

The Optimal Reference Guide:

# The Dash between PK and 20 A roadmap for PK-20 longitudinal data systems

Extraordinary insight<sup>™</sup> into today's education information topics

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With a foreword by Glynn D. Ligon, Ph.D.



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#### Foreword

By Glynn D. Ligon, Ph.D., President and CEO ESP Solutions Group

#### EC/PK/K-16/20

Stepping back from our personal vantage points allows us to periodically contemplate the broader landscape. Diving back to ground level where the newly found vision has to be implemented is much tougher. Dr. Clements does both with this paper on PK-20 longitudinal information systems. She envisions the full history of a person's education as a continuous source of information. Then she provides the specific steps to implement an ambitious effort to manage information across a person's journey through the education systems across at least two decades.

Predictably, whenever one of us uses a term such as PK-20, someone in the crowd voices a preference for EC or PK as the appropriate staring point, or 16 or "lifelong" as the other bookend. Maybe we should write this out as <PK-20> to acknowledge that people begin their education before kindergarten and continue it after graduate school. The point should be that the beginning and ending of the time span are open.

The greatest challenge, quite frankly, is not the end points but the little dash in between—the gap between high school and postsecondary education. Linking whatever data systems exist to record activities before high school graduation with data systems that begin only when a student matriculates at the postsecondary level is key.

I imagine this effort being similar to building a bridge from the U.S. to England. When the road is opened, the signs can all be in the same language, but when the first cars cross the middle of the bridge, which side of the road will they drive on, will the measurements be in kilometers or miles, will the food be fried or boiled?

The policy decisions and the governance process are of great interest to me. Kudos to Dr. Clements for organizing our thinking around not only the importance of the PK-20 issues, but a roadmap for solutions.





The Education Trust has just released a new set of recommendations for the reauthorization of No Child Left Behind. Like many other organizations, they have joined in the call for linking PK-12 data systems to data systems in higher education to enable the tracking of student success from high school into college. While many have called for such a data system, no one has provided specific guidance on how it could be accomplished. That is the purpose of this paper.

State education agencies (SEAs) and state higher education agencies (SHEAs) across the nation are being asked to show how they are working together to improve the educational experiences of the students in their states. Two basic questions being asked are 1) whether students are well prepared in high school for success at the postsecondary level, and 2) whether they complete their postsecondary education "on time."

There are many discussions one could have about those two questions. Regarding preparedness for college, one must consider what are the essential courses in high school that relate to college success. Regarding on-time college graduation, is it imperative that students complete within the expected time (three years for an associate's degree and six years for a bachelor's degree)? Or should success at any time be rewarded? Recently a 95-year-old woman graduated from an under graduate program.

There are many other questions, however, that cover the span across elementary/secondary (also known as prekindergarten through grade 12 or PK-12) and postsecondary education that should be reviewed but cannot be done with today's education information systems. For instance, PK-12 school districts want to know if the students who graduated from their high school do well or poorly in college level classes. Community colleges want to know how they are succeeding with students from different backgrounds, and like PK-12 districts, how are their students doing in a four-year college or university. Universities want to know how successful are their graduates who have gone into the classroom to teach or into another part of the workforce.

Beyond the education community, legislatures want to know which institutions and education programs are most efficient and effective. And the public wants to know how well their state's schools and universities are preparing students to succeed in the workplace.

For the most part, a state's PK-12 education system is separate from the state's postsecondary system. In fact, at one point curriculums were not articulated between elementary and middle schools and between middle and high schools. The development of state performance standards has helped to bring the PK-12 system into alignment. But there are still issues being discussed about the non-alignment of the curriculum between high schools and higher education and within higher education, between community colleges and four-year institutions.

As a result, there is little impetus to share data between PK-12 education and higher education. In nearly all states, SEAs have individual PK-12 individual student records that provide the capacity to respond to state and federal reporting needs and to analyses over time of student performance. In many states, SHEAs are also





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**ESP Insight** Transcripts should be submitted electronically to postsecondary institutions.



collecting individual student records from public colleges and universities for analysis and reporting. Some state agencies even collect data from private institutions as well the public institutions for which they are responsible. But little has been done to merge these records to each other to conduct meaningful research for the improvement of schools.

To develop an effective PK-20 longitudinal data system, there must be a way of following students throughout their educational career. Records must go with students when they move from one district to another. Transcripts should be submitted electronically to postsecondary institutions in a way that allows for analysis and reporting on the preparation of students. Feedback should be given to districts about the success of their students at the postsecondary level. And feedback should be given to postsecondary institutions about the success of their graduates who go into education positions.

Despite recent accomplishments with building infrastructure for managing student records at all levels of the education system, there are crucial needs associated with the implementation of a comprehensive PK-20 information system.

- Linking individual student records across years and institutions: Most SEAs now have a statewide student identifier and are collecting individual student records. Now there is a need for institutions of higher education (IHEs) to record those identifiers so that links to student records can be made across years and across levels of the education system in order to facilitate meaningful longitudinal analysis and reporting.
- **Data quality:** Districts, postsecondary institutions, and state-level education agencies have struggled with issues related to the quality of the data reported about students and schools. Student participation in virtual education programs and concurrent enrollment are areas where agreement is needed among all levels of the education system to ensure appropriate linking and reporting. We need to tighten up the standards for the data, train districts and postsecondary institutions in those standards, and improve the use of business rules to ensure the integrity of the data collected and reported.
- **Mobile students:** Most states receive numerous students from other states annually in addition to those that are mobile within the state and within districts. Similarly, postsecondary institutions have students entering and transferring within and across state lines. Documenting transfers who are not dropouts, ensuring that appropriate instructional and support services begin immediately upon enrollment, certifying the accuracy of education records sent from school to school, and maintaining the confidentiality of the contents of the student records are all crucial needs related to these students and their records.
- **Improved reporting:** The amount of time it currently takes for any data to be fed back to feeder schools is too long. And the usefulness of the data is limited. A joint PK-20 longitudinal data system could provide more detailed information aimed not only at reporting on success, but also



offering places where improvements to the education system could be made.

• Leadership and commitment: This is probably the most crucial need. Ownership among stakeholders is important, but leadership is needed to ensure the system is development, maintained, and useful to all.

This paper explores issues associated with linking PK-12 student records to postsecondary records in such a way that the education system in a state gets valuable feedback for improvement. It builds on a previous ESP Optimal Reference Guide titled "Electronic Student Records and Transcripts: The SEA Imperative," which made the case for a statewide solution for PK-12 electronic records.

The content of this paper is divided into four basic sections:

- Current Status of PK-12 and IHE Student Data Systems
- Recommendations for a Unified PK-20 Longitudinal Data System
- Requirements for a PK-20 Longitudinal Data System
  - o Unique Person Identifier
  - o Comprehensive Data about Education
  - o Standardized Electronic Records
  - o Sharing Records of Mobile Students
  - o Commitment to Timely and Useful Reports
- Steps for Implementing a Statewide PK-20 Longitudinal Data System





### **Current Status of PK-12 and IHE Student Data Systems**

Both SEAs and SHEAs are being held accountable for the success of their students. Data about individual students enables these agencies to compute graduation rates, including rates for subgroups of students such as minorities, low income students, and students who received particular programs. But the focus is on accountability, not evaluation.

To be fair, many IHEs have a long history of supporting institutional research to provide information for decision making within the institution. Many school districts produce similar types of research. But a comprehensive state-wide evaluation of the success of students in all PK-20 public schools and universities is rarely done.

Many states are looking at ways to smooth the transition of high school students into higher education. Web sites provide guidance to students about what courses they need to take in order to get accepted at a college or university. These websites often provide a link to scholarship information.

**ESP Insight** It is virtually impossible to evaluate the success of the school program from the point of view of what happens to students after they graduate. PK-12 schools and districts have very little information about what happens to their students once they have graduated from high school. Schools get copies of students' scores on tests such as the SAT or the ACT, and may assume that the students are planning to attend college. Many schools ask students what are their plans after graduation, but the reported plans are not checked for accuracy. Thus, it is virtually impossible to evaluate the success of the school program from the point of view of what happens to students after they graduate.

IHEs receive applications and transcripts from students who are applying for admittance. Most IHEs review this information for making acceptance decisions, but do not record much of this information in their student information systems. As a result, IHEs often do not maintain a record of where a student attended high school (usually just the district) or what courses they took in high school. And the information about individual students sent to a state's higher education system includes almost nothing about the students' background or experiences. Reports on first year enrollment into postsecondary education, number of remedial courses taken by students, and successful completion of the first year are generally reported as totals for districts, not results for each individual student. And they usually are not received for more than a year after when the students graduated from high school. And they usually do not include information about students who entered postsecondary education more than a year after graduating from high school.

IHEs and SHEAs have many potentially interesting questions that are hard to track. Many college students "stop out" due to money or personal issues. Others take non-traditional paths to completion of their degrees, such as taking traditional freshman or sophomore classes late in their college careers or changing majors midstream. It is for these reasons that "on time" graduation as been determined to be three years for an associate's degree and six years for a bachelor's degree. But also consider those students seeking professional degrees who take many years to complete a degree because they are working at the same time as they are attending school. I speak from personal experience here.



State educator licensing activities can provide valuable feedback to IHEs on the success of their graduates. This information could be used to improve the quality of the courses and programs received by teacher candidates. But there is little evidence of this happening, other than licensure test passing rates. Similarly, feedback regarding new teachers' performance in state school districts could be provided to IHEs to aid in identifying areas for improving programs and developing professional development activities. But again, there is little evidence that such analyses are being done.





## **Recommendations for a Unified PK-20 Longitudinal** Data System

Recommendations for the development of a PK-20 education system generally mention the importance of a reporting system that tracks individual students throughout their educational experience within a state. (We aren't yet talking about across state-lines, but that would be even more helpful for states where large numbers of students leave the state to attend postsecondary education.) Without the capability to track individual students, there is no way to identify specific courses, teachers, or programs that may or may not have made a difference in the success of students.

In *The Governance Divide: A Report on a Four-State Study on Improving College Readiness and Success*, the authors stress the need for longitudinal PK-16 student data systems. "States must create high-quality data systems that span the K-16 continuum. K-16 data systems should identify good practices, diagnose problems, provide information about all education levels, provide students with diagnostic information to help them prepare better, assess and improve achievement, and track individual students over time across levels. Without such systems, it is impossible to assess needs effectively, understand where the problems are, gain traction for changes needed, and evaluate reforms." (p. x)<sup>1</sup>

The Data Quality Campaign has listed as one of its "10 Essential Elements" for state data systems the requirement that states be able "to match student records between the PreK-12 and higher education systems." (p. 5) This would enable a state to look at enrollment in higher education rates, remediation rates, and persistence rates as related to high school courses taken, grades and test scores. Yet, according to a recent study conducted by the National Center for Educational Accountability, the home of the Data Quality Campaign, only twelve states actually link their PK-12 student records to postsecondary enrollment, and only eight states have information about student remediation in postsecondary education.<sup>2</sup>

The most recent call for a comprehensive state data system that links individual students at the K-12 level to records in higher education is the Education Trust.<sup>3</sup> The call for better data systems was the first recommendation listed, and the recommendations called for the gathering of data on "college enrollment, placement, persistence, and attainment," and also recommended the "ability to link systems to data from workforce development, unemployment insurance, and military services information systems." (p. 1)

These recommendations barely mention what is possible, but do not begin to describe what would be needed to build a truly useful system. Following are our recommendations on how to build such a PK-20 data system that would serve the needs of the citizens, state legislatures and parents, as well as the education system.

<sup>1</sup> Venezia, A., Callan, P. Finney, J., Kirst, M., and Usdan, M. *The Governance Divide: A Report on a Four-State Study on Improving College Readiness and Success.* (Boulder, Colorado: The National Center for Public Policy and Higher Education. 2005). Downloaded from www.highereducation.org/reports/governance\_divide/index.shtml.

<sup>2</sup> Data Quality Campaign. The 10 Essential Elements in Detail for 2005-2006. Downloaded from http://www.dataqualitycampaign.org/activities/elements.cfm#element9

<sup>3</sup> Education Trust Recommendations for No Child Left Behind Reauthorization. April, 2007. Downloaded from http://www2.edtrust.org/NR/rdonlyres/5A150FED-85FD-4535-8DF6-737A536EB0FB/0/EdTrustNCLBRecommendations41607.pdf



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## **Requirements for PK-20 Longitudinal Data Systems**

While many writers and organizations have stressed the importance of having PK-20 longitudinal data systems, few have talked about the requirements for such a system, except for the requirement that unique student identifier be used.

Following are descriptions of basic requirements we have identified during the course of working with state data systems:

- Unique identifiers for linking individual students' records
- Comprehensive data
- Data quality
- Sharing records of mobile students
- Producing timely and useful reports

#### **Unique Person Identifier**

As SEAs have begun to understand the importance of a longitudinal data system for tracking the progress of the students, they have noted the importance of having a unique student identifier. As a result, most states now assign a randomly-assigned unique ID to all students who enter into public schools. (A few use identifiers drawn from algorithms of key data.)

Institutions of higher education also use unique identifiers, but generally the ID used is the Social Security Number (SSN). The SSN is used for a couple of reasons. First, it is presumed to be assigned to only one person in the entire United States. (A similar identifier is available for students in Canada.) Second, it is tied to the application for financial aid which affects a large number of students.

When I was in college, my SSN was my ID number. At the end of finals, my exam grade and final grade were posted by the professor on a sheet next to my SSN next to the professor's office door. The assumption was that no one would know what grade I received because no one would know my SSN. There was no thought about the SSN being "stolen." But that has changed now that there is the threat of identity theft. The Family Educational Rights and Privacy Act (FERPA) has made the posting of grades with student ID a thing of the past. And SSNs are not recommended for use for anything other than Social Security reasons. It should be noted that several states and probably many school districts have used the SSN as the ID for students, but that is changing.

In order for students' records to be tracked from year to year and between education levels, a single unique student identifier should be used. We recommend that IHEs collect the SSN, but use the state PK-12 identifier for in-state students. A system that has been well-planned to meet all levels of the education system can provide unique identifiers for out-of-state students applying for admission to a state's IHEs. Or the identifier assigned by the sending state could be used. This identifier can be linked to the SSN in a separate file used only when needed.

Once educators are hired by schools and districts, they have a staff record created. The use of the state student identifier is not likely, however it could be gathered as part of the licensing process. A new unique identifier or the SSN will probably be







To download the ESP Optimal Reference Guide "Statewide Student Identifier Systems" go to www.espsg.com/resources. php. used. If the SSN and the state student ID are maintained in a crosswalk table with the new staff ID, then an educator's record could be tracked from the IHE to a school/district for analytic purposes.

For more information about unique student identifiers, see the ESP Optimal Reference Guide called **"Statewide Student Identifier Systems."** 

We believe that FERPA confidentiality issues are not a problem if the individually identifiable student data are maintained within the education system. Access to the individual records, however, must be restricted to only those with a legitimate educational purpose.

#### **Comprehensive Data About Education**

The type of information collected by SEAs for state and federal reporting does not always meet the needs of a PK-20 system. For instance, to answer questions about the quality of a student's high school program, a state would have to collect typical student record/transcript data such as:

- Historical dates of enrollment
- Programs in which the student participated
- Listing of courses taken
- Cumulative summary of credits earned
- Certification of diplomas and degrees awarded
- Additional data as recorded by the school (e.g., awards, activities, etc.)

Identifying the key questions to be answered by the PK-20 longitudinal data system will lead to the identification of the essential data elements for the system. This is where all relevant stakeholders must be included in the discussion because each group has a different focus.

Ideally a cross-section of stakeholder groups will be brought together to identify a set of questions that will provide feedback to the PK-12 school districts, Community Colleges, IHEs, the public, policy makers/legislators, and the media. The questions should have answers that are actionable, that is, provide some guidance as to changes that can be made if the outcomes are not as desired. Following are some examples of questions that could be used to help improve education institutions.

<u>General Questions</u>. There are general questions that are of interest to all audiences. These will require background information on individual students.

- What is the performance of certain types of students, such as low income and minority students, in all levels of schooling and for all desired outcomes?
- What is the number of students served, the number of completions, and the number successfully entering the workforce?
- How did student mobility affect the completion rates at all levels?

<u>Questions for the Improvement of PK-12 Schools and Districts.</u> There are questions that address the quality of the educational program and the schools and teachers providing the program.



**ESP Insight** Identifying the key questions to be answered by the PK-20 longitudinal data system will lead to the identification of the essential data elements for the system.

- What are the courses taken by high school students and how do they relate to success in related college-level courses?
- How well do a student's grades predict success in higher education? Are there schools where students made high grades, but were not successful in college-level courses?
- What schools produced students with the poorest level of performance: on SAT/ACT assessments, on readiness assessments, or in college-level classes?

<u>Questions for the Improvement of Community Colleges</u>. Community Colleges generally accept most applicants. Much of their focus is on transition from high school into postsecondary education and providing services to help students adjust.

- What services did students receive to promote success, and how successful were they?
- What are the characteristics of students who persisted in their education by moving on to four-year colleges versus those who entered the workplace?

<u>Questions for the Improvement of Four-Year Colleges.</u> The number of completions is the generally accepted accountability measure for four-year colleges and universities. However, these institutions have a responsibility to promote persistence to graduation. They also prepare teachers and leaders for the schools/districts.

- What new teachers taught students with the poorest level of performance? Where did they receive their licensure training?
- How did the performance of teacher candidates at an IHE relate to the performance of the students they subsequently taught?
- How many prospective teachers passed the required state assessments for licensure?

Many of these questions about teachers are complicated by other related issues such as student and school characteristics and mentoring and participation in continuing education. But this information should also be included in the longitudinal data system.

#### **Standardized Electronic Records**

As mentioned above, most states are now collecting individual PK-12 student records electronically and many are collecting electronic postsecondary student records. In order to ensure data quality and make these data useful, standard formats for data submission have been developed.

In many states the formats identified for these data are based on national standards developed by the National Center for Education Statistics, the Schools Interoperability Framework Association and the Postsecondary Electronic Standards Council. Unfortunately, the standards of these organizations are not identical.

Many state agencies are very protective of their data, and are reluctant to share the data because the data might be "misunderstood." Thus it is crucial for all levels of the education system to come together to agree on data elements and formats. Issues related to misuse of the data or misconstrued meaning should be documented.

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## **ESP Insight** The receipt of a standardized electronic record enables institutions of higher education and PK-12 schools and districts to

make more immediate data

driven decisions.

**ESP Insight** To download the ESP Optimal Reference Guide

Optimal Reference Guide "Electronic Student Records and Transcripts: The SEA Imperative" go to www.espsg.com/resources. php.

#### **Sharing Records of Mobile Students**

A side effect of this activity might be the development of a standard student transcript format and a procedure for sending the transcripts electronically. Time is crucial in the sending of student records. Institutions of higher education need to have student transcripts at a particular time during the school year in order to make acceptance decisions. PK-12 districts need to be able to place students into courses and identify needed services as quickly and appropriately as possible. All institutions need to be committed to sending student records as quickly and efficiently as possible to ensure student needs are met.

The receipt of a standardized electronic record enables institutions of higher education and PK-12 schools and districts to make more immediate decisions based on better quality data. Electronic records are extracted from student information systems with no re-keying, thus there should be fewer errors in the transcripts. In a statewide transcript system, IHEs will receive identical transcripts from all in-state PK-12 schools/districts and postsecondary institutions, thus making it easy to do interpretations and evaluate candidates. The data can be downloaded into the local student information system with little re-keying or time, and thus with better quality. Data shared in a standard format also makes it easier to move to a national standard for exchanging student data across state lines.

Standardizing course codes for the state also has benefits for both PK-12 and IHEs. Besides being able to download course data for new students to their system, PK-12 schools and districts will provide better information to IHEs in the students' transcripts. Articulation agreements and standard community college course codes also help to ensure that appropriate evaluations are made of applying students from community colleges to four-year institutions. Standards for reporting information about courses taken simultaneously at the secondary and postsecondary level is one area that will benefit from cross-education level discussions.

Although not usually done, data about students included in electronic transcripts can be downloaded by IHEs for students who are accepted and enroll. With an effective PK-20 longitudinal data system, however, maintaining data about all applicants within the state (not just those who were accepted) would give feedback to schools and districts about how their students' acceptance rates compared to other schools and districts within the state.

Clearly, mobile students, whether moving from district to district, from district to postsecondary institution or between postsecondary institutions, will be more likely to receive appropriate evaluation and assignment because the data are compiled and are better quality and more timely.

ESP is committed to facilitating the exchange of electronic student records/transcripts by all schools, districts, and postsecondary institutions as evidenced by our creation of the National Transcript Center. More information on Electronic Student Records/Transcripts can be found in ESP's Optimal Resource Guide called, **"Electronic Student Records and Transcripts: The SEA Imperative."** 



#### **Commitment to Timely and Useful Reports**

Many education agencies find themselves with large amounts of data and little understanding of how to use them. The deployment of a PK-20 longitudinal data system can overwhelm educators if it is complicated to use. Therefore, it is important to have in mind ahead of time the types of reports that can be produced from the data system, and to have a plan for making the data available in a useful format as soon as feasible.

Too often today reports come to schools and districts one-two years after the data were collected. These reports, once received, address the needs of a different set of students and a different point in time. As a result, the information in the reports may be ignored.

Reports should include actionable data, that is, data that lead to changes in behavior. For instance, if a dropout prevention program is having little effect, then additional activities can be undertaken. Thresholds for desired behavior should be established so that deviations will be noticeable as well as positive changes. The offering of dual credit courses by colleges and high schools is one area where actionable data would be useful. Does the availability of these courses lead to greater enrollments by students? If the numbers are increasing, then maybe more dual enrollment courses are needed.

Ideally in an evaluation, data are collected periodically throughout the school year so that feedback can be given to educators who can then make changes in what they are doing, if changes are needed. This means that students currently in school have a chance to be served better than if the report comes later after they have moved on to another teacher or school. This means that there needs to be a commitment for staff to produce and disseminate the reports.

More information on actionable reports can be found in ESP's Optimal Reference Guide called, **"Actions Speak Louder than Data."**  **ESP Insight** Reports should include actionable data.

**ESP Insight** There needs to be a commitment for staff to produce and disseminate the reports.

**ESP Insight** To download the ESP Optimal Reference Guide "Actions Speak Louder than Data"go to www.espsg.com/resources. php.



## Steps for Implementing a Statewide PK-20 Longitudinal Data System

There are numerous steps you will need to take if you decide to design such a system. First and foremost will be building good communications among all key stakeholders. Following are steps state-level education agencies should do to get the process underway.

Step	Action Required
1. Secure policy and administrative support.	<ul> <li>a. Review current policies and laws to determine state enhancements to FERPA and other mandates.</li> <li>b. Present the business case to policy and administrative leaders and secure high level support.</li> <li>c. Identify the appropriate organizational structure for implementation, especially the leadership and governance.</li> </ul>
2. Obtain buy-in and support of potential users.	<ul> <li>a. Identify key stakeholders and convene an advisory group to work on the project. This group should remain active beyond initial implementation.</li> <li>b. Include representatives knowledgeable about content and technical requirements.</li> <li>c. Consider including PK-20 private schools in the system.</li> </ul>
3. Determine the scope of the project.	<ul> <li>a. Will there be an electronic transcript system?</li> <li>b. Will linkages to workforce development, unemployment, and the military be attempted?</li> </ul>
4. Determine the resources needed and the source of state support and funding to be provided.	What resources will be needed and what level of funding will be sought and made available?
5. Determine the content specifications.	Identify and incorporate: a. State reporting metadata dictionary standards b. Course classification system c. State graduation standards d. State assessment standards e. State class rank and/or grade point average standards
6. Determine the level of integration to be established with the state's data collection processes.	<ul> <li>a. Only one system for both levels of education or separate systems with combined data for analysis purposes.</li> <li>b. Same metadata standards as state's funding and accountability reporting system.</li> <li>c. State collection of data to produce full student records and transcripts.</li> </ul>
7. Pursue the appropriate procurement process for the services to be provided.	Each state's procurement process is unique and must be followed to ensure a successful procurement and implementation if outside assistance is needed.
8. Establish expectations for the use of the system.	<ul><li>a. Who will have access?</li><li>b. What regular reports will be produced?</li><li>c. What ad hoc reporting capability will be needed?</li><li>d. What follow-up on the use of the data will be needed?</li></ul>



#### **Summary**

The development of an effective PK-20 longitudinal data system can provide muchneeded feedback on school improvement, services provided to students, and desired outcomes of the educational system. Crucial to the development is establishing knowledgeable and committed leadership. Also crucial is building communication among stakeholders, establishing unique identifiers, standardizing data, and committing to producing data that are useful to everyone. State-level education agencies realize that by supporting schools, districts, and postsecondary institutions in the development of a single longitudinal data system for all students in the state will help to improve the quality and timeliness of the education data collected for state funding formulas, public reports, No Child Left Behind's adequate yearly progress determinations, IPEDS and other submissions to the U.S. Department of Education. In addition, the longitudinal data system may be used to promote continued improvement and provides a means of getting specific data for use in improving the state's education system.

The main message in this paper is: The state education agency and the state higher education agency should take the lead in establishing a PK-20 longitudinal data system that will help to improve the programs and services offered to students in PK-12 schools and postsecondary institutions.

The experts at ESP Solutions Group have been involved in all aspects of education records creation, exchange, and reporting. We are ready to assist your state in the move to a PK-20 longitudinal data system.





#### About ESP Solutions Group

ESP Solutions Group provides its clients with *Extraordinary Insight*<sup>™</sup> into K-12 education data systems and psychometrics. Our team is comprised of industry experts who pioneered the concept of "data driven decision making" and now help optimize the management of our clients' state and local education agencies.

ESP personnel have advised school districts, all 52 state education agencies, and the U.S. Department of Education on the practice of K-12 school data management. We are regarded as leading experts in understanding the data and technology implications of the **No Child Left Behind Act (NCLB), Education Data Exchange Network (EDEN)**, and the **Schools Interoperability Framework (SIF).** 

Dozens of education agencies have hired ESP to design and build their student record collection systems, federal reporting systems, student identifier systems, data dictionaries, evaluation/assessment programs, and data management/analysis systems.

To learn how ESP can give your agency *Extraordinary Insight* into your PK-12 education data, contact Greg Nadeau at (512) 879-5346 or gnadeau@espsg.com.

This document is part of *The Optimal Reference Guide* Series, designed to help education data decision makers analyze, manage, and share data in the 21st Century.

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