Prepared by the Office of Planning and Policy. This is a new Policy.

E7.104   Data Administration Policy:
            Student Information Management System (SIMS)

I.   INTRODUCTION

      The four units of the University of Hawai'i (University of Hawai'i at
      Mānoa, University of Hawai'i at Hilo, University of Hawai'i-West Oahu,
      and University of Hawai'i Community Colleges) are presently operating on
      four different student information systems. These systems were developed
      by each unit to meet its own complete and particular needs, independent
      of other units. The expected and logical result is four different,
      independent, self-contained systems.

      However, the four units, nine campuses in all, remain part of a whole,
      the University of Hawai'i. Student Information is needed for planning,
      policy making, and decision support at both the campus/unit level and
      the University of Hawai'i system level. This information must be
      aggregated--related across the various campuses to support the needs of
      system level management. Additionally, the information must be
      disaggregated--provided in greater detail to meet the needs of lower
      level management. Different kinds of information must be provided to
      different levels of management.

      Most importantly, there must be uniform data standards (e.g., data
      definitions, naming conventions) that provide for consistency,
      comparability, accuracy, and integrity of student information.

      There must be a student information system that provides the management
      information needed and insures its consistency, comparability, integrity
      and accuracy. First and foremost, this system must serve the University
      of Hawai'i (system) as a whole, not just individual campuses. There must
      be cooperation and coordination between system and campus level
      management for the benefit of the entire University.

II. OBJECTIVES

The objectives of this policy are:

A. To establish a Student Information Management System (SIMS) that will provide the University of Hawai'i administration with information needed for planning, policy making, and decision support. SIMS is a management information system intended to serve the University of Hawai'i as a whole, not only individual campuses. It is intended to provide the University of Hawai'i administration at the system and campus level with management information needed for planning and policy making. It is not intended to serve the day-to-day operational needs of individual campuses. The intention is to establish cooperation and coordination between system and campus level management for the benefit of the entire University.

B. To establish uniform data standards that ensure consistency, comparability, accuracy and integrity of SIMS information.

C. To ensure security and privacy of student records maintained in the SIMS database.

III. DEFINITION OF TERMS

A. Data administration (DA) is an executive level responsibility. This functional responsibility includes the total management of an organization's data resource. Normally, implementation and monitoring of routine Data Administration activities are delegated by the Data Administrator to the Information Systems Staff of the University. This functional responsibility in no way abrogates the autonomy of the various Units of the University. It does, however, clearly delineate the responsibility and authority for systemwide data administration. These functions include, but are not limited to:

1. Logical database design: which data fields are needed, how they should be grouped together to form records and files, how they are related.

2.   Coordination of user requirements (the goals and objectives, the outcomes desired from the system), integration of those requirements into a database environment and a management information system.

3.   Development of data security and privacy controls.

4.   Development of policies and procedures for controlling data integrity and accuracy.

5.   User training and education in Data Administration.

6.   Policy formulation.

7.   Data dictionary development and maintenance, including naming conventions.

8.   Establishing standards and procedures in data sharing, resolving data sharing conflicts and disputes.

9.   Database administration functions (see below).

B.   Database administration (DBA) concerns the technical aspects of managing the data resource, rather than the administrative aspect, and involves activities such as system development, operation and maintenance. DBA is a subset of DA. Database administration functions include:

1.   Design of physical database, including maintenance, usage standards, guidelines, policies. Also, ensuring that physical database design is open-ended and allows for future growth and additional systems.

2.   Identification of hardware and software required, development and maintenance of software as required to support SIMS.

3.   Long-range planning to ensure that hardware and facilities are adequate to meet the needs of the system.

4.   SIMS user support and training in the database management system.

5.   Ensuring integrity of production data: controls for unauthorized access, adequate validation procedures.

6.   Ensuring security and privacy of data: controls for unauthorized access, safeguards against physical harm to the system (e.g., accidental erasures, physical deterioration of storage media, etc.).

C.   For the purposes of this policy, University of Hawai'i administration/management consists of:

1.   System level - President, Vice-Presidents, Chancellors, System Directors

2.   Campus level - Vice-Presidents, Chancellors, Provosts, Deans, Directors

D.   Management information is information used at the managerial/executive level as described above.

E.   The Data Administrator is responsible for data administration at the University of Hawai'i and reports directly to the President.

F.   The Information Systems Staff is the staff of the UH System offices responsible for production and analysis of Universitywide student information.

G.   The SIMS Data Administration Advisory Council consists of at least one representative from each unit, appointed by the President. It makes data administration policy recommendations to the President and also serves in an advisory capacity to the Data Administrator. Policy recommendations are limited to matters related to SIMS.

IV.   POLICY SCOPE

This policy is intended to be the backbone of the University of Hawai'i Student Information Management System (SIMS), and applies to student information at the University of Hawai'i System level.

It is recognized that the definitions and responsibilities set forth here are not complete. Additions and modifications will be made as data administration at the University of Hawai'i matures and takes shape. This is the first in a series of data administration policies.

V.   POLICIES

A.   Reporting Levels For Data Administration Function

To ensure the timely and accurate generation of student information, the Information Systems Staff is placed in a line-staff organization that reports directly to, and is fully supported by, top management. Furthermore, it is given responsibility and authority for the development and operation of the Student Information Management System. At the University of Hawai'i, the Information Systems Staff is part of the Office of Planning and Policy for the University system. The staff reports to the Director, or a designated representative, who serves as Data Administrator. In addition, the SIMS Data Administration Advisory Council, appointed by the President, and consisting

of at least one representative from each unit serves in an advisory capacity to the Data Administrator and makes policy recommendations to the President.

B. Responsibilities

1. The Information Systems Staff, under the direction of the Data Administrator, is responsible for:

   a. Determining, with input from end-users, the goals and objectives of the SIMS, that is, the outcomes of the system and the management information needs. This includes not only stating information needs in general terms, but specifically and in detail, prescribing what is needed and the time framework within which it is needed.

   b. Specifying, with input from end-users, SIMS fixed system requirements. This includes determining inputs to the system, procedures and protocol that cannot be altered, and data elements that are required to comply with legal and other requirements.

   c. SIMS system development, that is, designing, testing, modifying, implementing, evaluating, and maintaining the system. This includes:

      (1) Designing the physical database, including maintenance, usage standards, guidelines, policies. Also ensuring that physical database design is open-ended and allows for future growth and additional systems.

      (2) Identifying hardware and software requirements, developing and maintaining software as required to support the SIMS.

      (3) Undertaking long-range planning to ensure that hardware and facilities are adequate to meet the needs of the system.

      (4) Providing SIMS user support and training.

      (5) Ensuring integrity of production data: controls for unauthorized access, release or modification of data and adequate validation procedures.

      (6) Ensuring security and privacy of data: controls for unauthorized access, safeguards against physical harm to the system, etc.

(7) Setting technical specifications and standards for data transfer from campus databases to the University of Hawai'i SIMS.

d. Developing and maintaining a data dictionary, that specifies University of Hawai'i system definitions and naming conventions. This establishes a dictionary of data elements and terms used in SIMS. The process for establishing this dictionary includes procedures for soliciting campus input and arriving at a systemwide agreement or consensus in defining each data element, as well as a procedure for updating the dictionary as changes or additions are deemed necessary.

2. Top-level campus administrators (via Presidents/Chancellors) are responsible for ensuring that appropriate campus offices and staff:

a. Provide the required campus data, ensuring its integrity, accuracy, and conformance to existing SIMS standards and definitions.

b. Format/translate the data as necessary in accordance with SIMS technical specifications and standards as set by the Information Systems Staff.

c. Provide the Data Administrator with names of authorized SIMS users.

3. SIMS Data Administration Advisory Council is responsible for:

a. Making data administration policy recommendations to the President. These policy recommendations are limited to those concerning data needed for SIMS.

b. Serving in an advisory capacity to the Data Administrator in matters related to SIMS.