

Programme Classification Structure Manual – HEMIS 002

Second Edition

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PREFACE TO THE SECOND EDITION

The Programme Classification Structure (PCS) is a framework that allows for the classification of a higher education institution's resources and programmes/activities in accordance with their relationship to the achievement of institutional aims and objectives. It has been developed to enable planners and managers in higher educational institutions to relate information to the programmes and activities institutions carry out to achieve their objectives. Specifically, the PCS is a logical framework that enables an institution to array information in a hierarchical disaggregation of programmes, in which a "programme" is defined as an aggregation of activities serving a common set of objectives. This manual replaces the former (South African Post-School Education) SAPSE-002 manual. The functional programme classification system of the National Association of College and University Business Officers (NACUBO) in the United States was used as a basic framework for the identification of programmes and subcategories. It was however found that this classification had to be adapted extensively for the South African Higher Education System. Three additional programmes were added, namely Academic Development, Institutional Development and Internationalisation. The activities of all posts in a comprehensive university in South Africa were studied, to identify the programmes needed to provide an appropriate classification system for the South African Higher Education System. Based on this analysis several additions were made to the NACUBO framework. The revised classification system also differs markedly from the former classification system in SAPSE 002, since there are two more programmes. More subcategories were added and some of the subcategories were moved to other programmes.

ACKNOWLEDGEMENTS

This report is a revised version of the South African Classification of Educational Subject Matter (CESM) manual, which was published by the former Department of National Education in 1982 and reviewed by Department of Higher Education and Training in 2007. This 1982 edition was based in part on a report published in 1977 by the National Center for Education Statistics in the USA.

The proposals in this draft report are based on the latest available publication of the National Center for Education Statistics. The United States Department of Educational Research and Improvement has confirmed that the South African Department of Education can make free use of this material in its own up-dated report. The ability to use this material has been of great benefit to the Department of Education.

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THE PROGRAMME CLASSIFICATION STRUCTURE

1.1 Introduction

The Programme Classification Structure (PCS) is a framework that allows for the classification of a higher education institution's resources and programmes/ activities in accordance with their relationship to the achievement of institutional aims and objectives. It has been developed to allow planners and managers in higher education institutions to relate information to the programmes and activities institutions carry out to achieve their objectives. Specifically, the PCS is a logical framework that enables an institution to array information in a hierarchical disaggregation of programmes, in which a "programme" is defined as an aggregation of activities serving a common set of objectives. There are twelve major categories called programmes at the highest level of aggregation in the PCS, each of which can be further disaggregated into subcategories (see Figure1).

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

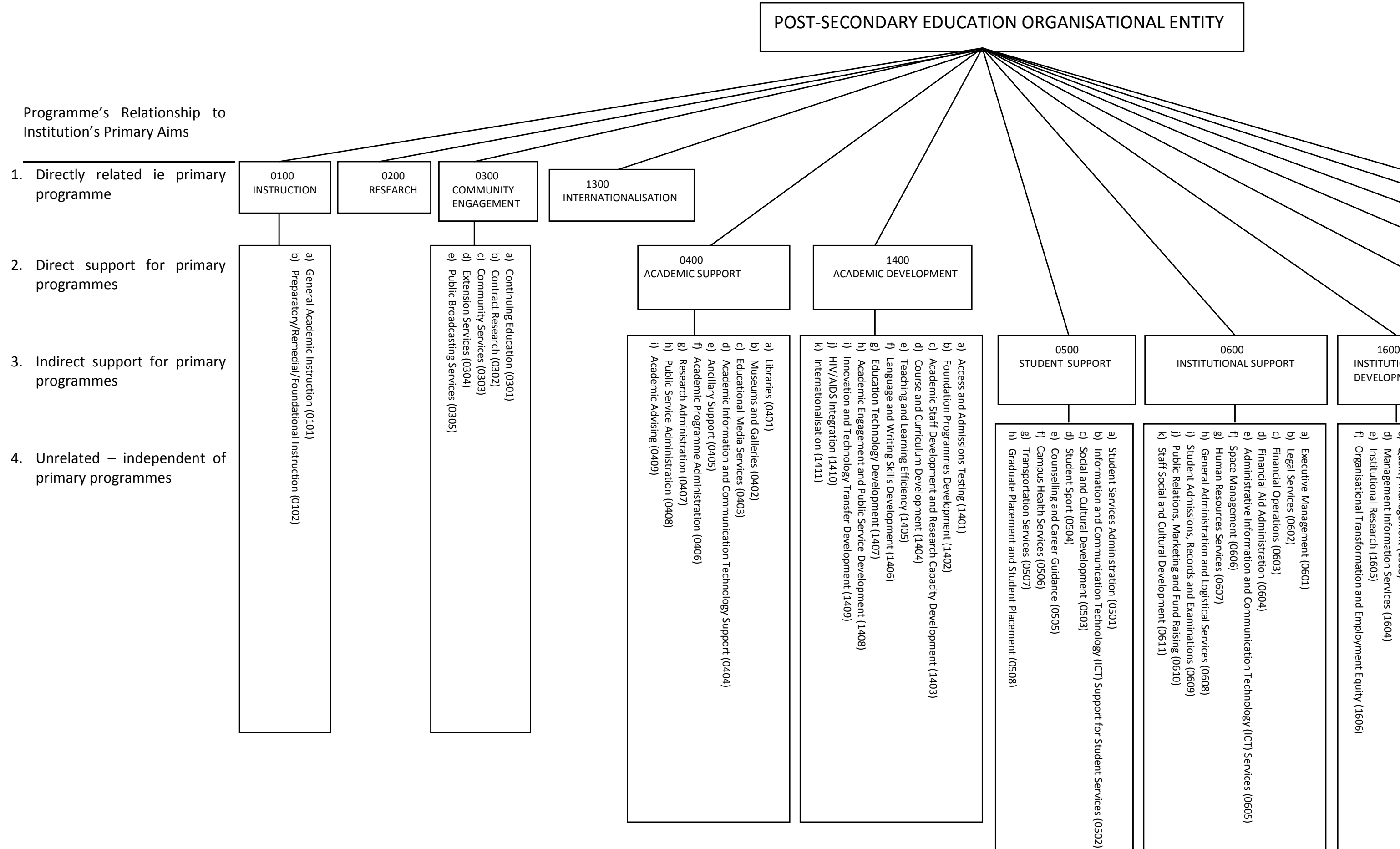
The twelve programmes in the PCS are the following:

0100	Instruction	} Educational and General
0200	Research	
0300	Public Service/ Community Engagement	
1300	Internationalisation	
0400	Academic Support	
1400	Academic Development	
0500	Student Services	

0600	Institutional Support
1600	Institutional Development
0700	Operation and Maintenance of Physical plant
0800	Bursaries
0900	Auxiliary enterprises
1000	Hospitals
1100	Independent Operations

In addition to the programmes and subcategories listed above, the one aggregation of programmes shown is often used as a functional category; namely, Educational and General, which refers to all operations related to the first twelve programmes.

FIGURE 1 – PROGRAMME CLASSIFICATION STRUCTURE



As indicated in Figure 1 the programmes may be ordered in another sense too; namely, according to the directness of the relationship of each to the primary aims of the institution. The three primary programmes, Instruction, Research and Public Service, are directly related to the primary aims of higher education institutions: briefly, the transmission of knowledge; the preservation, discovery and unification of knowledge; and service to the community of which the institution is part. At the next level the Academic Support programme and the Academic Development programme include those activities carried out in direct support of one or more of the three primary programmes. The group consisting of the Student Services, Institutional Support, Institutional Development, Operation and Maintenance of Plant, Bursaries and Auxiliary Enterprises programmes includes those activities carried out in indirect support of the primary programmes. In other words, they aim to provide for the effective functioning and viability of the institution as an operating entity. Finally, the Hospitals and Independent Operations programmes are independent of or unrelated to the primary missions of the institution.

1.2 Classification of Education Subject Matter

Closely related to the classification of an educational institution's activities are the courses offered by the institution. Since each higher education institution has its own organisational structure with regard to academic departments and the courses offered, it is essential for purposes of comparison to provide a common frame of reference in respect of subject matter/course content. The Classification of Educational Subject Matter (CESM) defines the basis used in the Higher Education Management Information System (HEMIS) Information System and each institution's instruction and research activities must be related to it. The CESM categories and codes are described in a separate manual: Classification of Educational Subject Matter (2008 Manual).

1.3 Role of the PCS in Planning and Management

The Programme Classification Structure was designed to allow its users to relate resource and activity/programme 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 programmes institutions carry out to achieve their objectives. However, the PCS has evolved to the point that it is now being used for many different purposes.

(a) Focus on programmes

The fact that the PCS focuses on programmes 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, human resources data, or 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, an assessment of the need for academic resources necessitates an analysis of personnel data, financial data, academic staff workload data, student data and so forth. To do this, the data must have some common denominator. The PCS is such a denominator. Each type of data - human resources, finances, outcomes, et cetera can thus be linked in the same way to particular PCS programmes/ subcategories. The ultimate result of this kind of linkage should be a comprehensive quantitative profile of those programmes/subcategories for each type of institution.

The programmatic focus built into the PCS has also made it an important starting point for programme planning, programme budgeting, and other types of objective-oriented planning and management in post-secondary education. The use of the PCS, for whatever purpose, encourages one to look at institutional objectives and to consider how, in practice, institutions go about combining resources to attain those objectives.

(b) Hierarchical structure

The PCS represents a prototypical set of programmes disaggregated into intermediate levels called subcategories. 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 it can be used also for organisational units within the institution.

(c) 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 analysis of activities in higher education institutions. Since the PCS focuses on programmes (which are in turn related to objectives), the PCS is a compatible data framework regardless of differences in the organisational structures among institutions. As such it serves as a link between the institution’s own data and data external to the institution. The ability to link one’s own data to those of others gives the manager the capability to employ comparative analysis as a tool for decision making. Inter-institutional comparative analysis has proved to be an effective aid in understanding how other institutions utilise resources to achieve “similar” objectives.

INSTRUCTION (0100)

1.1 Definition

The Instruction programme 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 and 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) such as the supervision of thesis work. The purpose of the activities is to facilitate the acquisition of knowledge and skills by individuals to enable them to function effectively within a profession and as productive members of broader society.

Whereas facilitating is an integral part of the design and conduct of the Instruction programme, academic advising (for example, clarifying requirements, describing alternatives) is generally carried out in support of the Instruction programme and is therefore included under programme 0406: Academic Administration. The Instruction programme includes both credit and non-credit instructional offerings. An instructional offering is a generic term to indicate any component of the curriculum of a student, e.g. subject courses (year, semester or otherwise), topics, theses and dissertations, et cetera.

The Instruction programme includes all activities through which a student may earn credit towards a higher education certificate/diploma/degree granted by the university. It also includes activities related to preparatory/remedial/foundational instruction even though these courses may not carry degree credit. The Instruction programme excludes outreach education/community instruction which is included under the programme Public Service (0300).

1.2 Subcategories

- (a) General Academic Instruction (0101).
- (b) Preparatory/Remedial/Foundational Instruction (0102).

1.1.2 General Academic Instruction (0101)

This subcategory includes all credit-bearing instructional offerings which form part of the institution's formal higher education degree/diploma/certificate programmes. The statutory minimum admission requirements for programmes requiring the National Senior Certificate

(NSC) or the National Certificate (Vocational) (NCV) are set out in Government Notice 751 of 2005 (revised 2008) and Government Notice 1114 of 2009. These are the minimum initial entrance requirements for programmes that have been developed under the Higher Education Qualification Sub-Framework (HEQSF).

A degree/diploma/certificate programme is regarded as formal if all three the following conditions have been met:

- (a) The introduction of the programme has been approved by the Department of Education in relation to an institution's PQM;
- (b) The programme has been accredited by the Higher Education Quality Council (HEQC) of the Council on Higher Education (CHE); and,
- (c) The programme has been registered on the National Qualifications Framework (NQF) by the South African Qualifications Authority (SAQA).

Activities pertaining to this subcategory would normally be subsidized. Foundational courses that are credit-bearing against approved extended programmes must be included under this subcategory, whereas foundational courses that are not credit-bearing must be included under Preparatory/ Remedial/Foundational Instruction (0102). Instructional offerings which are not offered for any of the institution's formal higher education degree/diploma/certificate programmes would not be included.

1.2.2 Preparatory/Remedial/Foundational Instruction (0102)

Includes all non-credit-bearing instruction offered by a university that prepares and equips students with the necessary skills and knowledge to continue to credit-bearing courses leading to a higher education certificate/diploma/degree. These offerings, supplementary to the normal academic programme, are designed typically as preparatory, remedial, developmental, or special education services. They may be taken prior to, or along with, the course work leading to the degree, diploma or certificate. Only those offerings that are non-credit-bearing and are provided specifically for the teaching of the pre-requisite preparatory or remedial skills or knowledge should be included in this category. Activities related to non-credit-bearing courses (short courses) to upgrade the skills and knowledge of employees of public and private organisations are excluded and must be included under the Continuing Education (0301) subcategory of Public Service (0300).

1.3 Additional Notes

1.3.1 Included under Instruction:

- (a) Instructional activities of departmental heads and school directors are included under the General Academic Instruction subcategory (0101).
- (b) All activities related to the teaching of credit-bearing courses, including winter and summer schools, regardless of course locations or hours during which they are taught, are included under the General Academic Instruction subcategory (0101).
- (c) Activities related to instructional Information and Communication Technology are included.
- (d) Activities related to field trips and similar instructional related activities are included.
- (e) Presentation of tutorials is included.
- (f) Internships should be coded to General Academic Instruction subcategory (0102) if for credit and to the Counselling and Career Guidance subcategory (0505) of Student Services (0500) if the internship is non-credit.

1.3.2 Excluded from Instruction

- (a) All non-credit instruction (except preparatory/remedial/foundational instruction) should be included under the Continuing Education subcategory (0301) of Public Service. (0300)
- (b) All administrative activities of academic deans and their staff should be included under the Academic Administration subcategory of Academic Support; however, activities of deans' offices that are directly for the benefit of Instruction, Research or Public Service should be included under the appropriate instruction programme. All activities of Deputy Vice-Chancellors and their staff should be included under the Executive Management subcategory (0601) of Institutional Support (0600).
- (c) All activities of academic staff associated with inter-university student sport, including staff release time, should be included under the Student Sport subcategory (0504) of Student Services (0500).
- (d) Activities related to formally budgeted/separately organised academic advising should be included under the Academic Advising subcategory (0409) of Academic Support (0400).

- (e) Activities related to formally budgeted/separately organised course and curriculum development should be included under the subcategory of Academic Development (1400).
- (f) Sabbaticals and other activities that provide academic staff with opportunities for personal and professional development should be included under the Academic Personnel Development and Research Capacity Development subcategory (1403) of Academic Development (1400).

1.4 The other dimensions for the classification of instructional offerings

As stated above instructional offerings can, apart from the subcategory to which they belong, be classified according to a number of other characteristic dimensions. These are:

1.4.1 The Subject Area Classification

The scheme for the Classification of Educational Subject Matter (CESM) is described in detail in the CESM (2008 Manual)

1.4.2 The Entrance Level

This refers to the minimum academic prerequisite for admission to an instructional programme. The classification scheme is described in the Higher Education Qualifications Sub-Framework (2013).

1.4.3 The Course Level

This refers to the intended degree of complexity of the material associated with the instructional offering, the level of comprehension required of students who follow the instructional offering, or some measure of the sequential position of the offering within a predetermined degree/diploma/ certificate programme. The classification scheme is described in the Higher Education Qualifications Sub-Framework (2013).

1.4.4 The Qualification Type

This refers to the levels at which an institution awards formal qualifications or recognition. The classification scheme is described in the Higher Education Qualifications Sub-Framework (2013).

1.4.5 The Credit/Non-credit Status

This indicates whether or not an instructional offering may be counted for credit towards a formal higher education degree, diploma or certificate. In the case of non-credit status several grades of certification of instructional programmes can be distinguished.

RESEARCH (0200)

2.1 Definition

The Research programme includes those activities intended to produce one or more research outcome including the creation of knowledge, the reorganisation of knowledge, the application of knowledge, innovation and the transfer of knowledge. The preparation and publication of research results and the reading of research papers at specialist conferences are included. However, it must be pointed out that some activities which accord with this description must in fact be categorised under other programmes.

In institutions of higher education, research and teaching are always very closely linked, as most academic staff do both, and many buildings, as well as much equipment, serve both purposes. The results of research feed into teaching, and information and experience gained in teaching can often result in research, and *vice versa*. The decision regarding the categorization is based on the primary purpose for which the research is undertaken, and the following cases may be distinguished:

- (a) Research which is undertaken primarily as an instruction activity, in other words, where staff members act as promoter/co-promoter/supervisor of, for example, master's or doctor's degree students at universities, must be classified as General Academic Instruction subcategory (0101).
- (b) Research which is undertaken by staff members primarily in order to obtain a further academic qualification (e.g. a master's or doctor's degree must be classified in this programme (0200) unless it is undertaken on a consultation or contract basis (see programme 0300 for a discussion of contract research).
- (c) Research which is undertaken on a consultation or contract basis and where the nature and content of the work are controlled by external agencies must be classified as Public Service. In determining whether to classify activities of this nature in this programme or the Public Service programme (0300) the nature of the activities must be carefully evaluated using the criteria described under the definition of Public Service.
- (d) Departmental research activities should be included in this programme (0200) when they are conducted for the express purpose of producing research outcomes (and not primarily for one of the above-mentioned reasons). Activities carried out with institutional funds or in terms of agreements with external agencies (such as CSIR,

HSRC, MRC) are included (unless they form part of contract research - see programme 0300 for a discussion of contract research).

(e) Innovation and Technology transfer activities

2.2 Subcategories

There are no subcategories within the Research programme.

2.3 Additional Notes

The definitions and classifications in this section were based on the classification systems in the Frascati Manual on Proposed Standard Practice for Surveys of Research (OECD, 2002) and Experimental Development and the Australian Standard Research Classification of the Australian Bureau of Statistics (1998).

2.3.1 Categories of Research and Innovation Activities

Research and innovation activities comprise creative work undertaken on a systematic basis in order to increase the body of knowledge, including knowledge of the physical universe, culture and society, and the use of this body of knowledge to devise new applications (UNESCO, Institute for Statistics, 2007). Although the Research programme does not contain any subcategories, it is often useful to distinguish between basic and applied research, innovation and technology transfer, and scientific and technological services. The distinctions are related to the objectives and are as follows:

Pure Basic Research is experimental or theoretical work undertaken primarily to acquire new knowledge of the underlying foundation of phenomena and observable facts, without any particular application or use in view.

Strategic Basic Research is experimental and theoretical work undertaken to acquire new knowledge directed into specific broad areas in the expectation of useful discoveries. It provides the broad base of knowledge necessary for the solution of recognized practical problems.

Applied Research is also original investigation undertaken in order to acquire new knowledge. It is, however, directed primarily towards a specific practical aim or objective. The practical aim of applied research may be to determine possible uses of the results of basic research, but it may also include determining new methods of achieving specific and predetermined aims. The main criterion used for distinguishing basic research from applied research is the objective in view. Basic research thus has no immediate practical aim in view

(although it may very well have such an ultimate aim), whilst applied research does have a specific practical objective in view.

Innovation is the systematic work, drawing on existing knowledge, gained from research and/or practical experience, which is directed to producing new materials, products or devices, to installing new processes, systems and services, or to improving substantially those already produced or installed. Whereas research deals with the increase of knowledge, innovation is directed towards bringing about new applications of existing knowledge. Innovation also includes the activities involved in adapting and improving existing human and natural sciences technology, whether of local or foreign origin. Also included are activities related to:

- (a) Developing and implementing strategies to assist researchers in research development activities; the commercialisation of research and technology products and innovations;
- (b) Facilitating the registration of patents; and,
- (c) Developing strategies to enhance research and technology innovation.

Scientific and Technological Services can be defined as any activities concerned with scientific research and experimental development and contributing to the generation, dissemination and application of scientific and technical knowledge. It includes those activities that cannot be regarded directly as research or experimental development but are closely allied to, or regarded as essential to, the furtherance of research and experimental development. Included are all management, administrative and operational activities aimed at the planning, support, control and improvement of the functions and tasks concerned with the recording, collection, evaluation, arrangement, storage, retrieval, processing, translation, provision and use of information in the fields of knowledge. It likewise covers activities related to the organization of, or attendance at, scientific and technical meetings (conferences, congresses, seminars, et cetera) and scientific societies. The following activities are also included;

- (a) Science and Technology Services provided by libraries, archives, information and documentation centres, reference departments, scientific congress centres, data banks and information-processing departments.
- (b) Science and Technology Services provided by museums of science or technology, botanical and zoological gardens and other Science and Technology collections (anthropological, archaeological, geological, et cetera).

- (c) Systematic work on the translation and editing of Science and Technology books and periodicals.
- (d) Topographical, geological and hydrological surveying; meteorological and seismological observations; surveying of soils and plants; fish and wildlife resources; routine soil, atmosphere and water testing; the routine checking and monitoring of radioactivity levels.
- (e) Prospecting and related activities designed to locate and identify oil and mineral resources.
- (f) The gathering of information on human, social, economic and cultural phenomena, usually for the purpose of compiling routine statistics, e.g. population censuses; production, distribution and consumption statistics; market studies; social and cultural statistics, et cetera.
- (g) Testing, standardization, metrology and quality control; regular routine work relating to analysis, checking and testing, by recognized methods, of materials, products, devices and processes, together with the setting up and maintenance of standards and standards of measurement.
- (h) Regular routine work on the counselling of clients, other sections of an organization or independent users, designed to help them to make use of scientific, technological and management information.
- (i) Activities relating to patents and licenses.

Examples

Pure basic research	Strategic basic research	Applied research	Innovation and technology transfer
Developing theory of compensation systems	Study of the influence on productivity of compensation systems that pay by piece-work versus salary structures	Study of the theory of compensation systems at motor manufacturers in SA	Developing a compensation system for the motor manufacturing industry
Study of the bonding characteristics between platinum and phosphines	Study of the effect of phosphine ligands on the reactivity between alkenes and platinum-phosphine compounds	Investigating the influence of platinum-phosphine compounds on the hydroformylation of 1-octene	Development of a new process for producing long-chain alcohols from alkenes using a specific platinum-phosphine catalyst
Identification and characterization of compounds in the leaves of <i>Carpobrotus Edulis</i>	Study the properties and chemical behaviour of specific compounds extracted from the leaves of <i>Carpobrotus Edulis</i>	Evaluating the surfactant and bactericidal properties of long-chain glycosides extracted from the leaves of <i>Carpobrotus Edulis</i>	Development of new antiseptic soaps for medical purposes using long-chain glycosides as active ingredients
A comparative literature review of labour relations practices in development zones	Study of the impact of personality type on personal stress management	Study of employee perceptions of diversity management at a tertiary institution. Study of factors influencing occupational choice	Development of a psychometric test to measure the extent of internal/external locus of control
Developing strategic planning theoretical models.	Study of the influence of strategic planning processes on decision-making and mission alignment in not-for-profit organisations.	Study of the impact of strategic planning processes on mission alignment and resource allocation in South African municipalities.	Design of a strategic planning process guide/manual for South municipalities to ensure mission aligned budget allocations.

2.3.2 Included under Research

- (a) Information and Communication Technology activities supporting the Research programme.
- (b) Grants administration activities related to research activities including proposal development services, information clearing house services, accounting services, et cetera. Grant accounting activities should be included if segregated and centralized.

2.3.3 Excluded from Research

- (a) Research supervision and scholarly activities that are performed to assist master and doctoral students are included under the General Academic Instruction subcategory (0101) of Instruction (0100).
- (b) Activities of the office of the deputy vice-chancellor/dean/director of research should be included under the programme of Academic Development (1400).
- (c) Research conducted for outside agencies e.g. contract research is classified under Public Service (0300).

2.4 The other dimensions for the classification of Research Activities

Two other dimensions frequently used to characterise research activities are the field of research and field of application. The CESM subject area, described in the manual CESM (2008 Manual), is used to classify the fields of research.

COMMUNITY ENGAGEMENT/PUBLIC SERVICE (0300)

3.1 Definition

Activities related to all non-credit/non-formal instruction (except preparatory/remedial/foundational) and activities that are established primarily to provide services beneficial to individuals and groups external to the institution. These activities include community service programmes (including non-credit/non-formal instructional activities) and cooperative extension services. Included in this category are conferences, institutes, general advisory services, reference bureaus, radio and television, consulting, and similar services to particular sectors of the community. It includes those activities carried out 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 programme is the provision of institutional facilities as well as those services of the staff that are made available outside the context of the institution's regular instruction and research programmes.

3.2 Subcategories

- (a) Continuing Education (0301)
- (b) Contract Research (0302)
- (c) Community Services (0303)
- (d) Extension Services (0304)
- (e) Public Broadcasting Services (0305)

3.2.1 Continuing Education (0301)

This subcategory includes formally organised and/or separate instructional activities that do not bear credits¹ (except preparatory/remedial/foundational instruction programmes). It includes for example: instructional activities related to the presentation of short learning programmes or offering of Continuing Professional Education programmes to the external community through non-formal and adult education programmes. The purpose of these activities is in general linked to meeting the need for further professional development and achieving social responsibility goals.

¹ Depending on the nature of the programme and its correspondence to elements of a formal programme, an institution may consider the successful completion of such a programme towards credit exemption for a formal programme.

This subcategory thus includes all instructional offerings that are not part of one of the institution's formal degree/diploma/certificate programmes or of preparatory/remedial/non-credit foundation instruction programmes. Activities in this subcategory are not normally subsidised by Central Government. Initial entrance prerequisites for these programmes would normally depend on the specific nature of the programme and could vary considerably. Many of these programmes might well have no specific entrance prerequisites, whereas others might require advanced degree status. Included in this subcategory are the activities of centres/institutes for Continuing Education and/or Extra-mural Studies such as public lectures, short courses, workshops, et cetera.

3.2.2 Contract Research (0302)

Contract research consists of research (and development) activities that conform to the definition of the Public Service programme (0300). This includes consultation/contracts for research or development by individual staff members (or groups of staff members) for outside agencies which are undertaken primarily because the staff member is (or they are) uniquely qualified for the work or because the institution has facilities uniquely suitable for the task.

In determining whether to classify activities as contract research, answers to the following questions can be used as criteria:

Q1: Is the research activity funded either wholly or in part by somebody/persons/a group external to the higher education institution? If not, it should be categorised as either Research or Instruction (whichever is appropriate). If it is the following questions should be carefully considered:

Q2: Are the detailed nature and content of the research activity set or determined by bodies/ persons/groups external to the higher education institution?

Q3: Are the benefits of the research activity available only to a particular group and not to the community at large?

Q4: Has the funding body/person/group the right to withhold publication of the results of the research activity?

If the answer to any of questions 2 to 4 is yes, then the research activity should be included in the Public Service programme as contract research. It should be classified as part of Public Service because, in the described circumstances, the institution would be carrying it out primarily because it is uniquely qualified to fulfil the specific task. This scenario suggests

that the institution is making available its particular unique resources, services, and expertise in order to solve a community problem.

3.2.3 Community Service (0303)

Community services include those activities that make the institution's resources, services and expertise available to the public outside the context of the institution's Instruction and Research programmes and that are generally sponsored and controlled by the Institution itself (in contrast with Extension services, which involve a measure of external finance and/or control). Includes activities organised and carried out to provide general community services, excluding instructional activities.

Examples: General advisory services and reference bureaus; consultation services free of charge; testing services free of charge (e.g., soil testing, carbon dating, structural testing); sport outreach programmes; provision of the institution's facilities/equipment or services free of charge to outside persons or bodies; concerts, recitals, and exhibitions for the public (unless they are aimed at and held primarily for Formal Instruction purposes or for Student Service); and, similar activities.

3.2.4 Cooperative Extension Services (0304)

Extension services include those non-contract research activities that make the institution's resources, services and expertise available out-side the context of the institution's Instruction and Research programmes and that are conducted on a contract or consultation (for a fee) basis. It also includes non-instructional public service activities established as the result of cooperative extension efforts between the institution and outside agencies. Included are consulting and advisory services (at a fee), or the provision of institutional facilities and equipment or services (at a fee) in any of the institution's fields of instruction or research. Also included are the hiring out of theatres, halls, sport facilities and computer facilities. Note, however, that patient care, health care and hospital services for the public fall under the programme Hospitals (1000).

Activities relate to the implementation of policies, strategies, procedures, operating processes and partnerships relevant to academic engagement and collaboration with relevant stakeholders.

3.2.5 Public Broadcasting (0305)

Includes operation and maintenance activities of broadcasting services that are not primarily used for the institution's instruction, research, and academic support programmes.

3.3 Additional Notes

3.3.1 Included in Public Service:

- (a) Activities should be classified in the Public Service programme only if they are carried out for the specific purpose of making available institutional resources, services, and expertise to the public. 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 programme, but if they are open to the general public they may incidentally benefit the community at large as well).

3.3.2 Excluded from Public Service

Broadcasting services conducted primarily in support of instruction (which should be classified in the subcategory Ancillary Support subcategory (0405) of Academic Support (0400)) and broadcasting services that are primarily operated as a student service programme (which should be classified in the subcategory Social and Cultural Development of Student Services (0503)). Where a broadcasting operation serves more than one purpose, all activities should be classified based on the primary purpose served (Public Service, Instruction or Student Service) with no allocation among activities.

INTERNATIONALISATION (1300)

Research has shown that over the past two decades the internationalisation of higher education globally has evolved substantially from what could be described as an added value component of a higher education institution's activities towards being recognised as an important aspect of mainstream activities of these institutions. It is therefore important that institutions capture their internationalisation activities appropriately.

13.1 Definition

Higher education internationalisation includes activities related to developing, enhancing, directing and promoting the integration of internationalisation as an essential component within the teaching, learning and research programmes of higher education institutions, in collaboration with international institutions of Higher Education together with international public and private sectors, partners and networks.

It includes activities related to:

- (a) Providing strategic direction and leadership in respect of the internationalisation of the curriculum;
- (b) Providing assistance and information to all incoming and outgoing study abroad and exchange students;
- (c) Recruitment of international students and research fellows;
- (d) Organising study abroad experiences;
- (e) Promoting international cultures on campus;
- (f) Managing and developing academic agreements, exchange programmes and partnerships with universities, public and private sector institutions internationally;
- (g) Fund raising for internationalisation activities; and,
- (h) Arranging and or attending international workshops and conferences.
- (i) Administration of study abroad programmes and generalized administration of international programmes should be included under the Academic Programme Administration subcategory (0406) of Academic Support (0400). Student services provided to international students should be coded to the appropriate Student Services (0500) subcategory.

ACADEMIC SUPPORT (0400)

4.1 Definition

The Academic Support programme includes all those activities related to supporting services for the institution's primary missions (Instruction, Research, and Public Service) including:

- (a) The retention, preservation, and display of educational materials (e.g., libraries, museums and galleries);
- (b) The provision of services that directly assist the academic functions of the institution, such as demonstration schools associated with a department, school, or faculty;
- (c) Activities that directly contribute to the way in which instruction is delivered or research is conducted (such as educational media services, academic information and communication technology support, ancillary support); and,
- (d) Academic administration and providing administrative support and management direction to the three primary missions.

The activities that should be classified in the Academic Support programme differ from those classified in the other support programmes in that they are carried out in direct support of one or more of the three primary programmes. While the activities of the Student Services programme (0500) 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 programme rather than a direct contributor to the objectives of the instruction programme. The Institutional Support, Operation and Maintenance of Plant, and Auxiliary Enterprises Programme (0600, 0700 and 0900), on the other hand, are primarily concerned with the institution as an operating entity and tend to focus on the institution as a whole rather than upon individual programmes,

4.2 Subcategories

- (a) Libraries (0401)
- (b) Museums and Galleries (0402)
- (c) Educational Media Services (0403)
- (d) Academic Information and Communication Technology Support (0404)
- (e) Ancillary Support (0405)
- (f) Academic Programme Administration (0406)

- (g) Research Administration (0407)
- (h) Public Service Administration (0408)
- (i) Academic Advising (0409)

4.2.1 Libraries (0401)

This subcategory includes those activities that directly support the collection, cataloguing, storage, and distribution of published materials as well as electronic resources in support of one or more of the institution's primary programmes. Also included are decentralised library services and organised departmental collections, catalogue and index services separate from library collections, organised archives (other than the institution's own archives, which are included under the appropriate subcategories) and the provision of study areas separate from library collections. The CESM codes can be used to relate activities in this subcategory to specific academic programmes or departments.

The following activities may be distinguished:

- (a) **Management and Administration** of Library Services which include, apart from the usual routine administrative functions, high - level planning functions such as the determination and periodic re-evaluation of acquisition. It includes activities such as: management of library services; preparing statistical reports on library usage; electronic resources management; managing the online subscription environment; administrative and management activities related to the Library and Information and Communication Technology (ICT) services and library internet and intranet pages.
- (b) **Technical processing** which includes ordering and order chasing; receipt cataloguing and classification; spine marking and shelving; the binding and repair of library books and journals.
- (c) **User services**, which include reader advisor), and reference services; providing information resources; circulation, loan and reserve services; interlibrary loan services; display of special (temporary or travelling) collections and exhibits; training operations of libraries; and information dissemination and promotions.

4.2.2 Museums and Galleries (0402)

This subcategory includes those activities related to the collection, preservation and exhibition of materials other than library materials that support the Instruction, Research or Public Service programmes. Included are permanent exhibitions of historical materials, art objects, scientific displays, et cetera. The CESM codes can be used to relate activities in this subcategory to specific academic programmes or departments.

The following activities may be distinguished:

- (a) **Management and Administration** of Museums and Galleries, which include, apart from the usual routine administrative functions, high-level planning functions such as the determination of the overall policy for the selection and acquisition of museum, art and science materials.
- (b) **Technical processing**, which includes purchasing; expeditions; preparation, identification and description (unless this can be classified as Research) and cataloguing; display, repairing and cleaning of materials.
- (c) **User services**, which include advisory and reference services; special (temporary or travelling) exhibitions; loan services; tours and guidebooks; and information dissemination and promotions.

4.2.3 Educational Media Services (0403)

This subcategory includes those audio, visual, and other technological services, aiding in the transmission of information, that have been established to provide direct support for the institution's Instruction, Research, and Public Service programmes. Those support services related to the use of learning resources centres, computer-aided instruction, and closed circuit television facilities should be included here. However, those instructional activities that use such facilities rather than contributing to their provision, should be classified appropriately in the Instruction programme (0100). This subcategory includes only those activities intended to "provide" or "make available" media services. The CESM codes can be used to relate activities in this subcategory to specific academic programmes or departments.

Examples: Telematics/Video conferencing function for instructional purposes; coordination of audio-visual services on campuses; activities of media assistants; production of video programmes and materials; graphic art services to academic staff and students; photographic services

The following activities may be distinguished:

- (a) **Management and Administration** of Educational Media Services, which include, apart from the usual routine administrative functions, high-level planning functions such as the determination of the overall policy for the selection and acquisition of equipment.
- (b) **Technical processing**, which includes purchasing and maintenance of equipment and -facilities.
- (c) **User services**, which, apart from the direct provision of facilities, include the production of graphic and audio-visual materials such as slides, films and recordings; videos, and information dissemination and promotions.

4.2.4 Academic Information and Communication Technology Support (0404)

This subcategory includes those Information and Communication Technology (ICT) Services that have been established to provide direct support for one or more of the institution's primary programmes - Instruction, Research and Public Service. Thus the central ICT services, or part thereof, used by the academic staff are classified here; but the services, or part thereof, used for administrative purposes must be allocated under subcategory 0600 (i.e. Administrative Information and Communication Technology Support). Also not included here are any facilities, which incidentally make use of ICT systems for support but whose primary purpose is not the provision of ICT services, such as computers incorporated into experimental apparatus. However, ICT systems providing computer services should be included here even if dedicated to one user department. The CESM codes can be used to relate activities in this subcategory to specific academic programmes or departments.

The following activities can be distinguished:

- (a) **Management and Administration** of Academic Information and Communication Technology Support, which include, apart from the usual routine administrative functions, high-level planning functions such as the determination of the overall policy for the provision, selection and acquisition of ICT systems and software.
- (b) **Technical processing**, which includes the activities related to computer operations; data capturing services; programming, software design, including the development and maintenance of operating systems, and software packages for general use.
- (c) **User services**, which include activities related to specific user projects and needs such as tailor-made programmes. Also included here are user advisory services, ICT help desks and information dissemination with regard to the facilities and services.

4.2.5 Ancillary Support (0405)

This subcategory 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 information and communication technology support. This is a “hold-all” category, designed to catch all academic support services not mentioned in the other subcategories. If the support function can be identified, then it should be included under this heading (and not under one of the primary programmes). Ancillary support services are generally unique to a particular academic programme or department and are so numerous and varied that individual PCS subcategories were not developed for each one. CESM categories can be used to relate activities in this subcategory to specific academic programmes or departments. Ancillary support activities usually provide a mechanism through which students can gain practical experience. An example of ancillary support is a demonstration school associated with the Faculty of Education.

Examples of services which fall (partially or totally) under this subcategory are:

- (a) Support provided to the instruction, research and public service programmes by the central electronic services, central mechanical services, central printing unit, and academic photocopying services.
- (b) The administration and equipping of chemical, physics and engineering workshops.
- (c) Sourcing and acquisition of equipment and materials and ensuring that sufficient consumables are available for practical demonstrations and tests.
- (d) Technical services provided for the construction/installing/servicing/upgrading/maintenance/repair of laboratory and research equipment such as an electron microscope unit, nuclear accelerators, spectrometer computer system, et cetera.
- (e) Design and manufacturing of specific and specialised equipment for laboratory and field research, e.g. activities performed by central glassblowing workshops.
- (f) The running and maintenance of central animal units and an experimental farm.
- (g) Activities that ensure that laboratories are operational at all times
- (h) Setting up of practical sessions, including relevant equipment.
- (i) Disposal of waste and chemicals.
- (j) Ensuring that safety measures in the laboratory are adhered to and ensuring compliance with Occupational Health and Safety Acts and Regulations.

- (k) Laboratory material inventory and stock control.
- (l) General cleaning and maintenance of equipment.

4.2.6 Academic Administration (0406)

- (a) This subcategory includes activities which are directly related to student records, registrations, and examination administration. It consists of those activities related to the administration of applications, registration, maintenance of records, administration of examinations of students and graduation processes. Both the activities of central, faculty and division offices engaged in such efforts are included. Also included is the invigilation of examinations, except by teaching staff (in which case it is included under the associated instruction programme). Not included are department-related activities such as the setting of examinations (which falls under Instruction) and typing of examination papers by the department (which falls under Academic Programme Administration - 0406). Also included are activities in respect of graduation ceremonies (although not the attendance of graduation ceremonies by academics), and the maintenance of records for previously enrolled students.

It includes activities related to providing application information to students; managing student applications and admissions; ensuring compliance with all DHET, SAQA and HEQC requirements, especially the FETC framework; implementing quality management systems; informing students of admission decisions; referring students for admissions testing; activities related to written and verbal enquiries with regards to examinations, examination time-table, viewing of scripts et cetera; all examination functions/activities (from admission to examination to publication of results); and processing of all activities/functions with regards to moderators/examiners/invigilators; administering of postgraduate research assessments; organising and managing graduation ceremonies; orientation programmes for students; administering and maintaining the student database system (Enterprise Resource Planning) and student records; setting up and maintaining electronically all information relevant to academic programmes and student records; controlling the accuracy of student data and programme information for auditing and funding purposes; and, providing of student records to students and other stakeholders in accordance with internal policy regarding the disclosure of information.

- (b) This subcategory also includes the activities that provide administrative and management support specifically for the academic programmes. Included are

activities which provide secretarial and administrative services to deans of faculties, assistant directors, school directors and departmental heads and also to academic committees set up by faculty boards and divisions. Also included are academic programme advisory services such as providing students with assistance in connection with the content and structure of courses. Deans, school directors, assistant directors and heads of departments will usually devote a portion of their time to this subcategory, as might any staff member serving on a faculty committee or academic division.

- (c) Included are the delivery of an experiential learning/work integrated learning placement service to students, faculties and employers; identifying and developing new experiential learning placement opportunities; liaising and cultivating links and training partnerships with commerce, industry and SETA's; advising new employers on setting up co-operative education partnerships; providing experiential learning placement support service to students and faculties; providing feedback to faculties on placement trends and statistics through annual reporting;
- (d) Excluded are activities usually associated with council and senate/board of studies and their committees (these belong with 0601- Executive Management).
- (e) Additional examples are the activities of faculty and academic division secretaries and administrative officers (academic), departmental secretaries, typists within academic departments, et cetera.
- (f) Activities related to the organising of all aspects of events for the installations of Chancellors and Vice-Chancellors, formal dinners, honorary doctorate dinners, inaugural lectures, long service awards ceremonies, certification ceremonies; academic award ceremonies, the Convocation and other public functions.
- (g) Activities related to maintaining the Institutional Statute.
- (h) The development of brochures and the development and updating of the prospectus of academic programmes, are included here.
- (i) Administrative services to support research activities and public service activities such as administrative services to deans of research, directors of research, research managers, directors of public service units, and managers of public service units should be classified under academic administration.

- (j) Facilitating and coordinating the presentation of short learning programmes through the provision of information, and administrative and logistical support services to internal and external clients.
- (k) Managing the database on admissions testing and results.

4.2.7 Academic Advising (0407)

This subcategory includes activities related to formally organised and/or separately budgeted academic advising. This subcategory is intended to include academic advising at faculty or school level; it is not intended to capture academic advising at the department level. For programme code purposes, academic advising identified by this subcategory includes, but is not limited to: providing accurate and reliable information to assist students in establishing goals and making wise curriculum choices; tying academic majors to careers; monitoring students' academic progress; communicating among and between academic staff of the various units; and referring students to other services. This subcategory does not include: formally organised placement, career guidance, and personal counselling for students which is included under Student Services (0500).

4.3 Additional notes

4.3.1 Included under Academic Support

- (a) Conservation areas, teaching clinics and field stations should be included under Ancillary Support (0405).
- (b) Activities that are related to student computer laboratories that are campus-wide should be coded to Academic Information and Communication Technology Support (0404). Activities related to departmental computer laboratories should be coded to General Academic Instruction (0101).
- (c) Generalized administration of international programmes should be included under the Academic Programme Administration (0406). Administration of study abroad programmes should be included under General Academic Instruction (0101). Student services provided to international students should be coded to the appropriate Student Services (0500) subcategory.
- (d) Activities related to distance education technology should be included under the Educational Media Services subcategory (0403).

- (e) Information and communication technology related to libraries should be included under Libraries (0401).
- (f) Activities performed by faculties, schools and departments related to the admissions at postgraduate level need not be separately identified and may be included as Academic Programme Administration (0406).

4.3.2 Excluded from Academic Support

- (a) Activities related to the institution-wide responsibilities of academic managers should be classified under the Executive Management (0601) subcategory of Institutional Support (0600).
- (b) Activities through deans' offices and directors' offices which are directly for the benefit of Instruction, Research or Public Service should be included under the appropriate programme.

ACADEMIC DEVELOPMENT (1400)

14.1 Definition

The Academic Development programme includes all those activities related to develop Instruction, Research and Public Service capacity including:

- (a) Improving access through the development of alternative admission systems and admissions testing;
- (b) Development and improvement of Foundation programmes to improve the knowledge and skills levels of students to better equip them for succeeding in the formal programmes of the institution;
- (c) Academic Staff development and research capacity development;
- (d) Course and curriculum development and the development of academic frameworks and models;
- (e) Implementing strategies to improve teaching and learning efficiency;
- (f) Providing language and writing skills development programmes;
- (g) Development of educational technology that enhances instruction;
- (h) Promoting academic engagement;
- (i) Academic engagement and Public Service programme development and networking;
- (j) Research Capacity Development initiatives; and,
- (k) HIV/AIDS integration;

14.2 Subcategories

- (a) Access and Admissions Testing (1401)
- (b) Foundation Programmes Development (1402)
- (c) Academic Staff Development and Research Capacity Development (1403)
- (d) Course and Curriculum Development (1404)
- (e) Teaching and Learning Efficiency (1405)
- (f) Language and Writing Skills Development (1406)
- (g) Education Technology Development (1407)
- (h) Academic Engagement and Public Service Development (1408)

- (i) Innovation and Technology Transfer Development (1409)
- (j) HIV/AIDS Integration (1410)

14.2.1 Access and Admissions Testing (1401)

Included in this subcategory are activities related to:

- (a) Broadening of access to higher education institutions and the identification of the development needs of students;
- (b) Establishing appropriate research-based admissions requirements for entry to the institutional instructional offerings;
- (c) Developing, implementing and maintaining policies and procedures related to admissions;
- (d) Facilitating research that will contribute to the setting of appropriate admissions requirements for entry to institutional instructional offerings and that will contribute to the body of knowledge with regards to access and admissions testing and measurement development and evaluation in a multilingual and multicultural society; and,
- (e) Informing staff, prospective students and their parents, and Technical and Vocational Education and Training (TVET) institutions of the value of assessment in broadening access and identifying the development needs of students.

14.2.2 Foundation Programmes Development (1402)

Included in this subcategory are activities related to:

- (a) Directing and facilitating the development and effective delivery of a wide range of foundation and extended curricula programmes aimed at broadening access and enhancing retention and throughput rates;
- (b) Managing the recruitment and selection of students and ensuring that the development needs of students in foundation and extended curricula programmes are appropriately attended to; and,
- (c) Facilitating teaching and learning experiences at a foundational level and participating in research activities aimed at exploring the efficacy of these programmes.

14.2.3 Academic Staff Development and Research Capacity Development (1403)

Included in this subcategory are activities related to:

- (a) Providing the academic staff with opportunities for personal and professional growth and development;
- (b) Evaluating and rewarding professional performance of the academic staff;
- (c) Sabbaticals, faculty awards, and organised faculty development programmes;
- (d) Improving and promoting the research capacity and broadening the research base of the higher education institution by equipping young researchers and post graduate masters and doctoral students with the appropriate skills and methodologies. Research or research-related activities such as the preparation and publication of research papers as such must however be included under the Research programme (0200).
- (e) Developing strategies to increase the research output of the institution; and,
- (f) Developing strategies to improve the equity and academic qualification profile of academic teaching and research staff.

14.2.4 Course and Curriculum Development (1404)

Included in this subcategory are activities related to:

- (a) The development, facilitation, dissemination and setting of standards of knowledge in order to address current and future needs of internal and external stakeholders;
- (b) Overall planning and development of new programme and instructional offering structures and curricula, examination systems and educational techniques at the broad institutional level. Also included are the evaluation and modification of existing structures, curricula and systems. Work that individual staff members carry out to update, revise or improve current instructional offerings, or even to institute new offerings, is generally not included here, but under the Instruction programme (0100);
- (c) Assisting in the coordination and facilitation of processes relating to the approval and accreditation of new academic programmes as well as the accreditation and review of existing programmes, in accordance with internal and external statutory requirements; and,
- (d) Developing and improving the quality of experiential learning/Work Integrated Learning.

14.2.5 Teaching and Learning Efficiency (1405)

Included in this subcategory are activities related to:

- (a) Developing, managing and expanding supplemental instruction programmes contributing to the student development and retention strategy;
- (b) External fund-raising to expand supplementary instruction initiatives;
- (c) Training and supervising supplementary instruction leaders;
- (d) Development and delivery of student academic development programmes and initiatives; and,
- (e) Developing, implementing and managing academic and life skill development initiatives at the institution to contribute to student development and retention.

14.2.6 Language and Writing Skills Development (1406)

Included in this subcategory are activities related to:

- (a) Developing and implementing strategies to effectively guide, support and monitor the implementation of multilingualism in teaching and learning;
- (b) Improving writing competencies among students and staff;
- (c) Presenting specialist lectures/workshops on different aspects of academic writing; and,
- (d) Liaising with academic staff regarding the writing competency skills required for specific disciplines and the development of programmes to address the identified needs.

14.2.7 Education Technology Development (1407)

Included in this subcategory are activities related to:

- (a) Developing models and systems for the integrated use of media and technology to enhance teaching and learning.

14.2.8 Academic Engagement and Public Service Development (1408)

Included in this subcategory are activities related to:

- (a) Developing and promoting academic engagement;

- (b) Promoting, developing and managing the offering of Continuing Education programmes by the institution to the external community through non-formal and adult education programmes;
- (c) Developing, enhancing, directing and promoting partnerships to enable the integration of engagement as a core function into teaching, learning and research in the institution;
- (d) Providing strategic direction and leadership in respect of Co-operative Education, Service Learning, Continuing Education, and Community Development; and,
- (e) Developing and facilitating the introduction of short courses in HIV/AIDS as part of community outreach programmes.

14.2.9 HIV/AIDS Integration (1409)

This subcategory includes activities related to developing, enhancing, directing and promoting the integration of knowledge about and awareness of HIV and AIDS as an essential component within the core functions of the institution, namely teaching, learning, research and community outreach programmes, in collaboration with national institutions of Higher Education together with public and private sectors. This includes activities related to providing strategic direction and leadership in respect of mitigating the impact of HIV and AIDS in the institution, the local environmental context, nationally and globally.

Included in this subcategory are activities related to:

- (a) Facilitating and managing the academic development and infusion of knowledge about HIV and AIDS in the curricula of undergraduate and postgraduate programmes;
- (b) Providing mentoring and supervision to students involved in community outreach programmes; and,
- (c) Ensuring the delivery of high quality short course programmes in HIV and AIDS for staff, students and the community.

14.3 Additional Notes

14.3.1 Included under Academic Development

- (a) Activities that aim to develop and improve the quality and efficiency of teaching and learning must be classified under the Academic Development programme (1400).

14.3.2 Excluded from Academic Development

- (a) Activities that support the academic programme of the institution and that are administrative and logistical in nature must be classified under the Academic Support programme (0400).

STUDENT SERVICES (0500)

5.1 Definition

The Student Services programme includes those activities carried out with the objective of contributing to the emotional and physical well-being of the students as well as to their intellectual, cultural, and social development outside the context of the institution's formal instruction programme. The Student Services programme attempts to achieve this objective by expanding the dimensions of the student's educational and social development by providing cultural, art, social, and sports experiences; by assisting students, in dealing with personal problems and relationships as well as in their transition from student to member of the labour force; and by providing health services. Note, however, that housing and food services and other auxiliary enterprises are not included here, but under the Auxiliary Enterprises programme (0900).

5.2 Subcategories

- (a) Student Services Administration (0501)
- (b) ICT support for Student Services (0502)
- (c) Social and Cultural Development (0503)
- (d) Student Sport (0504)
- (e) Counselling and Career Guidance (0505)
- (f) Campus Health Services (0506)
- (g) Transportation Services (0507)
- (h) Graduate Placement and Student Placement Services (0508)

5.2.1 Student Services Administration (0501)

This subcategory includes organised administrative activities that provide assistance and support (excluding academic support) for the needs and interests of students. It includes only administrative activities that support more than one subcategory of student activities and/or that provide central administrative services related to the various student service activities. Excluded from this subcategory are activities of the institution's chief officer for student affairs, whose activities are institution-wide and, therefore, should be appropriately classified as Institutional Support (0600). It also excludes the administrative assistance for those activities that are provided for in the Auxiliary Enterprises programme (0900). Specifically, it would include the activities of any coordinating student services organisation that provides administrative support for more than one of the subcategories of the Student Services programme. Excluded from this subcategory would be those administrative

functions related to the activities of a single subcategory, which should be classified within that subcategory. For example, the activities of the Director of Student Counselling and Career Guidance should be classified under Counselling and Career Guidance subcategory (0505) and administrative assistance provided solely for clubs and societies would all be classified under Social and Cultural Development subcategory (0503). Examples: Administrative office support for the manager of social, art and culture development.

5.2.2 ICT Support for Student Services (0502)

This includes activities related to ICT support that benefit student service activities.

5.2.3 Social and Cultural Development (0503)

Includes organised activities that provide for students' social, arts and cultural development outside the formal academic programme. This subcategory includes cultural events, student newspapers, student sport, student organisations, the non-retail operations of student representative councils, et cetera. It also includes activities that create opportunities for students to perform in public. It includes all recreational activities for students.

Included in this subcategory are activities related to:

- (a) Internally organising the choirs, drama groups, dance groups, student cultural societies and student functions;
- (b) Externally the presentation of concerts by students, the Music Competition for students and art exhibitions of the work of students;
- (c) Directing, promoting, organizing, and planning student life and events of the university; and,
- (d) Activities related to providing administrative support to the societies in planning and organising of society activities and events.

5.2.4 Student Sport (0504)

This subcategory includes activities related to directing, developing, promoting and managing sports activities, the sport profile of the University and participation in sports and recreation.

Examples: Activities performed by the Sports Bureau of the University. Activities related to inter-university sports events. Preparing the outdoor sport facilities for matches and practices for the various sport codes and events of the Sport Bureau.

5.2.5 Counselling and Career Guidance (0505)

This subcategory includes activities related to formally organised internships, placement, career guidance, and personal counselling services for students. (Personal counselling services conducted under the auspices of the Student Health Service should be included under that subcategory.) This subcategory includes vocational testing and counselling services and activities of the placement office. Excluded from this subcategory are formally organised/separately conducted academic counselling activities (Academic Support - 0400) and informal academic counselling services (Instruction - 0100) provided by the academic departments/academic schools/academic faculties in relation to course assignments. It also includes activities related to the coordination, supervision, development and implementation of appropriate Student Counselling, Career Guidance and Development programmes.

5.2.6 Campus Health Services (0506)

Campus and Health services are provided to both students and staff although the major portion of the services will be for students. The service delivered to students and staff must both be classified here.

This subcategory includes activities related to:

- (a) Provisioning of health services to students and staff.
- (b) Developing and implementing appropriate policies in respect of campus health issues;
- (c) Consultation, nursing diagnoses and referral of patients where relevant;
- (d) Prescribing, administering and dispensing of treatment and medication;
- (e) Liaising with medical officers and other health care providers/relevant departments in respect of patients' needs; and, administering injuries on duty;
- (f) Mitigating and monitoring the impact of HIV and AIDS on staff, students and the contextual environment in order to contribute towards institutional holistic wellness;
- (g) Analysing HIV and AIDS interventions internally and externally in order to evaluate the impact of interventions in order to contribute to best practices and to contribute to creating a supportive and enabling learning environment;
- (h) Providing comprehensive primary health care;
- (i) HIV/AIDS VCT care and support services;
- (j) Management of injury on duty services to all staff and students;
- (k) Providing comprehensive Occupational Health Services to all staff and students of the institution; and,

- (l) Administrative support for campus health services.

5.2.7 Transportation Services (0507)

Includes transportation services intended primarily for the benefit of students (unless these services rely primarily on user fees and fall within the definition of Auxiliary Enterprises - 0900).

5.2.8 Graduate Placement and Student Placement Services (0508)

Activities related to the promotion, development and management of the graduate placement process amongst students, employers and relevant external stakeholders.

5.3 Additional Notes

5.3.1 Excluded from Student Services

- (a) Sport clinics open to high school students and other members of the public should be included under the Community Services subcategory (0303) of Public Service (0300).

INSTITUTIONAL SUPPORT (0600)

6.1 Definition

The Institutional Support programme consists of those activities carried out to provide for the day-to-day functioning of the university as an operating organisation. The overall objective of this programme is to provide for the institution's organisational effectiveness and continuity of operations. The organisation does this by (a) providing for executive management and leadership; (b) providing for administrative and logistical services; (c) providing human resources and labour relations services; (d) enhancing relationships with the institution's constituencies; and, (e) providing services and conveniences for the employees of the institution.

6.2 Subcategories

- (a) Executive Management (0601)
- (b) Legal Services (0602)
- (c) Financial Operations (0603)
- (d) Financial Aid Administration (0604)
- (e) Administrative Information and Communication Technology (ICT) Services (0605)
- (f) Space Management (0606)
- (g) Human Resources Services (0607)
- (h) General Administration and Logistical Services (0608)
- (i) Public Relations, Marketing and Fund Raising (0609)
- (j) Staff Social and Cultural Development (0610)

6.2.1 Executive Management (0601)

This subcategory consists of those executive-level activities concerned with the overall management of the entire institution. Included within this subcategory are the activities of the senior officers involved in policy formulation and executive direction, including the activities of the council, student representative council, the chief executive officer, and the senior executive officers.

It includes activities related to:

- (a) Council , council committees and secretarial services;
- (b) Student representative council administrative support, management support, and student leadership development activities for members of the student representative council (e.g. organising student leadership, training and development);

- (c) Vice-chancellors and chief executive officers of universities, their secretariat and special advisors;
- (d) Deputy vice-chancellors and their secretariat;
- (e) The Registrar and secretariat;
- (f) Executive directors, chief directors, senior directors, and their secretariat;
- (g) Special executive committees;
- (h) Senate and its respective committees and the provision of secretariat services;
- (i) Faculty or college boards and their secretariat

6.2.2 Legal Services (0602)

This subcategory includes legal activities conducted on behalf of the institution to direct, manage, interpret and provide legal services in relation to all its parts except human resources related matters.

It includes activities related to:

- (a) Providing legal opinion and advice in respect of contracts;
- (b) Evaluating and interpreting the impact of legislation on the institution;
- (c) Ensuring that all intellectual property transactions conform to policy and legislative requirements;
- (d) Ensuring that all student disciplinary processes and procedures are conducted in accordance with student disciplinary code; managing applications and licences and ensuring institutional compliance with specific statutes such as the Copyright Act, the Promotion of Access to Information Act and the Protected Disclosure Act;
- (e) Liaison with staff on copyright clearance; creating copyright awareness; and,
- (f) Assisting staff with the copyright administrative procedures.

6.2.3 Financial Operations (0603)

This subcategory includes operations related to the auditing, corporate taxation, accounting and financial advisory services and the financial management function of the institution.

It includes activities related to:

- (a) Management accounting;
- (b) Corporate financial reporting;
- (c) Financial control;
- (d) Investments;

- (e) Budgeting;
- (f) Management of the trust funds;
- (g) Internal and external financial audits;
- (h) Preparation and presentation of financial statements;
- (i) Maintaining consortium contracts;
- (j) Processing and effective administration of student accounts;
- (k) Administration of meal booking systems for students;
- (l) Control of expenditure;
- (m) Payroll functions;
- (n) Costing accounting;
- (o) Cashiers;
- (p) Payment of suppliers and other creditor functions and *ad hoc* payment functions;
- (q) Procurement of services functions;
- (r) Insuring the movable and no-movable assets of the university; and,
- (s) Other financial administration functions.

6.2.4 Financial Aid Administration (0604)

This subcategory includes those activities related to the administration (advertising, award, payment and recovery) of bursaries and loans. It includes all activities related to the administration of the National Student Financial Aid Scheme (NSFAS). Note, however that the actual financial grants are not included here, but under the Bursaries programme (0800).

6.2.5 Administrative Information and Communication Technology (ICT) Services (0605)

This subcategory includes activities related to providing ICT services and support for administrative functions.

Included are activities related to:

- (a) Directing and providing ICT services, support and advice;
- (b) Establishing ICT requirements;
- (c) Establishing and maintaining ICT contracts and licensing;
- (d) Managing and maintaining ICT Operations and Database Administration functions;
- (e) Managing the utilisation, performance and availability of the network services infrastructure including all Personal Area Networks (PAN), Local Area Networks (LAN), Metropolitan Area Networks (MAN), Wide Area Networks (WAN), Wireless Networks (WN) and telecommunications infrastructure;

- (f) Providing ICT end-user support services;
- (g) Analysing user requirements and designing and implementing systems to meet user needs;
- (h) Designing procedures and policies to ensure best practice in the use of the ICT Systems;
- (i) Operating and maintain file servers and services and providing backup support;
- (j) Establishing and maintaining security systems, policies and awareness;
- (k) Providing personal computer or network based solutions;
- (l) Providing ICT support services to all students using institution-wide ICT laboratories;
- (m) Facilitating IT procurement and repairs;
- (n) Providing administrative ICT assistance;
- (o) Performing ICT facilities planning;
- (p) Providing technical support by IT technicians;
- (q) Managing the information systems (Enterprise Resource Planning and Management Information Systems) development and support at the institution; and,
- (r) Maintaining telecommunications and video-conferencing.

6.2.6 Space Management (0606)

This subcategory includes 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. The facilities management of the Auxiliary Enterprises programme (0900), the Hospitals programme (1000) and the Independent Operations programme (1100) are excluded here, but included in the specific programme for which the service is rendered.

It includes activities related to:

- (a) Keeping of a space register and the scheduling and allocation of space, for example lecture and examinations time-tabling.
- (b) Physical inspection of lecture venues to determine occupation and utilisation thereof and the capturing of this data onto the space utilization database are also included under this subcategory.
- (c) It also includes the maintenance of a fixed assets register and reporting on all fixed assets, including space.

6.2.7 Human Resources Services (0607)

This subcategory includes activities related to the managing and providing of human resources administration and development services.

It includes activities related to:

- (a) Managing and coordinating human resources strategic projects;
- (b) Directing, managing and providing human resources administration services;
- (c) Managing the recruitment, selection and placement of employees;
- (d) Managing the administration of compensation, employee benefits and conditions of service;
- (e) Ensuring that Human Resources policies and procedures are implemented and updated when required;
- (f) Advising, reviewing, monitoring and managing an Employee Relations strategy, policy and practice;
- (g) Administering the post establishment and post-related human resources budget functions;
- (h) Providing human resources services advice and support to management and employees;
- (i) Administering and maintaining the leave system;
- (j) Providing information to employees in respect of leave enquiries; monitoring and analysing leave trends and providing management reports;
- (k) Analysing and identifying human resources development needs;
- (l) Designing and presenting development programmes, including the assessment of learners; sourcing of training providers and monitoring their effectiveness; skills development facilitating including preparing skills plans and implementation reports; and, managing and monitoring job grading systems; and,
- (m) Capturing, maintaining and validating of data in the Human Resources Information Systems.

6.2.8 General Administration and Logistical Services (0608)

This subcategory includes activities related to general administrative operations and services (with the exception of financial operations and ICT services). Included in this subcategory are risk management; procurement and maintenance of equipment, supplies and materials; campus-wide communication and transportation services; and protective services (safety

and security). Also included are telephone, fleet operations, general stores, duplicating, printing shops, mail and postage.

The following categories of activities can be distinguished:

Health and Safety Services - those activities carried out, to provide for the environmental well-being and security of the campus and its residents. This includes providing protection services such as security, fire protection, emergency, risk management and traffic services on campuses and other property of the institution.

Procurement and Materials Handling - those activities involving the acquisition, storage, and movement of materials. This includes managing and controlling the centralised purchasing, stores and assets functions and the delivery of goods (but excluding these services for residences and cafeterias, which are included under the Auxiliary Enterprises programme (0900); for hospitals, which are included under the Hospitals programme (1000); and for independent operations, which are included under the Independent Operations programme (1100).

Transportation Services - those activities involving campus transportation systems and services. This includes central transportation services such as vehicle pools, bus services and parking services.

Communication Services - those campus communication services that are directly related to the operation of the institution. This includes: campus postal services; telecommunication services; operating the institution's switchboard; maintaining information systems on the telecommunications infrastructures; faxing services; courier services; and administrative reprographic services (including duplicating and photocopying). Note, however, that academic reprographic services are included under the Ancillary Support subcategory (0405). The rendering of a translation, editing, and proofreading service to staff with respect to official documentation is also included here.

Events organisation – those activities related to the booking, arranging and co-ordinating of audio-visual, catering, décor, security, cleaning, parking and other services for all conferences, seminars, workshops and other functions.

Registry Services - the managing and administering of all Registry matters and functions pertaining to the safe keeping of documents in accordance with relevant legislation and internal policy, managing the official document system, handling the document archiving

functions, recording and processing of monies received in the post, developing policies, procedures and guidelines for document management.; maintaining the registration of official committee documents.

6.2.9 Public Relations, Marketing and Fund Raising (0609)

Included under this subcategory are activities related to the development and facilitation of the establishment of a corporate brand for the institution, marketing the institution, and implementing internal and external communications strategies that will enhance the image of the institution.

It includes activities related to:

- (a) Advertising, branding, communication and marketing material/projects and/or campaigns;
- (b) Producing marketing material and corporate communication material and publications;
- (c) Creating demand for the products and services of the institution amongst target groups in order to meet recruitment objectives;
- (d) Building mutually beneficial relationships with alumni;
- (e) Establishing, building and maintaining support for the institution's strategic vision, mission and key values amongst internal and external stakeholders;
- (f) Planning, staging and evaluation of campus events and promotional events;
- (g) Building an institutional culture;
- (h) Student recruitment and maintenance of a positive public image for the institution;
- (i) Facilitating effective internal and external communication;
- (j) Disseminating of strategically targeted information through the local and national mass media, both print and electronic; coordinating crisis communication; and acting to minimise negative publicity;
- (k) Strategically planning and managing the marketing process of the University's programmes, services and overall brand to all potential customers and stakeholder groups in line with the University's strategic statements and enrolment plan; and,
- (l) Activities related to institution-wide development and fund raising.

6.2.10 Staff Social and Cultural Development (0610)

This subcategory includes activities related to social functions, staff societies and cultural activities organised for staff.

6.3 Additional Notes

6.3.1 Included under Institutional Support

- (a) The Executive Management subcategory should include the Vice-Chancellor/Chief Executive Officer and the immediate office support staff. However, organisational transformation and employment equity officers should be coded to the Organisational Transformation and Employment Equity subcategory (1606) under the Institutional Development programme (1600), and public relations and marketing officers should be coded to Public Relations, Marketing and Fund Raising (0610) even if these individuals report directly to the vice-chancellor/chief executive officer.
- (b) The Senate is also included under Executive Management (0601).
- (c) News services are included under Public Relations, Marketing and Fund Raising (0610).
- (d) The archiving of institutional records should be included under General Administration and Logistical Services (0608) unless the collections are catalogued, in which case the Libraries subcategory (0401) of Academic Support (0400) should be used.
- (e) Institutional memberships should be included under General Administration and Logistical Support (0608) except for certain institutional research memberships.
- (f) Those activities that do not have an institution-wide focus should be excluded.

6.3.2 Excluded from Institutional Support

- (a) Environmental health and safety, including hazardous waste removal, should be included under the Other Services subcategory (0708) of Operation and Maintenance of Physical Plant (0700).
- (b) Transportation services intended primarily for the benefit of students are included under the Transportation Services subcategory (0507) of Student Services (0500).

INSTITUTIONAL DEVELOPMENT (1600)

16.1 Definition

The Institutional Development programme consists of those activities carried out to provide for the long term sustainability, planning capacity, institutional research and quality improvement of the university as an operating organisation. The overall objective of this programme is to provide for the institution's organisational efficiency, quality and planning. The organisation does this by: (a) providing for strategic planning; (b) organisational development; (c) quality management; (d) management information and business analysis services; (e) quality management; and, (f) organisational transformation and employment equity.

16.2 Subcategories

- (a) Strategic Planning (1601)
- (b) Organisational Development (1602)
- (c) Quality Management (1603)
- (d) Management Information Services (1604)
- (e) Institutional Research (1605)
- (f) Organisational Transformation and Employment Equity (1606)

16.2.1 Strategic Planning (1601)

This subcategory includes activities related to directing, managing and integrating the strategic planning processes of the institution at organisational, Faculty and Divisional level.

It includes activities related to:

- (a) Coordinating the development and implementation of a framework for strategic planning;
- (b) Coordinating the development, implementation, monitoring and review of the institutional vision, mission and values and strategic priorities;
- (c) Facilitating strategic planning activities at institutional and sub-institutional levels;
- (d) Producing strategic planning documentation – e.g. strategic priorities, three year rolling plans;
- (e) Developing a framework for academic planning, including enrolment planning, programme planning and academic focus areas; and,
- (f) Coordinating and facilitating academic planning activities;

16.2.2 Organisational Development (1602)

This subcategory includes activities related to analysing and identifying needs for organisational development interventions; directing, designing and facilitating the implementation of organisational development interventions to enhance organisational effectiveness; directing the provision of human resources development initiatives that support the vision, mission, values and strategies of the institution; developing and facilitating the implementation of competency-based human resources systems; designing and directing competency audits; and, designing training programmes in respect of competency-based human resources systems and management.

16.2.3 Quality Management (1603)

This subcategory includes activities related to developing, managing, implementing and maintaining an institutional quality management system that addresses all requirements for the Higher Education Quality Committee (HEQC) institutional audit, as well as the requirements for programme accreditation as stipulated by the HEQC and professional bodies.

It includes activities related to:

- (a) Policy analysis, research and advice with respect to national and international developments in higher education quality;
- (b) Facilitation of the development and implementation of the quality system at the institutional level, as well as within faculties and support units;
- (c) The development and monitoring of policies and processes for:
 - The approval accreditation regulation of new programmes, in accordance with the requirements of the DHET, HEQC and SAQA;
 - The review and accreditation of existing programmes, in accordance with the requirements of the HEQC and professional bodies; and,
 - The review of support services.
- (d) The coordination of quality management processes at the University, including processes for:
 - Institutional audit;
 - The approval and accreditation of new academic programmes;
 - The review and re-accreditation of existing academic programmes; and,
 - The review of support services.

- (e) Integrating the key findings of institutional audits, and the reviews of academic programmes and support services into improvement plans.
- (f) The provision of an advisory service and capacity-development opportunities relating to the assurance and enhancement of quality in educational programmes and support services.
- (g) Development and maintenance of an academic programme database that provides updated information regarding the approval and accreditation status of programmes on the institution's Programme and Qualifications Mix (PQM), as well as the results of external and internal programme review and accreditation processes.
- (h) Liaison with the HEQC, professional bodies and HESA.
- (i) Liaison with institutional committees, such as Executive Management and Senate, and academic and administrative managers to ensure the integration of quality management activities.
- (j) Conduct of feedback studies that contribute to quality assurance and enhancement.

16.2.4 Management Information Services (1604)

This subcategory includes activities related to the provisioning of management information in order to guide institutional planning, quality assurance and decision-making processes that are responsive to the demands of the external regulatory environment for Higher Education in South Africa as determined by the Ministry of Education, the Higher Education Quality Committee, and other role-players.

It includes activities related to:

- (a) Developing and maintaining management information systems to provide information for planning, monitoring, and decision-making including the integration of data from various primary data-bases for management information purposes;
- (b) Identification of data and information needs, and development of data formats to support strategic decision-making, planning and policy development and quality management activities.
- (c) Developing data quality control procedures;
- (d) Conducting of regular data analyses to establish trends, cohort flows, success rates, cost analyses and tracer studies to inform policy making, planning and quality processes, and production of regular data-sets including an annual statistical digest;
- (e) Developing, implementing, and maintaining data dissemination systems such as portals, dashboards, query systems;
- (f) Developing institutional performance and efficiency indicator systems;

- (g) Preparing HEMIS data sets according to specifications for submission to the Department of Higher Education and Training including ensuring the accuracy of data-classifications according to HEMIS requirements;
- (h) Providing HEMIS programme, student, staff and space data and information to internal and external clients;
- (i) Providing training to database managers to improve data quality and providing training to data users in the interpretation and utilization of data;
- (j) Developing data models for institutional and strategic planning; and,
- (k) Coordinating the processes relating to the accuracy and updating of data on the academic structure and institutional PQM.

16.2.5 Institutional Research (1605)

This subcategory will include activities related to conducting research projects with the aim of improving the effectiveness, efficiency, responsiveness and overall performance of the institution and supporting the institution strategically.

It includes activities related to:

- (a) Analysing of international and national higher education policy and regulatory developments and their implications for the institution;
- (b) Advising management and other institutional stakeholders on Higher Education policy and regulatory developments;
- (c) Participating in international, national and regional networks relating to institutional research;
- (d) Maintaining a database of internal planning documents as well as external policy and planning documents;
- (e) Scanning of environmental trends (e.g. labour market; national/regional growth and development strategies; educational technology) and analysis of their implications for the institution;
- (f) Conducting surveys: Student feedback (modules, programmes, student experience); Graduate surveys; Staff culture/climate; Employer surveys;
- (g) Developing appropriate benchmarks and performance indicators to monitor performance at a variety of institutional levels;
- (h) Performance analyses, including the review of strategic plans and academic plans against specified targets; cost benefit analyses, et cetera;

- (i) Developing of models that support institutional planning and quality management – e.g. staff workload models;
- (j) Liaison with stakeholders (i.e. regional and local government, business and civic society), and the conduct of frequent situational and stakeholder analyses to ensure alignment between Higher Education trends and institutional planning activities; and,
- (k) Writing reports based on research and planning activities.

16.2.6 Organisational Transformation and Employment Equity (1606)

This subcategory includes activities related to the development, implementation and monitoring of equity policies and procedures and the promotion of organisational transformation as well as cultural and diversity management.

It includes activities related to:

- (a) Developing, managing, evaluating and monitoring of equity policies and procedures;
- (b) Providing reports reflecting the institution's Employment Equity profile, trends and benchmarking;
- (c) Promoting Organisational Transformation as well as cultural and diversity management;
- (d) Communicating transformation initiatives to staff and students;
- (e) Ensuring that adequate provision is made to accommodate staff and students with disabilities; and,
- (f) Complying with the Equity Reporting requirements of the Department of Labour (DOL).

OPERATION AND MAINTENANCE OF PHYSICAL PLANT (0700)

7.1 Definition

The Operation and Maintenance of Physical Plant programme consists of those activities related to administering and maintaining existing grounds and facilities, providing utility services, and planning and designing future expansions and modifications. Activities related to plant expansion and improvements to buildings should, if undertaken by the institution itself, be reflected under the Independent Operations programme (1100).

7.2 Subcategories

- (a) Physical Plant Administration (0701)
- (b) Facilities Planning and Activities Funded by the Capital Budget (0702)
- (c) Building Maintenance (0703)
- (d) Custodial Services (0704)
- (e) Utilities (0705)
- (f) Grounds Maintenance (0706)
- (g) Major Repairs and Renovations (0707)
- (h) Other Services (0708)

7.2.1 Physical Plant Administration (0701)

This subcategory consists of the activities of staff members that direct and support the administration of the operation and maintenance of physical plant at an overall level. Activities related to the managing and maintenance of the building, grounds and parking space data; and managing the municipal accounts for rates and services are included here.

7.2.2 Facilities Planning (0702)

This subcategory includes activities related to the development of plans for plant expansion or modifications, as well as plans for new construction. Activities funded by the capital budget should also be included in this subcategory. It includes physical planning and the overall control over the construction of new plant.

Managing the buildings, grounds and services plans of all infrastructure, performing architectural design work (new structures, alterations and additions), drawing building plans and updating all changes and project managing of capital works are included in this subcategory.

However, activities of the institution's facilities planning director/deputy-director/manager and related clerical support should be included under the Executive Management (0601) subcategory of Institutional Support (0600).

7.2.3 Building Maintenance (0703)

This subcategory consists of those activities related to routine repair and maintenance of buildings, structures, utilities and furniture. It includes both normally recurring repairs and preventative maintenance.

It includes activities related to:

- (a) The provision of engineering services; carpentry; locksmith; sign writing; painting; electrical; mechanical; masonry; bricklaying; and, plumbing maintenance and preventative maintenance and services.
- (b) Maintenance of any furniture, fixed or loose, belonging to the institution; and,
- (c) Minor building work as well as the recurring repairs and preventative maintenance of services and equipment.

7.2.4 Custodial Services (0704)

This subcategory consists of those activities related to the routine care of buildings and the related facilities. It includes activities related to: cleaning services; refuse collection; pest control and hygiene services. This subcategory excludes services provided by external contractors which would fall under the Independent Operations programme (11).

7.2.5 Utilities (0705)

This subcategory consists of those activities related to heating, air-conditioning, light and power, gas, water, and any other utilities necessary for operation of the physical plant. Examples are central air-conditioning, sewage disposal and power plant. The maintenance of utilities is, however, included under the Building Maintenance subcategory (0703).

7.2.6 Grounds Maintenance (0706)

This subcategory consists of those activities related to the operation and maintenance of campus landscape and grounds. It includes the maintenance of trees, grass, shrubs, roads, walks and sports fields. Activities related to managing the production and utilization of in- and outdoor plants, as well as maintaining and providing decorative plants for all official

functions; implementing the relevant garden maintenance work or development work; and managing and providing horticultural services are included in this subcategory.

7.2.7 Major Repairs and Renovations (0707)

This subcategory includes activities related to major repairs and renovations. Minor repairs should be classified in the subcategory Building Maintenance. This subcategory consists of those activities related to alterations and renovations which are intended to alter the nature of physical facilities either by "upgrading" (e.g. improving an old physics laboratory to conform to present standards) or by conversion (e.g. changing a chemistry laboratory into one for biological sciences). However, if the alterations and renovations increase the replacement value and are therefore capitalised, the activity, if undertaken by the institution itself, should be reflected under the Independent Operations programme (1100).

7.2.8 Other Services (0708)

Other services organisationally assigned to the physical plant programme but not compatible with prior subcategories are included here. These tend to be unique to particular institutions.

Activities related to property rentals (i.e., for space rented by the institution) and moving inter-office and inter-campus furniture and equipment should be included under Other Services. Setting up of venues for exams and other official University functions should be included under Other Services. Environmental health and safety, including hazardous waste management activities should be included under the Other Services subcategory. Activities related to the operation and maintenance of nature reserves and experiential farms are included here.

BURSARIES PROGRAMME (0800)

8.1 Definition

The Bursaries programme includes all the financial assistance provided for students in the form of outright grants, stipends, and prizes awarded by and/or administered through the institution. Included in this programme 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. This subcategory excludes waivers and remissions of tuition and other fees granted as a result of either staff status or family relationships of students to staff. Such waivers and remissions should be recorded as staff fringe benefit expenses and categorized in the Executive Management subcategory (0601). Also excluded from this programme are loans (which represent conversion of assets) and work/study assistance (which is a payment for services rendered). Note that the administration of bursaries is reported under Financial Aid Administration subcategory (0604), and this programme exists only to report the actual funds involved. Furthermore, only bursaries in respect of Formal Instruction are included – other bursaries must be reported under the relevant subcategory (e.g. Continuing Education).

8.2 Subcategories

- (a) First Qualification Bursaries and Awards (0801)
- (b) Higher Qualification Bursaries and Awards (0802)

8.2.1 First Qualification Bursaries and Awards

This subcategory includes all bursaries and student achievement awards provided for undergraduate level students at universities, for certificate or first diploma level students at universities of technology and for students at all levels at teachers' training and nursing colleges.

8.2.2 Higher Qualification Bursaries and Awards

This includes all bursaries and student achievement awards provided for post-graduate level students at universities and post-diploma level students at universities of technology. It includes activities related to managing bursaries, co-coordinating and implementing strategies and policies for the acquisition of funds; allocating and administering such funds to deserving registered students as well as potential students; and, allocating and administering student achievement awards.

8.3 Additional Notes

8.3.1 Included under Institutional Support

- (a) Activities related to bursaries must be included here only if the institution has financial control of the funds used to make the grant or award.
- (b) The recipients should not be required to render services to the institution as consideration for the grant (in which case the grant would be considered as personnel compensation) nor should they be expected to repay the amount of the grant to the funding source (in which case the grant would be regarded as a loan to be reported under Financial Aid Administration - 0604).
- (c) The institution must have selected the recipient of the grant. If the institution is given control of the funds, but is not allowed to select the recipient of the grant, the activities should be reported under Financial Aid Administration subcategory (0604).
- (d) Recipients of sport bursaries and awards must be included here if the university selects the recipient of the bursary or award.

8.3.2 Excluded from Institutional Support

- (a) Activities related to student achievement awards may be included under Student Services programme (0500), Instruction programme (0100) or Financial Aid Administration subcategory (0604) depending on the unit that performs the activities.

AUXILIARY ENTERPRISES PROGRAMME (0900)

9.1 Definition

The Auxiliary Enterprises programme includes those primary conveniences and support services needed to maintain an on-campus student body as well as those primary conveniences and support services established primarily to serve the staff. Included are student and staff accommodation and food services. Retail sales, including retail operations of the student representative council and textbook sales are also included. This programme includes all activities relating to the operation of auxiliary enterprises, including activities for operation and maintenance of plant for auxiliary services and for institutional support for auxiliary services. These enterprises normally operate for a fee, although the cost of providing the service may often not be met. When several groups (students, staff, et cetera) benefit from the same auxiliary service, such as a central cafeteria or food service, the use which each group makes of the service should be determined and the service should be apportioned accordingly to the relevant subcategories. Facilities management and procurement and materials handling for auxiliary enterprises, and administration of auxiliary enterprises, should be included in the subcategory below for which the service is rendered.

9.2 Subcategories

- (a) Student Housing Services (0901)
- (b) Student Food Services (Residential) (0902)
- (c) Staff Housing Services (0903)
- (d) Other Food Services (0904)
- (e) Other Auxiliary Enterprises (0905)
- (f) Operation and Maintenance of Plant for Auxiliary Enterprises (0906)

9.2.1 Student Housing Services (0901)

This subcategory includes those activities related to providing and managing of housing facilities for students. It includes activities associated with the securing of both on-campus and off-campus housing. Food services fall under 0902 and are not included here.

9.2.2 Student Food Services (Residential) (0902)

This subcategory includes those activities related to the provision of food and eating facilities for students in university residences.

9.2.3 Staff Housing Services (0903)

This subcategory includes those activities related to the providing of housing facilities for staff (off and on-campus). Normally only those houses which a staff member is entitled to by virtue of his/her position (e.g. Vice-rector's official residence) are included. Note, however, that provision made for operations staff in student residences is included under 0901. Houses et cetera, which are owned by the institution and let to staff members only incidentally, i.e. not purchased specifically for these purposes, should also not be included.

9.2.4 Other Food Services (0904)

This subcategory includes activities related to the provision of all food services and eating facilities, for staff or students, other than students in university residence. These include student cafeterias and snack bars, staff cafeterias and restaurants, catering services, staff tea service, et cetera.

9.2.5 Other Auxiliary Enterprises (0905)

Activities related to the provision of special services or enterprises which are not covered above. Examples are staff/ student bookshops, banks, post offices and child care centres (that are not run for instructional purpose).

9.2.6 Operation and Maintenance of Plant for Auxiliary Enterprises (0906)

This subcategory includes all activities described under 0700 above but applying to auxiliary enterprises.

9.3 Additional Notes

9.3.1 Included under Auxiliary Enterprises

- (a) Housing services, food services and retail sales (including retail operations of the student representative council and textbook sales).

9.3.2 Excluded from Auxiliary Enterprises

- (a) Hospitals (1000) are classified as a separate programme by virtue of their relative financial significance.
- (b) Student Health Services and Student Sport are separately identified subcategories under Student Services (0500).

- (c) Internal service departments including central stores, fleet operations, copy centers, and similar revolving activities that exist primarily to service the administrative needs of operating departments are included under the General Administration and Logistical Services subcategory (0608) of Institutional Support (0600).
- (d) Instructionally related activities such as library and media services, special courses for students and field trips should be included under Instruction (0100).
- (e) Non-retail operations of student representative councils should be included under the Social and Cultural Development subcategory of Student Services (0500).
- (f) Activities related to child care services which exist primarily to provide an instructional practicum for students should be included under the Ancillary Support subcategory of Academic Support (0400).

HOSPITALS (1000)

10.1 Definition

The Hospitals programme includes those activities related to the services provided by and the administration and maintenance required for a teaching hospital, clinic or health sciences centre. Note that the specific provision of health and medical services solely for the student body (or staff) is not included here but under Campus Health Services (0506) subcategory. Only those hospital activities for which the institution is responsible are included.

10.2 Subcategories

- (a) Medical Care of Patients (1001)
- (b) Medical Care Supportive Services (1002)
- (c) Administration of Hospitals (1003)
- (d) Operation and Maintenance of Plant for Hospitals (1004)

10.2.1 Medical Care of Patients (1001)

This subcategory includes those activities carried out for the specific purpose of providing medical care for patients - prevention, diagnosis, treatment, education and rehabilitation, et cetera. Veterinary care of animal patients is also included here. This subcategory 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 the direct care of patients (such as instruction, research, and administration) should be appropriately classified elsewhere. Note that in order to decide whether a particular activity should be classified in this subcategory or elsewhere the following criterion should be used: If the activity forms part of, or is associated with, a service that would have to be rendered for the direct care of patients in any event (i.e., irrespective of instruction or other considerations), then it should be included in this subcategory.

10.2.2 Medical Care Supportive Services (1002)

This subcategory includes those activities that support the provision of the medical care of patients. Examples are EEG, ECG, Ophthalmic, X-Ray, Pathological, Radiological and Pharmacological Services. Excluded are those nursing services that are an integral part of the provision of patient care and that should be classified under 1001.

10.2.3 Administration of Hospitals (1003)

This subcategory includes those activities related to the administrative aspects of the Hospitals programme including those activities carried out to provide for both the day-to-day functioning and the long range viability of the hospitals. Examples are the admission of patients, keeping of medical records, patient charging and accounts, cleaning and food services, administration of staff, et cetera. Also included are incidental retail services such as flower shops. Facilities management, and procurement and materials handling for hospitals, should be included in this subcategory.

10.2.4 Operation and Maintenance of Plant for Hospitals (1004)

This subcategory includes all the activities described under 0700 above, but applying specifically to hospitals.

INDEPENDENT OPERATIONS (1100)

11.1 Definition

The Independent Operations programme includes those operations that are independent of, or unrelated to, the primary programmes (Instruction, Research, and Public Service) of the institution.

The distinction between reporting under Public Service and Independent Operations must rely on the definition of the former, which requires that skills or facilities unique to the institution must be involved. In the case of independent operations there is no such saving aspect and they will probably arise by accident rather than by design, or as a matter of convenience only.

Facilities management, and procurement and materials handling for independent operations, should be included in that subcategory below for which the service is rendered.

11.2 Subcategories

- (a) Independent Operations – Institutional (1101)
- (b) Independent Operations - External Agencies (1102)
- (c) Operation and Maintenance of Plant for Independent Operations (1103)

11.2.1 Independent Operations – Institutional (1101)

This subcategory includes those activities owned or controlled by the institution but unrelated to or independent of the institution's mission. An example is the activities of those building teams that are employed by institutions to undertake the construction of new buildings.

11.2.2 Independent Operations - External Agencies (1102)

This subcategory includes those activities that are controlled or operated by outside agencies, but that are housed or otherwise supported in some way by the institution. An example is the housing of the Joint Matriculation Board at UNISA.

11.2.3 Operation and Maintenance of Plant for Independent Operations (1103)

This subcategory includes all activities described under 0700 above, but applying to independent operations.

REFERENCES

- ALTBACH, Phillip; REISBERG, Liz; RUMBLEY, Laura. (2009). *Trends in Global Higher Education, Tracking and Academic Revolution*. Paris: UNESCO
- DE WIT, Hans. (2011). *Globalisation and Internationalisation of Higher Education*. RUSC. Vol. 8 No 2
- KNIGHT, Jane. (2008). *Higher Education in Turmoil. The Changing World of Internationalization*. Rotterdam: Sense Publishers.
- National Association of College and University Business Officers (NACUBO). (2007). *Functional programme classification system for Colleges and Universities*. Retrieved February 4, 2008, from <http://www.uwsa.edu/fadmin/>
- Organisation of Economic Co-operation and Development (OECD). (2002). *Frascati Manual: Proposed Standard Practice for Surveys of Research and Experimental Development*. (6th Edition 2002).