The Design

GEARUP_DB is designed for the collection and management of information and/or services provided by GEAR UP programs/projects. The database is designed to assist program personnel in processing and analyzing data to be used in implementing and evaluating the GEAR UP program/project.

The design includes a user-friendly interface, while the complexities of the design are not exposed to the user.

Major Components and Advantages

Major Components

The GEARUP_DB database includes the following major components …

- **Data Import** and conversion of related data which exists in electronic format in other databases
- **Data Entry Switchboard** through which data can be entered manually
- **Reports Switchboard** through which reports can be generated based upon the data imported or manually entered
- **Administrator Switchboard** through which database administrative functions can be performed

Customized Database Advantages

- Electronic import of some required data from existing databases
- Conversion of existing data formats to that required of the program
- Significant reduction of the time required for manual data entry
- Pre-designed reports
- Separation of the data entry and reporting functions of the database — the most efficient way to enter data is not necessarily the way the information needs to be reported
- Navigation through database with the click of a button
- Most Importantly: Designed to meet individual needs of the user.
The Process

GEARUP_DB is a customized relational database. The framework for its design includes ...

- Determining End Data to be produced
- Identifying Existing Data to import
- Creating a Program Design which will reduce the amount of manual data entry and produced desired reports

Data Entry Switchboard

The Annual Performance Report form provides a means of entering information needed to generate the APR.

The Student Basic Data form allows the user to manually enter basic information on students for service delivery, program evaluation, and reporting.

In the initial design of the database, most of the data required in this component is typically entered electronically by importing and converting data that exist in other databases.

Reports Switchboard

The Reports Switchboard provides links to the various reports available in the GEARUP_DB database.

Annual Performance Report components are available to be printed individually. Once all the data entry requirements are met, the GEARUP_DB generates a Composite Annual Report.

Other reports are available for administrative functions.

Administrator Switchboard

The Administrator Switchboard provides links to various system-defined tables and administrative processes.

This component includes features to define conversion codes/definitions for data imported from other sources. It also provides a form through which program service codes and descriptions can be entered.

Functions performed through the Administrator Switchboard provide the structure for eliminating much of the redundant manual data entry required in other data collection and processing practices.