

**Establishing The New Generation System For  
Maintenance, Access, and Presentation of migrant  
Student Academic and Health Data**

*Establishing*

**The New Generation System**

*For*

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of Migrant Student Academic and Health Data*

*August 1, 1995*

# ***Establishing The New Generation System for Maintenance, Access, and Presentation of Migrant Student Academic and Health Data***

The establishment of the New Generation System begins with a vision of what this new system should do for teachers, health providers, families, and administrators in creating an optimum educational environment for migrant students. With a far-reaching vision, it is possible to create a system that addresses the immediate need of record/text data transfer, yet lays the foundation for a new system that addresses the need to communicate relevant and authentic information on students in an efficient and cost effective manner.

## **Vision**

*Immigrant  
Secure physical conditions*

**To create a new generation system that collects, stores, communicates, and presents migrant student education and health information. This system will:**

- Lay foundation for sharing academic and health information of migrant students today and in the future;
- Consider the educators as the primary clients because they are responsible for creating the optimum learning environment for the student;
- Increase utilization of the system by the education and health provider by designing a system that is easy to use and has value; and
- Optimization: reflect built-in procedures and mechanisms for incorporating state-of-the art technology on the basis of lower-costs and higher-efficiency criteria.

## **Objective**

**To design a system using existing and future technologies that will collect, store/maintain, communicate, and present education and health information for migratory children.**

## Features

- One national database with a unique record and ID number per student.
- Ability for system to be an immediate solution to current text data needs, but have the capability to include the next level of data types, i.e., audio, graphics, time-based data.
- Ability to access data in timely manner and forward to provider.
- Ability to update data in timely manner.
- Information must be confidential, and privacy must be safeguarded (Family Education Rights and Privacy Act (FERPA)).
- Ability to extend database to include data elements specific to each state's administrative needs-customization.
- Capability to extract data from other existing databases at state, regional center, school district or campus.
- Incorporate current and emerging technologies in the system design.
- Make it easy for a user to work in an environment that gives them control over a very sophisticated and powerful system.
- Create a system that can be economically updated as new technologies are developed.
- Provide for flexibility in end-user configuration in order to set up a system that matches closely to the site's needs.
- Create an end-user system with cross platform compatibility.

## Scope of Work

Replacing the MSRTS with the New Generation System is unlike the conventional technological "off-the shelf" practice. A systematic development effort reflecting user needs as well as technically feasible options is utilized:

## **Phase I Design**

This activity required careful and deliberate attention to technical elements. The level of effort and costs in the design stage are minimal compared to the opportunity cost.

## **Phase II Implementation Stages**

**Stage 1** Database First Level of Service

**Stage 2** Expansion of Database to incorporate transfer of records

**Stage 3** Transfer of complete educational and health data

**Stage 4** Authentic assessment capability (Full Implementation)

### Student Orientation:

Throughout the implementation stages, the student's needs are the focus of primary attention. Thus, the ultimate goal of the New Generation System is campus based access.

### Continuous Rethinking:

This system will continuously evolve as schools acquire resources to use current technology such as video conferencing, and as new technologies emerge which bring new possibilities for communication to occur between educators within the proximal development of students. The NGS Advisory Committee will consider all user needs and recommend appropriate changes.

# Stage 1

## First Level of Service

The principle objective of this level of service is to create a locator system in response to the immediate needs expressed by the stakeholders of the New Generation System. This First Level of Service forms the foundation for the New Generation System through its collection and maintenance of student demographic data. Thus, the following represents Texas' plans to implement the Level 1 Database:

### I. LEVEL 1 DATABASE

*The Level 1 Database will do the following:*

- Assign a unique student identification number:** uniformly identifies migrant students ages 3-21.
- Collect basic demographic data necessary for program planning, management, and reporting purposes:** makes available state specific data to generate basic management reports (See **Appendix B** for listing of Level 1 Data Elements).
- Provide a locator system that designates last school attended:** allows states to track migrant students throughout the New Generation Consortium.
- Supply homebase contacts:** enables receiving states to contact homebase schools for additional information that may be necessary for school/program placement.

### II. TRAINING

- ESC Training:** provided by TEA and New Generation System (NGS) staff at TEA/ESC Meeting, August 1-3, 1995 (See **Appendix C** for detailed Timelines).
- LEA Training:** provided by ESCs in August and September, based on training received August 1-3. A Task Force will be available to assist ESC in training.
- On-Going Technical Support:** NGS staff (1-800-687-0108) assists ESCs with *technical* questions on problems received from LEAs.

TEA assists ESCs with *policy* questions. ESCs are first line of support to LEAs.

### III. DATABASE DEVELOPMENT

•**Delivery of Data from Regional Databases:** to NGS staff by August 15. Each ESC will call the NGS office (1-800-687-0108) for individual instructions for data submission.

Beginning August 15, ESCs and LEAs have responsibility to supply missing data elements to the NGS office.

•**Help Line:** will be provided for ESCs to call NGS office at: 1-800-687-0108 Monday-Friday 8 a.m. - 5 p.m.

### IV. SECURITY

•The **Internet** will be utilized by the New Generation System to transfer migrant student records.

•Each user will be assigned a **password** to access the Internet by the service provider (e.g., NETCOM)

•Each user will be assigned a NGS password with **different levels of authorization** dependent upon degree of system access. Authorization statement will be completed by each user and kept on file at NGS office. The following authorization levels will be maintained:

CAMPUS LEVEL: Searches to locate a student on NGS  
Printing of student records

DISTRICT LEVEL: Creating and updating student  
information

### V. REPORTS

•Basic reports will be accessible on NGS Level 1 Database beginning November 1.

### VI. QUALITY CONTROL

•Procedures that are now being implemented will remain in place.  
•Responsibility for maintaining Certificates of Eligibility (COEs) remains with District

Each District  
must go into system  
to update the  
put in missing info.

- ESCs will assist Districts and maintain responsibility for non-project schools and non-operational LEAs (Districts which do not have appropriate equipment to access New Generation System).

## **VII. ASSIGNMENT OF ROLES**

### ***Role of ESC***

- Provides training to LEAs; LEAs input data directly to New Generation System
- Provides technical support
- Extension of New Generation System service
- LEAs request assistance from ESCs for technical support
- Assists LEAs with maintaining quality control
- Collaborates with LEAs in determining educational needs
- Maintains current role for non-project schools and non-operational LEAs

### ***Role of LEA***

- Has direct access to data --input, search, create and update
- Retrieval of reports
- Builds capacity - internal training at LEA
- Monitors quality control
- Receives training
- Determines educational needs

### ***Role of Central Database***

- Assigns unique number
- Maintains database
- Expands database
- Generates formulas for reports
- Provides training to ESCs
- Provides technical support to ESCs
- Populates database
- Provides operating applications (e.g., Netscape)
- Registration of users
- Develops database
- Issues passwords
- Issues user IDs
- Assigns security codes
- Provides hardware specifications, parameters and standards

### ***Role of TEA***

- Provides leadership and vision
- Funds NGS
- Develops policy in conjunction with ESCs and LEAs

- Works with the ESCs
- Oversees NGS special project

### **Role of NGS Advisory Committee**

*obj: respond to user needs*

The committee will have membership from state, regional, and local levels. It will receive input from different perspectives, such as instructional staff, paraprofessionals, technicians, administrators, parents, students and community. The principle objective is to respond to user needs. Additionally, the advisory committee will review emerging technologies to maintain the state of the art system.

## **VIII. COST**

The New Generation System is accessed using PC computers (see **Appendix A** for hardware specifications and costs). Student record transfer on NGS is accomplished using the Internet. There are start-up and monthly service fees which must be paid in order to access the Internet. These fees are dependent upon the service provider. NETCOM is the service provider recommended by the New Generation System. There is a non-refundable start-up fee of \$25 to establish an account with NETCOM. A subscription is \$19.95 per month (per user). This fee includes 40 prime hours of Internet access every month. (See handouts on NETCOM for more specific pricing information and service provider contacts.)

*0 paid to all states  
28 joined  
contributions  
based upon benefit  
of stage allocation*

## **IX.**

### **CONSORTIUM STATES**

Consortium states will begin to populate NGS Database following a timeline similar to that of Texas.

The following states have joined the New Generation System of Migrant Student Record Transfer:

Arkansas, Colorado, Delaware, Idaho, Illinois, Indiana, Iowa, Louisiana, Maryland, Massachusetts, Michigan, Missouri, Montana, Nebraska, Nevada, New Mexico, North Dakota, Ohio, Pennsylvania, South Dakota, Texas, Tennessee, Utah, Washington, Washington D.C., Wisconsin and Wyoming.



## **APPENDICES**

? MENDING PROCESS?  
what is it

## Appendix A

### Hardware Specifications for Implementation of the New Generation System (as of 8/1/95)

If you have the following hardware available at your site, you will be ready for the first level of service. Please note that if you are considering the purchase of new equipment, you should refer to the next section listing minimum requirements for full implementation.

**Computer:**

|                               |                     |
|-------------------------------|---------------------|
| 486 DX 66 8M RAM (or greater) | (\$1,400 - \$1,900) |
| Color Monitor                 | (\$400 - \$600)     |

|  |                     |
|--|---------------------|
| Power Macintosh 6100 66 MHz (or greater) | (\$1,500 - \$2,000) |
| Color Monitor                            | (\$400 - \$600)     |

**Communications Hardware/Software:**

|                    |                |
|--------------------|----------------|
| 14.4 Fax/Modem     | (\$80 - \$100) |
| Delrina WinFax Pro | (\$80 - \$120) |

**Printer:**

|                |         |
|----------------|---------|
| HPLJ4L Printer | (\$500) |
|----------------|---------|

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If you are considering the purchase of new equipment, here are the basic long-term Hardware Specifications for the New Generation System:

(\* - more expensive, better quality options)

**Multimedia Computer** (use same monitor prices listed above):

|   |   |
|---|---|
| Pentium Based PC with (at least) 16 M RAM | (\$2,800 - \$4,000)                     |
| with Windows for Workgroups.              | (\$150 / \$50 for additional computers) |

|                                   |                     |
|-----------------------------------|---------------------|
| Power Macintosh 8100 (or greater) | (\$2,800 - \$4,000) |
| with System 7.5 or later.         | (included)          |

**Communications Hardware/Software:**

|                    |                 |
|--------------------|-----------------|
| 28.8 Fax/Modem     | (\$200 - \$300) |
| Delrina WinFax Pro | (\$80 - \$120)  |

|                                   |   |
|-----------------------------------|---|
| (*ISDN or T1 Internet Connection) | (prices vary greatly by region and carrier) |
|-----------------------------------|---|

**Printer:**

|                            |                   |
|----------------------------|-------------------|
| HPLJ4L Printer (or better) | (\$500 - \$1,500) |
|----------------------------|-------------------|

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When considering the purchase of new equipment, remember that the following recommendations will be needed for full implementation of the New Generation System:

**Video Digitizing Hardware** (preferably color):

|                      |  |
|----------------------|--|
| Video Camera         | (\$400 - \$1200)                         |
| with digitizing card | (\$300 - \$700)                          |
| AV Macintosh,        | (\$400 - \$600 more than<br>regular Mac) |

This imaging hardware will be used for video conferencing and creating the short computer movies planned for the completed database. While this hardware can also double as a still image scanner, some may choose to utilize the full functions of a separate image scanner.

|               |                   |
|---------------|-------------------|
| Image Scanner | (\$400 - \$1,500) |
|---------------|-------------------|

**Sound Hardware:**

|                              |  |
|------------------------------|--|
| Sound Blaster 16 (or better) | (\$200 - \$400)                          |
| AV Macintosh                 | (\$400 - \$600 more than<br>regular Mac) |

This sound hardware will be used for the capture and playback of student's voice samples.

**Appendix B**  
**DATABASE**  
**FIRST LEVEL OF SERVICE**  
**DATA ELEMENTS**

- |                                |                                  |
|--------------------------------|----------------------------------|
| * Student Number/NME           | * Enrollment Date                |
| * Student Number #2            | * Withdrawal Date                |
| * Student First Name           | * Qualifying Arrival To: City    |
| * Student Middle Name          | * Qualifying Arrival To: State   |
| * Student Last Name            | * Qualifying Arrival From: City  |
| * Sex                          | * Qualifying Arrival From: State |
| * Birthdate                    | * Current School District        |
| * Birth City                   | * Current School Contact         |
| * Birth State                  | * Current School Name            |
| * Birth Country                | * Current School Address         |
| * Race                         | * Current School City            |
| * Termination Reasons          | * Current School State           |
| * Parent/Guardian Last Name #1 | * Current School Zip             |
| * Parent/Guardian Last Name #2 | * Current School Phone           |
| * Grade Level                  | * Homebase School                |
| * Residency Date               | * Homebase City                  |
|                                | * Homebase State                 |
|                                | * Homebase School Phone          |

## Appendix C

### Timeline

#### Implementation of the NGS:

During the implementation period, the NGS staff at Texas A&M University will, upon request, provide technical support to ESC staff. In turn, ESC staff will provide technical support to LEA staff.

- August 1-3                      ESC staff training
- August 7-15                    ESCs deliver regional database to NGS staff
- August - Sept                LEA staff training
- Sept - ongoing                Advisory committee considers appropriate time to add additional data elements to Level 1 Database
- Nov 1                            Basic reports available
- Fall 1995                      Development & Execute RFP for full implementation
- Jan 1996                      Full Implementation