doctoral Dissertation courses*—this category represents doctoral thesis instructional offerings.

The following categories are recommended for those offerings that are not part of a formal degree/diploma/certificate program:

91 *Basic*—refers to those instructional offerings that assume that the learner has no prior knowledge of, or experience with, what will be dealt with in the course or offering. In some instances, this level is referred to as the "apprentice" level.

92 *Intermediate*—refers to those instructional offerings that assume that the learner already possesses a basic level of knowledge, understanding, and skills associated with what will be dealt with in the course or offering. In some instances, this level is referred to as the "journeyman" level.

93 *Advanced*—refers to those instructional offerings that assume that the learner already possesses a significant level (beyond the intermediate level) of knowledge, and/or skills associated with what will be dealt with in the course or offering. In some instances, this level is referred to as the "master" level.

Student Level

Definition: Usually based on the proportion of total requirements the student has obtained toward the completion of the degree/diploma/certificate program in which he or she is enrolled, according to the number of years normally required to obtain them. As with course level, there are two sets of student level categories. One set of categories applies to those students who are participating in a formal program designed to provide the learner with a degree/diploma/certificate (other than a certificate of completion). The other set of categories (actually only one category) should be used to designate those students who are not participating in such a formal degree/diploma/certificate program and for whom the concept of "level" does not have meaning. The following categories of student level are recommended.

The categories below are recommended for degree/diploma/certificate students. These are students who have been admitted to a general or specific course of study or program at the completion of which a degree/diploma/certificate is awarded by the institution. A certificate does not signify simply the completion of the courses of study through attendance, but rather indicates the completion of an organized curriculum and the achievement of competence in that curriculum. Students who have not yet declared a major (that is, indicated the specific program they will follow) but have taken and/or are presently enrolled in courses and activities attempted and completed by degree/diploma/certificate students should be included in this category.

01 and 02 *Undergraduates*—students enrolled in a four- or five-year bachelor's degree program, in an associate degree program, or in a vocational or technical program that is normally terminal and results in formal recognition up to the baccalaureate. This category is broken down as follows:
    01 Lower Division—includes all undergraduate students enrolled in programs leading to an associate degree (including three-year associate degree programs) or in undergraduate occupational or vocational programs of three years' duration or less; and all other undergraduate students who have earned less than 50% of the number of academic credits normally required for a

four-year bachelor's degree or 40% of the number of academic credits normally required for a five-year bachelor's degree (typically classified as freshmen or sophomores).
    02 Upper Division—includes all undergraduates who are not in associate degree or occupational/vocational programs and who have completed more than 50% or a four-year, or more than 40% of a five-year, undergraduate program that terminates in a degree, usually measured by the number of credits earned as a proportion of the number of credits required for graduation.

03 *First Professional*—students enrolled in a professional school or program that requires at least two academic years of college work for entrance and a total of at least six years for a degree. Report only students in those first-professional degree programs in the field of medicine, law, and theology specified in the HEGIS Survey (Degrees and Other Formal Awards Conferred), Part A of EO Form 2300-2.1. Students in programs requiring only four or five years beyond high school should be reported as undergraduates.

04, 05, and 06 *Graduate*—students who hold a bachelor's or first professional degree, or equivalent, and are working toward a master's or doctor's degree. This category is broken down as follows:
    04 Graduate I—graduate students who (a) are pursuing a master's degree, or (b) are pursuing a doctoral degree, but have not earned a master's degree and have earned fewer than the equivalent number of credits normally required for a master's degree, or (c) are pursuing an Educational Specialist certificate, degree, or coordinate intermediate level degree program, whether or not they possess an earned master's degree.
    05 Graduate II—graduate students who are pursuing a doctoral (except first professional) degree program, except those are who are classified as Graduate I by the definition above.
    06 Other—includes medical interns and residents as well as any students not otherwise defined.

09 *Nondegree/diploma/certificate students* — individuals who have been admitted to a general or specific program(s) in the institution at the completion of which a degree/diploma/certificate is not awarded by the institution. These students may be enrolled in credit and/or noncredit courses. They should not be confused with students with undeclared "not designated" majors admitted to degree/diploma/certificate programs and thereby classified as degree/diploma/certificate students. Students classified as visiting, provisional, special, and so on would normally be included in this category, although their classification in the degree/diploma/certificate student category might also be appropriate.

Appendix IV
DELIVERY MECHANISM

The process of delivering instruction has been defined in many ways, from the most narrow view of "the activity that takes place during school and within the classroom setting," to the broadest view of "any method of acquiring new knowledge." In using a classification of delivery mechanism in the context of the PCS, it is necessary to incorporate the full spectrum of instructional processes in order to usefully describe postsecondary education programs.

Delivery mechanism, therefore, has been broadly defined as "those methods employed in delivering educational programs to the learner." The various categories of delivery mechanism should be considered as those "type of activity" categories that are related to the Instruction program and subprograms.

The NCHEMS classification of delivery mechanism set forth in this appendix is a revision of the scheme developed by Coolie Verner,* and represents the efforts of an NCHEMS advisory group representing the Coalition of Adult Education Organizations. The following categories are taken directly from the report of that NCHEMS advisory group.**

153 Distance Teaching/Independent Study
Those methods in which the learner is isolated from the learning situation by reasons of time, distance, etc. It typically involves a systematic program of study which is conducted primarily through the use of written materials (although mass media devices may also be used). There is generally limited personal contact between the teacher/agent and the learners, with most interaction taking place through written communication. The instruction tends to be individualized rather than focusing on a group of learners and normally enables students to progress at their own pace. *Examples: correspondence schools, home study*

293 Instructional Materials/Devices-Based Instruction
Those methods in which there is no direct personal contact on the part of the learner with any teacher/agent. The learner utilizes electronic, mechanical, printed, or multimedia materials/devices which have been specifically prepared to provide instruction, and the amount of interaction of any kind that takes

*Coolie Verner, *Adult Education Theory and Method: A Conceptual Scheme for the Identification and Classification of Processes* (Chicago: Adult Education Association of the USA, 1962).

**Douglas J. Collier and Clara Roberts, *A Framework and Language for Postsecondary Education* (Boulder, Colorado: National Center for Higher Education Management Systems, 1976).

place is determined by the capabilities of the materials or devices utilized. The instruction tends to be individualized rather than focusing on a group of learners and normally enables students to progress at their own pace. *Examples: computer-assisted instruction, programmed instruction, telelecture, auto-tutorials, audio-video cassettes*

149 Directed Individual Study
Those methods in which the student learns a set of skills or gains knowledge in a *one-to-one situation* from a teacher/agent. In some cases, the teacher/agent actually teaches and in other cases the learning process is facilitated by the teacher/agent through direction or supervision. This method involves direct personal contact and a high degree of interaction between the learner and the teacher. *Examples: library-directed study programs, student-centered curriculum study, private instruction (languages, piano lessons), tutorial learning*

145 Directed Experiential Learning
Those methods which provide the learner an opportunity to acquire or apply previously acquired knowledge and skills in a supervised situation that approximates or duplicates the conditions under which the knowledge/skills will be used. The instruction is typically individualized with a high degree of interaction between the student and the supervisor. *Examples: apprenticeship, on-the-job training, work experience programs, performance-based education, hospital internship, practice teaching, practicums*

081 Classroom
Those methods which utilize a sequence of learning experiences arranged in a systematic order of predetermined duration, generally structured around a limited segment of a particular body of knowledge. The teacher/agent is charged specifically with the general direction, organization, and control of the learning experience. Classroom instruction generally focuses on the instructional needs of a group rather than of individuals, and interaction is provided for between the student(s) and/or the teacher/agent.

509 Seminar/Workshop
Those methods in which the responsibility for learning is shared by the group members and the teacher/agent(s) or in which the group applies prior knowledge in addressing a problem or issue. This method generally involves a group of persons who meet, under the direction of one or more teacher/agent(s), to discuss topics of mutual interest and concern. This

method includes Discussion Groups. The duration of the activity will vary with the nature of the content and purposes of the group. *Examples: topic-related seminars, forums, task-oriented workshops*

317 Laboratory
Those methods in which knowledge is acquired and/or applied in a learning activity that is an *artifical construct* of reality. Laboratory instruction generally focuses on the group rather than individuals and allowance is made for interaction between the student and the teacher/agent. *Examples: language laboratories, art studio/laboratories, science laboratories*

025 Assembly
Those methods which involve a group of individuals too large to permit effective face-to-face interaction. Assemblies are generally specifically structured learning situations which involve a single independent or series of independent events in which there is limited participation by the learner, and the major control of the learning situation is held by the teacher/agent. *Examples: lectures, community gatherings*

345 Mass Media Instruction
Those methods in which instruction is provided for a general, nontargeted audience through mass media. Major control of the learning experience is held by the teacher/agent, and there is no interaction intended or allowed for. *Examples: educational television networks (unless part of a correspondence course), newspaper courses (unless part of a correspondence course)*

393 Nondirected Experiential Learning
Those situations in which the learner acquires knowledge or skills through *independent* experiences. There is no formal interaction between the learner and a teacher/agent, but interaction does take place between the learner and individuals encountered in the education experience, as well as between the learner and the actual surroundings (i.e., viewers of original art works in galleries and displays in museums). *Examples: cultural exchange programs, learning through independent experiences, do-it-yourself learning*

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Appendix V
PCS TYPE OF ACTIVITY CODES

001 Academic Administration/Governance
005 Academic Program Advising
009 Agriculture and Related Industries
013 Alumni and Constituency Relations
2xx Ambulatory
021 Applications
025 Assembly
029 Athlete/Team Support

041 Baseball
045 Basketball
x03 Behavioral
053 Boxing
057 Broadcast Production
061 Broadcast Programming
065 Broadcast Sales
069 Building Maintenance

081 Classroom
085 Coaching
089 Communication Services
093 Computer Operations/Production
097 Computer Systems Support
101 Conduct of Events
105 Construction Planning
109 Course and Curriculum Planning
113 Course and Curriculum Research
117 Cultural Events
121 Curriculum Evaluation
125 Custodial Services

x08 Dental Care
141 Development/Modification of Curriculum
145 Directed Experiential Learning
149 Directed Individual Study
153 Distance Teaching/Independent Study
157 Diving

169 Educational Media Research
4xx Emergency
177 Executive Direction

189 Facilities Management
193 Faculty Recognition Programs
197 Fencing
201 Financial Aid Counseling and Evaluation
205 Financial Management and Control
209 Financial Operations
213 Food Services
217 Football

229 General Hospital/Clinical Support
233 General Student Recreation
237 Golf
241 Governmental Relations
245 Grants and Contracts Financial Management
249 Gymnastics

261 Health and Safety Services
265 Housing Services

277 Ice Hockey
281 Ice Skating
285 Information Dissemination/Promotion
1xx Inpatient
293 Instructional Materials/Devices-Based Instruction
297 Interinstitutional Exchange and Loan Services
301 International Extension
305 Investment Management

317 Laboratory
321 Lacrosse
325 Landscape and Ground Maintenance
329 Legal Services

341 Major Repairs and Renovation
345 Mass Media Instruction
349 Materials Acquisition
353 Materials Distribution
357 Materials Identification/Access Services
361 Materials Preparation
5xx Mixed Function
369 Medical Support
x02 Medical/Surgical Care
377 Museum Speciman Identification Services

389 News Acquisition and Preparation
393 Nondirected Experiential Learning
397 Nongovernmental Fund Solicitation

409 Operation and Maintenance of Athletic Facilities
3xx Outreach
x12 Other Type of Care

x07 Patient Education
429 Personnel Management and Support
433 Planning and Program Development
437 Procurement and Materials Handling
441 Production Operations
445 Production Services
449 Provision of Cultural and Recreational Services
453 Provision of Facilities/Equipment
457 Provision of Faculty/Staff Services
x06 Public/Community Medicine

473 Records Maintenance and Reporting
477 Recruitment
x04 Rehabilitative Care
485 Retail Services and Concessions
489 Rowing
493 Rugby
497 Rural Social and Economic Development

509 Seminar/Workshop
513 Skiing
517 Soccer
521 Specialized Services
525 Student Admissions
529 Staff Development
533 Student Career Guidance and Placement Services
537 Student Employment Services

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Appendix VI
ACTIVITY LOOK-UP TABLE

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BOARD OF DIRECTORS

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