

U.S. Department of Education

Washington, D.C. 20202-5335



**APPLICATION FOR GRANTS
UNDER THE**

Statewide, Longitudinal Data Systems

CFDA # 84.372A

PR/Award # R372A120006

Grants.gov Tracking#: GRANT11025791

OMB No. , Expiration Date:

Closing Date: Dec 15, 2011

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This application was generated using the PDF functionality. The PDF functionality automatically numbers the pages in this application. Some pages/sections of this application may contain 2 sets of page numbers, one set created by the applicant and the other set created by e-Application's PDF functionality. Page numbers created by the e-Application PDF functionality will be preceded by the letter e (for example, e1, e2, e3, etc.).

Application for Federal Assistance SF-424

* 1. Type of Submission: <input type="checkbox"/> Preapplication <input checked="" type="checkbox"/> Application <input type="checkbox"/> Changed/Corrected Application	* 2. Type of Application: <input checked="" type="checkbox"/> New <input type="checkbox"/> Continuation <input type="checkbox"/> Revision	* If Revision, select appropriate letter(s): <input type="text"/> * Other (Specify): <input type="text"/>
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* 3. Date Received: <input type="text" value="12/14/2011"/>	4. Applicant Identifier: <input type="text"/>
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5a. Federal Entity Identifier: <input type="text"/>	5b. Federal Award Identifier: <input type="text" value="N/A"/>
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State Use Only:

6. Date Received by State: <input type="text"/>	7. State Application Identifier: <input type="text"/>
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8. APPLICANT INFORMATION:

* a. Legal Name:

* b. Employer/Taxpayer Identification Number (EIN/TIN): <input type="text" value="660433481"/>	* c. Organizational DUNS: <input type="text" value="0901425220000"/>
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d. Address:

* Street1:
Street2:
* City:
County/Parish:
* State:
Province:
* Country:
* Zip / Postal Code:

e. Organizational Unit:

Department Name: <input type="text" value="Office of the Secretary"/>	Division Name: <input type="text"/>
--	--

f. Name and contact information of person to be contacted on matters involving this application:

Prefix: * First Name:
Middle Name:
* Last Name:
Suffix:

Title:

Organizational Affiliation:

* Telephone Number: Fax Number:

* Email:

Application for Federal Assistance SF-424

*** 9. Type of Applicant 1: Select Applicant Type:**

A: State Government

Type of Applicant 2: Select Applicant Type:

Type of Applicant 3: Select Applicant Type:

* Other (specify):

*** 10. Name of Federal Agency:**

U.S. Department of Education

11. Catalog of Federal Domestic Assistance Number:

84.372

CFDA Title:

Statewide Data Systems

*** 12. Funding Opportunity Number:**

ED-GRANTS-092011-001

* Title:

Institute of Education Sciences (IES): Statewide, Longitudinal Data Systems Program CFDA Number 84.372A

13. Competition Identification Number:

84-372A2012

Title:

14. Areas Affected by Project (Cities, Counties, States, etc.):

Add Attachment

*** 15. Descriptive Title of Applicant's Project:**

Puerto Rico K-12 Statewide Longitudinal Data System Initiative

Attach supporting documents as specified in agency instructions.

Add Attachments

Application for Federal Assistance SF-424**16. Congressional Districts Of:*** a. Applicant b. Program/Project

Attach an additional list of Program/Project Congressional Districts if needed.

 17. Proposed Project:* a. Start Date: * b. End Date: **18. Estimated Funding (\$):**

* a. Federal	<input type="text" value="4,737,680.00"/>
* b. Applicant	<input type="text" value="0.00"/>
* c. State	<input type="text" value="0.00"/>
* d. Local	<input type="text" value="0.00"/>
* e. Other	<input type="text" value="0.00"/>
* f. Program Income	<input type="text" value="0.00"/>
* g. TOTAL	<input type="text" value="4,737,680.00"/>

*** 19. Is Application Subject to Review By State Under Executive Order 12372 Process?**

- a. This application was made available to the State under the Executive Order 12372 Process for review on .
- b. Program is subject to E.O. 12372 but has not been selected by the State for review.
- c. Program is not covered by E.O. 12372.

*** 20. Is the Applicant Delinquent On Any Federal Debt? (If "Yes," provide explanation in attachment.)** Yes No

If "Yes", provide explanation and attach

21. *By signing this application, I certify (1) to the statements contained in the list of certifications and (2) that the statements herein are true, complete and accurate to the best of my knowledge. I also provide the required assurances** and agree to comply with any resulting terms if I accept an award. I am aware that any false, fictitious, or fraudulent statements or claims may subject me to criminal, civil, or administrative penalties. (U.S. Code, Title 218, Section 1001)**

 ** I AGREE

** The list of certifications and assurances, or an internet site where you may obtain this list, is contained in the announcement or agency specific instructions.

Authorized Representative:Prefix: * First Name: Middle Name: * Last Name: Suffix: * Title: * Telephone Number: Fax Number: * Email: * Signature of Authorized Representative: * Date Signed:

ASSURANCES - NON-CONSTRUCTION PROGRAMS

Public reporting burden for this collection of information is estimated to average 15 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Office of Management and Budget, Paperwork Reduction Project (0348-0040), Washington, DC 20503.

PLEASE DO NOT RETURN YOUR COMPLETED FORM TO THE OFFICE OF MANAGEMENT AND BUDGET. SEND IT TO THE ADDRESS PROVIDED BY THE SPONSORING AGENCY.

NOTE: Certain of these assurances may not be applicable to your project or program. If you have questions, please contact the awarding agency. Further, certain Federal awarding agencies may require applicants to certify to additional assurances. If such is the case, you will be notified.

As the duly authorized representative of the applicant, I certify that the applicant

1. Has the legal authority to apply for Federal assistance and the institutional, managerial and financial capability (including funds sufficient to pay the non-Federal share of project cost) to ensure proper planning, management and completion of the project described in this application.
2. Will give the awarding agency, the Comptroller General of the United States and, if appropriate, the State, through any authorized representative, access to and the right to examine all records, books, papers, or documents related to the award; and will establish a proper accounting system in accordance with generally accepted accounting standards or agency directives.
3. Will establish safeguards to prohibit employees from using their positions for a purpose that constitutes or presents the appearance of personal or organizational conflict of interest, or personal gain.
4. Will initiate and complete the work within the applicable time frame after receipt of approval of the awarding agency.
5. Will comply with the Intergovernmental Personnel Act of 1970 (42 U.S.C. §§4728-4763) relating to prescribed standards for merit systems for programs funded under one of the 19 statutes or regulations specified in Appendix A of OPM's Standards for a Merit System of Personnel Administration (5 C.F.R. 900, Subpart F).
6. Will comply with all Federal statutes relating to nondiscrimination. These include but are not limited to: (a) Title VI of the Civil Rights Act of 1964 (P.L. 88-352) which prohibits discrimination on the basis of race, color or national origin; (b) Title IX of the Education Amendments of 1972, as amended (20 U.S.C. §§1681-1683, and 1685-1686), which prohibits discrimination on the basis of sex; (c) Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. §794), which prohibits discrimination on the basis of handicaps; (d) the Age Discrimination Act of 1975, as amended (42 U.S.C. §§6101-6107), which prohibits discrimination on the basis of age; (e) the Drug Abuse Office and Treatment Act of 1972 (P.L. 92-255), as amended, relating to nondiscrimination on the basis of drug abuse; (f) the Comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment and Rehabilitation Act of 1970 (P.L. 91-616), as amended, relating to nondiscrimination on the basis of alcohol abuse or alcoholism; (g) §§523 and 527 of the Public Health Service Act of 1912 (42 U.S.C. §§290 dd-3 and 290 ee- 3), as amended, relating to confidentiality of alcohol and drug abuse patient records; (h) Title VIII of the Civil Rights Act of 1968 (42 U.S.C. §§3601 et seq.), as amended, relating to nondiscrimination in the sale, rental or financing of housing; (i) any other nondiscrimination provisions in the specific statute(s) under which application for Federal assistance is being made; and, (j) the requirements of any other nondiscrimination statute(s) which may apply to the application.
7. Will comply, or has already complied, with the requirements of Titles II and III of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (P.L. 91-646) which provide for fair and equitable treatment of persons displaced or whose property is acquired as a result of Federal or federally-assisted programs. These requirements apply to all interests in real property acquired for project purposes regardless of Federal participation in purchases.
8. Will comply, as applicable, with provisions of the Hatch Act (5 U.S.C. §§1501-1508 and 7324-7328) which limit the political activities of employees whose principal employment activities are funded in whole or in part with Federal funds.

9. Will comply, as applicable, with the provisions of the Davis-Bacon Act (40 U.S.C. §§276a to 276a-7), the Copeland Act (40 U.S.C. §276c and 18 U.S.C. §874), and the Contract Work Hours and Safety Standards Act (40 U.S.C. §§327-333), regarding labor standards for federally-assisted construction subagreements.
10. Will comply, if applicable, with flood insurance purchase requirements of Section 102(a) of the Flood Disaster Protection Act of 1973 (P.L. 93-234) which requires recipients in a special flood hazard area to participate in the program and to purchase flood insurance if the total cost of insurable construction and acquisition is \$10,000 or more.
11. Will comply with environmental standards which may be prescribed pursuant to the following: (a) institution of environmental quality control measures under the National Environmental Policy Act of 1969 (P.L. 91-190) and Executive Order (EO) 11514; (b) notification of violating facilities pursuant to EO 11738; (c) protection of wetlands pursuant to EO 11990; (d) evaluation of flood hazards in floodplains in accordance with EO 11988; (e) assurance of project consistency with the approved State management program developed under the Coastal Zone Management Act of 1972 (16 U.S.C. §§1451 et seq.); (f) conformity of Federal actions to State (Clean Air) Implementation Plans under Section 176(c) of the Clean Air Act of 1955, as amended (42 U.S.C. §§7401 et seq.); (g) protection of underground sources of drinking water under the Safe Drinking Water Act of 1974, as amended (P.L. 93-523); and, (h) protection of endangered species under the Endangered Species Act of 1973, as amended (P.L. 93-205).
12. Will comply with the Wild and Scenic Rivers Act of 1968 (16 U.S.C. §§1271 et seq.) related to protecting components or potential components of the national wild and scenic rivers system.
13. Will assist the awarding agency in assuring compliance with Section 106 of the National Historic Preservation Act of 1966, as amended (16 U.S.C. §470), EO 11593 (identification and protection of historic properties), and the Archaeological and Historic Preservation Act of 1974 (16 U.S.C. §§469a-1 et seq.).
14. Will comply with P.L. 93-348 regarding the protection of human subjects involved in research, development, and related activities supported by this award of assistance.
15. Will comply with the Laboratory Animal Welfare Act of 1966 (P.L. 89-544, as amended, 7 U.S.C. §§2131 et seq.) pertaining to the care, handling, and treatment of warm blooded animals held for research, teaching, or other activities supported by this award of assistance.
16. Will comply with the Lead-Based Paint Poisoning Prevention Act (42 U.S.C. §§4801 et seq.) which prohibits the use of lead-based paint in construction or rehabilitation of residence structures.
17. Will cause to be performed the required financial and compliance audits in accordance with the Single Audit Act Amendments of 1996 and OMB Circular No. A-133, "Audits of States, Local Governments, and Non-Profit Organizations."
18. Will comply with all applicable requirements of all other Federal laws, executive orders, regulations, and policies governing this program.

<p>* SIGNATURE OF AUTHORIZED CERTIFYING OFFICIAL</p> <p>Elsa Paz</p>	<p>* TITLE</p> <p>Director of Office of Federal Affairs</p>
<p>* APPLICANT ORGANIZATION</p> <p>Department of Education of Puerto Rico</p>	<p>* DATE SUBMITTED</p> <p>12/14/2011</p>

Standard Form 424B (Rev. 7-97) Back

CERTIFICATION REGARDING LOBBYING

Certification for Contracts, Grants, Loans, and Cooperative Agreements

The undersigned certifies, to the best of his or her knowledge and belief, that:

(1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure of Lobbying Activities," in accordance with its instructions.

(3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

Statement for Loan Guarantees and Loan Insurance

The undersigned states, to the best of his or her knowledge and belief, that:

If any funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this commitment providing for the United States to insure or guarantee a loan, the undersigned shall complete and submit Standard Form-LLL, "Disclosure of Lobbying Activities," in accordance with its instructions. Submission of this statement is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required statement shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

* APPLICANT'S ORGANIZATION <input style="width: 90%;" type="text" value="Department of Education of Puerto Rico"/>	
* PRINTED NAME AND TITLE OF AUTHORIZED REPRESENTATIVE	
Prefix: <input style="width: 100px;" type="text" value="Ms."/>	* First Name: <input style="width: 200px;" type="text" value="Rina"/> Middle Name: <input style="width: 150px;" type="text"/>
* Last Name: <input style="width: 300px;" type="text" value="Gonzalez-Gelpi"/>	Suffix: <input style="width: 80px;" type="text"/>
* Title: <input style="width: 250px;" type="text" value="Director of Office of Federal Affairs"/>	
* SIGNATURE: <input style="width: 300px;" type="text" value="Elsa Paz"/>	* DATE: <input style="width: 150px;" type="text" value="12/14/2011"/>

SUPPLEMENTAL INFORMATION
REQUIRED FOR
DEPARTMENT OF EDUCATION GRANTS

1. Project Director:

Prefix:	* First Name:	Middle Name:	* Last Name:	Suffix:
Ms.	Norma	M.	Ortiz	

Address:

* Street1: PO Box 190759

Street2:

* City: San Juan

County:

* State: PR: Puerto Rico

* Zip Code: 00919-0759

* Country: USA: UNITED STATES

* Phone Number (give area code) Fax Number (give area code)

{787} 773-8028 {787} 767-693

Email Address:

Ortiz_N@de.gobierno.pr

2. Applicant Experience:

Novice Applicant Yes No Not applicable to this program

3. Human Subjects Research

Are any research activities involving human subjects planned at any time during the proposed project Period?

Yes No

Are ALL the research activities proposed designated to be exempt from the regulations?

Yes Provide Exemption(s) #:

No Provide Assurance #, if available:

Please attach an explanation Narrative:

Abstract

The abstract narrative must not exceed one page and should use language that will be understood by a range of audiences. For all projects, include the project title (if applicable), goals, expected outcomes and contributions for research, policy, practice, etc. Include population to be served, as appropriate. For research applications, also include the following:

- Theoretical and conceptual background of the study (i.e., prior research that this investigation builds upon and that provides a compelling rationale for this study)
- Research issues, hypotheses and questions being addressed
- Study design including a brief description of the sample including sample size, methods, principals dependent, independent, and control variables, and the approach to data analysis.

[Note: For a non-electronic submission, include the name and address of your organization and the name, phone number and e-mail address of the contact person for this project.]

You may now Close the Form

You have attached 1 file to this page, no more files may be added. To add a different file, you must first delete the existing file.

* Attachment:

PROJECT ABSTRACT

The Government of Puerto Rico has chartered the Puerto Rico Department of Education (PRDE) with the mission of heading the *Puerto Rico K-12 Statewide Longitudinal Data System Initiative*. This critical project spans the design, development and implementation of a K-12 Statewide Longitudinal Data System (SLDS), with the ultimate objective of enhancing education policy and operational decisions with hard data pertaining to student achievement over time. It also aims to establish the necessary organizational, political, procedural, systemic and human resource mechanisms necessary to perpetuate its use by education stakeholders at all levels.

As established by the Institute of Education Sciences in its *Request for Applications* number NCES 12-01 (CFDA 84.372), the proposal presented herein focuses exclusively on those project activities related to Priority 1 (K-12 Data System). The systemic capability objectives of the proposed project are the following:

- To effectively implement the K-12 portion of what shall be Puerto Rico's full-fledged statewide longitudinal data system
- To establish and perpetuate an effective K-12 data governance and quality function that shall proactively guarantee information reliability
- To uniformly instill an information-based education performance management culture among those stakeholders vested with said responsibility

To address these systemic capability objectives, PRDE will follow a strategy leveraging on the solid transactional systems infrastructure that it already has in place, furthering the development of its existing data warehouse to receive all of the necessary data in order to produce the desired information, and constituting an *Educational Performance Information Portal* for use by its stakeholders. Thus, the related project activities are in the areas of SLDS output definition, infrastructure acquisition and installation, systems design and development, and data governance organization establishment, along with the required implementation, change management and project management events. This effort shall yield the following project deliverables:

- Constitute the PRDE *Educational Performance Information Portal*
- Integrate transactional systems functionality and K-12 SLDS architecture
- Establish a renewed data governance and quality model

Some activities related to the first project deliverable are already in progress, as the *Educational Performance Barometer* (a standard set of reports aimed at identifying trends in educational outcomes at all levels, from individual classrooms to the SEA as a whole, further expanded upon in Appendix A) is currently being conceived. Overall, the project is expected to transgress over a period of approximately 33 months, and cost \$4,737,680.

Project Narrative File(s)

* Mandatory Project Narrative File Filename:

To add more Project Narrative File attachments, please use the attachment buttons below.

Add Optional Project Narrative File

PROJECT NARRATIVE***A – NEED FOR PROJECT******Puerto Rico and the Puerto Rico Department of Education: A Brief Tutorial***

The Puerto Rico Department of Education directly operates Puerto Rico’s public school system. Unlike almost every other State Educational Agency (SEA), PRDE is also the territory’s sole Local Educational Agency (LEA). This “unitary” condition makes it the third largest school district under the jurisdiction of the US Department of Education (USDE), a reality that should, henceforward, provide much insight into the current situations described within this application. The following are a few basic figures that reveal the dimensions of this SEA/LEA:

- Number of students 473,735
- Number of schools 1,463
- Number of teachers 36,497
- Internal hierarchy 7 educational regions with 28 regional districts

As of the end of the 2010-2011 academic year, 87% of PRDE schools were not meeting Adequate Yearly Progress (AYP) goals. This compares with 59% of schools not meeting AYP requirements in 2007-2008. In addition, the agency does not have all of the tools and information systems necessary to address the situation. In particular, PRDE teachers and administrators lack reliable longitudinal data analysis resources that can help them pinpoint specific educational situations, evaluate available alternatives, make adequate determinations, take the corresponding corrective actions, and measure the results. This circumstance, coupled with the sheer size and often monolithic nature of a highly centralized educational agency employing nearly 68,000 people prompted the Office of the Governor to launch the *Puerto Rico K-12 Statewide Longitudinal Data System Initiative*.

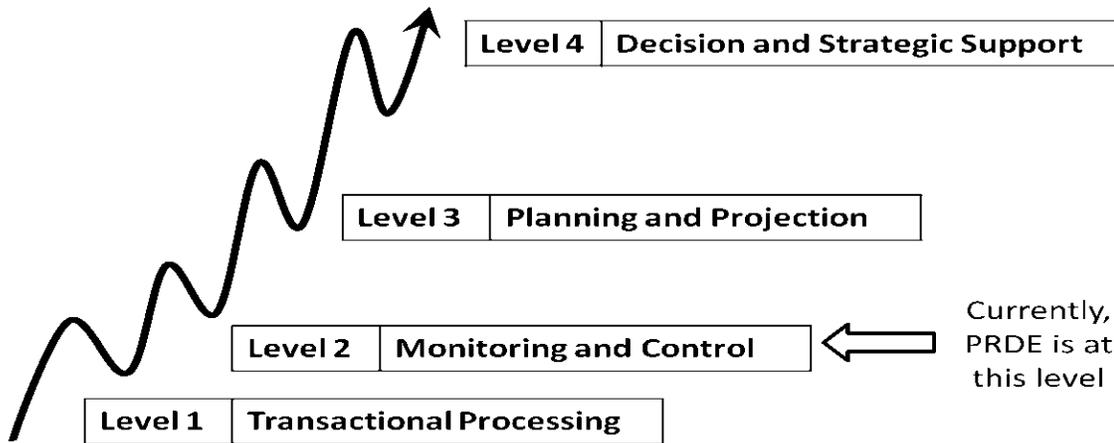
From a central government and SEA standpoint, the requirements established by the Institute of Education Sciences in its *Request for Applications* are in alignment with the goals of the *Puerto Rico K-12 Statewide Longitudinal Data System Initiative*. It is, therefore, PRDE’s hope that the system that the project would develop will enable Puerto Rico to reverse past educational trends, promote the academic achievement of students, and foster societal development.

PRDE’s Systemic Capability Objectives

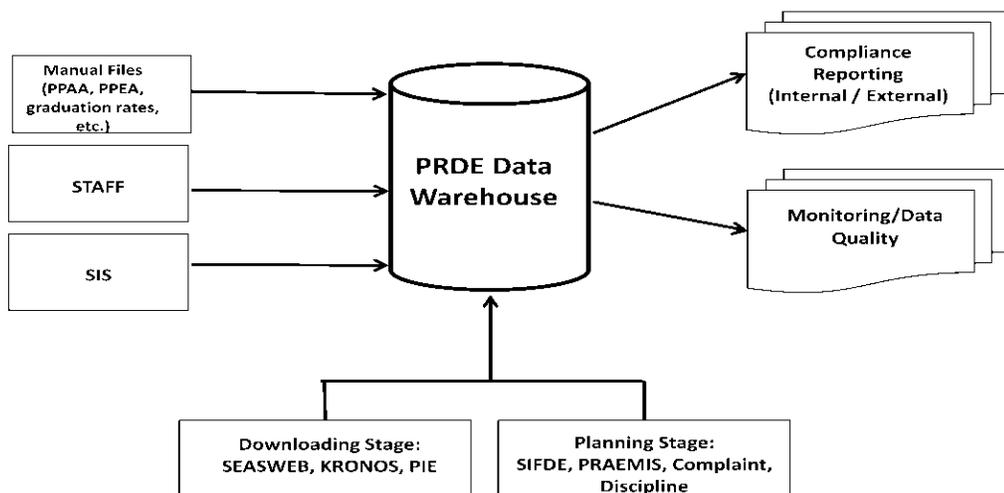
By way of the project proposed herein, PRDE is seeking to fulfill at least three systemic capabilities (goals), hereinafter referred to as the “systemic capability objectives”. They are:

- Systemic Capability Objective #1: To effectively implement the K-12 portion of what shall be Puerto Rico’s full-fledged statewide longitudinal data system**

In terms of the level of use of information technology for the purposes of furthering its educational agenda, PRDE’s current status can be portrayed by way of the following model:



The above model suggests that there are four levels of use of information technology within an organization: Transactional processing, monitoring and control, planning and projection, and decision and strategic support. It also suggests that, generally speaking, PRDE is currently positioned somewhere between the first and second levels. This is further supported by the following diagram, which shows the main information system components that are currently in place at the agency:



Almost all of the systems identified above were implemented over the last five years (before that, most educational data was of an entirely manual nature). Most noticeably, in 2006-2007 PRDE acquired and implemented the SIE system (Spanish for “Student Information System”), a comprehensive, web-based SIS serving all of its schools, teachers and student population (in fact, it contains data corresponding to all PRDE students, except for those that are in the Adult Education Program). This has turned out to be a solid transactional systems infrastructure, and is the main source of student-related educational information for the agency. Other notable transactional systems include STAFF, the custom-built human resources system where most teacher detail information is maintained, SIFDE (Spanish for “PRDE Financial Information System”), and SEASWEB, the special education database. There are also a few other prominent transactions that are not reliably captured by any core system, such as teacher professional development.

At the monitoring and control level, PRDE possesses a centrally-accessible, locally-developed data warehouse. Originally, this customized data repository was almost exclusively conceived for the purposes of satisfying Federal compliance reporting needs (e.g. *EDFacts*), a goal that is still being progressively accomplished (as of 2011, the data warehouse produced or supported the production of 39 out of 166 *EDFacts* reports that are applicable to Puerto Rico for the year). This data warehouse system is the closest system PRDE currently has to a full-fledged K-12 SLDS. It must be stressed, however, that because it has evolved as a Federal compliance tool, its core design is not yet entirely aligned with a broad educational performance management vision.

PRDE does not possess any other pertinent tools or information systems “farther up the ladder” in the model above. The agency aims to elevate its level of use of information systems from the current transactional processing and monitoring/control levels, to the planning/projection and decision/strategic support levels. It is time for PRDE’s important educational decisions to be based on hard data produced by reliable information systems that follow a strategy such as the one implied by the model.

Hence, this first systemic capability objective intends to address PRDE’s information systems reality head on. The expectation is that of further standardizing and solidifying the current data model and data dictionary across all transactional applications, enhancing the scope of transactions processed, and implementing an aligned, congruent K-12 SLDS solution. In this specific technological context, the term “K-12 SLDS solution” implies the following:

- Robust data repository and data management system
- Firm data architecture (data model, data dictionary, business rules)
- Flexible data import, export and reporting functionality
- Web-based data reporting and distribution portal (standard and ad-hoc)

The resulting systems will continue to support PRDE's Federal compliance reporting obligations, and will be designed to adjust to varying data and user needs as they evolve over time. It is PRDE's expectation that this will accommodate the ever-changing needs of education stakeholders in Puerto Rico.

- **Systemic Capability Objective #2: To establish and perpetuate an effective K-12 data governance and quality function that shall proactively guarantee information reliability**

As may also be the case with many other LEAs, the traditional driver behind any data collection, reporting and analysis process at PRDE has been the fact that the Federal government requires it. A natural consequence of this is the fact that the quality of such data is only as reliable as the Federal reporting standards require (which may be adequate at the aggregated State level, but not enough when scoping down to the school or intra-school levels). Another factor affecting data quality is the level of understanding that stakeholders at the school, regional district and regional levels may have about the importance of the timeliness and accuracy of the information entered into the transactional systems, and how each of these systems impacts the management and decision making process.

PRDE's current data quality efforts are mostly tied to the Federal compliance reporting process, which resides within the central Planning Office. When a particular compliance reporting submission is due, the report produced by the data warehouse is examined. When potential inconsistencies are identified by the Planning Office, a number of customized data queries and data cleanup functions are performed (including direct correction of source data by school personnel). The report is submitted only when a satisfactory result is obtained.

As for a data governance structure, not enough formal mechanisms exist whereby data usage is formulated, standardized, regulated and promulgated across the agency. Some standardization has been achieved as a consequence of events that are coordinated at the transactional level, usually by specific key participants in the Information Technology, Planning and Educational Technology areas. Yet this has not been enough to guarantee consistent usage of data throughout the agency. Finally, although some data stewardship functions are being executed between the central Planning Office and the regional districts, they are not as formally structured as they need to in order to ensure consistent use of data.

Indeed, PRDE needs to focus on transforming its data governance and quality efforts from the current style to a proactive, consistently orchestrated model. Building upon a stronger data system will transition the agency from a compliance reporting structure to a results-oriented and performance management organization. Using the *Puerto Rico K-12*

Statewide Longitudinal Data System Initiative as a means, the agency mainly expects to accomplish the following:

- Institute permanent data governance and quality roles, such as a Data Policy Board, a Data Quality Coordinator function and a Data Curator function at regional and/or regional district levels
- Develop proactive data quality tools such as verification procedures, checklists and diagnostic reports (some are already available, albeit in a very basic form)
- Establish data audit guidelines that can be used at any time for third party review purposes, and institute such reviews as a standard policy

PRDE is very much aware of how important it is to not only develop a sound technical K-12 SLDS but to also establish the mechanisms required to ensure that the information that flows through it is accurate enough to perpetuate its utilization and sustainability.

- **Systemic Capability Objective #3: To uniformly instill an information-based education performance management culture among those stakeholders vested with said responsibility**

The relatively recent implementation and availability of most of the aforementioned PRDE transactional systems has opened the door for some agency stakeholders to begin to visualize the potential uses of the data that is being collected. Moreover, some in top management have already garnered an understanding of the depth and breadth of the educational information that is available, and how it could be used to make better informed strategic decisions with educational impact. That is, PRDE is realizing that it needs to reform its decision making process based on much more information than that provided by, say, a standard student report card. It needs to engage with tools such as the proposed K-12 SLDS.

Not by design but by default, PRDE feels that the *Puerto Rico K-12 Statewide Longitudinal Data System Initiative* will be a useful, effective vehicle through which a renewed educational performance management culture can be promulgated. To accomplish this, the agency expects to be able to do the following:

- Define and implement an *Educational Performance Barometer*, a standard reporting package that is currently being conceived, aimed at pinpointing trends in educational outcomes at all PRDE levels, from individual classrooms to the State Educational Agency level as a whole
- Ensure that the K-12 SLDS is able to reliably produce the queries, reports and indicators defined within the *Educational Performance Barometer*, at the required levels

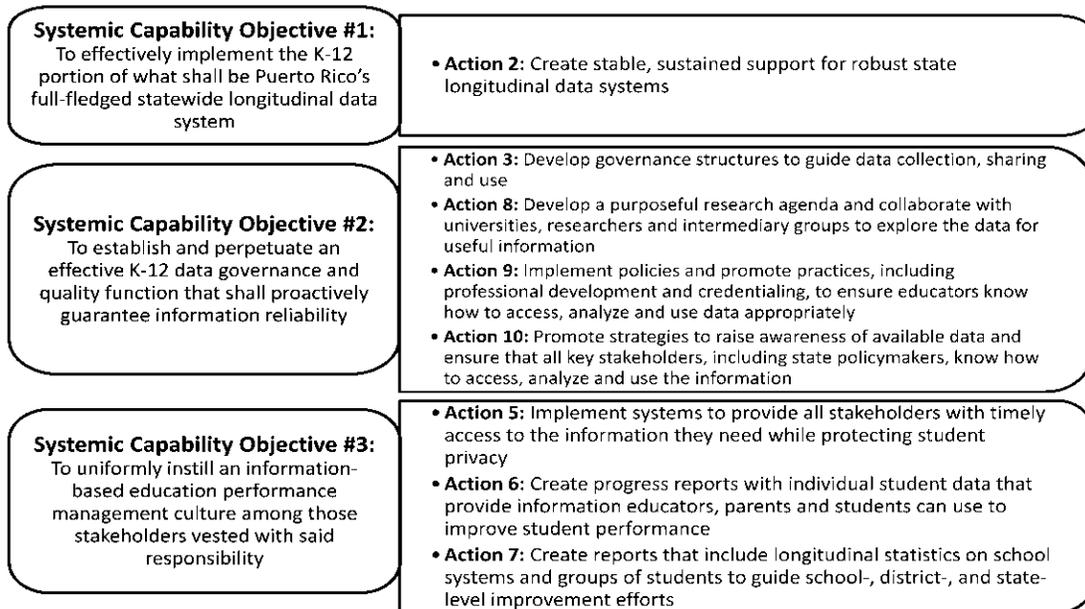
- Establish a training and professional development program aimed at all relevant stakeholders on the production and use of the *Educational Performance Barometer* within their domains

PRDE needs to “move the cheese” and prompt a systemic cultural transformation process that shall result in the constructive use of K-12 SLDS information by its stakeholders to further advance the educational agenda. To take full advantage of an SLDS like the one proposed herein, the agency has to elevate itself to be able to reap its benefits at all levels.

Data Quality Campaign Annual Survey

Recently, the Data Quality Campaign (DQC) completed its annual survey of states’ ability to build and use longitudinal data systems. Essentially, this survey indicates the current capacity that each State and territory has to empower stakeholders to use decision driven data to improve student outcome and system performance. This year’s survey findings revealed that although Puerto Rico currently complies with eight out of DQC’s *10 Essential Elements of a State Longitudinal Data System* (the remaining two elements being only applicable beyond the K-12 world), it has only completed one of the *10 State Actions to Ensure Effective Data Use* (building State data repositories), of which only nine are applicable to this proposal (Priority 1, exclusively).

Strictly from an information technology perspective, the results of the DQC survey are consistent with the scenarios and systemic capability objectives presented above: That PRDE seems to have a reasonably solid base of transactional systems, but that it falls short when it comes to elevating its use of the corresponding data by way of an SLDS model. The three systemic capability objectives mentioned above focus on addressing the eight remaining State actions, as diagramed herein (although the actions could apply to multiple systemic capability objectives, they are only matched with one below):



Again it must be stated that, from a PRDE standpoint, it seems convenient that the results of the DQC survey are in alignment with the goals of the *Puerto Rico K-12 Statewide Longitudinal Data System Initiative*.

Support of Educational Improvement Efforts and Accountability System

It is a requirement of the *Request for Applications* that this subsection of the proposal summarize “*how these capabilities and key elements will support the State’s education improvement efforts, goals and accountability system*”. As far as educational improvement goes, it should be evident that the *Educational Performance Barometer* to be designed and implemented by way of this project shall empower teachers, principals, regional district superintendents and central administrators to understand current trends in, among other areas, attendance, academic achievement, State assessment outcomes and college entrance examinations, and make the required educational decisions. The K-12 SLDS will be able to produce the corresponding reports and establish correlations between (and among) these and other variables.

A particularly specific area in which the K-12 SLDS is expected to support PRDE’s education improvement efforts is in evaluating classroom level data. Many of the *Educational Performance Barometer* queries, reports and indicators that are currently under consideration are aimed to be produced at this level, and on a comparative basis (that is, comparing classrooms over time). This should be a valuable tool when trying to identify specific situations and trends.

As for supporting the PRDE accountability system, there are several ways in which the proposed K-12 SLDS will be of value. First, the *PRDE Accountability Workbook* (as amended) establishes how graduation rates are to be determined. The K-12 SLDS, via the *Educational Performance*

Barometer, will produce such information at varying levels. Second, the *Accountability Workbook* currently states how the State assessment participation rates are to be calculated. This will be incorporated into the design of the *Educational Performance Barometer* as well. Third, the accountability system promotes that all students in the educational system be included. This shall be a natural consequence of the design of the K-12 SLDS.

In Closing...

PRDE is assiduously making use of a number of transactional systems, most of which were implemented for the first time in recent years. Naturally, this has afforded the agency a seemingly insurmountable amount of data, but still very little real information. The urgent need to convert data into useful information is recognized by the agency, and has started by way of the current data warehouse. The proposed K-12 SLDS shall play an essential role not only in furthering this process, but also in implementing the complementary mechanisms necessary to perpetuate a new model for education policy and decision making in Puerto Rico. PRDE needs such a system. Puerto Rico needs it too.

B – PROJECT DELIVERABLES RELATED TO SYSTEM REQUIREMENTS AND IMPLEMENTATION

Deliverables Explained

With a meaningful understanding of PRDE's needs and systemic capability objectives, as stated above, three specific project deliverables related to the implementation of its K-12 SLDS become apparent. They are the following:

- **Project Deliverable #1: *Constitute the PRDE Educational Performance Information Portal***

This first project deliverable is the most tangible and obvious product of the *Puerto Rico K-12 Statewide Longitudinal Data System Initiative*. Essentially, it defines the technology end-product that PRDE ultimately aims to have in place in order to take advantage of the power of SLDS functionality. The resulting components shall be the following:

- Design and development of the *Educational Performance Barometer*, a standardized set of queries, reports and indicators addressing education stakeholder SLDS reporting needs at nearly all levels (from a user standpoint, this is already being conceived by a team of PRDE stakeholders; see Appendix A)
- Hardware and software data management infrastructure, including servers, storage devices, Internet connectivity and administration devices, and relational database management system (implicitly including data modeling and data dictionary tools, and data manipulation and import/export functionality)

- Application infrastructure, including the related business intelligence, data mining and performance management tools, and a custom developed portal mechanism (for stakeholder report production and publication purposes)
- Corresponding technical solution design, documentation, testing plans and protocols (and acceptance of final-tested *Portal*)
- Comprehensive training and professional development program, aimed at promoting stakeholder understanding and use of the *Barometer*, the *Portal*, and the related tools

Regarding the training and professional development program, PRDE understands how it shall become a pillar for the sustained success of the K-12 SLDS. Correspondingly, the agency foresees that it will have to work on optimizing an internal organization to adopt its administration, evaluation and continuous execution. Such organization will be chartered with the responsibility of obtaining stakeholder input and feeding it back to the program in order to perpetuate its value and prevalence. Again, PRDE sees this as a critical item for longstanding project success.

It goes without saying that the *Educational Performance Information Portal* shall comply with all of the *Technical Requirements* stated for Priority 1 applications in the *Request for Applications* document (Federal reporting, privacy protection and data accessibility, data quality, interoperability and enterprise-wide architecture), as well as those applicable ones in the *Governance and Policy Requirements* and *Technical Requirements* sections. It also should be noted that the *Portal* design shall further position PRDE in compliance with the K-12 related elements of the America COMPETES Act.

- **Project Deliverable #2: Integrate transactional systems functionality and K-12 SLDS architecture**

This second project deliverable is closely related to the first. It focuses on guaranteeing full alignment and integration between PRDE's transactional systems and the reporting functionality and architecture that is to be housed within the *Educational Performance Information Portal*. The main resulting components of this deliverable include the following:

- A formal *Data Source Map* of all data elements destined to feed the *Portal*, given the *Educational Performance Barometer* and Federal compliance reporting requirements, primarily identifying the corresponding source system(s), transaction(s), data silo(s), table(s) and field(s)
- Newly developed transactional system capabilities for those additional data elements not currently in existence (e.g. teacher evaluations), and the mechanisms

necessary to capture them for eventual *Portal* use (such elements will also be included in the formal *Data Source Map* mentioned above)

- Full integration of all applicable transactional systems with the *Educational Performance Information Portal*, including the related design and testing documentation

Finally, it should be stated that the *Educational Performance Barometer* effort that is in progress at the agency has already revealed a number of transactions that are currently not processed by any PRDE system. They are mainly related to teacher-based events, such as daily school attendance, educational career, continued education records, and lecture time. While there may be other unknown transactions to capture, to date PRDE does not foresee any significant additions in this area.

- **Project Deliverable #3: Establish a renewed data governance and quality model**

If the first two project deliverables are jointly deemed to be the project's "core technology product", this third project deliverable can appropriately be referred to as the "enabler and perpetuator". Such is the case because this project deliverable aims to ensure that PRDE establishes the organizational, political, procedural, systemic, and human resources mechanisms necessary to guarantee that the information produced by the K-12 SLDS is continuously reliable. Mainly, such mechanisms are foreseen to include the following:

- Complete data governance and quality organizational structure, including centralized roles, such as a data governance/policy board and a quality administration/coordination function, and regional and regional district functions such as local data curators (with clearly established, specific scope of responsibility descriptions per role)
- Detailed data quality policies and procedures spanning all data elements feeding the *Educational Performance Information Portal* (at a minimum)
- Detailed data dictionary documentation and documentation tools
- Reporting and accountability mechanisms, both within the proposed model and beyond it (how it fits and integrates with PRDE as a whole)
- Corresponding training and continued professional development structure

PRDE recognizes how some of the functions pertaining to the proposed data governance and quality structure may have slightly existed in the past, and how some aspects may still be in place (for example, several of the tasks performed by the central Planning Office). However, the agency is also well aware of how these functions need to be

formally instituted within its organizational structure in order to perpetuate the effectiveness of its K-12 SLDS.

Compliance with Section IV Priorities and Requirements

The *Request for Applications* document specifically states that proposals shall “*identify which of the following requirements are in place, and if the requirements are not currently being met, describe how the requirements will be developed through the project*”. Following this directive the table below provides the corresponding compliance details:

Detailed Requirement	Requirement Coverage Determination
<i>Governance and Policy Requirements</i>	
<p>Needs and Uses – In addition to providing information that helps to improve student achievement and reduce achievement gaps among students, a successful data system should address several of the State’s other key educational policy questions. The system should provide data and data-use tools that can be used in education decision-making at multiple levels, from policy to classroom instruction.</p>	<p>PRDE aims to fulfill this requirement by way of the proposed project. Currently, the agency has a data warehouse that it continues to expand and use to generate compliance reports that shall be expanded to help identify, evaluate and reduce achievement gaps in the aggregate while improving individual student results. Certainly, it drives educational public policy making. The current initiative to conceive the <i>Educational Performance Barometer</i> further aligns the agency with this requirement, as it shall result in numerous reports at multiple levels (from the classroom and intra-school level to the statewide level) that can be used for education decision-making processes. It is expected that some of these reports will directly address several State key education policy questions.</p>

Detailed Requirement	Requirement Coverage Determination
<p>Governance – A successful data system rests upon a governance structure involving both State and local stakeholders in the system’s design and implementation. Particularly when expanding the data capacity in existing K-12 systems to include other educational data, an SLDS must identify the entities responsible for the operation of the statewide data system and should include a common understanding of data ownership, data management, and data confidentiality and access, as well as the means to resolve differences among partners.</p>	<p>This requirement is mostly in place. Given the Puerto Rico school system’s “unitary” organization, there are no exceptions to the required governance structure involving State and local stakeholders. The systems required to build the K-12 SLDS are entirely under PRDE responsibility. Furthermore, the proposed project’s governance plan calls for participation from all required stakeholders, as it specifically pertains to building a K-12 SLDS. Finally, the proposed data governance function will include roles such as Data Policy Board, Data Quality Coordinator and Data Curator, as well as the related standards, policies, processes and procedures that shall perpetuate reliable data performance. It shall have full cognizance of applicable data privacy and confidentiality issues. Hence, this is a lesser issue for a State agency like PRDE, and not much more needs to be done to “resolve differences among partners”. Everything reports under the PRDE umbrella.</p>
<p>Institutional Support – A successful data system requires institutional support from leadership within the SEA and from relevant stakeholders within and outside the SEA. The support must include authorization to develop and implement the SLDS, as well as the commitment of necessary staff and other resources. If the SLDS is to be expanded to include data from other systems, all involved institutions must agree to a shared vision for deliverables and objectives.</p>	<p>This requirement is mostly in place. Most direct project stakeholders operate under the PRDE umbrella. The others have issued support statements, as evidenced by the letters of support in Appendix B. Such section includes letters from the other key project stakeholders: The Puerto Rico Council on Education and the Puerto Rico Statistics Institute. The Appendix also includes letters of support from the highest pertinent authorities in the State: Office of the Governor, Office of the Resident Commissioner (in the U.S. Congress) and Office of the CIO of Puerto Rico. The K-12 SLDS is more than a PRDE priority. It is a territorial priority backed by the chief executive of the insular government.</p>

Detailed Requirement	Requirement Coverage Determination
<p>Sustainability – A successful data system requires ongoing support from the SEA after it has been implemented. At a minimum, the system requires ongoing commitment of staff and other resources for system maintenance, quality control, and user training.</p>	<p>PRDE will comply with this requirement by way of the proposed project. The proposal explains the project’s governance structure which, by design, includes components that should evolve into self-standing perpetual functions within the agency. It is PRDE’s position that this focus (e.g. permanent structures such as the proposed data governance and quality function), joined by the forthcoming <i>Educational Performance Barometer</i> shall become a key policy administration tool for the agency, and should be enough to warrant permanence of operations. It should also be noted that the proposed project work plan includes segments and activities specifically concerned with guaranteeing system and operational sustainability once the project is completed.</p>
<p>Technical Requirements</p>	
<p>Federal Reporting – A successful data system must be able to meet Federal reporting requirements, including those of the U.S. Department of Education’s (Department) <i>EdFacts</i> system. The system should provide efficiencies that reduce the burden of Federal reporting for schools and districts.</p>	<p>PRDE is in the process of complying with this requirement, and intends to achieve full compliance by way of the proposed project. The agency’s data warehouse already produces 39 central level reports that are submitted to <i>EDFacts</i>, an efficiency over which PRDE should be poised to capitalize. The proposed project would not only bring the report development process to culmination. It would support report producing efficiency as a consequence of an effective, sustained data quality role. This should benefit all stakeholders.</p>

Detailed Requirement	Requirement Coverage Determination
<p>Privacy Protection and Data Accessibility – An SLDS must ensure the confidentiality of student data, consistent with the requirements of the Family Educational Rights and Privacy Act (FERPA) and State laws or regulations concerning the confidentiality of individual records. The system should also include public documentation that clearly articulates what data will be accessible, to which users, and for what purposes.</p>	<p>PRDE intends to comply with this requirement through and throughout the execution of the proposed project. The going-in position is to strictly follow FERPA regulations, as they have been recently revised by USDE. This is to be done as part of the design review and testing stages of the project, during which <i>Educational Performance Information Portal</i> features would be evaluated against the regulations. PRDE will publish documentation clearly stating which student data can be disclosed, and how it may be used for educational purposes.</p>
<p>Data Quality – A successful data system must ensure the integrity, security, and quality of data. It should include an ongoing plan for training those entering or using the data, as well as procedures for monitoring the accuracy of information.</p>	<p>PRDE aims to comply with this requirement by way of the proposed project. Regarding an ongoing training plan, said activity is explicitly included within the third project deliverable, in segment called <i>Data Governance Sustainability</i> (see subsection 6c). As for the “<i>procedures for monitoring the accuracy of information</i>”, they are also explicitly planned for development as part of the project deliverable number 3 (subsection 6c). Finally, the scope of the regional Data Curator function shall explicitly include the execution of said procedures.</p>

Detailed Requirement	Requirement Coverage Determination
<p>Interoperability – The system should use a common set of data elements with common data standards to allow interoperability and comparability of data among programs such as the Common Education Data Standards (http://nces.ed.gov/programs/ceds/), as available and applicable. A successful data system has the capacity to exchange data between the SEA and its LEAs, as well as among LEAs, or with other appropriate State agencies or educational entities.</p>	<p>PRDE partly complies with this requirement, and intends to comply fully by way of this project. To begin with, the “unitary” nature of the Puerto Rico school system structurally averts data commonality differences between parties (e.g. all of the State’s students are already in a single student database). As for the Common Education Data Standards (CEDS), it has been the central Planning Office’s strategy all along to ensure alignment with this standard (to the extent that <i>EDFacts</i> has adopted it, which is known not to be 100%). In other words, as far as compliance reporting goes, the CEDS standards have been adopted by PRDE. But any reporting that is not required by the Federal government is not currently CEDS compliant. This shall be addressed via the proposed project.</p>
<p>Enterprise-wide Architecture – A successful SLDS includes an enterprise-wide data architecture that links records across information systems and data elements across time and allows for longitudinal analysis of dropout and graduation rates and student achievement growth. The architecture should include, at a minimum, a system for assigning unique student identifiers, a data dictionary, a data model, and business rules. The system must make data dictionaries publicly available.</p>	<p>PRDE is in partial compliance with this requirement. The SIE system already includes a student identifier that is unique throughout the public education system. This will be used to link information within the K-12 SLDS, and is expected to facilitate the development process and enable the agency to produce important indicators such as graduation and dropout rates. As stated in multiple instances within this proposal, the K-12 SLDS shall include a formal data dictionary, a data model and business rules. Finally, it is within the scope of this project to make these formal elements available to stakeholders (mainly via the <i>Educational Performance Information Portal</i>, but also on an “as needed” basis).</p>

Detailed Requirement	Requirement Coverage Determination
<i>Data Use Requirements</i>	
<p>Secure Access to Useful Data for Key Stakeholder Groups – Appropriate and secure access to data must be provided to key stakeholder groups including policymakers, SEA program staff, external researchers, district administrators, and school-level educators. Access must be balanced with the need to protect student privacy and confidentiality consistent with applicable privacy protection laws.</p>	<p>PRDE expects to reach compliance with this requirement as part of the proposed project. Most stakeholders will obtain information through the <i>Educational Performance Information Portal</i>, which will include as part of its design a role-based access control (RBAC) security model. Essentially, this will allow for data access to be administered on an assigned role basis (for example, teachers vs. superintendents), which should mitigate risks and promote privacy and confidentiality. However, other stakeholders (e.g. researchers) will most likely need to access ad-hoc information. The intent is to address most of these needs via an ad-hoc reporting tool that shall be part of the <i>Portal</i>, with no access to individual identifying data. Finally, regarding specific research needs for detailed data, PRDE shall define a protocol that guarantees the right balance between research and student privacy and confidentiality.</p>
<p>Data Use Deliverables – The system must include deliverables to meet end-user needs (to inform decision-making and evaluate policies and programs) such as reporting and analysis tools. Design of these deliverables must be informed by early and sustained engagement of representatives from user groups to ensure the system will meet their information needs and continuously improve to meet evolving needs.</p>	<p>PRDE has already started to move towards complying with this requirement, and expects to fulfill it by way of this project. The agency is conceiving the <i>Educational Performance Barometer</i>, an educational reporting standard aimed at satisfying the static and longitudinal information needs of its diverse stakeholders at multiple levels: Classroom, grade, school, regional district, region and State. Stakeholders from multiple levels are being included in this process. The <i>Barometer</i> will be made available through the proposed <i>Educational Performance Information Portal</i>. Finally, the <i>Portal</i> shall include the necessary data querying, reporting and report publication tools.</p>
<p>Training on Use of Data Tools and Products – The system should include a professional development program to prepare end-users to effectively use the data products.</p>	<p>PRDE aims to fulfill this requirement by way of the proposed project. As stated previously, Project Deliverable #1 (the <i>Portal</i>) includes the establishment of a comprehensive professional development program for stakeholders, particularly focusing on use of <i>Portal</i> tools and <i>Barometer</i> reports.</p>

Detailed Requirement	Requirement Coverage Determination
<p>Professional Development on Data Use – The system should include a professional development program to help end-users effectively interpret and apply the data to inform decision-making and improve practices.</p>	<p>PRDE will comply with this requirement by way of the proposed project. The professional development program mentioned above shall be designed to instruct stakeholders on, among other items, specific usage of the <i>Educational Performance Barometer</i> described previously. In the specific case of “operational stakeholders” (that is, teachers, principals and superintendents), instruction will focus on understanding of report parameters, identification of revealing trends, and formulation of strategies aimed at addressing them.</p>
<p>Evaluation of Data Products, Training, and Professional Development – The system should include a process for evaluating the effectiveness of the data use deliverables, and training and professional development programs.</p>	<p>This is a requirement that PRDE intends to fulfill within the scope of the proposed project. As stated in subsections 6b and 6c, a professional development program focusing on the data use deliverables (the <i>Educational Performance Barometer</i> and the <i>Educational Performance Information Portal</i>, mainly) shall be prominently included within the scope of the first project deliverable. As for a process to evaluate the effectiveness of such deliverables, it is also in PRDE’s plans to establish the mechanisms necessary to guarantee their prevalence.</p>
<p>Partnerships with Research Community – The State must have a policy in place for the processing of requests for data for research purposes and for communicating the scope of data available for analysis. The State should establish partnerships with internal and/or external research groups to assist with answering questions that can inform policy and practice. The State should actively disseminate research and analysis findings to the public while ensuring confidentiality of individual student data.</p>	<p>This requirement will be accomplished as part of the proposed project. PRDE has a formal policy in place for these purposes, as it engages with internal and external research groups in several partnerships. As part of the third project deliverable, the renewed data governance and quality model, activities related to revisiting this policy and reformulating and disseminating information will be included (while ensuring data privacy and confidentiality objectives a la FERPA). Partnerships with the Puerto Rico Council of Education and the Puerto Rico Statistics Institute, among other bodies, will also be revised to increase efficiency in data analysis and facilitate research.</p>

Detailed Requirement	Requirement Coverage Determination
Sustainability Plan – The system must include a plan for sustaining the deliverables and training beyond the life of the grant.	PRDE intends to comply with this requirement by way of the proposed project. Subsection 6c provides specific activities related to the development of plans to sustain the project deliverables well beyond the culmination of the proposed project (this for Project Deliverable #1 and Project Deliverable #3). Said plans are expected to address issues in areas such as organizational structure, agency policies, procedures, information systems, human resources, budgets and others.

Requirement and Goal Traceability Matrix

Making reference to the *Section IV* priorities and requirements, the following *Traceability Matrix* shows how every one of the applicable Priority 1 priorities relates to at least one of PRDE’s Systemic Capability Objectives, and which project deliverable addresses it. This is further evidenced throughout the proposal.

<i>Section IV</i> Priorities & Requirements	Systemic Capability Objective	Project Deliverables
Governance and Policy		
Need and Uses	1, 3	1
Governance	2	2, 3
Institutional Support	2	3
Sustainability	2	3
Technical		
Federal Reporting	1	2
Privacy Protection and Data Accessibility	3	1
Data Quality	2	1, 2
Interoperability	1	2
Enterprise-wide Architecture	1, 2	1, 3
Data Use		
Secure Access to Useful Data for Key Stakeholders Groups	2, 3	1
Data Use Deliverables	1, 3	1
Training on Use of Data Tools and Products	1, 3	1, 3
Professional Development on Data Use	3	1
Evaluation of Data Products, Training, & Professional Development	2	3
Partnerships with Research Community	3	3
Sustainability Plan	1	3

By successfully completing the *Traceability Matrix* exercise, PRDE feels assured that this proposal is complete, in terms of the required scope and level of detail, and the coverage of the priorities and requirements established in the *Request for Applications*.

C – TIMELINE FOR PROJECT DELIVERABLES

Timeline for Project Deliverable #1 (Constitute the PRDE Educational Performance Information Portal)

As expressed earlier, this is the most tangible product of the *Puerto Rico K-12 Statewide Longitudinal Data System Initiative*. It is structured in terms of six major project segments, which are the following:

- ***Educational Performance Barometer Design***

This first segment focuses on the finalization of the current effort to conceive the *Educational Performance Barometer*, ensuring alignment between all PRDE stakeholders with respect to that which is going to be reported on by way of the portal. Starting in January, 2012, it is expected to last 2½ months (this aside from what has already been completed by PRDE).

- ***Portal Functional Design***

This second segment includes activities related to hiring a contractor for *Portal* development and training efforts, engaging with such contractor in the development of the design and functional specification documents, reviewing and approving the design, and establishing the specifications for the infrastructure components that will be needed to operate the system. The segment is expected to last about six months.

- ***Portal Development***

This segment spans activities related to the procurement and establishment of *Portal* infrastructure (hardware and software), detailed technical development of all components, institution of the required data privacy and security elements, development finalization and initial “alpha” testing. From beginning to end, it should require about 15 months.

- ***Portal Testing***

This is the segment in which all activities related to ensuring that the completed product is technically ready for use occur. It includes activities such as the establishment of test environments, the development of functional test plans and scripts, the execution of said scripts, the execution of stress and load tests, and the final approval of the product for full launch. It is expected to last about five months from beginning to end.

- **Professional Development Program**

This segment is concerned with the development and institution of a professional development training program for stakeholders that will be using the K-12 SLDS. It includes events such as training curriculum planning, training development, training material production, training schedule development and actual training. Of course, a training effectiveness evaluation process would be part of the program. The training program would also address issues such as the protocol to follow to process requests for specific K-12 SLDS data, so as to balance research needs, student privacy and confidentiality, and PRDE priorities. This is expected to take ten months.

- **Portal Sustainability**

This last segment addresses the need to ensure that the *Portal* and all its components are properly received by PRDE, so that it can sustain its operation thereafter. Mainly, it includes events such as the development of a *Sustainability Plan*, the transfer of specific knowledge from contractor personnel to PRDE personnel, and the institution of the professional development curriculum within the PRDE training organization. It is estimated to be accomplished over a five month period.

It is important to mention that although the timeline implies that the *Portal* will not be launched until almost two years after the project has gotten underway, it is PRDE’s intent to launch an initial “alpha *Portal*” one year into the project. This responds to the urgent need of putting good data in the hands of those who need it, and is aligned with the fact that this is the practice today with the current data warehouse (the data warehouse does not yet produce all the reports that it should, but parts of it are in use and support several *EDFacts* submissions). Of course, this would be done for specific reports and outputs that are needed, and only if: 1) there is a need to be specifically addressed; 2) the results can be guaranteed to be accurate; 3) data privacy and confidentiality requirements are complied with; and, 4) project timelines and costs are not affected. The Steering Committee would be involved in the approval process.

The following table identifies, at a high level, the segments and activities corresponding to this project deliverable, including the estimated dates and resources (refer to Sections 6e or 11 for an explanation of the resource abbreviations presented herein):

Project Deliverable Activity/Task	Duration	Begin	End	Resource(s)
Educational Performance Barometer Design	3 months	Jan-12	Mar-12	
Review and update existing draft with stakeholders	1.5 months	Jan-12	Feb-12	PIA,SC
Finalize Barometer specifications	0.75 months	Feb-12	Mar-12	PIA,PMO
Approve Barometer with Steering Committee	0.25 months	Mar-12	Mar-12	PMO,SC

Project Deliverable Activity/Task	Duration	Begin	End	Resource(s)
Portal Functional Design	6 months	Mar-12	Aug-12	
Develop RFP for Portal developer (and training contractor)	0.5 months	Mar-12	Mar-12	PIA,PMO
Launch and complete developer (and trainer) selection process	1 month	Mar-12	Apr-12	PMO,SC
Develop Barometer functional specifications	1.5 months	Apr-12	Jun-12	PIA,PBDL,PBDC
Develop remaining Federal report functional specifications	1.5 months	Apr-12	Jun-12	PBDL,PBDC
Identify data sources for all functional specifications	0.75 months	Jun-12	Jun-12	PBDC
Design Portal UI standards and interface	0.75 months	Apr-12	May-12	PBDC
Develop data privacy and confidentiality requirements (FERPA)	0.5 months	May-12	May-12	PIA,PBDL,PBDC
Develop user security design (Role-Based Access Controls)	0.5 months	May-12	May-12	PBDC
Define technical and infrastructure requirements for Portal	0.5 months	Jun-12	Jul-12	PBDC
Consolidate Portal design document	0.5 months	Jul-12	Jul-12	PBDC
Perform design review and document amendments	0.5 months	Jul-12	Aug-12	PIA,PBDL,PBDC
Approve design with Steering Committee	0.25 months	Aug-12	Aug-12	PMO,SC
Portal Development	15 months	Jul-12	Sep-13	
Develop RFP for required Portal infrastructure (HW & SW)	0.5 months	Jul-12	Jul-12	PIA,PMO
Develop detailed Portal data architecture and database design	1.5 months	Jul-12	Aug-12	PBDL,PBDC
Launch and complete vendor selection process	1.5 months	Jul-12	Aug-12	PMO,SC
Install necessary infrastructure (HW & SW)	1 month	Sep-12	Sep-12	DATC
Prepare Portal development environment	0.5 months	Oct-12	Oct-12	DATC
Prepare detailed Portal development plan	0.5 months	Aug-12	Aug-12	DATC,PBDC
Prepare technical specifications for each Portal element	3 months	Aug-12	Nov-12	DATC,PBDC
Develop alpha Portal	3 months	Nov-12	Feb-13	DATC,PBDC
Secure alpha Portal test and production environment	0.25 months	Feb-13	Feb-13	DATC
Conduct alpha portal testing	1 month	Feb-13	Mar-13	PBDL,DGML, CMTC

Project Deliverable Activity/Task	Duration	Begin	End	Resource(s)
Train internal PRDE group on alpha Portal	0.5 months	Mar-13	Mar-13	CMTC,PBDC
Release alpha Portal (PRDE internal)	0.25 months	Apr-13	Apr-13	CMTC,PBDC
Release alpha Portal (PRDE internal)	0.25 months	Apr-13	Apr-13	CMTC,PBDC
Support alpha Portal	4 months	Apr-13	Jul-13	PBDC
Conduct Portal initial testing (second release)	1.5 months	Jul-13	Sep-13	PBDC
Portal Testing	5 months	Jul-13	Nov-13	
Prepare Portal test environment	0.5 months	Jul-13	Jul-13	DATC
Prepare Portal functional test scripts and data	1 month	Jul-13	Aug-13	PIA,PBDL,PBDC
Execute functional Portal tests	1 month	Aug-13	Sep-13	PIA,PBDL
Address functional test exceptions	0.75 months	Sep-13	Sep-13	PBDC
Conduct final functional testing	0.5 months	Sep-13	Oct-13	PIA,PBDL
Document functional testing results	0.25 months	Oct-13	Oct-13	PIA,PBDL
Prepare stress testing scripts and data	0.5 months	Sep-13	Oct-13	PIA,PBDL,PBDC
Execute stress tests	0.5 months	Oct-13	Oct-13	PIA,DATL,PBDL
Address stress testing exceptions	0.5 months	Oct-13	Nov-13	PBDC
Conduct final stress testing	0.25 months	Nov-13	Nov-13	PIA,DATL,PBDL
Document stress testing results	0.25 months	Nov-13	Nov-13	PIA,DATL,PBDL
Approve Portal test results with Steering Committee	0.25 months	Nov-13	Nov-13	PMO,SC
Professional Development Program	10 months	Dec-13	Sep-14	
Prepare training environment	0.5 months	Dec-13	Dec-13	DATC
Prepare training strategy and detailed training plan	0.75 months	Dec-13	Dec-13	CMTL,CMTC
Develop Barometer training curriculum and materials	3 months	Dec-13	Mar-14	CMTC
Develop Portal training curriculum and materials	3 months	Dec-13	Mar-14	CMTC
Develop report-writing training curriculum and materials	2 months	Dec-13	Feb-14	CMTC
Test final training curricula on training environment	1 month	Mar-14	Apr-14	CMTL,CMTC
Approve training curricula with Steering Committee	0.25 months	Apr-14	Apr-14	PMO,SC
Develop detailed training schedule	0.5 months	Apr-14	May-14	CMTL,CMTC
Coordinate training sessions	0.5 months	May-14	May-14	CMTL,CMTC
Perform Portal training	4 months	May-14	Sep-14	CMTL,CMTC
Perform Barometer training	4 months	May-14	Sep-14	CMTL,CMTC
Perform report-writing training	4 months	May-14	Sep-14	CMTL,CMTC
Portal Sustainability	5 months	May-14	Sep-14	
Document Portal Sustainability Plan for PRDE	0.75 months	May-14	May-14	PIA,PMO

Project Deliverable Activity/Task	Duration	Begin	End	Resource(s)
Discuss Plan requirements with Steering Committee	0.25 months	May-14	May-14	PMO,SC
Follow up on Plan fulfillment	2 months	Jun-14	Jul-14	PMO
Transfer technical knowledge to PRDE personnel	3.5 months	Jun-14	Sep-14	DATL,DATC, PBDL,PBDC
Institute curricula within PRDE training organization	0.5 months	Jun-14	Jun-14	CMTL,CMTC
Establish recurrent training schedule (all stakeholders)	0.5 months	Jun-14	Jun-14	CMTL

Timeline for Project Deliverable #2 (Integrate transactional systems functionality and K-12 SLDS architecture)

This project deliverable will occur during the first half of the project, with timeline of approximately 15 months. It consists of three major project segments, detailed below:

- ***Data Source Map***

This first segment is primarily concerned with the development of the *Data Source Map* document, which shall specify the data linkage between PRDE's transactional systems and the K-12 SLDS. It considers activities related to analyzing current transactional systems, evaluating data structures and relationships between them, identifying the unsupported transactions (using the *Educational Performance Barometer* as an input, as well as information already known at PRDE), defining transaction capture strategies and producing the *Data Source Map* document. Starting once the main K-12 SLDS contractor is selected (early May, 2012, in accordance with the timeline corresponding to the previous project deliverable), it is estimated to take about three months.

- **Unsupported Transaction Capture Mechanisms**

In this second segment, the focus shifts exclusively to the development and implementation of the so called "unsupported transactions". To date, said transactions include teacher educational career tracking, teacher training and continued education, teacher evaluations, teacher daily attendance (partially). Not many others are foreseen. The corresponding activities span events such as technical strategy, design, development, testing and implementation. Altogether, this segment should transcend over a period of approximately ten months.

- **Data Extraction, Transform and Load (ETL)**

This last project deliverable segment starts once the *Data Source Map* is approved and the unsupported transaction mechanisms are effectively put in place. It consists of all the activities required to build, test, execute and implement the data extraction, transform and

loading (ETL) mechanisms needed to continuously feed the *Educational Performance Information Portal*. Overall, it should take about 3½ months to complete this segment.

The timeline described above appropriately integrates with the timeline corresponding to the first project deliverable. Similar to the first deliverable, the timeline implies that, as a group, the unsupported transaction mechanisms will not be available until about 1½ years after the proposed project's start date. However, PRDE's intent is to seek opportunities to implement some of these mechanisms ahead of the others. Again, of course, this would only be attempted if: 1) there is a specific need to be specifically addressed; 2) the results can be guaranteed to be accurate; 3) data privacy and confidentiality requirements are complied with; and, 4) project timelines and costs are not affected. The Steering Committee would be involved in the approval process.

The following table identifies, at a high level, the segments and activities corresponding to this project deliverable, including the estimated dates and resources (refer to Sections 6e or 11 for an explanation of the resource abbreviations presented herein):

Project Deliverable Activity/Task	Duration	Begin	End	Resource(s)
Data Source Map	3 months	Jun-12	Aug-12	
Survey PRDE transactional systems	0.5 months	Jun-12	Jun-12	DATL,DATC
Identify data sources and relationships for SLDS	0.75 months	Jun-12	Jul-12	DATC
Analyze data relationships across transactional systems	0.5 months	Jul-12	Jul-12	DATC
Identify and validate unsupported transactions	0.5 months	Jun-12	Jun-12	PIA,DATC
Define strategy for capturing unsupported transactions	0.5 months	Jul-12	Jul-12	PIA,DATL,DATC
Approve strategy with Steering Committee	0.25 months	Jul-12	Jul-12	PIA,PMO,SC
Develop detailed source data map document	0.75 months	Jul-12	Aug-12	PIA,DATL,DATC
Review and finalize document with Steering Committee	0.25 months	Aug-12	Aug-12	PIA,PMO,SC
Unsupported Transaction Capture	10 months	Aug-12	May-13	
Design data capture mechanisms for unsupported transactions	1.5 months	Aug-12	Sep-12	DATC
Approve strategies and designs with Steering Committee	0.25 months	Oct-12	Oct-12	PIA,PMO
Develop new data capture mechanisms	5 months	Oct-12	Feb-13	DATC
Test new data capture mechanisms	1 month	Feb-13	Mar-13	PIA,DATL,DATC
Approve tests with Steering Committee	0.25 months	Mar-13	Mar-13	PIA,PMO

Project Deliverable Activity/Task	Duration	Begin	End	Resource(s)
Implement new data capture mechanisms	2 months	Apr-13	May-13	DATC
Data Extraction, Transform and Load (ETL)	4 months	May-13	Aug-13	
Develop ETL design for each element in data source map	0.5 months	May-13	Jun-13	DATC
Develop ETL routines for each element	1 month	Jun-13	Jul-13	DATC
Prepare preliminary ETL plan	0.25 months	Jul-13	Jul-13	DATC
Test ETL routines and plan	0.5 months	Jul-13	Jul-13	PIA,DATL,DATC
Approve tests with Steering Committee	0.25 months	Jul-13	Aug-13	PIA,PMO
Transfer knowledge to PRDE resources	0.75 months	Aug-13	Aug-13	DATL,DATC
Prepare final ETL plan	0.25 months	Aug-13	Aug-13	PIA,DATC
Perform and validate ETL procedures in production environment	0.5 months	Aug-13	Aug-13	PIA,DATL,DATC

Timeline for Project Deliverable #3 (Establish a renewed data governance and quality model)

This third project deliverable is planned to take place over a period of approximately 23 months (strictly in terms of elapsed time). It consists of the following segments:

- **Initial Data Governance Structure**

In this first segment, the main objective is that of taking the first rough steps needed to get a rudimentary data governance function underway at PRDE, and procuring the services required to assist in the development of an eventual full-fledged data governance and data quality model. The related activities are concerned with issues such as chartering the function and assembling the initial team, evaluating all applicable regulatory frameworks, contracting necessary consulting services and launching an initial set of repetitive activities to be carried out by the data governance function. The segment would start once the first project deliverable's *Educational Performance Barometer* segment is completed, and is expected to last nearly three months.

- **Data Quality Model Development**

This second segment concentrates on, once the initial data governance function is established, designing and developing the organizational, political, procedural and systemic infrastructure on top of which the related data quality tasks are to be executed on a continued basis. Activities include the development of the organizational structure and role descriptions, the detailed documentation of the corresponding policies and procedures, the creation of the necessary tools (e.g. checklists, reports, system tools,

others), and the consolidation of all these items into a *Data Quality Model* document. The segment is expected to transcend over a period of nearly 16 months. However, not all of this time is continuous work time. As the other segments progress, it has been estimated that the *Data Quality Model* will need to be updated twice. Because this will occur at different points in time, the segment as such lasts for 18 months. Barring slack time, this segment would take approximately five months.

- **Data Model and Data Dictionary**

A significant portion of a well structured data governance function depends on the existence and due maintenance of a data model and data dictionary. Consequently, PRDE has decided to incorporate this function into the data governance and quality function. This segment, hence, is concerned with activities such as the detailed documentation of the data dictionary, based on the reporting requirements and the dictionaries currently in place within each transactional system, and the maintenance of said standard as PRDE needs (and the K-12 SLDS) grow and expand. The standard would be CEDS compliant, and would be made available to the public on a request basis. The segment will last for about 14 months, but once the data dictionary is instituted and completed, it will only need to be updated as a function of SLDS development issues.

- **Data Governance and Quality Training, and Launch**

This fourth segment is intended to launch the detailed data governance and quality organization developed previously, albeit as a formal PRDE function. It includes activities such as the development of the training curriculum, and the establishment and execution of a training schedule. It is expected to occur over a 2½ month timeframe.

- **Data Governance Sustainability**

This last segment addresses the need to ensure that the data governance and quality function and all its components are implemented in such a way that its continuity is virtually guaranteed. The related activities are those of developing a formal *Sustainability Plan*, getting it approved and agreed to by the Steering Committee, transferring knowledge to the corresponding PRDE resources, and following up on its fulfillment. It should transpire over a period of 1½ months.

The following table identifies, at a high level, the segments and activities corresponding to this project deliverable, including the estimated dates and resources (refer to Sections 6e or 11 for an explanation of the resource abbreviations presented herein):

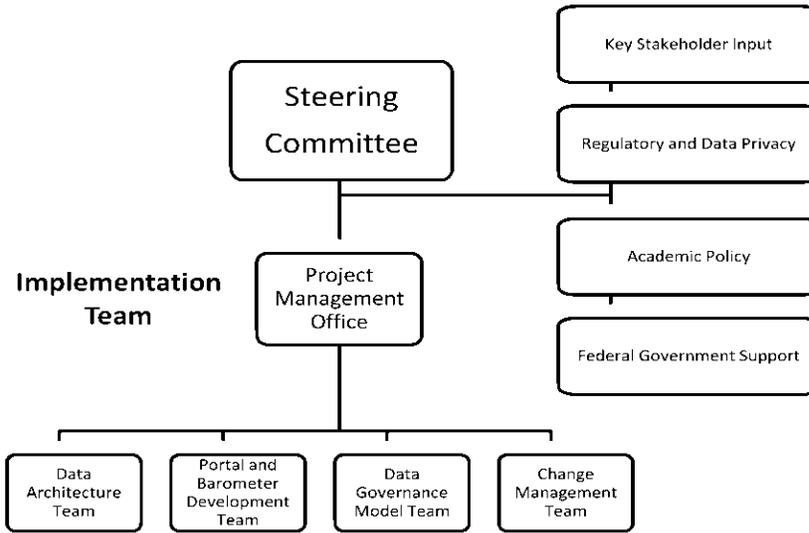
Project Deliverable Activity/Task	Duration	Begin	End	Resource(s)
Initial Data Governance Structure	3 months	Mar-12	May-12	
Gather and organize initial PRDE data governance team	0.25 months	Mar-12	Mar-12	PIA,DGML
Develop initial data governance project agenda	0.25 months	Mar-12	Mar-12	PIA,DGML
Develop RFP for data quality model contractor	0.5 months	Mar-12	Mar-12	PIA,PMO
Launch and complete vendor selection process	1 month	Apr-12	Apr-12	PMO,SC
Analyze regulatory framework for data governance	0.5 months	Apr-12	May-12	PIA,DGML,DGMC
Launch initial data governance agenda and mechanisms	0.25 months	May-12	May-12	DGML,DGMC
Data Quality Model Development	18 months	May-12	Oct-13	
Define data governance and quality organizational structure	0.5 months	May-12	Jun-12	DGML,DGMC
Define roles, responsibilities, chains of command	0.5 months	Jun-12	Jun-12	DGML,DGMC
Develop governance and quality policies	1 month	Jun-12	Jul-12	DGMC
Develop data quality procedures	2 months	Jul-12	Sep-12	DGMC
Develop data quality internal tools, resources and systems	2 months	Jul-12	Sep-12	DGMC
Document and consolidate final data quality model	0.5 months	Sep-12	Sep-12	DGML,DGMC
Approve data quality model with Steering Committee	0.25 months	Sep-12	Sep-12	PMO,SC
Update model in line with Portal progress (first time)	0.5 months	Mar-13	Mar-13	DGMC
Update model in line with Portal progress (second time)	0.5 months	Sep-13	Sep-13	DGMC
Approve final data quality model with Steering Committee	0.25 months	Sep-13	Oct-13	PMO,SC
Data Model and Data Dictionary	14 months	Aug-12	Sep-13	
Analyze dictionaries corresponding to current systems	0.75 months	Aug-12	Aug-12	DGML,DGMC
Establish new data model and dictionary standards	0.5 months	Sep-12	Sep-12	DGMC
Develop data model and data dictionary maintenance plan	0.5 months	Sep-12	Sep-12	PIA,DGML,DGMC
Maintain data dictionary in line with Portal development	12 months	Oct-12	Aug-13	DGMC
Maintain data dictionary in line with unsupported transactions	12 months	Oct-12	Aug-13	DGMC

Project Deliverable Activity/Task	Duration	Begin	End	Resource(s)
Finalize and release data model and dictionary for future purposes	0.5 months	Sep-13	Sep-13	DGMC
Data Governance and Quality Training, and Launch	3 months	Oct-13	Dec-13	
Prepare training strategy and detailed training plan	0.25 months	Oct-13	Oct-13	PIA,DGML,DGMC
Develop data quality model training curriculum and materials	1 month	Oct-13	Nov-13	DGMC
Develop training schedule and coordinate sessions	0.5 months	Nov-13	Nov-13	DGMC
Perform Data Quality Model training	1 month	Nov-13	Dec-13	DGMC
Data Governance Sustainability	3 months	Dec-13	Feb-14	
Document Data Governance Sustainability Plan for PRDE	0.5 months	Dec-13	Jan-14	DGMC
Discuss Plan requirements with Steering Committee	0.25 months	Jan-14	Jan-14	PMO,SC
Follow up on Plan fulfillment	1 month	Jan-14	Feb-14	PMO
Transfer required knowledge to PRDE personnel	1 month	Jan-14	Feb-14	DGML,DGMC

D – PROJECT MANAGEMENT AND GOVERNANCE PLAN

Project Organization Diagram

Due its importance, size and inherent complexity, the *Puerto Rico K-12 Statewide Longitudinal Data System Initiative* calls for a well-defined governance structure that not only balances the needs and interests of several educational stakeholders, but also promotes the sane execution of what is certain to be a long and demanding project schedule. From a project governance and project management standpoint, the following diagram illustrates how PRDE intends to carry out the project:



The diagram above illustrates that the project’s key participating units include a Steering Committee, a Project Management Office and four main project execution teams. It also identifies three specialized “of counsel” roles that shall be available for the duration of the project. The role of each of these units is described herein.

Steering Committee

The diagram above affirms that the project shall be steered and directed by the *Puerto Rico K-12 Statewide Longitudinal Data System Initiative* Steering Committee. The role of the Steering Committee shall be that of ensuring the success of the project by providing overall project direction and conscientiously making the key decisions that will be needed throughout its lifetime. The Committee shall have ultimate authority and responsibility over all significant project issues, including the designation and termination of personnel assignments and the selection of project contractors, thus effectively balancing real stakeholder needs with an “on scope, on time, on budget” agenda. Due its scope and level of impact, the following key individuals shall sit in the Steering Committee:

Member Name	Current Title	Committee Role
Dr. Edward Moreno	<i>Secretary</i> Puerto Rico Department of Education	Executive Sponsor
Juan Eugenio Rodríguez	<i>Chief Information Officer</i> Government of Puerto Rico	Executive Sponsor
Dr. Grisel Muñoz	<i>Undersecretary for Academic Affairs</i> Puerto Rico Department of Education	Project Director
Rafael Blanco, Esq.	<i>Undersecretary of Administrative Affairs</i> Puerto Rico Department of Education	Member

Member Name	Current Title	Committee Role
Norma M. Ortiz	<i>Chief Information Officer</i> Puerto Rico Department of Education	Member
María Jaunarena	<i>Advisor to the Governor in Education,</i> Culture, Recreation and Sports Office of the Governor	Member

The positions of the members of this Steering Committee evidence that which is claimed throughout this application: That the government deems the *Puerto Rico K-12 Statewide Longitudinal Data System Initiative* a serious endeavor, and that it is placing top executives directly as project overseers, so as to warrant its success.

The members of the Committee shall meet periodically to review project issues and make the required decisions. The professional résumés of some of the individuals named above are included in Appendix C of this proposal.

Steering Committee Supporting Roles

In order to keep the prominence of a number of important issues and stakeholders at a high level throughout the project, four formal supporting roles will be instituted. These roles will interact directly with the Steering Committee on an “as needed” basis, when project issues requiring their input are addressed. The supporting roles are the following:

- **Key Stakeholder Input**

This supporting role is concerned with ensuring that, even at the Steering Committee level, input from impacted stakeholder groups is kept in perspective. The project’s key stakeholders—teachers, school directors, superintendents and PRDE top management—will be represented through this role, as will the other stakeholders: Education researchers, governmental agencies, planning offices, students and parents. This is foreseen to be a continuous role through which project issues deemed by the Steering Committee to be of relevance will be channeled towards applicable stakeholder representatives, the objective being that of garnering much needed input and perspective. If deemed necessary as the project evolves, PRDE may designate a Key Stakeholder Liaison resource to continuously interact with the Steering Committee in such matters.

- **Regulatory and Data Privacy**

Throughout the design and implementation stages of the *Puerto Rico K-12 Statewide Longitudinal Data System Initiative*, it is expected that the project team shall have to address the issue of data privacy and confidentiality. When such issue is faced from a non-technical standpoint (usually from a legal and compliance angle), due to the nature of

the subject matter, the Steering Committee will most likely require expert advice. Hence, regulatory and data privacy legal counsel may be identified to help in such matters.

- **Academic Policy**

As the *Puerto Rico K-12 Statewide Longitudinal Data System Initiative* is primarily a project that shall impact the educational agenda of the Puerto Rico Department of Education, it is expected that a supporting role specializing in academic policy issues will at times be required by the Steering Committee. Therefore, PRDE will designate a specific, qualified resource to support the Steering Committee in said issues as the project moves along.

- **Federal Government Support**

Given the fact that the Federal government continuously makes resources available in specific disciplines (e.g. SLDS proposal preparation, data quality, Federal data privacy legislation, etc), the Steering Committee shall recognize at all times that such support will be available throughout the lifetime of the project. Although no specific resource is to be named by PRDE to this supporting role, the fact remains that the Steering Committee shall count on Federal support teams (e. g. PTAC, SST, others) as the project develops.

Project Management Office

A continuous Project Management function will be carried out by a centralized Project Management Office (PMO). The PMO will report directly to the Steering Committee, and have access to its supporting roles, as needed. The PMO will also manage all activities to be carried out by the project implementation teams, and will perform the typical project management activities:

- Establishment and maintenance of the project work program (project segments, activities, timelines, milestones, resources, dates, etc)
- Planning, scheduling and follow-up of all project-related events, ensuring that they are carried out in accordance with project requirements
- Management of project resources, both PRDE employees and contractors, as the project progresses
- Coordination and execution of project status review and Steering Committee reporting meetings (including production and distribution of the related documentation)
- Identification and follow-up of ongoing project issues (from the status reporting perspective), and channeling of communications across the project team

- Generation and maintenance of relevant project documentation (scope management plan, risk management plan, communications plan, etc), and validation that all required documentation is generated, verified and approved in compliance with applicable standards
- Implementation and maintenance of project and project management procedures (respecting established standards), and usage of the available tools
- Continued analysis and administration of the project work program, and identification of potential scope, time, resource or cost-related exceptions
- Overall support throughout the project initiation, planning, execution, monitoring, controlling and closing activities

A particularly important area of responsibility in which the PMO is expected to add value to the project is procurement support. As indicated previously, each project deliverable will include one or more contractor selection processes. Given its experience in such matters, the PMO is expected to participate in said processes by assisting in the corresponding RFP development activities, and by supporting the contractor selection duties of the Steering Committee.

Aside from the responsibilities described above and due to the broad nature of the project, the PMO will also ensure overall best practices in SLDS development and guarantee that enough subject matter expertise is kept on board. To accomplish this, the PMO will include a high level “Project Integration Analyst” position. This full time role shall act, strictly from a subject matter expertise perspective, as the integrating agent between the project teams and their immediate activities, and shall make sure that the PMO is keenly aware of project substance issues throughout its planning, executing and controlling functions.

Finally, a Project Management Quality Assurance function will be instituted within the PMO. The purpose of this function will be to periodically monitor the execution of the project and guarantee that standard project management, project execution, methodology and documentation standards are being followed, and that overall management expectations are contemplated at all times. This will be a part-time role, yet with Steering Committee reporting responsibilities.

The PMO is already staffed by a trusted PRDE contractor with previous experience in projects of similar nature, size and complexity. The contractor is already facilitating the effort to conceive the *Educational Performance Barometer*, and will soon engage in other aspects related to the overall organization and staffing of the project.

Implementation Teams

Four specifically targeted implementation teams will carry out the brunt of the project activities described within this proposal, in response to the plans and directions imparted by the PMO. Each team will specialize in specific types of activities, as identified below:

- **Data Architecture Team**

This is a highly technical team that will be concerned with the design and development aspects of the project, particularly pertaining to data and system architecture. Dedicating most of its energy to the first and second project deliverables, the team will be composed of internal PRDE resources as well as specialized SLDS contractors.

- **Portal and Barometer Development Team**

This second implementation team will focus on the application and user aspects of the K-12 SLDS (primarily part of the first project deliverable), thus ensuring that the *Educational Performance Information Portal* and the *Educational Performance Barometer* tools are appropriately designed, developed and implemented. It will be led by an internal PRDE resource versed in the current data warehouse development effort, complemented by a contractor development team.

- **Data Governance Model Team**

This team shall be focused on designing and developing the proposed data governance and quality model (the third project deliverable proposed herein), including the corresponding organizational diagrams, reporting lines, policies and regulations, procedures, tools and human resources. It will be led by two PRDE resources versed in the data quality and statistics arenas, on a part-time basis. Said resources will be supported by a contractor team that will be in charge of the corresponding detail model development and implementation tasks.

- **Change Management Team**

This last team's scope of responsibility concentrates on designing, developing, enabling and seeing through the stakeholder education and development process that will be required by a project of this nature. It will be led by two PRDE resources that specialize in personnel training and development, on full time basis. Contractors will support these resources in the related training and curriculum development activities.

Finally, it must be stated that while PRDE does not foresee the need to create another role or implementation team at this time, if project situations so call for it, the agency will address the situation as it develops. That is, PRDE recognizes that project execution requirements can

change, and it is willing to flexibly address the situation for the overall benefit of the organization.

E – STAFFING

Project Staffing Strategy Considerations

The previous two subsections should not be misunderstood to suggest that the approach to staffing the *Puerto Rico K-12 Statewide Longitudinal Data System Initiative* will involve only a small number of key PRDE personnel. In fact, every one of the teams, including the Project Management Office, will employ contractors whose involvement will add thousands of work hours to the effort.

To some, this highly leveraged strategy may seem as a risky approach to conducting a project of such importance and sensitivity. After all, if PRDE is going to custom-develop its K-12 SLDS solution, and basing it on its current customized data warehouse, wouldn't it make sense to heavily engage its own resources to ensure the proper evolution of its intellectual property? To address this point, the following realities should be considered:

- **Finite PRDE Resources**

As with any other SEA, PRDE's staff is finite. This happens within and beyond the Information Technology Department, which is bound to have significant participation in the proposed project. Although the agency has numerous capable resources, their current scope of responsibilities limits many from fully engaging in such an aggressive development project for a prolonged period of time, without adversely impacting other important responsibilities.

- **PRDE Defines, Contractor Develops, PRDE Approves**

As evidenced in the work plans corresponding to each project deliverable, the staff assignments show PRDE's functional and IT resources significantly participating in all of the activities that are related to defining, reviewing and approving work products. Contractor teams, on the other hand, are more heavily involved in the detailed product and system building activities. These activities typically require full-time continued resources over extended periods of time.

- **Full Knowledge Transfer**

Also evidenced in the work plans are a number of activities that are specifically concerned with transferring contractor knowledge and documentation to PRDE resources. This is an established PRDE policy which is required to be written into every contract for projects of this nature, and is duly overseen by the agency. In the proposed plan, it

should be evident that the knowledge transfer activities provide ample time for the professional resources of both parties to engage.

Finally, it should be noted that, over the last few years, PRDE has employed this project staffing strategy very successfully. In fact, this was the same strategy that was followed to develop and implement nearly all of the transactional systems that the agency uses today. As an example, the successful implementation of the SIE (the single student database) was an extensive project that highly leveraged product development activities with a technology integrator, and used finite PRDE resources tactically to ensure system use. This same approach was followed with the SIFDE (financial) system, the Kronos (time and attendance) system, the STAFF (Human Resources) system and the data warehouse, among others. Indeed, the proposed staffing strategy is not an exception to how project of this sort are handled by the agency. It is part of PRDE’s successful modus operandi.

Detailed Staffing Role Assignments

As indicated previously, the project team includes a varying number of roles. Those that have already been discussed at length in subsection 6d (or that do not need to be discussed from a staffing perspective) are the following:

Role Initials	Role Name	Staffing Resources
SC	Steering Committee	PRDE, others
PMO	Project Management Office	Contractor
PIA	Project Integration Analyst	Contractor (part of PMO)
n/a	Special roles (Key Stakeholder Input, Regulatory and Data Privacy, Academic Policy, Federal Government)	Ad-hoc

The remaining roles must be discussed in terms of their responsibilities, capabilities and staffing assignments. They are listed herein, followed by a detailed specification:

Role Initials	Role Name	Staffing Resources
DATL	Data Architecture Team Lead	PRDE
DATC	Data Architecture Team Contractor	Contractor
PBDL	Portal and Barometer Development Team Lead	PRDE
PBDC	Portal and Barometer Development Team Contractor	Contractor
DGML	Data Governance Model Team Lead	PRDE
DGMC	Data Governance Model Team Contractor	Contractor
CMTL	Change Management Team Lead	PRDE

Role Initials	Role Name	Staffing Resources
CMTC	Change Management Team Contractor	Contractor

- **DATL – Data Architecture Team Lead**

This is a part-time role concentrating on the proper conception and development of the end product's data and system architecture. Its responsibilities are mainly those related to the development of the database, the work related to the data managed by the transactional systems, and the ETL process required to load said data into the *Portal*. It will also be involved in *Portal* testing activities, from a data architecture perspective.

This role will be shared by two PRDE IT veterans, Vicente Graulau and Elí Barreto. Mr. Graulau currently oversees several technical and data administration tasks related to the operation of the SIE system. He has also interacted steadily with the agency's data warehouse development efforts and is reasonably knowledgeable of its data architecture. Mr. Barreto has worked in several capacities at the agency, often developing databases for intra agency use. Based on their known capacity, PRDE estimates that they will spend 20% of their time on the project. This should occur virtually throughout the entire life of the project.

- **DATC – Data Architecture Team Contractor**

This is a full time role starting in June, 2012 and finishing in November, 2013, but having part-time participation thereafter. Its main responsibilities are those related to the actual design and development of the K-12 SLDS database and its feeders (e.g. those corresponding to existing applications and those corresponding to previously unsupported transactions), and the related ETL development and execution processes. It is planned to be staffed by a contractor through an open procurement process.

- **PBDL – Portal and Barometer Development Team Lead**

This is a part-time role concentrating on several quasi-technical activities within the first project deliverable. Its responsibilities are mostly those related to ensuring proper specification and development of the *Education Performance Information Portal* as a whole (including the *Barometer*), and that the end product fulfills PRDE functional expectations. It will also be responsible for operationally managing the activities and tasks of the related contractor (see below), and interacting with the PMO for overall progress and exception reporting.

This role will be filled by PRDE's Lourdes Rodríguez on a part-time basis. Ms. Rodríguez has been involved in several central data reporting and data management projects, and has historically led the data warehouse development initiative. She is very

familiar and experienced with working within the Systems Development Life Cycle (SDLC). Based on her past experiences, PRDE is estimating that the project will required 20% of her time throughout the entire project.

- **PBDC – Portal and Barometer Development Team Contractor**

This is a full time role that shall start in April, 2012 and finish in November, 2013. Its main responsibilities are those related to the actual design and development of the *Education Performance Information Portal*, including testing and launch support activities. It is planned to be filled by a contractor through an open procurement process.

- **DGML – Data Quality Team Lead**

This role is part-time, and is concerned exclusively with conceiving and overseeing the detailed development of the renewed data governance and data quality functions. It includes responsibilities tied the establishment of the data governance agenda, and the oversight of the detailed development of the data quality model's infrastructure (policies, procedures, tools, others).

To fill this role, PRDE will appoint Dr. Janet de Jesús. Dr. de Jesús is currently the agency's *EDFacts* Coordinator, and has a long history working in planning, statistical, and data quality issues within PRDE. She will dedicate an estimated 20% of her time to the project.

- **DGMC – Data Governance Model Contractor**

This role has three main responsibilities. First, it will be responsible for the detailed development of the data quality model's infrastructure (policies, procedures, tools, others), which will be a full time role that is scheduled to start a full-time basis in April, 2012 and finish in October of the same year. Second, it will be responsible for maintaining the model as the project progresses, which will be part-time job until September of 2013. Third, it will be responsible for the required training, professional development and support tasks that occur on a full-time basis until January, 2014. It is planned to be filled by a contractor through an open procurement process.

- **CMTL – Change Management Team Lead**

This is a part-time role that focuses on the development and implementation of a professional development training program for key PRDE stakeholders, mainly on the use of the *Barometer* and the *Portal*. More specifically, it will be involved in overall training program design, final training program review and acceptance, training schedule coordination and execution, and final institution of the training program into the agency's permanent internal training curriculum.

The role will be filled by Ms. Carmen Cepeda and Ms. Esther Rivera. In parallel, these two training professionals lead PRDE's internal professional development organizations for teachers and directors, two of the principal K-12 SLDS stakeholders. They will dedicate about 20% of their time to the project.

- **CMTC – Change Management Team Contractor**

This role will be responsible for the detailed development of the training programs and curricula, including tools and materials, and following up on their final acceptance. It will also be responsible for carrying out the corresponding training activities with all K-12 SLDS PRDE stakeholders. It is planned to be filled by a contractor through an open procurement process.

Staffing Policies and Ground Rules

Finally, a few additional issues must be stated regarding the project's staffing process and ground rules:

- Steering Committee meetings are expected to occur on a monthly basis, or as situations require. As for the implementation teams, a weekly detailed status discussion meeting will be instituted. PMO personnel will be present at each meeting.
- From the project management perspective, all contractors and internal PRDE resources will be fully accountable to the PMO. In turn, the PMO will be fully accountable to the Steering Committee.
- Before hiring, contractor personnel will be reviewed and approved by the PMO team, and by the corresponding PRDE lead person. Furthermore, any contractor personnel moves throughout the project will be required to be made only with prior consent from the same officials.

Other Attachment File(s)

* Mandatory Other Attachment Filename:

To add more "Other Attachment" attachments, please use the attachment buttons below.

APPENDIX A – OPTIONAL ATTACHMENTS**A – EDUCATIONAL PERFORMANCE BAROMETER**

Throughout the proposal, the *Educational Performance Barometer* has been mentioned and defined as “a standard reporting package that is currently being conceived, aimed at pinpointing trends in educational outcomes at all PRDE levels, from individual classrooms to the State Educational Agency level as a whole”. This item is currently under conception by PRDE stakeholders. However, for the purposes of the proposal, a summary of some of the reports that are being worked on is included herein. Said reports are being designed so that they can be scoped at various levels, such as the following:

- By/across regions, regional districts, schools, grade levels, genders and programs (e.g. LSP)
- By/across PRDE subgroups
- By/across catalogue courses
- By/across teachers
- By/across class periods (sections)
- Showing trends over multiple timeframes (e.g. comparing the same cohort year after year)
- Beginning and ending grade level (the period of time in question)
- Per specific topic (math, science, etc)

Following is a partial list of the reports that are being developed:

- **Grades and Academic Achievement**
 - Grade Distribution – Indicates the number (and percent) of A’s, B’s, C’s, D’s and F’s in a given cohort.
 - Grade Evolution (gains/losses) – Indicates changes in school grades obtained over a specific period of time (beginning grade level and ending grade level), expressed in terms of numbers and percentages in a given cohort.
- **State Assessments (PPAA)**
 - Proficiency Level Distribution – Indicates the number (and percent) of students rated as Pre-Basic, Basic, Proficient and Advanced in a given cohort.
 - Proficiency Level Evolution (gains/losses) – Indicates changes in proficiency levels obtained over a specific period of time (beginning grade level and ending grade level), expressed in terms of numbers and percentages in a given cohort.

- Grade-PPAA Performance Correlation – Indicates proficiency level distributions for each academic grade, expressed in terms of numbers and percentages in a given cohort.
 - PPAA-Grade Performance Correlation – Indicates grade distributions for each proficiency level, expressed in terms of numbers and percentages in a given cohort.
 - PPAA Student Participation Levels – Indicates tested/untested students (with those untested qualified by a reason code) in terms of numbers and percentages in a given cohort.
 - PPAA Outcome Rankings – Ranks several cohorts within a larger one in terms of a PPAA outcomes index (an “average” of proficiency levels obtained).
- **College Entrance Examinations (PEAU)**
 - PEAU Results Distribution – Indicates the number (and percent) of students in each results range for a given cohort.
 - Grade-PEAU Performance Correlation – Indicates PEAU results range distributions for each academic grade, expressed in terms of numbers and percentages in a given cohort.
 - PEAU-Grade Performance Correlation – Indicates grade distributions for each PEAU results range, expressed in terms of numbers and percentages in a given cohort.
- **Enrollment and graduation**
 - Enrollment Levels – Indicates total enrollment expressed in terms of numbers and percentages within a given cohort.
 - Graduation Rates – Indicates graduation rates at a specific point in time, expressed in terms of numbers and percentages within a given cohort (both ways: compared to enrollment at the 9th grade, and to graduates plus dropouts).
 - Yearly Dropout Rates – Indicates intra-year dropout rates in terms of numbers and percentages within a given cohort (compared to enrollment at the beginning of the school year).
 - Multi-Year Dropout Rates – Indicates multi-year dropout rates in terms of numbers and percentages within a given cohort (compared to enrollment at the beginning of the established start year).

- **Attendance**

- Average Daily Attendance – Indicates the total number of days of student attendance divided by the total number of days in the school year, for a given cohort.
- Average Daily Attendance Ranking – Ranks several cohorts within a larger one in terms of average daily attendance.
- Attendance-Grade Performance Correlation – Indicates grade distributions for each numeric range of Average Daily Attendance, expressed in terms of numbers and percentages in a given cohort.

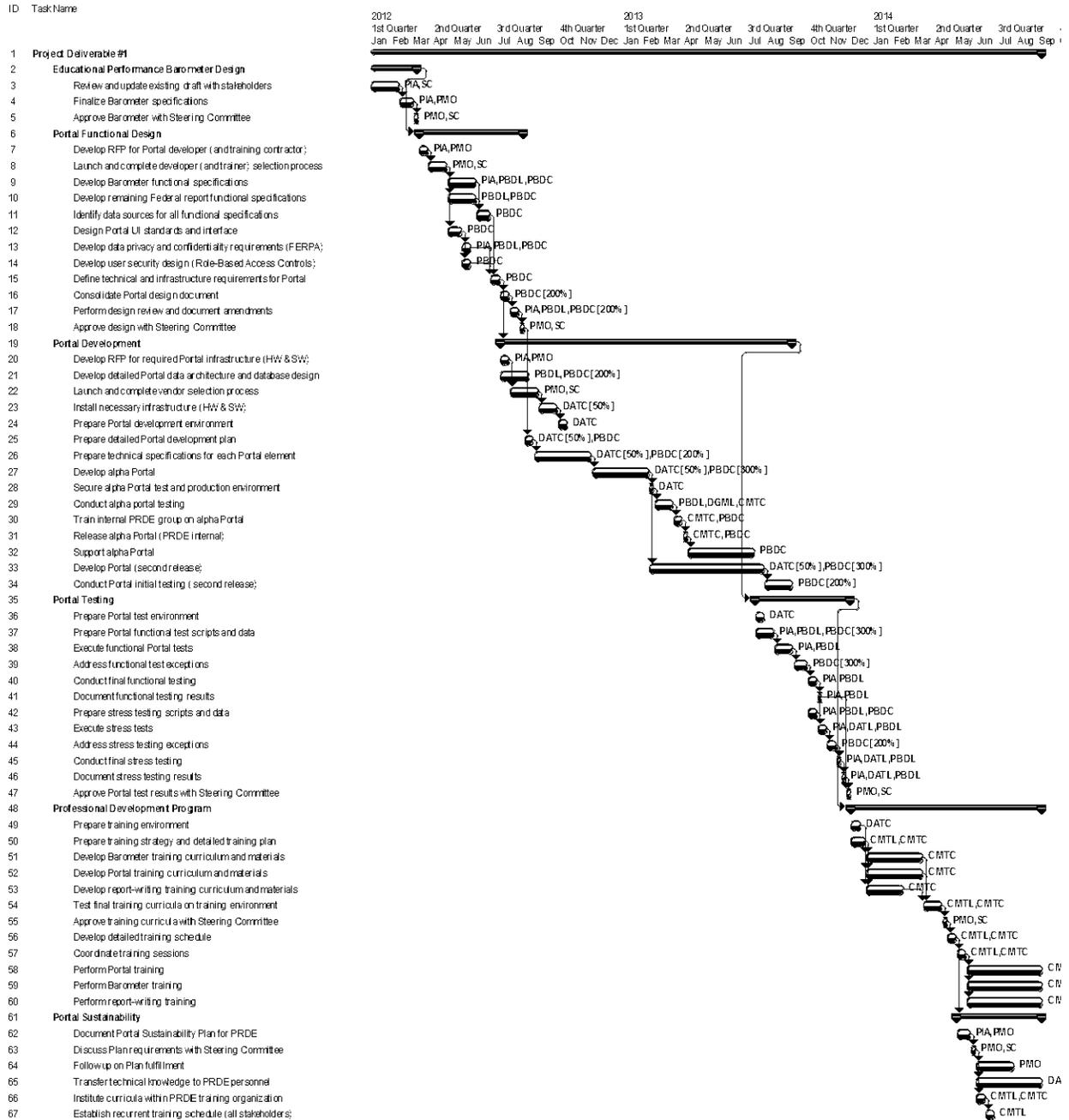
- **Teachers and Teacher Performance**

- HQT Student Impact – Indicates the number of students impacted by Highly Qualified Teachers (in their HQT subjects), expressed in terms of amounts and percentages within a given cohort.
- Teacher Evaluation-PPAA Correlation – Indicates proficiency level distributions for each teacher evaluation level, expressed in terms of numbers and percentages in a given cohort.

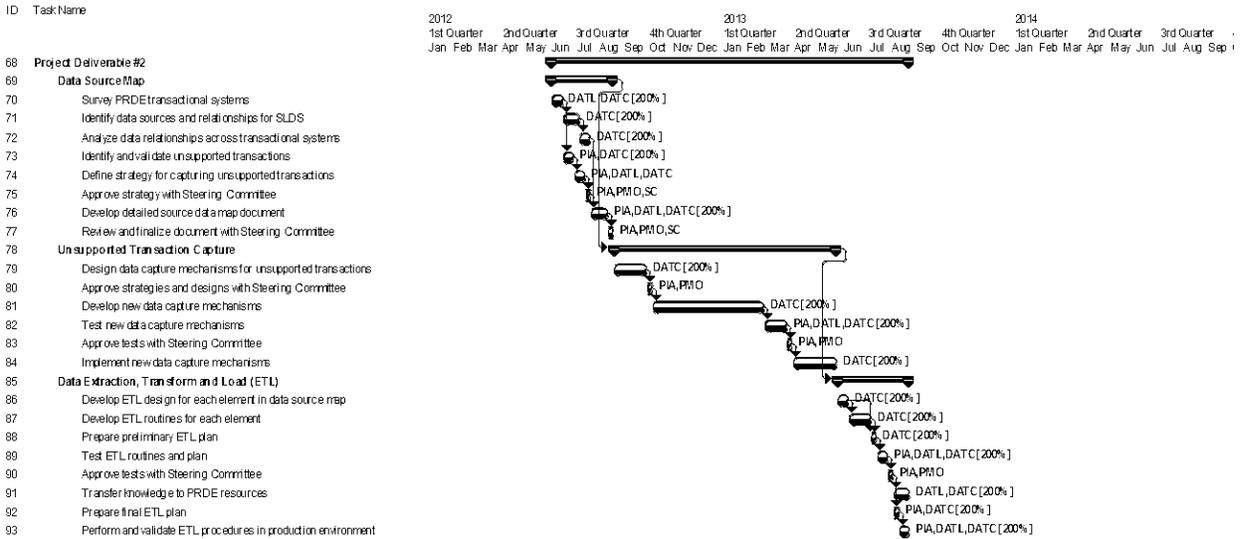
- **Schools and School Performance**

- Elementary School Effectiveness – Indicates changes in school grades obtained between the end of elementary school and the end of middle or high school, expressed in terms of numbers and percentages in a given cohort.
- Elementary School Proficiency Level Evolution – Indicates changes in state assessment proficiency levels obtained between the end of elementary school and the end of middle or high school, expressed in terms of numbers and percentages in a given cohort.
- Middle School Effectiveness – Indicates changes in school grades obtained between the end of middle school and the end of high school, expressed in terms of numbers and percentages in a given cohort.
- Middle School Proficiency Level Evolution – Indicates changes in state assessment proficiency levels obtained between the end of middle school and the end of high school, expressed in terms of numbers and percentages in a given cohort.

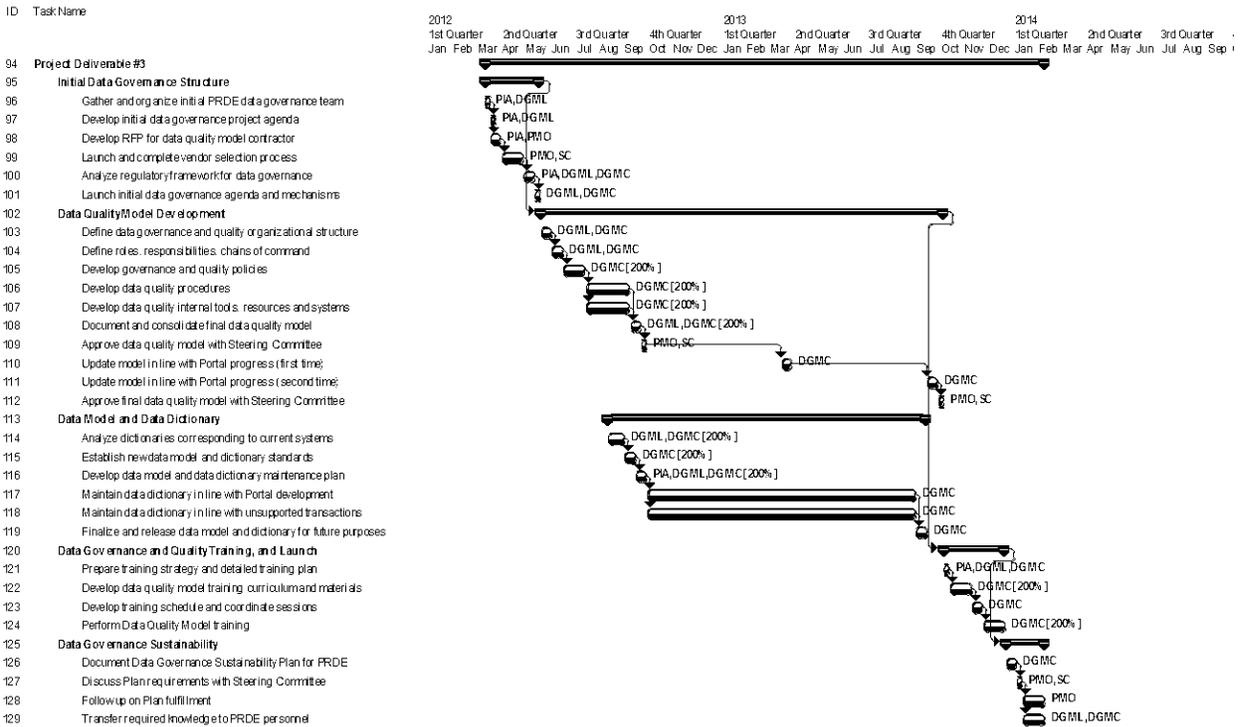
B – GANTT CHART FOR PROJECT DELIVERABLE #1



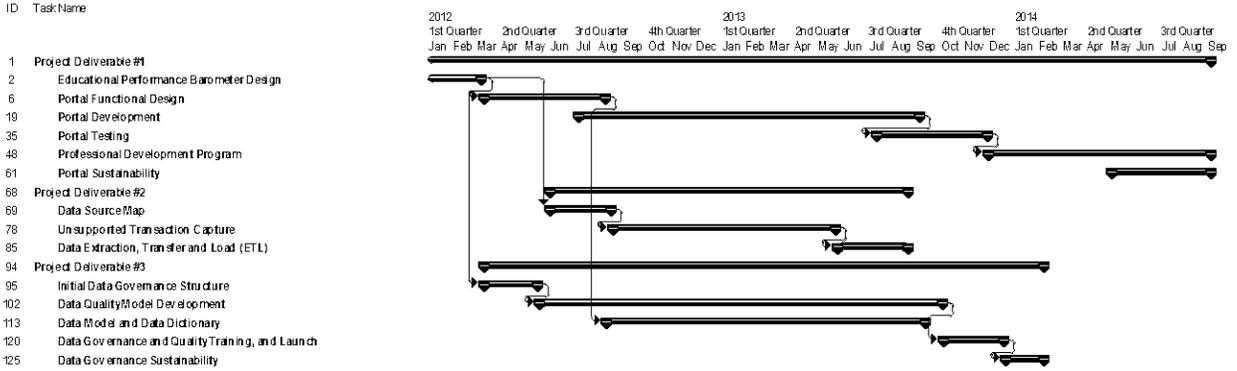
C – GANTT CHART FOR PROJECT DELIVERABLE #2



D – GANTT CHART FOR PROJECT DELIVERABLE #3



E – SUMMARY GANTT CHART



APPENDIX B – LETTERS OF SUPPORT

LETTER FROM THE OFFICE OF THE GOVERNOR



GOVERNMENT OF PUERTO RICO

LUIS G. FORTUNO
GOVERNOR

December 7, 2011

Dr. Dale Gould
Program Contact
Statewide Longitudinal Data Systems
Grant Program (CFDA 84.372)
Institute of Education Sciences
National Center for Education Statistics
1990 K Street, NW
Washington, DC 20006

Dear Dr. Gould:

I am writing to confirm my enthusiastic support for the Puerto Rico Department of Education's grant application for a K-12 Statewide Longitudinal Data System. The Puerto Rico Longitudinal Data System will be a key component of our government's ability to assess the success of our educational strategies and therefore make the necessary adjustments.

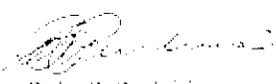
Although we are in the midst of an adverse economic climate, we are fully committed to making the Puerto Rico Statewide Longitudinal Data System a reality. My office is and will continue to be an integral part of this effort.

Sincerely,

Luis G. Fortunó

16 PR08 129, 1694, 1695, PR1029411 * P01 (for 80/0062), Sec. Just., PR 00922-0032
11/13/11 11:41:00 AM Fax: (787) 722-4202

LETTER FROM THE OFFICE OF THE RESIDENT COMMISSIONER

<p>PEDESA, P.R. 00981 Calle Princesa, 100 San Juan, P.R. 00901 Tel: (787) 724-1000 Fax: (787) 724-1001 Email: pedesa@prde.gobierno.pr</p>	<p>Congress of the United States House of Representatives Washington, DC 20515-5401</p>	<p>JOHN H. BOYER CLERK U.S. HOUSE OF REPRESENTATIVES NATIONAL BUDGET CENTER</p>
<p>December 9, 2011</p>		
<p>Dr. Eric Gould National Center for Education Statistics Room 9023 1990 K Street, NW Washington, DC 20006</p>		
<p>Re: Puerto Rico Statewide Longitudinal Data System Initiative</p>		
<p>Dear Dr. Gould:</p>		
<p>I am writing to request full consideration of the grant application submitted by the Puerto Rico Department of Education (PRDE) for the development and implementation of a Puerto Rico Statewide Longitudinal Data System Initiative.</p>		
<p>Over the past three years, PRDE has begun to enact significant reforms to improve the delivery of educational services to students in Puerto Rico. The establishment of a Statewide Longitudinal Data System in Puerto Rico would strengthen these reforms by substantially improving the quality and quantity of data on student achievement that is available to PRDE. As you are aware, data is increasingly being used by educators to improve teaching and learning. Through the disaggregation of data, educators can identify trends in student achievement that enable teachers to provide differentiated instruction to individual students and subgroups of students. I expect that the Puerto Rico Statewide Longitudinal Data System Initiative will become an essential tool used by PRDE to increase student achievement.</p>		
<p>Thank you for your consideration of PRDE's application.</p>		
<p>Sincerely,</p>		
		
<p>Pedro R. Pierluisi Member of Congress</p>		

LETTER FROM THE SECRETARY OF THE PUERTO RICO DEPARTMENT OF EDUCATION

**GOVERNMENT OF PUERTO RICO
DEPARTMENT OF EDUCATION**

OFFICE OF THE SECRETARY

December 7, 2011

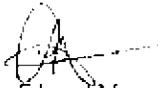
Dr. Tate Gould
Program Contact
Statewide Longitudinal Data Systems Grant Program (CFDA 84.372)
Institute of Education Sciences
National Center for Education Statistics
1990-K Street, NW
Washington, DC 20006

Dear Dr. Gould:

The Puerto Rico Department of Education fully supports the establishment of a K-12 Statewide Longitudinal Data System (SLDS). The development of this system shall afford K-12 education stakeholders with the tools needed to evaluate performance, facilitate research, support data driven decisions, and ensure sustainable results. Indeed, it shall help shape Puerto Rico's public education policy and improve our students' achievement for many years to come.

As the Secretary, I am pleased to endorse the grant application, and I am committed to working with all other education stakeholders in the successful development of Puerto Rico's SLDS.

Sincerely,



Dr. Palward Moreno
Interim Secretary
Department of Education

P.O. BOX 190759, SAN JUAN, PUERTO RICO 00919-0759 * PHONE: (787) 771-5600 * FAX: (787) 250-0275
The Department of Education does not discriminate in its activities, educational services or employment opportunities on the basis of race, color, sex, age, birth, national origin, social and financial status, political views, religious beliefs or any language.

LETTER FROM THE OFFICE OF THE CHIEF INFORMATION OFFICER OF PUERTO RICO



COMMONWEALTH OF PUERTO RICO
Office of the Chief Information Officer of Puerto Rico

December 7, 2011

Dr. Tate Gould
Program Contact
Statewide Longitudinal Data Systems Grant Program (CFDA 84.372)
Institute of Education Sciences
National Center for Education Statistics
199J-K Street, NW
Washington, DC 20006

Dear Dr. Gould:

I herein express my office's full commitment to the success of the Puerto Rico Statewide Longitudinal Data System initiative. It is recognized as a project of great impact to our evolving society, and one that shall provide recurrent benefits for years to come.

My office will support this project unconditionally.

Sincerely,

A handwritten signature in black ink, appearing to read "Juan Eugenio Rodríguez".

Juan Eugenio Rodríguez
Chief Information Officer
Government of Puerto Rico

LA FOM ALTA - SAN JUAN, PR 00901 • P.O. Box 9090180, SAN JUAN, PR 00902 0082
TEL: (787) 721-7700 • FAX: (787) 725-7823

LETTER FROM THE PUERTO RICO COUNCIL ON EDUCATION



GOVERNMENT OF PUERTO RICO
PUERTO RICO COUNCIL ON EDUCATION
Tel: (787) 671-2006 Fax: (787) 341-5633 web: www.coe.pr.gov
P.O. Box 19493 San Juan, Puerto Rico 00916-1949

December 9, 2011

Dr. Tate Gould
Program Contact
Statewide Longitudinal Data Systems Grant Program (CFDA 84.372)
Institute of Education Sciences
National Center for Education Statistics
1990-K Street, NW
Washington, DC 20006

Dear Dr. Gould:

The Puerto Rico Council of Education (PRCE) is charged by its Enabling Act with the purpose of administering public policy about the education standards in Puerto Rico. One of its main functions is licensing education institutions at all levels; it also charged with accrediting basic, vocational institutions. The Council is the only agency with the power to demand data from public and private education institutions; said power is based on two specific roles assigned to the Council: that of research on the student populations and institutions and that of accrediting and licensing them.

The Council staff participated in a general discussion on the thrust of the proposal. While the Council was not involved in the processes leading to its final form or to the specific final arrangements supporting it, I am writing to express my full commitment to collaborate and support the grant application submitted by the Puerto Rico Department of Education for an SLDs since this is a ministerial responsibility of the Council.

With this system, we expect to track educational performance over a period of time at the teacher, class, school and state agency levels, and to produce information regarding our students, teachers, programs and how the educational services comply with our goals and objectives. It will be a reliable source of information about clusters of groups covered by the jurisdiction of the PRCE.

The Council is eagerly awaiting the completion of this project, and offers its unconditional support to it. Please do not hesitate to contact us if you have any questions.

Sincerely,


Ricardo Aponte Pons, Esq
President
Puerto Rico Council of Education

Imp: 07/03/2011
Departamento
de Educación PRCE/2011

LETTER FROM THE PUERTO RICO INSTITUTE OF STATISTICS

Instituto de Estadísticas de Puerto Rico
Estado Libre Asociado de Puerto Rico

Calle Quesqueya #57, 2do piso
San Juan, PR 00917
P.O. Box 195484
San Juan, PR 00919 5484
Teléfono: (787) 993 3336



December 12, 2011

Dr. Tate Gould
Program Contact
Statewide Longitudinal Data Systems Grant Program (CFDA 84.372)
Institute of Education Sciences
National Center for Education Statistics
1990-K Street, NW
Washington, DC 20006

SUBJECT: ENDORSEMENT LETTER FOR PUERTO RICO DEPARTMENT OF EDUCATION'S GRANT APPLICATION FOR A STATEWIDE LONGITUDINAL DATA SYSTEM

Dear Dr. Gould:

On behalf of the Puerto Rico Institute of Statistics, I write to endorse the Puerto Rico Department of Education's grant application for a Statewide Longitudinal Data System. The Puerto Rico Institute of Statistics is a quasi-governmental organization charged with the responsibility of ensuring universal and timely access to reliable and comprehensive statistical information on Puerto Rico. Currently, Puerto Rico needs to improve the quality of its education statistics. The Institute believes that the full development of the Puerto Rico Statewide Longitudinal Data System (PR-SLDS) will be an important step forward in making this possible.

We also wish to express that the Institute is available to participate in this project. This year, the Governor of Puerto Rico signed into Law, Puerto Rico Act No. 165 of 2011 (see attached), which permanently designates the Institute as an authorized representative of the Puerto Rico Department of Education under the Family Education Rights Privacy Act (FERPA) for the purpose of releasing educational records to the Institute with personally identifiable information of students without the written consent of their parents. The goal of this designation is the development of an Early Warning System for the Identification of Potential School Dropouts to be used by the Puerto Rico Department of Education. Continued investment and development of the PR-SLDS will facilitate the establishment of an Early Warning System for Dropout Prevention.

As Executive Director of the Puerto Rico Institute of Statistics, I am pleased to endorse the Puerto Rico Department of Education's grant application.

Sincerely,

Mario Marazzi-Santiago
Executive Director

APPENDIX D – ACRONYM LIST

- **CEDS** – Common Education Data Standards
- **CMTC** – Change Management Team Contractor
- **CMTL** – Change Management Team Lead
- **DATC** – Data Architecture Team Contractor
- **DATL** – Data Architecture Team Lead
- **DGMC** – Data Governance Model Team Contractor
- **DGML** – Data Governance Model Team Lead
- **ETL** – Extract Transform and Load
- **PBDC** – Portal and Barometer Development Team Contractor
- **PBDL** – Portal and Barometer Development Team Lead
- **PEAU** – *Pruebas de Evaluación para Admisión Universitaria* (Spanish for University Admission Evaluation Test, the college entrance examination)
- **PIA** – Project Integration Analyst
- **PMO** – Project Management Office
- **PPAA** – *Pruebas Puertorriqueñas de Aprovechamiento Académico* (Spanish for Puerto Rico Academic Achievement Tests, the local State assessment)
- **RBAC** – Role Based Access Controls
- **SC** – Steering Committee
- **SDLC** – Systems Development Life Cycle
- **SIE** – *Sistema de Información Estudiantil* (Spanish for Student Information System, the PRDE SIS)
- **SIFDE** – *Sistema de Información Financiera del Departamento de Educación* (Spanish for PRDE Financial Information System)

APPENDIX C – RÉSUMÉS OF KEY PERSONNEL

STEERING COMMITTEE: DR. EDWARD MORENO

Dr. Edward Moreno Alonso**Work Experience**

PR Education Department, San Juan PR <i>Secretary Assistant</i>	2011 - Present
Sports and Recreation Department, San Juan PR <i>Director of School Athletic League</i>	2010 - 2011
PR Education Department, San Juan PR <i>Acting Secretary</i>	2010 - 2010
PR Education Department, San Juan PR <i>Associate Secretary</i>	2009 - 2010
Caribbean University, Bayamon PR <i>Graduate Level Professor of Education</i>	2003 - 2008
PR Education Department, San Juan PR <i>Executive Director III, Physical Education Program</i>	2000 - 2008
PR Education Department, San Juan PR <i>Labor Specialist III, Office of Collective Bargaining</i>	1999 - 1999
PR Education Department, San Juan PR <i>Director of the School Council, Institute for Educational Reform</i>	1995 - 1998
PR Education Department, San Juan PR <i>Director of Physical Education Program</i>	1993 - 1994
PR Education Department, San Juan PR <i>Technical Curriculum Physical Education Program</i>	1992 - 1992
Escuela Agustin Cabrera, Carolina PR <i>Physical Education Teacher</i>	1985 - 1991

Escuela Casiano Cepeda, Rio Piedras PR 1984 - 1984

Physical Education Teacher

Education

Doctorate in Administration, Supervision and Leadership 2002

Dowling College, New York, USA

Master in Administration and Supervision (Physical Education) 1991

Metropolitan University of Puerto Rico, San Juan, PR

Bachelor in Language Arts 1984

University of Puerto Rico, Rio Piedras, PR

STEERING COMMITTEE: DR. GRISEL MUÑOZ

Grisel Muñoz Marrero

Work Experience

Puerto Rico Department of Education, San Juan PR **2011 - Present**

Undersecretary for Academic Affairs

Puerto Rico Department of Education, Cayey PR **2004 - 2011**
Associate Professor

NCATE Coordinator. Trainer on: Accreditation Issues, Instructional Objectives, Learning Communities, Assessment, Measurement, and Teachers professional Development Topics.

Inter American University of Puerto Rico, Metropolitan Campus **1999 - 2004**
Associate Dean of Studies

Coordinate faculty evaluation process, academic program revisions, and faculty research, publications and instructional material development. Organize faculty development activities related to the teaching-learning process, and use of technology in the classroom, among others. In charge of the preparation of the Faculty Development Plan, Academic Area Work Plan and Academic Area Annual Report. Coordinate the Annual Academic and Administrative Leadership Chancellor's Retreat of the Metropolitan Campus. Responsible for the Campus Assessment Plan and for the implementation of the assessment process at the classroom and program level. Coordinator of the Middle States Association accreditation process (preparation of the Self-Study Design, Coordinator of the MSA Steering Committee and Sub-committees, Coordinator of Self-Study Report and of the Evaluation Team Agenda). Coordinator of the Puerto Rico Higher Education Council accreditation and licenses process. In charge of the preparation of the Convalidation Report for the Fifth License Renovation Cycle. Organize conferences, workshops and seminars on current trends in higher education. Serve as Acting Dean when appointed. Trainer on Evaluation, Assessment and Action Research Topics. Designed and delivered over 50 workshops for public school teachers on the topics of Performance Assessment, Action Research and Program Evaluation.

**General Council on Education Commonwealth of Puerto Rico
Director of the Evaluation Unit**

1991 - 1999

The Evaluation Unit of the General Council on Education has the responsibility of facilitating the fulfillment of nine out of the eighteen duties assigned to the Council by the Department of Education Organic Law. The unit is responsible also, for planning and designing evaluation and auditing processes to calibrate the effectiveness of the educational programs and services provided by the Department of Education of Puerto Rico.

Coordinator of the Systemic Assessment And Accountability Component of the PR-SSI

Coordinate the development of K-12 science and math curriculum excellent standards, assessment and professional standards for teacher preparation programs. Coordinate the translation of the National Assessment of Educational Progress (NAEP), Coordinate the administration, scoring and reporting of the Puerto Rico Assessment of Educational Progress in Science and Mathematics for the Puerto Rico Systemic Statewide Initiative Project. Develop a Systemic Assessment and Accountability Model to document and analyze the improvement of the teaching and learning processes in science and mathematics and therefore the academic improvement of the students. Organize conferences, workshops and seminars on current trends in education. Conduct school site visits to verify the implementation of the SSI project.

Trainer on Evaluation and Assessment Topics

Designed and delivered over 325 workshops for public and private school teachers in the island on the following subjects: Classroom Assessment Techniques; Classroom Research; Portfolio; Performance Assessment; Non-Traditional Test; Criterion Reference Test; and Validity and Reliability. Over 6,100 teachers were trained in these topics.

NAEP Network Coordinator

Puerto Rico Representative for NAEP. Keep the State informed on NAEP issues discussed at the National Network Meetings. Coordinate the assessment administration with the School Coordinators. Review items and assessment reports prior to their release. Review assessment frameworks.

**Inter American University of Puerto Rico, San German Campus
Director of Planning, Evaluation and Institutional Research**

1986 - 1991

Develop and implement an Assessment Program that was later used as a model for other units of the Inter American University of Puerto Rico. Provide management information for general needs and specific activities; conduct institutional research on university activities including policy and planning analysis. Respond to external request for

data and institutional information; provide data interpretation assistance to administrative and academic units, and maintain data integrity controls for academic planning and student and program assessment activities done by other campus units. Maintain a collaborative working relationship with all vice presidents, senior administrators and academic staff of the university.

**Puerto Rico Department of Public Instruction - Ponce School District
Special Education Teacher Consultant**

1980 - 1981

Prepare proposal for the Special Education Program of the school district. Interpreted intelligence test results for parents and teachers, and parents of handicapped children. Coordinate workshops to train Puerto Rican teachers in special education issues. Work as a liaison between government agencies and schools. Assembled and supervised special education multidisciplinary team.

**Puerto Rico Department of Public Instruction - Ponce School District
Special Education Teacher**

1980 - 1981

Teach students with health problems. Counsel students and parents. Recruit and evaluate potential students for the health program. Coordinate support services and cultural activities for learning disabled students. Administer, score and code test data. Conduct educational and academic evaluations for appropriate selection and placement of learning disabled students.

Education

Ph.D. Curriculum and Instruction; Supervision and Staff Development
Pennsylvania State University

1987

M.Ed. Curriculum and Instruction; Special Education
Pennsylvania State University

1982

B.A. Elementary Education; Special Education
University of Puerto Rico, Rio Piedras Campus
Magna Cum Laude

1978

STEERING COMMITTEE: JUAN EUGENIO RODRÍGUEZ***Juan Eugenio Rodríguez de Hostos*****Work Experience****Office of the Governor of Puerto Rico, San Juan PR****Chief Information Officer of the Government of Puerto Rico** 2009 - Present

Create and implement public policy regarding the application of innovation and new technologies to the improvement of the socioeconomic well being of the citizens of Puerto Rico and the provision of services by the Government to its customers, including citizens and businesses. Generate, manage and ensure the success of various government wide or interagency initiatives to decrease costs and improve delivery of services and benefits achieving significant improvements in customer satisfaction, technological readiness, cost reductions and social and economic indicator improvements.

Boreal Investments, Inc., San Juan PR**Co-founder and Partner** 2007 - Present

Analyze, evaluate and structure investment opportunities for placement of private capital in new for-sale detached and multifamily housing projects in Puerto Rico. Establish and manage partnerships with select developers and support a stream of new investment opportunities to fund. Build a pool of investment capital from commitments by qualified investors and ensure high returns through a well-researched selection process and close supervision of each project.

Dorado Farms, Inc. and Auri's Farm, Inc., San Juan PR**Real Estate Developer** 2005 - Present

Develop and execute the land development business model for extracting long-term optimal value for land holdings of both corporations. Meet corporate targets for return on investment. Hire and coordinate architectural, engineering and legal services providers to execute planning, environmental, permitting and other work within the established strategic framework. Establish and nurture relationships and negotiate on behalf of the company with investors, builders, municipal, state and federal agencies and with neighboring community members for new projects, entitlements and permitting in company lands.

Keane, Inc., San Juan PR**Managing Director** 2004 - 2005

P&L responsibility for Keane's Puerto Rico operations. Management of Sales, Delivery, Finance, Human Resources, Recruiting. Clients included Fortune 500 and local organizations: Verizon, Pfizer, Eli Lilly, Merck, Mitsubishi, AT&T, Doral Bank, Triple-S, Mapfre, Banco Popular, El Nuevo Día, FirstBank, Caribbean Produce and others.

**BitTime, Inc., Miami FL
Chief Operating Officer**

2000 - 2003

Responsible for day-to-day operations, delivering services to Fortune 500 client companies including Microsoft, FedEx, Motorola, 3Com, Procter & Gamble, Kraft, Kodak and Avaya. BAT. Coordination with Finance, R&D, Sales, Marketing, Customer Service and Logistics. Managed international operations teams in Brazil, Mexico, Venezuela, Colombia, Chile, Argentina and the United States (Hispanic and US General markets) and partners for logistics and operations including Bank of America, American Express, Amazon, Accor, Sodexo, Blockbuster, KB Toys, Marriott, Exodus, Verio, NewRoads. Design and Development of core features of BitTime's technology and operations platform as well as functional and communications features of each client solution.

**Momentum Consulting Services, San Juan PR
Founder and Consultant**

1996 - 1999

Clients included:

Financial Institutions: Built customer-centric e-Business presence of institution through implementation of technology services and business processes to increase customer attraction, reduce costs, and increase competitive advantage. Solutions included: Internet and Intranet services development, on-line banking and brokerage, customer service, sales automation, loan application automation, marketing and communications strategies, operations consulting, human resources consulting.

Private Equity: Executed market analyses of Internet industry and evaluated investment opportunities by interviewing and building relationships with entrepreneurs, investors, established players. Developed business plans for new ventures and expansion of ongoing businesses.

Office Centers: Managed the development of a state-of-the-art furnished and supported office center and implemented all services including LAN and Data communications, Internet communications, Telephone communications and messaging services, videoconferencing and other operational responsibilities.

Health Care: Executed a viability study for Emergency Room process reengineering, patient flow management and systems integration.

Intel Corporation, Santa Clara CA

Marketing Manager, Corporate Multimedia Marketing

1994

Achieved major wins for Intel's multimedia technologies and microprocessors through joint marketing strategies with multimedia application developers and promotional activities.

Technical Marketing Engineer, Mobile Computing Group

1993

Managed vendor and key customer participation in evaluation of mobile computer designs.

Product Engineer, Mobile Computing Group

1991 - 1993

Ensured six-sigma quality standards for Intel's microprocessors designed for mobile applications.

Design Engineer, Super Computing Components Organization	1991
Designed high-end semiconductor components for highly parallel computer systems.	
Process Engineer, California Technology Development	1991
Research and Development for manufacture of new generation semiconductors	

Education

Basic Real Estate Development	2007
Urban Land Institute	
Master of Business Administration	1995
Stanford University, Stanford CA	
Bachelor of Science - Mechanical Engineering	1989
Yale University, New Haven CT	

STEERING COMMITTEE: NORMA M. ORTIZ

Norma M. Ortiz Sánchez

Work Experience

Puerto Rico Department of Education, San Juan PR

Chief Information Officer

2011 - Present

Align IT objectives and programs to the PRDE objectives and strategies. Define and adjust IT standards and technologies. Lead the Technology Plan preparation and execution and the efforts to participate in the eRate Program. Plan and Manage Strategic IT initiatives and Projects. Direct the information and data integrity of the PRDE for all Information Technology functions of the Department. This includes the Data Center, Technical Services, Help Desk, Communication Networks, Computer Program Development and Computer Systems Operations. Budget definition and control. Third parties contract negotiation and management. Overall IT operation supervision.

Puerto Rico Department of Education, San Juan PR

Information Systems Office - Executive Director III

2007 - 2011

Information Systems Office - Executive Director II

2006 - 2007

Work directly with the CIO in the overall coordination and supervision of different areas such as technical assistance, new systems planning and deployment, help desk, human resources, project management and administration. Meet with vendors and other agencies personnel as part of the different projects development and implementation process. Assist in the implementation of the Student Information System. Supervise and coordinate the PRDE Data and Voice Network support supervision. Director in charge of the Student Information System Office. Supervise over 45 employees. Collaborate in the development of the Information Office Work Plan, Organization and Budget Petition.

Puerto Rico Department of Education, San Juan PR

Transformation Office - Executive Director II

2002 - 2006

Responsible for the coordination and development of various initiatives in the Re-engineering Process within the Department of Education. Responsible for the coordination of the communication process with the Communications Office, including the creation of a newsletter, press releases, etc. Coordinate professional events, such as seminars, conferences and meetings as requested by the Office Director. Write articles, press releases, presentations and speeches for the Secretary. Coordinate two Technology Congress: "Transformando la Educación, Integrando la Tecnología" foro ver 4,000 participants.

Puerto Rico Department of Education, San Juan PR

Communications Office - Executive Director II 2000 - 2002
Communications Office - Executive Director I 1995 - 2000

Responsible for the administrative area of this Office. Supervise personnel including photographers, videographers, press officials, public relations officials, secretaries and clerks. Coordinate professional events, such as seminars, conferences and meetings as requested by the Secretary of Education. Coordinate and supervise the production and publication of brochures, press inserts and other print material. Coordinate, prepare and write corporate ads for the different areas of the Department of Education. Write articles, press releases, and speeches for the Secretary.

Puerto Rico Department of Education, San Juan PR

Specialized Schools Unit - Executive I 1993 - 1995

Create and develop an information bulletin for every school within the Unit. Coordinate seminars, meetings and other activities for the schools. Develop and coordinate two shows in order to demonstrate the student's talents and their work in the schools.

Public Relations Puerto Rico (PRPR, Inc.), San Juan PR

Account Executive 1991 - 1993

Responsible for the development, coordination and execution of Public Relations Programs for clients such as The College of Engineers and Surveyors, The General Contractors Association and Roche Products, Inc. Presentation of media plans, budgeting and media selection. Coordinate professional and social activities for all clients.

Park Advertising, Inc., San Juan PR

Account Executive 1986 - 1989

Responsible for the development, coordination and execution of advertising and public relations plans for agency clients. Coordinated trade activities, media presentations, production of advertising campaigns and others for Clorox Company, Beecham Products, B. Fernandez & Hnos., among others. Write press releases and articles.

Education

BA Communications- Public Relations/Advertising 1986
 University of Puerto Rico, Rio Piedras, PR

STEERING COMMITTEE: MARÍA JAUNARENA***María M. Jaunarena*****Work Experience****Office of the Governor of Puerto Rico, San Juan, PR****Advisor to the Governor on Education, Culture, Recreation & Sports 2009 - Present**

Principal policy advisor to the Governor, cabinet members and state government agency staff on the areas of education (PK-20), culture, sports and recreation. Responsible for providing direct public policy and operational guidance and support on the above mentioned matters. Offer recommendations on budget appropriations that represent around 30% of the state budget to enable the implementation of approved or desired public policy initiatives. Offer recommendations on strategic planning and implementation based on the established public policy. Principal respondent to a range of complex enquiries from key community stakeholders and municipal, state and federal elected officials in education, culture, sports and recreation such as teachers, principals, parents, mayors, legislators, and councilors as well as responsible to initiate action where necessary. Manage complaints received about schools and providing impartial advice and guidance to governors and education stakeholders; teachers, parents, students, etc., and provide mediation where needed.

Fundación Ángel Ramos, Inc., San Juan, PR**Program Officer 2004 - 2008**

Responsible for developing and overseeing the Foundation's work in the new program focus area of Preschool Education and other program-related activities, including conceptualization, design and planning of program objectives, research, investigation and evaluation. Manage current grants and work with nonprofits to build capacity. Help to develop strategic relationships that support the overall strategic direction for the Foundation and for program related efforts within the community. Determine (through analysis, questioning, informal research, and site visits) the feasibility of submitted proposals. Prepare funding recommendations to the Foundation's Board of Trustees.

La Fondita de Jesús, Inc., San Juan, PR**Executive Director 2001 - 2009**

Responsible for carrying out the mission, implementing short, medium, and long-term organizational plans, and securing necessary and adequate resources ensuring diversity of funding sources. Designed, led and documented an in-depth internal evaluation process that assured representation and participation of all constituency groups and resulted in the consolidation of four previously fragmented programs into two coherent service tracks. Conducted a widespread endorsement of a healthy and charismatic organizational culture promoting the perception that people (staff of 30, over 2,000 clients, and 160 volunteers) are the organization's greatest asset. Successful in managing development process of low-income housing projects from the conceptualization and construction phase through the design

and implementation of complementary integral supportive services protocols. Cultivated nourishing giving relationships with over 20 corporate, foundation and public sector donors.

Community Development Office Municipality of Aguadilla, PR

Director

1997 - 2000

Responsible for need and resource assessment, planning, implementation, budget management, procurement, monitoring and evaluation of various community programs, to be carried out with over \$ 10 million in federal funds. Managed a 21 person staff at a unit of local government including accountants, project and program managers, citizen participation specialist, environmentalist, planners, and grant writers. Knowledgeable of all managerial and regulatory affairs related to various federal programs; Community Development Block Grant (ESGP), Section 8, Community Facilities, Water & Waste, Transportation Improvement/ Enhancement Program, Supportive Housing, AmeriCorps*VISTA, Community Oriented Policing Services (COPS), Weed & Seed, and Local Law Enforcement Grants, among others. Managed over 15 construction projects to develop infrastructure and community facilities: public transportation terminal, elderly centers, recreational facilities, rehabilitation of historic sites, etc. Instrumental in the financial planning and development process of over 200 new and rehabilitated low-income housing units, and achieved recognition by HUD as a Best Practice on year 2000. Represented the Mayor at official affairs with local, state and federal agencies.

Center for Community Development Mandel School of Applied Social Sciences Case Western Reserve University, Cleveland, OH

Graduates Student Intern

1995 - 1996

Researched, designed, delivered and evaluated a core curriculum for community capacity-building training sessions developed for the Cleveland Community Building Initiative sponsored by the Cleveland Foundation. Conducted an environmental scan of training services and continuing education opportunities available for staff of community organizations. The information gathered was used by the Cleveland Family Development Collaborative to develop a new curriculum for Social Work Practitioners with emphasis on community-based family practice. The collaborative is a partnership of families, community organizations and universities sponsored by the W.K. Kellogg Foundation.

STEERING COMMITTEE: RAFAEL BLANCO, ESQ.

**Rafael Blanco-Latorre, Esq.
Curriculum Vitae**

I. Education:

- Juris Doctor-1975 University of Puerto Rico Law School. Admitted to State and Federal District Court practice.
- B.A. Economics-1971 University of Notre Dame, Notre Dame Indiana

II. Employment History:

- April 2011-Present: Undersecretary of Administration, Puerto Rico Department of Education.
- June 2010-April 2011: Private Practice under Blanco Law Office, PSC
- December 2009-June 2010: Undersecretary of Administration, Puerto Rico Department of Education.
- July 1998-October 2009: Senior Executive Vice President and member, Board of Directors, Banco Bilbao Vizcaya Argentaria Puerto Rico (BBVAPR).
- February 1992-June 1998: President and CEO and member, Board of Directors of Ponce Federal Bank (converted to a commercial Bank under the name PonceBank in 1996). Bank was sold to BBVAPR in 1998.
- August 1989-February 1992: Senior Vice President and Chief Lending Officer, Banco Santander Puerto Rico.
- February 1982-August 1989: Senior Vice President and Chief Lending Officer, Banco de Ponce (Puerto Rico).
- March 1977-February 1982: Resident Vice President Asset Review Director for Caribbean and South America, Special Loans Head (Workout Loans), Citibank, N.A.
- January 1976-February 1977: Associate, Legal Firm of McConnell Valdés (San Juan, Puerto Rico)- Corporate and Banking Law.
- June 1973-January 1976: Resident Vice President and Corporate Group Head, Citibank, NA.

III. Participation in Boards of Directors :

- United Funds: 1983-1985
- Pontifical Catholic University of Puerto Rico (Development Committee): 1994-1995
- Corporación del Fondo del Seguro del Estado (1993-1998)
- Federal Home Loan Bank of New York (1997-2000)
- Chairman, Puerto Rico Bankers Association (2007-2009)

IV. Recognition/Awards:

- 1993: Outstanding Businessman of the Year (Minority Business Development Agency)
- 1994: Top Management Award (Sales and Marketing Executives Association)
- 1994: Excellence in Private Business (Southern Chamber of Commerce)
- 1994: Excellence in Banking (Puerto Rico Chamber of Commerce)
- 1995: Top Management Award (Caribbean Business.

PROJECT TEAM: VICENTE GRAULAU

Vicente Graulau Rosario

Work Experience

Puerto Rico Department of Education, San Juan PR

SIS Administrator (SIE/SchoolMax®)

2007 - Present

Maintain the stability and reliability of the Student Information System (Servers and Applications). Maintain the interoperability of the Data Base with other systems. Manage Services Request and Request for change for hardware failure or software issues. Evaluate and authorize upgrades or updates to SIS. Monitor system performance and network communication. Setup and maintain configuration requirement for SIS. Defining and modifying the overall Security Policy in SIS. Setup and Maintain End of Year and Beginning Year process. Maintain the specific privileges for each Role. Meetings with DE personnel for requirements gathering. Provide weekly report of Data Progress or other special reports on request. Analyze and Provide Data Mapping for Datawarehouse. Provide third level of support for HelpDesk.

Puerto Rico Department of Education, San Juan PR

Data Conversion/Integration Lead

2006 - 2007

Define Requirements for Data Conversion on PRDE SIE (Sistema de Información Estudiantil) Project. Analyze PL/SQL code for loaders and procedures needed for the data conversion process. Support on VPN set-up between PRDE and Oracle Corp. Performed Data Mapping between source and target databases. Provided weekly status reports of data conversion team. Setup and maintain documentation standards. Online Forms Developer for fulfill the SIS. Operating System: Redhat Linux 64-bit. Data Base: Oracle 10.2.0.2.0 . TOAD Developer tool

Puerto Rico Department of Education, San Juan PR

IT Technician

2002 - 2006

Provide Technical Support to Schools. Online Forms Developer. Provide School Network Support. Design, Develop images and configuration for Fixed Labs. Setup and maintain documentation for fixed and Mobil labs. Certified Quality Assurance of Fixed Labs in Schools. Oper. System: Windows 2000 Server AD, XP.

Education

BBA: Management Information Systems 2012
Metropolitan University of Puerto Rico

**SQL Fundamentals I, SQL Fundamentals II, Oracle Database 10g – Administration
Workshop I, Oracle Database 10g – Administration Workshop II, Oracle Database 10g
Security, Oracle Database Performance Tuning** 2010 - 2011
Oracle University

AD: Management Information Systems
Universidad del Este

PROJECT TEAM: ELÍ BARRETO

Eli Barreto Cortez

Work Experience

Puerto Rico Department of Education, San Juan PR

System Analyst (Webmaster)

2004 - Present

Software analysis, programming, web application development. Maintain and administer the web base infrastructure and web portals. Database and Datawarehouse administration. Reporting and BI solutions implementation.

Compu Cursos de PR, San Juan PR

Instructor

2000 - 2003

Offer computer repair, diagnostic, networking and other related courses. Maintain and administer the local area network and computer labs. Research, evaluate and implement new computer related courses.

PC Warehouse, Carolina PR

Technical support supervisor

1996 - 2000

Computer repair and diagnostic, LAN design and installation. Supervise the technical department support staff, quality control. Procedures, evaluation of service personnel and shop administration.

American Airlines, Carolina PR

Ramp Service

1990 -1998

Cargo and baggage handling, Aircraft cleaning, maintenance and cabin service. Flight departure and arrival ground service.

Education

Polytechnic University of Puerto Rico, Hato Rey PR

2004

PROJECT TEAM: LOURDES RODRÍGUEZ***Lourdes N. Rodríguez Colón*****Work Experience**

Area for Planning and Educational Development,
PR Department of Education, San Juan PR

Executive Director II**2007 - Present**

Gather, manage and analyze electronic educational data stored in the Data Warehouse, thru Business Objects' tools (InfoView and WebIntelligence). Design, develop, produce and analyze reports related with educational data; such as students' information, membership, grades and school, among others. Organize, coordinate and supervise the technical aspects of the reports production. Prepare, validate and submit electronic educational data files to the US Department of Education. Assist in the implementation and development of the Student Information System (SIS). Meet with Programs representatives to develop the business rules needed to map their information from the SIS to the Data warehouse.

Area for Planning and Educational Development,
PR Department of Education, San Juan PR

Executive Director I**2004 - 2007**

Gather, manage and analyze electronic educational data, thru Business Objects' tools (InfoView and WebIntelligence). Assist in the implementation of the Student Information System, as a liaison between IT and the Planning Areas. Coordinate the Institutional Planning Area. Prepare, evaluate and analyze Working Plans, and Progress and Final Reports; as well as the Organization Budget Request. Meet with Program Directors and other personnel as part of the different projects development and implementation process, related with the institutional planning. Collaborate with the structural planning team.

"Oficina de Transformación" Reengineering Project,
PR Department of Education, San Juan PR

Executive Director I**2002 - 2006**

Coordinate and participate in the development of various initiatives in the Re-engineering Process within the Department of Education; such as Organizational structure redesign, processes evaluation and redesign. Coordinate and participate in the development of an accountability system for the whole organization. Develop, coordinate and implement the logistic and the management of the register process in the "Primer y Segundo Congreso: Transformando la Educación, Integrando la Tecnología". Serve as Evaluation Advisor and Trainer. "Academia de Evaluación, Instituto 2000": Resource Center for Sciences and Engineering, Rio Piedras Campus, University of Puerto Rico.

Area for Planning and Educational Development, Evaluation Division
PR Department of Education, San Juan PR

Pedagogic Researcher 2002 - 2003

Design and perform research in the educational field.

Education

Graduate courses on Evaluation and Educational Research 1998 - 2005
University of Puerto Rico, Rio Piedras Campus

Bachelor Degree in Health Sciences, Magna Cum Laude 1996
University of Puerto Rico, Medical Sciences Campus.
College of Health Related Professions

Undergraduate Certificate in Dental Hygiene 1984
University of Puerto Rico, Medical Sciences Campus.
College of Health Related Professions

Associate Degree in Dental Assistance with Expanded Functions 1982
University of Puerto Rico, Medical Sciences Campus.
College of Health Related Professions

PROJECT TEAM: DR. JANET DE JESÚS***Janet de Jesús Cancel*****Work Experience****Puerto Rico Department of Education, San Juan PR****EDFacts Coordinator****2007 - Present**

Responsibilities: Serves as the official SEA contact for the EDFacts team. Coordinate and manage collection of data from different State Program Offices. Work closely with database designers, builders and managers. *Key Objectives:* Promote the collection and analysis of timely and quality data in education and administration decisions. *Achievements:* Established the understanding of education data sources, work processes and users' needs. Provide ad hoc analysis of federal data for PRDE Programs, other State agencies, research organizations and the public.

Puerto Rico Department of Education, San Juan PR**Director Statistics Division****2008 - 2010**

Responsibilities: This position is primarily responsible for collecting and submitting quantitative data required by the U.S. Education Department. The Director acts as the EDFacts Coordinator and is accountable for organizational development and management related to data reporting. *Key Objectives:* Meet PRDE commitments for improving data quality and reporting consistency. Develop program and school awareness of data, its collection and use in effective decision making. Provide ad hoc analysis of federal data for PRDE Programs, other State agencies, research organizations and the public. *Achievements:* Established Department-wide instructions and training for data collection, and reporting. Improved analysis of data quality and remediation processes and increased the number of data groups submitted to EDFacts.

Puerto Rico Department of Education, San Juan PR**Auxiliary Secretary of the Planning Area****2005 - 2008**

Responsibilities: Direct and manage four divisions in Planning, including the Statistics Division, Research Division, Institutional Planning Division and the Administrative Unit. *Key Objectives:* Coordinate data reporting with the development and implementation of essential information systems including Student Information, Data Repository and Special Education. Creates and manages the strategic PRDE Annual Plan and the data submission plan which includes planning, scheduling, collection, data quality management and submission. *Achievements:* Established the processes needed to move the PRDE from a paper-based reporting organization to one that emphasized automated data submissions to

EDFacts. During this period, the PRDE achieved an annual submission level of over 93% of the EDFacts transactions. Data collected for federal reporting purposes is now routinely used for facilities planning, student services forecasting and AYP Monitoring.

Puerto Rico Department of Education, San Juan PR

Assistant to the Secretary of the Planning Area **2001 - 2005**

Responsibilities: Supervise staff progress of operational activities and projects. Prepare annual operating plan and budgets.

Puerto Rico Department of Education, San Juan PR

Educational Researcher **1983 - 2001**

Responsibilities: Manage research projects including defining the research objective and metrics, developing the survey instruments, collecting and analyzing the data and presenting the conclusions of the research. Provide leadership and training to new researchers.

Education

Doctor in Education - Emphasis-Administration and Supervision **2002**

University of Puerto Rico, Rio Piedras Campus

Master of Planning - Emphasis-Educational Planning **1978**

University of Puerto Rico, Rio Piedras Campus

B.A. in Education - Emphasis-Mathematics **1976**

University of Puerto Rico, Rio Piedras Campus

PROJECT TEAM: CARMEN CEPEDA***Carmen María Cepeda Ramos*****Work Experience**

Special Assistant PRDE Central Level **2010 - 2011**

Offer technical assistance to the schools in the improvement program. Visit schools, evaluate job plans and competitive proposals. Supervise the Academic Services Auxiliary Secretary and Community Educational Services (Adults Program).

Directora Regional (Región Educativa San Juan) **2009-2010**

Supervised Administrative areas and visited school districts. Evaluated school's proposals to named school personnel. Writing work plans and supervised transportation area among others:

- Human Resources
- Fiscal Area
- Adults Program
- Federal Programs (Title 1)
- School Dinners
- School Councils
- Vocational and Technical Education Program

Elementary School Principal **2001 - 2009**

Plan, organize flexibly, manage, monitor and evaluate all teaching under my supervision. Evaluate the effectiveness of teaching and learning process using a variety of modalities such as academic achievement, retention, reward, and so on. Provide all documents required for payment audit or tax issues related to law and administered under 149. Direct the preparation of Annual Work Plan and implement actions in the short and long term. Keep up to date statistics of the school, sending essential reports and disseminate offerings and achievements of the school.

Executive Director Central Level (Federal Affairs) **1997 - 2000**

Evaluation and monitoring the use of the federal budget allocated to private schools. Analyze and evaluate proposals submitted. Performing for payment to the educational regions, school districts and private schools Title I Program Advice to Regional Directors, Superintendents and school districts Facilitators and Supervisors Title I Program Allocate funds to participating carriers Title I Program.

Head of School (Canóvanas District)	1995 - 1997
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Saturday School Director (Canóvanas District)	1991 - 1997
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Math Program Supervisor (Canóvanas District)	1992 - 1995
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Teacher of Elementary and Secondary level	1976 - 1992
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Provide high quality education to students in public schools in the Department of Education. Develop strategies to achieve many innovative high achievement. Providing individual assistance to students on the needs and capabilities. Assess student academic progress.

Education

<i>Masters in Administration and Supervision</i>	1994
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University of Phoenix Guaynabo, Puerto Rico – High Honors

<i>BS in Education (Elemental Level)</i>	1983
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Metropolitan University Rio Piedras, Puerto Rico – High Honors

PROJECT TEAM: ESTHER RIVERA

Esther Rivera Ortiz

Work Experience

Puerto Rico Department of Education, San Juan PR

Executive Director - Administrative Training Institute and School Counseling

Puerto Rico Department of Education, Guaynabo School District

Assistant Superintendent of Schools

Santiago Iglesias Pantín School, Guaynabo, Puerto Rico

Elementary School Principal

K-6th Teacher

Educational Activities Coordinator for parents of special needs students

- **Project Head Start**
- **Archdiocese of San Juan**

New Haven, Connecticut

Evaluation Teacher

Catholic diocese, Ponce PR

Educational Supervisor Head Start Program

Education

- ***Credits on Doctorate Degree level in School Administration.***
- ***Master Degree in School Administration and Supervision.***
- ***Bachelor Degree in Science in Special Education.***

Budget Narrative File(s)

* Mandatory Budget Narrative Filename:

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To add more Budget Narrative attachments, please use the attachment buttons below.

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BUDGET NARRATIVE***General***

The information included in this section describes the resources that will be necessary for PRDE to accomplish the proposed work, and the corresponding costs. Said costs are presented on a per deliverable basis, by year, and broken down into the categories specified in the *Request for Applications* document. The total budget for the *Puerto Rico K-12 Statewide Longitudinal Data System Initiative* over 33 months is \$4,737,680. Said amount is broken down in the following table:

	Year 1 (2012)	Year 2 (2013)	Year 3 (2014)	Total
Deliverable 1 - Constitute the PRDE Educational Performance Information Portal				
Personnel	\$ -	\$ -	\$ -	\$ -
Contractual	\$ 558,884	\$ 1,039,036	\$ 713,780	\$ 2,311,700
Other	\$ 309,000	\$ 9,000	\$ 209,000	\$ 527,000
Total	\$ 867,884	\$ 1,048,036	\$ 922,780	\$ 2,838,700
Deliverable 2 - Integrate transactional systems functionality and K-12 SLDS architecture				
Personnel	\$ -	\$ -	\$ -	\$ -
Contractual	\$ 342,948	\$ 422,832	\$ 66,150	\$ 831,930
Other	\$ 104,500	\$ 4,500	\$ 4,500	\$ 113,500
Total	\$ 447,448	\$ 427,332	\$ 70,650	\$ 945,430
Deliverable 3 - Establish a renewed data governance and quality model				
Personnel	\$ -	\$ -	\$ -	\$ -
Contractual	\$ 389,940	\$ 467,400	\$ 82,710	\$ 940,050
Other	\$ 4,500	\$ 4,500	\$ 4,500	\$ 13,500
Total	\$ 394,440	\$ 471,900	\$ 87,210	\$ 953,550
Total	\$ 1,709,772	\$ 1,947,268	\$ 1,080,640	\$ 4,737,680

It is important to note that the budget presented above does not include an amount for PRDE personnel. This is because the agency will provide all of its project personnel as “in-kind” services. These personnel will also be committed to sustain the project after the grant period.

A justification of the proposed budget is presented below. As specified in the *Request for Applications* document, it is discussed individually, for each deliverable. Again, PRDE personnel costs have been excluded, but their level of involvement in the project is included in the discussion. The salaries of these staff are covered by existing state funds and are not included in the amount of federal funds requested.

Project Deliverable #1 Justification (Constitute the PRDE Educational Performance Information Portal)

The total budget for this first deliverable is \$2,838,700. The corresponding breakdown is presented in the following table, followed by the corresponding specific details:

	Year 1 (2012)	Year 2 (2013)	Year 3 (2014)	Total
Deliverable 1 - Constitute the PRDE Educational Performance Information Portal				
Personnel and Fringe Benefits	\$ -	\$ -	\$ -	\$ -
Travel	\$ 4,000	\$ 4,000	\$ 4,000	\$ 12,000
Equipment	\$ 300,000	\$ -	\$ -	\$ 300,000
Supplies	\$ 5,000	\$ 5,000	\$ 5,000	\$ 15,000
Contractual	\$ 558,884	\$ 1,039,036	\$ 713,780	\$ 2,311,700
Construction	\$ -	\$ -	\$ -	\$ -
Other	\$ -	\$ -	\$ -	\$ -
Training Stipends	\$ -	\$ -	\$ 200,000	\$ 200,000
Total Costs	\$ 867,884	\$ 1,048,036	\$ 922,780	\$ 2,838,700

- **Personnel**

A total of three PRDE resources will serve as lead persons in project deliverable, on a part-time basis. One of them is the Portal and Barometer Development Team Lead, and the other two will each be a Change Management Team Lead. Each will dedicate 20% of their time to this project deliverable. The corresponding costs are “in-kind”.

- **Contract work**

A total of four contractors will participate in this project deliverable. The brunt of the technical work will be performed by a contractor specialized in the development of business intelligence systems and information portals like the one being sought by PRDE (the so called Portal and Barometer Development Team Contractor). Using a blended rate of \$113 per hour (this being 10% off of the current market rate, in line with PRDE’s experience), the yearly costs for this and the other contractors are detailed in the table below:

	Year 1 (2012)	Year 2 (2013)	Year 3 (2014)	Total
Deliverable 1 - Constitute the PRDE Educational Performance Information Portal				
Portal and Barometer Design Contractor (PBDC)	\$ 373,352	\$ 657,208	\$ 63,280	\$ 1,093,840
Data Architecture Contractor (DATC)	\$ 63,732	\$ 89,948	\$ 63,280	\$ 216,960
Change Management Contractor (CMTC)	\$ -	\$ 48,280	\$ 454,920	\$ 503,200
Project Management Office Contractor (PMO)	\$ 121,800	\$ 243,600	\$ 132,300	\$ 497,700
Total Costs	\$ 558,884	\$ 1,039,036	\$ 713,780	\$ 2,311,700

A second contractor, the Data Architecture Team Contractor, would render most of its services as part of the second project deliverable, but those that are related to establishing the data infrastructure for the portal are included under this first project deliverable (see the work plan). Using the same blended rate of \$113 per hour, the table above shows the corresponding costs per year.

A third contractor is the Change Management Team Contractor. This contractor will be responsible for the development and institution of a professional development training program for stakeholders that will be using the K-12 SLDS. Assuming a blended rate of \$85 per hour, and based on the staffing levels established in the work program, the table above shows the costs corresponding to this contractor, per year.

The last contractor is the PMO contractor (as stated previously, this function will include a full time project management function, a full time Project Integration Analyst role, and a part-time Quality Assurance function). The first six months of the first year, the PMO cost will be assumed by PRDE (it is already under contract). Using the same cost as a basis, PRDE has budgeted the remainder of the project and assigned half of it to this project deliverable (the other half being evenly split between the other two project deliverables). The results (as they pertain to this project deliverable) are presented in the table above.

- **Other Costs**

This project deliverable includes the following additional costs:

- **Travel costs** – Assuming two trips of two persons per year, at a cost of \$2,000 per person (a total of \$8,000 per year), the total project travel budget is \$24,000. Half of this cost is attributed to this project deliverable, with the other two splitting the other half.
- **Equipment** – PRDE is assuming that it will require \$400,000 in additional hardware capacity and software licensing for this project. The number was estimated, at best, based on previous experience with local vendors (and considering PRDE's size). 75% of this cost has been assigned to this project deliverable (the remaining 25% to the second project deliverable).

- **Supplies** – PRDE has budgeted a total of \$10,000 a year in supply expenses. This project deliverable will carry half of the cost, which totals \$5,000 per year (the other two deliverables will split the difference).
- **Training facilities** – The K-12 SLDS training facility and per diem expenses are estimated at \$200,000 during the third year (PRDE will rollout three training sessions – one related to the use of the *Barometer*, one to the use of the *Portal*, and one related to ad-hoc reporting). This cost is entirely attributable to this first project deliverable.

Project Deliverable #2 Justification (Integrate transactional systems functionality and K-12 SLDS architecture)

The budget for this second project deliverable is \$945,430. The corresponding breakdown is presented in the following table, followed by the corresponding specific details:

	Year 1 (2012)	Year 2 (2013)	Year 3 (2014)	Total
Deliverable 2 - Integrate transactional systems functionality and K-12 SLDS architecture				
Personnel and Fringe Benefits	\$ -	\$ -	\$ -	\$ -
Travel	\$ 2,000	\$ 2,000	\$ 2,000	\$ 6,000
Equipment	\$ 100,000	\$ -	\$ -	\$ 100,000
Supplies	\$ 2,500	\$ 2,500	\$ 2,500	\$ 7,500
Contractual	\$ 342,948	\$ 422,832	\$ 66,150	\$ 831,930
Construction				\$ -
Other				\$ -
Training Stipends	\$ -	\$ -	\$ -	\$ -
Total Costs	\$ 447,448	\$ 427,332	\$ 70,650	\$ 945,430

- **Personnel**

Two PRDE resources will serve as lead persons in this project deliverable, both on a part-time basis. Each will dedicate 20% of their time to this project deliverable. The corresponding costs are deemed “in-kind”.

- **Contract work**

The main contractor for this deliverable is the Data Architecture Team Contractor. As specified in the work program, this contractor will be performing detailed data modeling and architecture work, and performing systems analysis and data ETL services. Using a

blended rate of \$113 per hour (this being 10% less than the current market rate, as dictated by PRDE) and assuming the level of participation established in the work program, the yearly costs were calculated as per the table below.

	Year 1 (2012)	Year 2 (2013)	Year 3 (2014)	Total
Deliverable 2 - Integrate transactional systems functionality and K-12 SLDS architecture				
Data Architecture Contractor (DATC)	\$ 282,048	\$ 301,032	\$ -	\$ 583,080.00
Project Management Office Contractor (PMO)	\$ 60,900	\$ 121,800	\$ 66,150	\$ 248,850
Total Costs	\$ 342,948	\$ 422,832	\$ 66,150	\$ 831,930

One quarter of the cost of the project's PMO contractor (the details of which are explained in the justification corresponding to the first project deliverable) is being attributed to this project deliverable. The result of this exercise is presented in the table above.

- **Other Costs**

This project deliverable includes the following additional costs:

- **Travel costs** – One quarter of the total travel budget is attributed to this deliverable. This amounts to a total of \$6,000.
- **Supplies** – One quarter of the total supplies budget is attributed to this deliverable.

Project Deliverable #3 Justification (Establish a renewed data governance and quality model)

The budget for this third project deliverable is \$953,550. The corresponding breakdown is presented in the following table, followed by the corresponding specific details:

	Year 1 (2012)	Year 2 (2013)	Year 3 (2014)	Total
Deliverable 3 - Establish a renewed data governance and quality model				
Personnel and Fringe Benefits	\$ -	\$ -	\$ -	\$ -
Travel	\$ 2,000	\$ 2,000	\$ 2,000	\$ 6,000
Equipment	\$ -	\$ -	\$ -	\$ -
Supplies	\$ 2,500	\$ 2,500	\$ 2,500	\$ 7,500
Contractual	\$ 389,940	\$ 467,400	\$ 82,710	\$ 940,050
Construction	\$ -	\$ -	\$ -	\$ -
Other	\$ -	\$ -	\$ -	\$ -
Training Stipends	\$ -	\$ -	\$ -	\$ -
Total Costs	\$ 394,440	\$ 471,900	\$ 87,210	\$ 953,550

- Personnel**

One PRDE resource will serve as the lead person for this project deliverable, on a part-time basis. She will dedicate 20% of her time to this project deliverable. The corresponding costs are deemed “in-kind”.

- Contract work**

A primary contractor will participate in this project deliverable. As specified in the work program, this contractor will be performing all the data governance organization and data quality model development services, including training-related activities. Using a blended rate of \$90 per hour and assuming the level of participation established in the work program, the yearly costs were calculated as per the table below.

	Year 1 (2012)	Year 2 (2013)	Year 3 (2014)	Total
Deliverable 3 - Establish a renewed data governance and quality model				
Data Governance Management Contractor (DGMC)	\$ 329,040	\$ 345,600	\$ 16,560	\$ 691,200
Project Management Office Contractor (PMO)	\$ 60,900	\$ 121,800	\$ 66,150	\$ 248,850
Total Costs	\$ 389,940	\$ 467,400	\$ 82,710	\$ 940,050

One quarter of the cost of the project’s PMO contractor (the details of which are explained in the justification corresponding to the first project deliverable) is being attributed to this project deliverable. The result of this exercise is presented in the table above.

- **Other Costs**

This project deliverable includes the following additional costs:

- **Travel costs** – One quarter of the total travel budget is attributed to this deliverable. This amounts to a total of \$6,000.
- **Supplies** – One quarter of the total supplies budget is attributed to this deliverable. This amounts to a total of \$7,500.

BUDGET INFORMATION NON-CONSTRUCTION PROGRAMS (ED 524) – SECTION C

	Year 1 (2012)	Year 2 (2013)	Year 3 (2014)	Total
Deliverable 1 - Constitute the PRDE Educational Performance Information Portal				
Personnel and Fringe Benefits	\$ -	\$ -	\$ -	\$ -
Travel	\$ 4,000	\$ 4,000	\$ 4,000	\$ 12,000
Equipment	\$ 300,000	\$ -	\$ -	\$ 300,000
Supplies	\$ 5,000	\$ 5,000	\$ 5,000	\$ 15,000
Contractual	\$ 558,884	\$ 1,039,036	\$ 713,780	\$ 2,311,700
Construction	\$ -	\$ -	\$ -	\$ -
Other	\$ -	\$ -	\$ -	\$ -
Training Stipends	\$ -	\$ -	\$ 200,000	\$ 200,000
Total	\$ 867,884	\$ 1,048,036	\$ 922,780	\$ 2,838,700

Deliverable 2 - Integrate transactional systems functionality and K-12 SLDS architecture				
Personnel and Fringe Benefits	\$ -	\$ -	\$ -	\$ -
Travel	\$ 2,000	\$ 2,000	\$ 2,000	\$ 6,000
Equipment	\$ 100,000	\$ -	\$ -	\$ 100,000
Supplies	\$ 2,500	\$ 2,500	\$ 2,500	\$ 7,500
Contractual	\$ 342,948	\$ 422,832	\$ 66,150	\$ 831,930
Construction				\$ -
Other				\$ -
Training Stipends	\$ -	\$ -	\$ -	\$ -
Total	\$ 447,448	\$ 427,332	\$ 70,650	\$ 945,430

Deliverable 3 - Establish a renewed data governance and quality model				
Personnel and Fringe Benefits	\$ -	\$ -	\$ -	\$ -
Travel	\$ 2,000	\$ 2,000	\$ 2,000	\$ 6,000
Equipment	\$ -	\$ -	\$ -	\$ -
Supplies	\$ 2,500	\$ 2,500	\$ 2,500	\$ 7,500
Contractual	\$ 389,940	\$ 467,400	\$ 82,710	\$ 940,050
Construction	\$ -	\$ -	\$ -	\$ -
Other	\$ -	\$ -	\$ -	\$ -
Training Stipends	\$ -	\$ -	\$ -	\$ -
Total	\$ 394,440	\$ 471,900	\$ 87,210	\$ 953,550

**U.S. DEPARTMENT OF EDUCATION
BUDGET INFORMATION
NON-CONSTRUCTION PROGRAMS**

OMB Number: 1894-0008
Expiration Date: 02/28/2011

Name of Institution/Organization

Department of Education of Puerto Rico

Applicants requesting funding for only one year should complete the column under "Project Year 1." Applicants requesting funding for multi-year grants should complete all applicable columns. Please read all instructions before completing form.

**SECTION A - BUDGET SUMMARY
U.S. DEPARTMENT OF EDUCATION FUNDS**

Budget Categories	Project Year 1 (a)	Project Year 2 (b)	Project Year 3 (c)	Project Year 4 (d)	Project Year 5 (e)	Total (f)
1. Personnel	0.00	0.00	0.00			0.00
2. Fringe Benefits	0.00	0.00	0.00			0.00
3. Travel	8,000.00	8,000.00	8,000.00			24,000.00
4. Equipment	400,000.00	0.00	0.00			400,000.00
5. Supplies	10,000.00	10,000.00	10,000.00			30,000.00
6. Contractual	1,291,772.00	1,929,268.00	862,640.00			4,083,680.00
7. Construction	0.00	0.00	0.00			0.00
8. Other	0.00	0.00	0.00			0.00
9. Total Direct Costs (lines 1-8)	1,709,772.00	1,947,268.00	880,640.00			4,537,680.00
10. Indirect Costs*	0.00	0.00	0.00			0.00
11. Training Stipends	0.00	0.00	200,000.00			200,000.00
12. Total Costs (lines 9-11)	1,709,772.00	1,947,268.00	1,080,640.00			4,737,680.00

***Indirect Cost Information (To Be Completed by Your Business Office):**

If you are requesting reimbursement for indirect costs on line 10, please answer the following questions:

(1) Do you have an Indirect Cost Rate Agreement approved by the Federal government? Yes No

(2) If yes, please provide the following information:

Period Covered by the Indirect Cost Rate Agreement: From: To: (mm/dd/yyyy)

Approving Federal agency: ED Other (please specify):

The Indirect Cost Rate is %.

(3) For Restricted Rate Programs (check one) -- Are you using a restricted indirect cost rate that:

Is included in your approved Indirect Cost Rate Agreement? or, Complies with 34 CFR 76.564(c)(2)? The Restricted Indirect Cost Rate is %.

Name of Institution/Organization Department of Education of Puerto Rico	Applicants requesting funding for only one year should complete the column under "Project Year 1." Applicants requesting funding for multi-year grants should complete all applicable columns. Please read all instructions before completing form.	
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**SECTION B - BUDGET SUMMARY
NON-FEDERAL FUNDS**

Budget Categories	Project Year 1 (a)	Project Year 2 (b)	Project Year 3 (c)	Project Year 4 (d)	Project Year 5 (e)	Total (f)
1. Personnel	0.00	0.00	0.00			0.00
2. Fringe Benefits	0.00	0.00	0.00			0.00
3. Travel	0.00	0.00	0.00			0.00
4. Equipment	0.00	0.00	0.00			0.00
5. Supplies	0.00	0.00	0.00			0.00
6. Contractual	0.00	0.00	0.00			0.00
7. Construction	0.00	0.00	0.00			0.00
8. Other	0.00	0.00	0.00			0.00
9. Total Direct Costs (lines 1-8)	0.00	0.00	0.00			0.00
10. Indirect Costs	0.00	0.00	0.00			0.00
11. Training Stipends	0.00	0.00	0.00			0.00
12. Total Costs (lines 9-11)	0.00	0.00	0.00			0.00

SECTION C - BUDGET NARRATIVE (see instructions)