

HOME PAGE

Welcome to the EBE toolkit!

The toolkit provides information and tools to school intermediaries, state and district education departments, and charter school management organizations interested in helping high schools – especially Early Colleges – to effectively use data to improve students’ experiences and outcomes. Users will be able to facilitate professional development on school-based EBE (evidence based education) in which participants can critically consider problems or issues using evidence. The toolkit is designed to equip school leaders and facilitators with resources to lead schools through processes for thinking about the various forms of, and uses for, data to inform instructional, curricular, and organizational decisions.

On the toolkit, facilitators will find information about comprehensive approaches for collecting and managing data in decision-making, facilitator modules with templates for data use, references to reading selections, and links to additional resources.

BECOMING AN EBE SCHOOL

According Grover Whitehurst, formerly of the USDOE's Institute for Education Sciences, *Evidence Based Education* (EBE) is "the integration of professional wisdom with the best available empirical evidence in making decisions about how to deliver instruction."¹

An EBE school draws on the experience, wisdom and dedication of its staff, while systematically using evidence (or data). By understanding and using data in meaningful ways, an evidence based school culture can be developed that is the foundation of:



- Your work to improve student experiences and outcomes
- The use of data to tell your school's story in a compelling way

This section of the toolkit includes:

- **Assessing Readiness for EBE**
- **Developing Commitment and Forming a Team**
- **School-based EBE: Making It Work**
- **Telling Your Story, Using Data**

¹ From <http://www2.ed.gov/nclb/methods/whatworks/eb/edlite-slide003.html>
NCREST Data Toolkit Manual
DRAFT OCT 2010

ASSESSING READINESS FOR EBE

Most schools today are involved in some sort of data use process or evidence based practice. Schools may begin this process by assessing their overall readiness for effective use of data. Results of these assessments can help schools to reflect on ways to prepare themselves to more effectively implement Evidence Based Education.

This section of the toolkit includes:

- **A Mini-Lit Review on Data Use**, providing an overview of research on data informed decision-making, including definitions of key terms, challenges to data use in schools, and conditions facilitating data use in schools.
- **A Short Self-Assessment: Conditions for Data Use**, based on what the literature indicates are the most important factors in being ready to use data effectively.
- **A Longer Self-Assessment: The School EBE Self-Assessment**, a more extensive assessment that considers three sets of factors related to data driven decision making at schools: people, processes, and management.

One assessment should be selected and administered to participants. Results should be tallied and shared. School administrators and staff can then be involved in a process to improve conditions for data use in the school.

ASSESSING EBE READINESS MIN-LITERATURE REVIEW

Definitions

- Data-driven: “the consistent use of objective information to enhance human judgment”—can be used to focus action on improving student learningⁱ
- Data-driven decision-making: the process of collecting student data—academic performance, attendance, demographics, etc.—in such a way that administrators, teachers, and parents can accurately assess student learningⁱⁱ
- Data analysis is a “drilling down” process. After identifying an area of concern, “drill down” to get additional information that might give a clearer idea of the problemⁱⁱⁱ

Challenges that Impede Data Use in Schools

- Limited analytical training/expertise amongst staff⁴
- Limited data-use process training (plan, do, study, act) amongst staff⁴
- Perceived inaccuracy of large-scale, standardized assessments in measuring student achievement⁴
- Limited time^{iv}
- Poor data management/limited access to data that can be manipulated^v

Conditions, Factors, and Policies that Facilitate Data Use in Schools

- A teacher (who is knowledgeable/who has received training on data management and analysis) serves as a data-person/mentor at each school^{vi}
- Teachers, organized into school improvement teams/study groups, develop data-driven improvement plan⁷
- All teachers and administrators are involved in process of data analysis^{vii}

ⁱ Lashway, L. (2002). “Data analysis for school improvement.” *National Association of Elementary School Principals*. ERIC Digest

ⁱⁱ Doyle, D. P. (2003). “Data-Driven Decision Making” *Technological Horizons in Education Journal Online*. <http://www.thejournal.com/magazine/vault/articleprintversion.cfm?aid=4419>

ⁱⁱⁱ Maryland State Department of Education. (1997). “Leading the Data Analysis Discussion” School Improvement in Maryland. <http://mdk12.org/data/index.html>

^{iv} Crome, A. (2000) “Using student assessment data: What can we learn from schools?” *Policy Issues* (NCREL)

^v Bernhardt, V. (2002) “Databases can help teachers with standards implementation” Education for the future initiative. <ftp://eff.csuchico.edu/downloads/articlesofnote/dbases.pdf>

^{vi} Nichols, B.W. & Singer, K.P. (2000). “Developing Data Mentors” *Educational Leadership*, 57, (5), 34-7. and Armstrong, J. & Anthes, K. (2001). “Data-Driven Decision Making” *Education Commission of the States Policy Brief*. <http://www.ecs.org/clearinghouse/30/69/3069.doc>

^{vii} Maryland State Department of Education. (1997). “Leading the Data Analysis Discussion” School Improvement in Maryland. <http://mdk12.org/data/index.html>

- Principals lead and support the use of data^{viii}
- Schools allocate more time—or modify existing schedules—so that teachers/teams of teachers may analyze and reflect upon data and plan revisions to their curricula & teaching practices^{ix}
- Schools rearrange the day to allow for more professional development time (specifically for data use)^x
- Multiple indicators/pieces of data are used to make decisions and gauge outcomes^x
- School has philosophy that supports data use, and continual growth on the part of students, teachers, and administrators^{xi}
- Conversations on data are focused on 1) improvement, not blame 2) what the data show, not what the staff think should be done to solve the problems^{xii}
- Conversations guard against early conclusions of why the data look like they do^{xii}
- Schools have a mechanism to analyze and disaggregate data quickly^{xiii}

^{viii} Armstrong, J. & Anthes, K. (2001). "Data-Driven Decision Making" *Education Commission of the States Policy Brief*. <http://www.ecs.org/clearinghouse/30/69/3069.doc>

^{ix} Cromey, A. (2000) "Using student assessment data: What can we learn from schools?" *Policy Issues* (NCREL) and Maryland State Department of Education. (1997). "Leading the Data Analysis Discussion" School Improvement in Maryland. <http://mdk12.org/data/index.html>

^x Armstrong, J. & Anthes, K. (2001). "Data-Driven Decision Making" *Education Commission of the States Policy Brief*. <http://www.ecs.org/clearinghouse/30/69/3069.doc> and Cromey, A. (2000) "Using student assessment data: What can we learn from schools?" *Policy Issues* (NCREL)

^{xi} Cox, J. (2000) "Data-driven organizations . . . what do they look like?" Portical.org

^{xii} Maryland State Department of Education. (1997). "Leading the Data Analysis Discussion" School Improvement in Maryland. <http://mdk12.org/data/index.html>

^{xiii} Nichols, B.W. & Singer, K.P. (2000). "Developing Data Mentors" *Educational Leadership*, 57, (5), 34-7. and Armstrong, J. & Anthes, K. (2001). "Data-Driven Decision Making" *Education Commission of the States Policy Brief*. <http://www.ecs.org/clearinghouse/30/69/3069.doc>

ASSESSING EBE READINESS (Short Assessment)

Conditions that Facilitate Data Use in Early Colleges

The items below have been identified in the literature as important for schools that want to make data use part of their practice. Mark the ones you think are in place in your school.

In My Early College...	Not True	Somewhat True	Very True
We have a teacher who is knowledgeable on data management and analysis; he/she serves as a data-person/mentor at the school.			
We have teachers, organized into school improvement teams/study groups, who develop data-driven improvement plans.			
All teachers and administrators are involved in process of data analysis.			
The principal leads and supports the use of data.			
We have allocated time so that teachers/teams of teachers can analyze and reflect upon data and plan revisions to their curricula and teaching practices.			
We use multiple indicators and pieces of data to make decisions and gauge outcomes.			
We have a philosophy that supports data use and continual growth on the part of students, teachers, and administrators.			
Conversations on data are focused on 1) improvement, not blame, and 2) what the data show, not what the staff think should be done to solve the problems.			
Conversations guard against early conclusions about why the data look like they do.			
We have a mechanism to analyze and disaggregate data quickly.			

Reference:
Spence, K. (2006). *Data driven decision making: A mini lit review*. New York: Teachers College, NCREST.

ASSESSING READINESS FOR DATA USE (Long Assessment)

SCHOOL DATA READINESS SELF-ASSESSMENT

Date: _____ School Name: _____

This survey is intended as a tool for prompting school review, reflection, discussion, and ultimately, action aimed at the improvement of data informed decisions.¹

1. **No Implementation** – There is no evidence that this practice has been implemented at the school.
2. **Under Discussion** – The practice is being discussed or is in the planning stages.
3. **Marginal Implementation** – There are isolated examples of this practice in the school.
4. **Partial Implementation** – This practice is being implemented in some areas of the school in a visible and substantial way.
5. **Full Implementation** – This practice has been fully implemented across the school.

Strategies Associated with Implementation of Data Informed Decision Making Processes	No Implementation	Under Discussion	Marginal Implementation	Partial Implementation	Full Implementation
PEOPLE					
1. The school has developed a strong history of using data to make decisions.	1	2	3	4	5
2. The principal and leadership team emphasize the importance of data and actionable information to the health of the school.	1	2	3	4	5
3. The principal and leadership team frequently use data about student outcomes, especially promotion and learning, to make decisions.	1	2	3	4	5
4. Teachers are receptive to data on the effectiveness of the school's programs and teaching methods.	1	2	3	4	5
5. Teachers meet at least once a semester within and across departments and grade level teams to examine outcomes and to develop strategies for improving student success.	1	2	3	4	5

¹ This instrument is modified from Richard Voorhees' (2007) Institutional Data Readiness Assessment Tool and Learning Point Associates (2006) Effective Use of Electronic Data Systems: A Readiness Guide for School and District Leaders.

6. Teachers are centrally involved in using data to evaluate academic programs and teaching strategies.	1	2	3	4	5
7. Teachers are integrally involved in developing strategies and action plan that result from data analysis	1	2	3	4	5
8. Teachers, staff, and administrators see a clear and visible connection between data, school planning, and resource allocation.	1	2	3	4	5
9. There is a common commitment by all stakeholders to using data to guide school improvement.	1	2	3	4	5
10. There is a specific team of teachers and administrators who take the lead on data initiatives at the school.	1	2	3	4	5
11. Professional development opportunities provide all teachers the opportunity to learn to create useful and actionable information from existing data.	1	2	3	4	5
PROCESSES					
12. Multiple forms of data are regularly collected and analyzed throughout the academic year.	1	2	3	4	5
13. Data is used to answer specific questions or focus areas.	1	2	3	4	5
14. Data are shared widely regardless of whether they are “good news” or “bad news” information.	1	2	3	4	5
15. There is frequent dialog among teachers and administrators about what information is critical for the school to know, including qualitative and quantitative data.	1	2	3	4	5
16. The staff routinely assesses its ability to use data to make decisions.	1	2	3	4	5
17. Decision-making is viewed by most stakeholders as a logical process.	1	2	3	4	5
18. Data at the school are typically viewed as being reliable for decision-making.	1	2	3	4	5
19. Data collected by different groups/accountability offices are combined to present a comprehensive picture of school performance.	1	2	3	4	5

20. Data depicting student promotion, learning, and attainment are routinely disaggregated and reported by student characteristics including gender, race/ethnicity, and income level.	1	2	3	4	5
21. The school routinely conducts surveys and focus groups with students, teachers, and parents to identify weaknesses in programs and services and opportunities for improvement.	1	2	3	4	5
22. Data are collaboratively shared with outside entities (<i>including students, parents, and community stakeholders</i>).	1	2	3	4	5
23. The school regularly collects, analyzes, and reports data on basic student outcomes (graduation rates, progression, persistence, transfer rates, etc.).	1	2	3	4	5
24. Action is taken (e.g. instructional programs are modified or replaced) as a result of data collection and analysis.	1	2	3	4	5
25. The school has a strategic plan that uses data and converts that data into actionable information.	1	2	3	4	5
26. The school has a strategic plan that uses data to clearly and succinctly state its goals for future development.	1	2	3	4	5
27. Baseline data are established and targets periodically set.	1	2	3	4	5
28. Reports inform the user about limitations of the data and/or research processes which might limit generalizations.	1	2	3	4	5
29. Data users see data as unbiased and reputable.	1	2	3	4	5
30. In general, data are used to guide discussion and as appropriate, to close off unproductive dialog	1	2	3	4	5
31. The school provides training to teachers on using data and research to improve programs and services.	1	2	3	4	5
32. Routine PD occurs to assist teachers in making the best use of existing data.	1	2	3	4	5
33. There is a concentrated effort to improve teacher knowledge about what data exist and where they can be obtained.	1	2	3	4	5

DATA MANAGEMENT					
34. Data are available before decisions are made, not after.	1	2	3	4	5
35. Historical data are routinely combined with current data to allow stakeholders to view and analyze trends.	1	2	3	4	5

DEVELOPING COMMITMENT AND FORMING A TEAM

Becoming an EBE school requires more than just getting members of the school community to comply with a school or district mandate. It is best seen as a collaborative commitment to engage in building an EBE school. Staff need to understand, support, and value using data in decision-making. Most importantly, participants have to trust that data will be used to support planning and improvement decisions that best meet student needs. Forming this team means identifying the right people to lead the EBE effort.

❖ Establish trust and respect.

Your plan for EBE should be designed with consideration for the different needs and perspectives of those participating. Teachers and others are more likely to buy-in to an initiative when value for their participation is expressed. As busy professionals, their time, commitment, and effort need to be recognized. They need to know that their work will contribute to school improvement decisions and that their own practice may be enhanced. Provide real-life examples of how EBE projects are working in schools and how the results are used in planning and improvement decisions.

❖ Clear expectations.

Participants should be clear on what their roles will be in the project. How much time is required? What are the work expectations? Can they help decide how results will be used? To reduce perceived risk and surprise, be upfront about the anticipated investment of time and energy. To help ease anxiety, establish how professional development will assist participants throughout the decision-making process.

Specifically describe the help they will receive in formulating goals, implementing activities, and use of any assessments.

Sarason (1995) examined teacher involvement in the school reform efforts and found that classroom teachers were minimally participating in decision-making. Frequently, teachers felt that programs and initiatives were forced upon them. Lack of a voice in decision-making was found to be a large contributor to resistance by teachers to new initiatives.

Findings from Ingram, et al. (2004) suggest teachers are willing to participate in data use in decision making, but they often have significant concerns about the kind of available information and how it is used to judge their own and colleagues' performance.

Participants need to know the various ways data can be used to effect change, and how data for their particular problem, project, or issues will be handled and applied in the decision-making process. Further, highlight how this work can be expected to impact their own practice and professional development. The potential impact can be seen as a reward or incentive for participation.

Turnbull (2002) identified seven variables accounting for variance in teacher buy-in: training, administrator buy-in, developer support, resources, knowledge of budget, influence in school-level implementation, and control over classroom implementation.

Power of a team.

The EBE process can afford opportunities for exchanging knowledge and skills and learning together as a group. Identify potential “data mentors” who can illustrate data use experiences with team members. By highlighting shared responsibility in the process, concern over how to contribute or being overworked can be reduced. Team members can be seen as resources for information and support. It is important to assist participants to realize how much they already know about data and how

professional growth can expand by becoming more fluent in data use. In addition, data use creates clear and transparent accountability in making improvement decisions.

❖ Supportive leadership.

Participants are more likely to “buy-in” to data use when they feel supported by school leadership. Discuss in what ways in which the leadership will provide ongoing data work support and resources (i.e. assistance from coaches or lead teachers, additional professional development, conference attendance opportunities). It is also important to talk about plans that leadership may have for becoming involved in larger school wide reform efforts.

Research finds that buy-in during year one of a school initiative or reform was the most significant predictor of buy-in at year two (Turnbull, 2002)

This section of the toolkit includes:

A Team Composition Tool. Use this tool to think about who should be on your EBE team. You may want to complete this after choosing a Focus Area so that you can include those most concerned with it. Or you can prioritize the inclusion of people who want to work on school improvement more generally.

References:

- Bryk, A. S. & Schneider, B. (2003). Creating caring schools. *Educational Leadership*, 60(6): 40-45.
- Igram, D., Louis, K. S., & Schroeder, R. G. (2004). Accountability policies and teacher decision making: Barriers to the use of data to improve practice. *Teachers College Record* 106(6): 1258-1287.
- McKenzie, J. (1999). Reaching the reluctant teacher. *eSchool News*. Retrieved from: <http://fno.org/sum99/reluctant.html>
- Sarason, S. B. (1995). Some reactions to what we have learned. *Phi Delta Kappan* 77(1): 84-85.
- Turnbull, B. (2002). Teacher participation and buy-in: Implications for school reform initiatives. *Learning Environments Research*, 5: 235-252.

DEVELOPING COMMITMENT AND FORMING A TEAM: TEAM COMPOSITION TOOL

TEAM COMPOSITION		
Skills needed for working on this task		
Suggested Team Composition	Suggested Participants	From the list above, what skill(s) will this participant contribute to the team?
	Name:	
	Role:	
	Name:	
	Role:	
	Name:	
	Role:	
Team Meeting Schedule		

SCHOOL-BASED EBE: MAKING IT WORK DEVELOPING A WORK PLAN



The first step in EBE is developing a work plan. You may want to start small, perhaps just tracking an indicator that is important to you.

This section includes:

How To Choose and Explore an Area of Focus. If you want to tackle an area of more critical concern or a long-term project, start by choosing and exploring a focus area. A focus area is a defined issue, topic, or area needing improvement that your school wants to devote considerable energy to over an extended period of time. If you want to start small, perhaps just tracking an indicator that is important to you or for a short-term project, using a dashboard would be most appropriate.

Choosing an EBE Strategy. Once you've selected a focus area, find an EBE strategy that works for you. We offer three strategies to choose from: Data Drive Decision-Making , Data Dashboard, and Action Research.

Making a Calendar to Organize Your Work. Organizing data collection activities, goals, and assessments into a coherent work plan can help make using data a more manageable practice. A technique that can make a data use project more effective is to apply the work plan to a calendar. In this way, details of the process are organized, transparent, and you can clearly decide when to make any necessary revisions to the plan. Two models are included here. The shorter model is paper-based. The more detailed model is electronic-based, using Excel.

SCHOOL-BASED EBE: MAKING IT WORK

DEFINING THE FOCUS AREA

A focus area is a defined issue, topic, or area needing improvement that your school wants to devote considerable energy to over an extended period of time. Using the EBE approach, you will use evidence to strengthen your school, concentrating your attention on an important topic.

By exploring the focus area first, you will be able to identify a more specific problem or issue within the focus area. This problem or issue will become the focal point for your EBE project.

1. When choosing a FOCUS AREA, consider whether it will:

- Impact one of the following:
 - *Your school*
 - *All students*
 - *A group of students*
- Be worthy of intense focus
- Lead to important change

SAMPLE FOCUS AREAS
Improving students' college readiness
Improving students' skills in math
Differentiating instruction
Building a positive school culture
Helping students succeed in college courses.

2. Your next step is to get together with your team to answer the following questions about your selected focus area. Leave enough time to dig below the surface on each question.

Exploring the FOCUS AREA	
FOCUS AREA: _____	
How would you describe what is currently going on in this focus area?	How many students are involved? Which students?
What is the role of each participating student in this focus area?	What should be the result (outcome) of what is currently done in this focus area?
What resources are used? Needed?	How is progress measured?
What is going well? What's the evidence?	What could be better? What's the evidence?
Who cares most about this focus area in the school? From outside?	What else should be taken into account to understand this focus area?

SCHOOL-BASED EBE: MAKING IT WORK EBE MODELS

There are many ways to approach evidence-based education practice, but we have chosen three models that we believe are especially useful to high schools. They can be used individually, or in combination with one another. Remember that all of these are intended to be used over an extended period of time.

This section includes tools for using the following strategies:

The Data Driven Decision Making Model: *Choose DDDM when you want to make evidence based decisions.* This approach is useful when you want to use available data to make the best possible decision about improvements in your Focus Area. It is designed to guide you through a systematic process in which you identify a problem and the contributors to the problem and then consider strategies to resolve it.

Data Dashboards: *Use Data Dashboards when you want to monitor something that the school is working on.* A dashboard is designed to complement and support a school goal- setting process that may occur once or twice a year. Setting goals can help a school to focus on the areas of school improvement most important for the coming year. The dashboard can be used to establish baselines and then track progress toward the goals.

Action Research: *Action Research is most useful as a way of building knowledge around a focus area. This can then be the basis for taking action to address a particular issue or problem.* Action research involves assessing school or classroom needs, studying the dynamics of classrooms and/or schools, and taking action to lead to better understanding and positive changes. Action research is a systematic and structured approach to developing a course of action to address real, everyday problems or issues within a school system.

SCHOOL-BASED EBE: MAKING IT WORK

EBE MODELS: DATA DRIVEN DECISION-MAKING

Planning For School Improvement

After completing the *Exploring the FOCUS AREA* worksheet, you will work with your group to 1) define a *specific problem* in your FOCUS AREA, 2) pick a goal to guide your work and 3) generate strategies for implementation.

Put your FOCUS AREA Here

THE PROBLEM

What specific problem within your focus area do you want to address?

What factors contribute to this problem? Brainstorm!

For each of these factors, what evidence (data) do you have that confirms or disconfirms that it contributes to the problem?

THE SOLUTION

Put your **GOAL STATEMENT** here (what outcome do you want?)

Pick strategies that will be effective in reaching your goal (when possible, choose strategies that have worked elsewhere).

INDICATORS OF SUCCESS

For the goal (I will know I've met my goal when.....):

For the strategies (I will know that I completed each strategy when....):

SCHOOL-BASED EBE: MAKING IT WORK
EBE MODELS: DATA DRIVEN DECISION-MAKING (REPORT EXAMPLE)



Using Data Driven Decision Making to Improve Math Outcomes in Middle-Early College High Schools

Elisabeth A. Barnett
January 2008

The Project

Middle-Early College high schools¹ associated with the Middle College National Consortium (MCNC) have traditionally worked together to try out, reflect on, document, and disseminate new practices. In the fall of 2005, members of the MCNC leadership began discussing ways to help schools more effectively use data to inform decision-making. Although principals of these schools, like other school leaders, receive data from different sources as well as frequent encouragement to analyze and use it, their multiple demands compete for the time they would need to lead their staffs in extended reflective practice. There was a clear need to help schools to find effective ways to reflect on and utilize

data that fit with the practical realities of their day-to-day world.

To figure out how to help schools effectively and practically engage in data-driven decision making, MCNC enlisted the help of the National Center for Restructuring Education, Schools, and Teaching (NCREST) at Teachers College, Columbia University. Together, they established a working group to focus on this issue during the 2005-06 and 2006-07 academic years. Its membership consisted of principals, teachers, and college liaisons from four invited schools (located in California, New York, and Michigan).

The project had a dual purpose. First, in keeping with its original mandate, it was set up to develop practices and/or models for data-driven decision making that would lead to improved student experiences and outcomes. However, during initial discussions related to the development of this project, it emerged that all four of the participating schools were concerned about student performance in math. In addition, the MCNC leadership was becoming increasingly aware that student outcomes in math were frequently lagging behind

¹ Middle-Early College high schools are small schools located on college campuses. Students take a blend of high school and college courses and may graduate with a high school diploma and associates degree or 60 transferable college credits. A group of these schools have been developed with funding from the Bill and Melinda Gates Foundation and with guidance and support from the Middle College National Consortium (see <http://www.mcnc.us>).

those in other subject areas. Thus, a second purpose was added—to explore ways to improve instruction, supportive practices, and student outcomes related to math.

The four participating schools agreed to undertake the following:

- 1) To engage in the process of data-driven decision making around a specific issue related to math instruction, preferably one that could be informed by student performance information already on hand.
- 2) To interact with MCNC leaders and NCREST researchers to identify effective practices or models that could be used widely in making data-driven decisions and/or improving math instruction.
- 3) To share their experiences with other schools in the MCNC and nationally.

The Process

YEAR 1

In the spirit of co-constructing knowledge, MCNC and NCREST invited a team of educators from each school to participate in a full day workshop in May 2006. To direct the discussion toward using data in problem solving, NCREST created a process that enabled schools to: 1) immerse themselves in their school's existing situation related to student performance in math, 2) frame a problem, 3) examine contributors to the problem, 4) decide on a goal that they hoped to achieve related to the problem, and 5) identify strategies that would lead to goal attainment. Each step of this process involved using data

to make choices and assess the results of these choices. Some of the data were provided by NCREST while others were derived from other sources. Where data points were missing, there was discussion about how to find them. Each school left the workshop with an initial plan in hand to take back for further discussion in the school.

Follow up discussions with the leadership of each school during June and July of 2006 indicated that the process was moving forward vigorously. Each principal had worked with others in the school to further refine the plan and taken steps to implement it. Each school made key changes to the math program in the fall of 2006 [see **Participating Schools** box].

YEAR 2

In the second year of the initiative, each school—with support from their college partners—moved forward with the plan to improve math instruction. A point person from the math faculty at each school took the lead; they also agreed to document their progress on the MCNC's "polilogue," an online, collaborative work environment. NCREST staff members posed questions to the documenters and synthesized the information they provided. In addition, the NCREST staff spent a day at each participating site to document their process in using data to make decisions as well as to learn about their math improvement initiatives. Information on these projects was summarized and shared with MCNC leaders and member schools.

During the course of the project, MCNC and NCREST decided not to develop a single model for data-driven decision

making. Rather, we have developed a series of tools and structures that could be used or adapted as needed.

Lessons Learned

Some of the lessons that emerged from this project may be useful for other schools interested in using data more effectively as part of their decision-making processes. They include:

- 1) *The literature on data-driven decision making contains recommendations for ways to establish conditions that favor data driven-decision making. These can be used by schools to reflect on the presence of these conditions in their own environments [see Conditions for Data Use box].*

Evidence: Schools participating in MCNC initiatives have benefited from referring to principles that come out of the literature on data-driven decision making (summarized by NCREST into a short review of the literature) when discussing ways to improve leadership and decision making processes.

- 2) *It is very helpful to have both faculty and administrators from all participating institutions at the table when key curricular decisions are made.*

Evidence: Participants noted that discussions were enriched by including those who provide leadership along with those most directly involved in math instruction. Both high school and college representatives offered curricular and administrative resources to support

improvement of math instruction during discussions.

- 3) *When you look at data at a deliberate pace, the problems that are identified as central may not be those that were originally expected.*

Evidence: Two of the participating schools had strategies in mind that they wished to implement. After a full review of the data, new strategies were selected.

- 4) *It is a useful habit to continuously ask, "What is the evidence for this?" in response to statements made about contributors to a problem or beliefs that a solution will work.*

Evidence: Those involved in the project became better at differentiating between *knowledge* based on evidence and *beliefs* based on assumptions and values (Patton, 2001). This led them to consider a wider range of possible contributors to their schools' problems and possible strategies to address them.

- 5) *Data does not have to be complete or perfect to inform decision making.*

Evidence: Despite limited data (almost always the case in the real world), discussions were viewed by participants as richer and deeper than is ordinarily the case. Participants felt satisfied that their decisions were based on evidence.

- 6) *One outcome of the process of data driven decision making is that there is greater awareness of and willingness to gather important additional data.*

Evidence: During the discussions, when data were not available to inform an important decision, plans were made to obtain it. People expressed willingness to take on research projects within their school as their ownership of the problem increased.

- 7) *Difficult discussions become less personal when they are based on data. The focus is on how to change outcomes rather than people or processes (although they may need to change as well).*

Evidence: A principal commented that it is easier to talk about how assessments show that boys are having difficulty with fractions, rather than about how math teachers are not teaching fractions properly.

- 8) *Political support can be garnered for decisions that are backed by data.*

Evidence: A principal talked about how she would use the results of this session to obtain additional resources from the school district. She believed that she would be taken more seriously if the request was based on data.

- 9) *Structured discussions using data can make complex problem-solving more manageable.*

Evidence: A school principal repeatedly commented that she

had felt overwhelmed by the issues surrounding math performance at her school and was now able to address them more thoughtfully.

- 10) *It can be helpful to have the support of an outside entity (e.g., NCREST) that specializes in working with data.*

Evidence: At a national conference of early colleges, Dr. Cecile Cunningham, Director of the MCNC stated, "The [Math and Data Use Project] was predicated both on partnership and avoiding the data flood. Principals are often flooded with data that they can't use or don't trust and need an external process to help them make sense of it."

Further Thoughts

While this project initially sought to develop a model that could be widely used to make data-driven decision making an integral part of a school, it was decided that it would be more beneficial to create adaptable tools and structures. Further, we learned that it was possible to create a change in school culture. This involved helping schools to "believe in" the use of data, because: 1) they gained confidence that their decisions were of higher quality as a result of using data, 2) they increased their capacity to use and comfort level with analyzing data, and 3) they became excited about being able to measure and track changes in student performance.

A school culture that uses data in making important decisions does not spring forth overnight. It results from

hands-on experiences in which participants gain skills and confidence in their capacity, and in which they have opportunities to use helpful tools. It is also enhanced by leadership

commitments within schools that emphasize data-driven decision making and the development of solutions to problems in cooperation with those who will be affected by them.

The Middle College National Consortium (MCNC) is a national network of high schools situated on community college campuses that provide under-performing youth with access to college. ECC supports schools in implementing six design principles that are intended to promote student success in high school and their matriculation into higher education. Building on this history, the ECC, with support from the Gates, Ford, and Carnegie Foundations, has recently begun creating Early Colleges that redefine the boundaries between high school and the community college in order to create “blended institutions.” Students in these small schools are given the opportunity to graduate in 4-5 years with a high school diploma and an associates degree. A total of 30 such schools will be open by 2010.

The National Center for Restructuring Education, Schools, and Teaching (NCREST) is a research and development organization at Teachers College, Columbia University. Founded in 1990 by Linda Darling-Hammond and Ann Lieberman, NCREST is currently co-directed by Jacqueline Ancess and Thomas Hatch. Since its inception NCREST has conducted research in critical areas of school reform such as assessment, accountability, standards, restructuring elementary, middle, and high schools, small schools, new-school creation, big school conversions, school leadership, professional development, teacher education, professional development schools, learner-centered classrooms and schools, multi-cultural education, equity, under-served and under-performing students, technology, state and local policy, and systemic reform.

Participating Schools—Math Initiatives

Contra Costa Middle College High School

Problem identified: Contra Costa students performed lower in college-level math classes than in other subject areas despite good attendance.

Planned activities:

- Students were placed in college level math classes based on readiness indicators related to a combination of factors without reliance on a single determinant.
- A student support “seminar” was offered to assist them with college math course work.
- An after-school intervention class was created for students earning a D or F in math.

International High School

Problem identified: Students did not successfully participate in enough math or science college courses for credit.

Planned activities:

- High school and college math departments collaborated to develop a co-taught math class (Math 115) that serves as a bridge to college pre-calculus.
- Student performance data was collected before, during, and after participation in the course.

Mott Middle College High School

Problem identified: Students entered Mott with gaps in their basic math knowledge, which hindered college math readiness and success.

Planned activities:

- A diagnostic math test was created and administered to all incoming students.
- Teachers developed and taught three curricular modules to address gaps in math knowledge.
- The school developed and taught support “seminars” to compliment the math modules.

Buffalo Early College High School:

Problem identified: There was an achievement gap between the performance results on the New York State Math A exam and the entrance requirements for MT 125 at college. Students were frequently not successful in college level math.

Planned activities:

- Students were kept in high school for 11th grade math; only students who placed into college classes took math at the college.
- The school hired another high school math teacher.
- Negotiations were undertaken with the college about using calculators for placement testing and using a different placement test.

SCHOOL-BASED EBE: MAKING IT WORK

EBE MODELS: DATA DASHBOARD

A dashboard is designed to complement and support a school goal-setting process that may occur once or twice a year. Setting goals can help a school to focus on the areas of school improvement most important for the coming year. The dashboard can be used to establish baselines and then track progress toward the goals.



This section of the toolkit includes:

In this section you find information about developing **BUILDING BLOCKS** for a dashboard that would be used to help schools to track their progress toward meeting their goals. These may be used as-is, adapted, or they can serve as models for other **BUILDING BLOCKS**.

The **BUILDING BLOCKS** can be displayed in various ways. We include three here:

1. **SUPER SIMPLE DASHBOARD:** A simple graphic display of an important indicator.
2. **EASY DASHBOARD:** A one-page Word document.
3. **EXCEL DASHBOARD:** An Excel spreadsheet with built-in bar charts.

SCHOOL-BASED EBE: MAKING IT WORK
EBE MODELS: DATA DASHBOARD

SETTING UP AN EARLY COLLEGE DASHBOARD

1. Early College leaders often work with school staff to establish annual goals for school improvement. While these may vary by school, the following are common:
 - Improving student performance in high school
 - Improving readiness for college
 - Math
 - English
 - Writing
 - College knowledge
 - Other aspects
 - Insuring student success in
 - Initial college courses
 - Ongoing college courses
 - Improving student attendance in high school or college
 - Recruiting target groups of students.
 - Retaining target groups of students
 - Improving performance on state tests
 - Identifying strategies that work best with different groups of students.
2. Pick 2-4 goals to work on and track for the coming year. There are important advantages to including those who will implement activities to attain the goals in the decision making process.
3. Adopt or adapt the BUILDING BLOCKS that correspond to each goal. Make sure that they focus on priority concerns of the school.
4. Decide:
 - When the data in each building block will be collected
[RECOMMENDED: data collection at least 2 times per year].
 - Who will collect it
[RECOMMENDED: one person should be responsible for each BUILDING BLOCK]
 - When it will be shared and analyzed by school staff
[RECOMMENDED: make data sharing an agenda item during retreats or staff meetings]

SAMPLE BUILDING BLOCKS

BUILDING BLOCK: College readiness in math	Baseline	Check-in #1	Check-in #2	Check-in #3
% of students who complete geometry and algebra 1 by the end of 10 th grade				
% of students who complete geometry, and algebra 1 and 2 by the end of 11 th grade				
% of students who show proficiency on the 10 th grade state math test				
% of students who score “college ready” on the math college placement test by the end of 11 th grade				
% of students who get a passing grade in their first college-level math course				

BUILDING BLOCK: Recruiting target groups of students	Baseline	Check-in #1	Check-in #2	Check-in #3
% of students who come from the lowest performing middle school in the area				
% of racial/ethnic minority students admitted/attending				
% of boys admitted/attending				
% of first generation students admitted/attending				
% of students with low (not proficient) 8 th grade test scores admitted/attending				

BUILDING BLOCK: Student performance in high school	Baseline	Check-in #1	Check-in #2	Check-in #3
% of 9 th grade students who are on track for on-time graduation at each grade level *				
% of 10 th grade students who are on track for on-time graduation at each grade level *				
% of 11 th grade students who are on track for on-time graduation at each grade level *				
% of 12 th grade students who are on track for on-time graduation at each grade level *				
% of students have a GPA of 80 or above				
% of students with a GPA of 79 or below who are attending twice weekly tutoring sessions				
% of students who complete a high quality senior project				

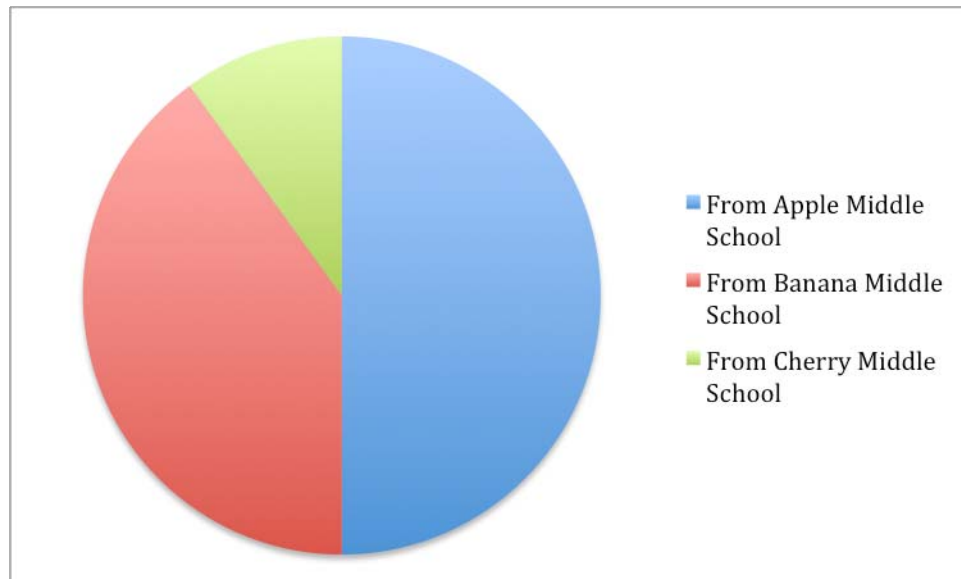
* expected number of high school credits are earned

SCHOOL-BASED EBE: MAKING IT WORK

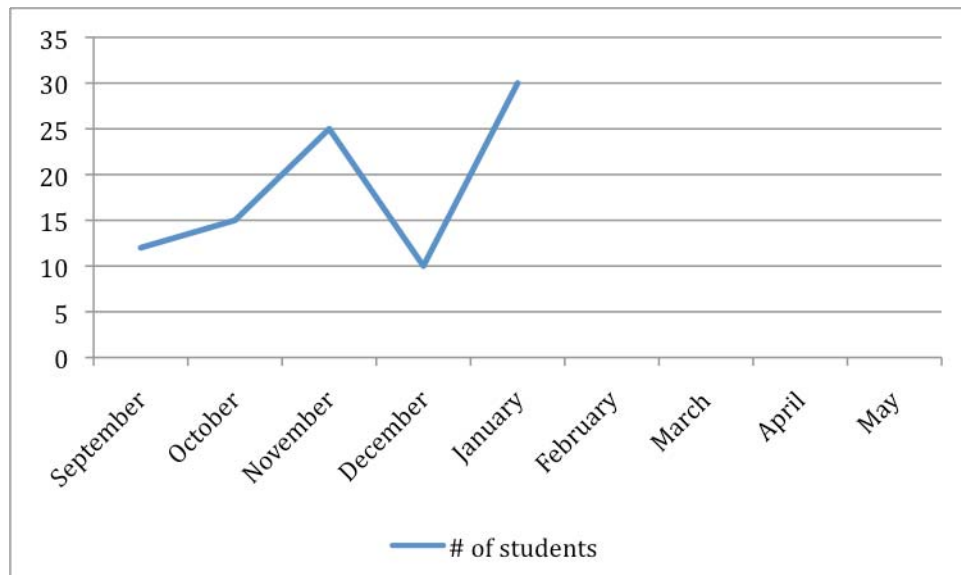
EBE MODELS: DATA DASHBOARD (SUPER SIMPLE DATA DASHBOARD EXAMPLE)

Use any simple graph or chart that you like to display important data that you want to display or follow over time. Here are two examples. They are created with the Excel graphs function, but may also be developed as a paper-based they could also be done with a set of markers on paper.

STUDENTS ADMITTED, CLASS OF 2014 (%)



STUDENTS WITH LOW GPAS ATTENDING TUTORING (#)



SCHOOL-BASED EBE: MAKING IT WORK
EBE MODELS: DATA DASHBOARD (EASY DASHBOARD EXAMPLE)

Outstanding Early College High School  EASY DATA DASHBOARD 2010-11				
BUILDING BLOCK: College readiness in math	Baseline	Check-in #1	Check-in #2	Check-in #3
% of students who complete geometry and algebra 1 by the end of 10 th grade				
% of students who complete geometry, and algebra 1 and 2 by the end of 11 th grade				
% of students who show proficiency on the 10 th grade state math test				
% of students who score “college ready” on the math college placement test by the end of 11 th grade				
% of students who get a passing grade in their first college-level math course				
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% of boys admitted/attending				
% of first generation students admitted/attending				
% of students with low (not proficient) 8 th grade test scores admitted attending				
BUILDING BLOCK: Student performance in high school	Baseline	Check-in #1	Check-in #2	Check-in #3
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% of 10 th grade students who are on track for on-time graduation at each grade level *				
% of 11 th grade students who are on track for on-time graduation at each grade level *				
% of 12 th grade students who are on track for on-time graduation at each grade level *				
% of students have a GPA of 80 or above				
% of students with a GPA of 79 or below who are attending twice weekly tutoring sessions				
% of students who complete a high quality senior project				

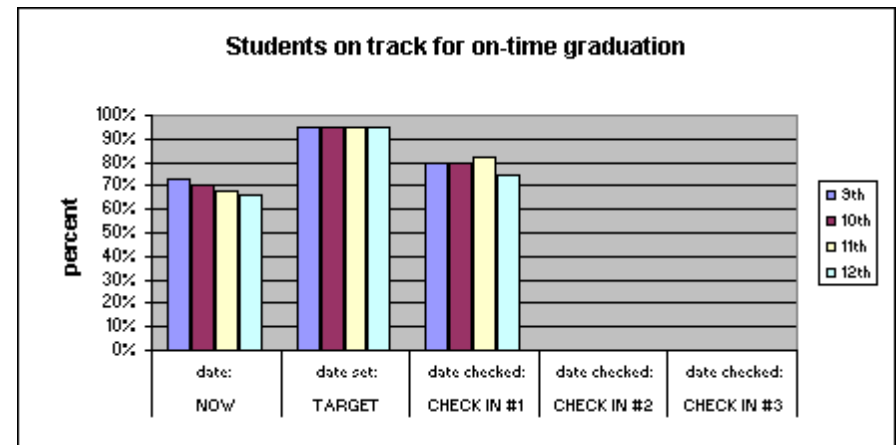
SCHOOL-BASED EBE: MAKING IT WORK
EBE MODELS: DATA DASHBOARD (EXCEL TEMPLATE)

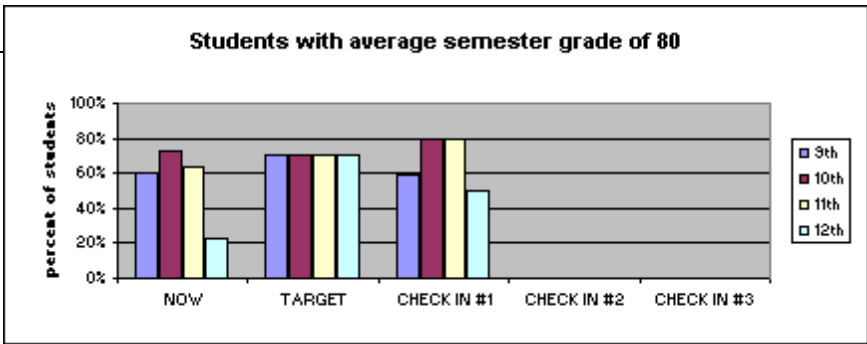
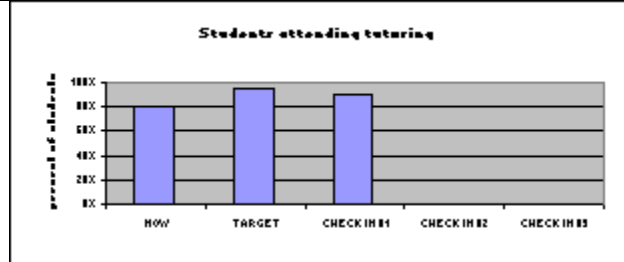
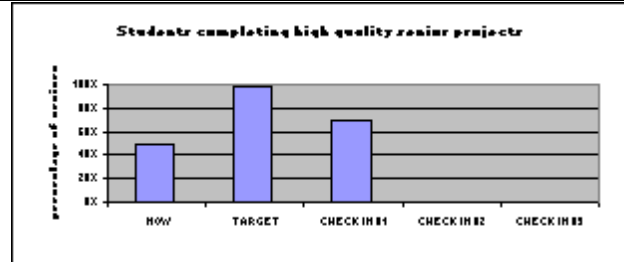
To view the complete file, see Excel Dashboard attachment

Student performance in high school

% of students who are on track for on-time graduation at each grade level (expected number of high school credits earned)

	BASELINE	TARGET	CHECK IN #1	CHECK IN #2	CHECK IN #3
	date:	date set:	date checked:	date checked:	date checked:
9 th	0.73	0.95	0.8		
10 th	0.7	0.95	0.8		
11 th	0.68	0.95	0.82		
12 th	0.66	0.95	0.75		



% of students with an average semester grade of over 80	9 th	0.6	0.7	0.5																																	
	10 th	0.73	0.7	0.8																																	
	11 th	0.64	0.7	0.8																																	
	12 th	0.23	0.7	0.5																																	
 Students with average semester grade of 80 <table><tr><th>Grade</th><th>NOW</th><th>TARGET</th><th>CHECK IN #1</th><th>CHECK IN #2</th><th>CHECK IN #3</th></tr><tr><td>9th</td><td>60%</td><td>70%</td><td>60%</td><td>0%</td><td>0%</td></tr><tr><td>10th</td><td>75%</td><td>70%</td><td>80%</td><td>0%</td><td>0%</td></tr><tr><td>11th</td><td>65%</td><td>70%</td><td>80%</td><td>0%</td><td>0%</td></tr><tr><td>12th</td><td>20%</td><td>70%</td><td>50%</td><td>0%</td><td>0%</td></tr></table>								Grade	NOW	TARGET	CHECK IN #1	CHECK IN #2	CHECK IN #3	9 th	60%	70%	60%	0%	0%	10 th	75%	70%	80%	0%	0%	11 th	65%	70%	80%	0%	0%	12 th	20%	70%	50%	0%	0%
Grade	NOW	TARGET	CHECK IN #1	CHECK IN #2	CHECK IN #3																																
9 th	60%	70%	60%	0%	0%																																
10 th	75%	70%	80%	0%	0%																																
11 th	65%	70%	80%	0%	0%																																
12 th	20%	70%	50%	0%	0%																																
% of students with a GPA of 79 or below who are attending twice weekly tutoring sessions		0.8	0.95	0.9																																	
 Students attending tutoring <table><tr><th>Time Point</th><th>Percent of students</th></tr><tr><td>NOW</td><td>80%</td></tr><tr><td>TARGET</td><td>95%</td></tr><tr><td>CHECK IN #1</td><td>90%</td></tr><tr><td>CHECK IN #2</td><td>0%</td></tr><tr><td>CHECK IN #3</td><td>0%</td></tr></table>								Time Point	Percent of students	NOW	80%	TARGET	95%	CHECK IN #1	90%	CHECK IN #2	0%	CHECK IN #3	0%																		
Time Point	Percent of students																																				
NOW	80%																																				
TARGET	95%																																				
CHECK IN #1	90%																																				
CHECK IN #2	0%																																				
CHECK IN #3	0%																																				
% of students who complete a high quality senior project		0.5	0.99	0.7																																	
 Students completing high quality senior projects <table><tr><th>Time Point</th><th>percentage of students</th></tr><tr><td>NOW</td><td>50%</td></tr><tr><td>TARGET</td><td>99%</td></tr><tr><td>CHECK IN #1</td><td>70%</td></tr><tr><td>CHECK IN #2</td><td>0%</td></tr><tr><td>CHECK IN #3</td><td>0%</td></tr></table>								Time Point	percentage of students	NOW	50%	TARGET	99%	CHECK IN #1	70%	CHECK IN #2	0%	CHECK IN #3	0%																		
Time Point	percentage of students																																				
NOW	50%																																				
TARGET	99%																																				
CHECK IN #1	70%																																				
CHECK IN #2	0%																																				
CHECK IN #3	0%																																				
Other indicator _____																																					

SCHOOL-BASED EBE: MAKING IT WORK

EBE MODELS: ACTION RESEARCH

Action research involves assessing school or classroom needs, studying the dynamics of classrooms and/or schools, and taking action to lead to better understanding and positive changes. Action research is a collaborative process through which teachers, administrators, or other school personnel take a systematic and structured approach to developing a course of action to address real, everyday problems or issues within a school system.

Experienced educators point out that good teachers never stop being students. They seek to continuously improve their understanding of factors that influence the quality of their teaching. Action research can be an important tool in this endeavor.



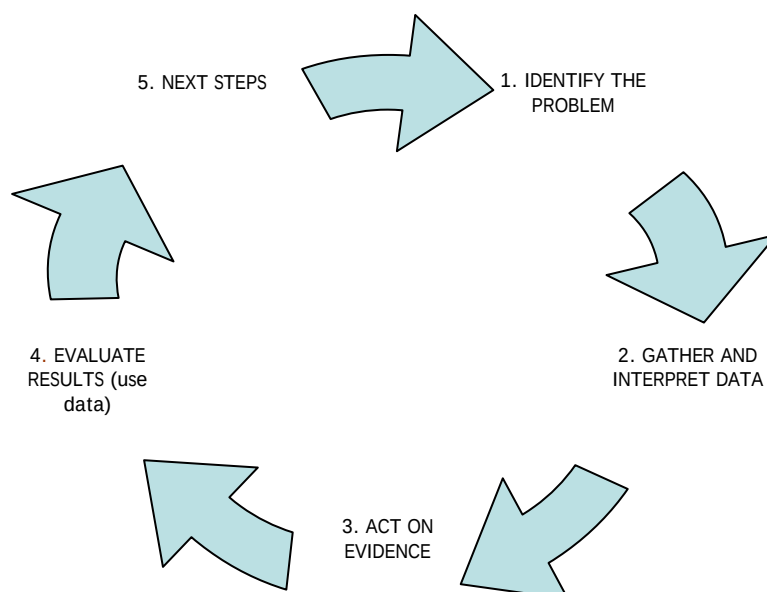
Experienced educators point out that good teachers never stop being students. They seek to continuously improve their understanding of factors that influence the quality of their teaching. Action research can be an important tool in this endeavor.

Action research is defined as, “a process where participants- who might be teachers, principals, support staff- examine their own practice, systematically and carefully, using the techniques of research.” (from Cathy Caro-Bruce, in the Action Research Facilitator’s Handbook)

Action research can offer multiple benefits to schools such as:

- Helping teachers, or whole schools, focus in on an area of concern or collective interest.
- Serving as a form of professional development.
- In the case of collaborative projects, reducing teacher isolation.
- Developing evidence-based strategies for action.

STEPS IN ACTION RESEARCH



1. IDENTIFY THE PROBLEM

- First, choose a [Focus Area](#)
- Use the [Exploring the Focus Area](#) tool to guide a discussion with others about what is going on in the Focus Area.
- Choose a specific problem that you want to work on using Action Research.

Qualities of a researchable problem include:

- It is important.
- You don't already know the best way to address it.
- It's big enough to be worth spending time on; but small enough to explore within the time available.
- It's connected to the everyday concerns of the Action Researchers.

2. GATHER AND INTERPRET DATA

- Identify available data that could cast light on your problem (see [Data Audit Tool](#)). Pull out any pieces of data that help you to understand the problem.
- Find books or articles that have been written on this topic. Read the most interesting.
- Think about what else you need to know to choose a course of action. Make a plan to gather data that will help you to fully understand the problem.
- Write a summary and/or create some tables and graphs that will help you make sense of the information you've gathered.
- Consider splitting out some of your data points by sub-group (e.g. gender, race/ethnicity, grade level, etc.)

Things to think about when gathering data:

- Select the most useful data you can think of to shed light on your problem. It could be quantitative or qualitative.
- See the [data collection](#) section of this tool kit for more information on how to use good research methods.
- Consider using multiple data sources (sometimes called triangulation). You can have more confidence in your results if your findings are consistent across data sources.
- Create graphs or tables if it will help you to see trends or themes.

3. ACT ON EVIDENCE

- Based on what you've learned by gathering and interpreting data, come up an idea for something that you could do differently in your school or classroom (your Action).
- Get feedback from others on your idea and refine it.
- Figure out indicators of success (data points that would show that the problem has been solved or lessened).
- Implement your change.

What to consider in selecting your Action:

- Make sure that you choose an Action suggested by your data.
- Be fairly modest. If you change too many things at once, it will be hard to know worked!
- Identify whose help you will need to make sure that your Action works and get their commitment of support.
- Figure out a workable timeline; consider trying your Action on a small scale first.

4. EVALUATE RESULTS

- Keep data on the indicators of success that you selected in planning your Action. Figure out the best way to track changes in the indicators. You may want to keep a [Data Dashboard](#).
- If you're seeing evidence of improvement, keep going! Share your success with others!!
- If you're not seeing evidence of improvement, reflect on the reasons why? Does your Action need to be tweaked? Is it time to try something different?

5. NEXT STEPS

Think about what happens next. For example:

- Did you see the change that you wanted? Why or why not?
- Is there another, related topic that you want to explore using Action Research?
- Would others benefit from knowing about your project? What could they learn?

SCHOOL-BASED EBE: MAKING IT WORK

EBE MODELS: ACTION RESEARCH (VIGNETTES)

4TH GRADE ELEMENTARY SCHOOL CLASSROOM¹ **NORTH FLORIDA**

Debbi Hubbell, a Center for School Improvement Teacher Inquirer, taught 4th grade in a rural elementary school located in North Florida. Intrigued when her principal offered the opportunity to engage in teacher inquiry as a part of staff development at her building, Debbi decided to look closely at one of her teaching passions - reading. Debbi knew that one of the best predictors of performance on Florida's yearly standardized test, the (Florida Comprehensive Assessment Test [FCAT]) was reading fluency, and that research has shown a direct correlation between fluency and comprehension. She wanted to help her students become more successful in reading and perform better on the FCAT.

Worried about 7 students she felt were at risk and less fluent than others in her class, for her research, she decided to introduce the rereading of fractured fairy tale plays to these 7 learners to see if this activity might increase reading fluency. As common for at risk learners, at the start of her research, these 7 students were engaged mostly in more traditional skill building activity.

To gain insights into her wondering, "What is the relationship between my fourth graders' fluency development and the reading of fractured fairy tale plays?," Debbi collected 3 forms of data. First, Debbi administered Dynamic Indicators of Basic Early Literacy Skills (DIBELS) at different time periods throughout her research. DIBELS are a set of standardized, individually administered measures of literacy development. They are designed to be short fluency measures used to regularly monitor the development of pre-reading and early reading skills. Debbi also took anecdotal notes each time she utilized fractured fairy tale plays with these fourth grade students, documenting their reactions, engagement, and Debbi's assessment of their fluency development with each rereading of a play. Finally, Debbi relied on student work or artifacts as a third data source, asking her students to write "Dear Mrs. Hubbell" letters, telling her about their perceptions and experiences with the fractured fairy tale unit of study.

Debbi analyzed her data by charting student DIBELS scores over time, organizing and reading through her anecdotal notes, and student produced artifacts. Based on her data, Debbi was able to make 3 statements about what she learned as a result of her research. First, all students DIBELS scores improved over time. Second, the reading of fractured fairy tale plays generated enthusiasm for school and learning. This student improved at least by a grade or more in UUeach subject. Third, positive social interactions occurred between students who previously had difficulty communicating in a positive way.

As her action research progressed and Debbi's data indicated the academic, social, and emotional value of fractured fairy tales, Debbi began implementing fractured fairy tale plays with her entire class, in addition to the seven learners who were the focus of her inquiry. Debbi shared what she learned as a result of her inquiry into the relationship between the reading of fractured fairy tale plays and the fluency development of struggling 4th grade readers at the Center's annual Teaching, Inquiry and Innovation Showcase, receiving solid feedback on her inquiry from other teachers (Hubbell, 2005). Next, Debbie shared her inquiry at a faculty meeting in her school. Her inquiry served as the impetus for her school to develop school-wide fluency objectives and engage in dialogue to assess existing reading practices in her school and district (Dana & Yendol-Hoppey, in press).

¹ Vignettes provided courtesy of
Bracewell, M. (2008). The "Forgotten Factor" in the Inclusion Equation: What Effect Does the Inclusion Environment Have on the Reading Achievement of Eighth Grade Language Arts Students?
In D.C. Delane & S.B. Hayes (Eds.) *Improving Florida Schools Through Teacher Inquiry: Selections from the 2007 Teaching, Inquiry, and Innovation Showcase*. Gainesville, FL.: Center for School Improvement and North East Florida Educational Consortium, pp. 239 – 240.

LAKE BUTLER MIDDLE SCHOOL

Lake Butler, Florida

Mark Bracewell, principal of Lake Butler Middle School in Lake Butler, Florida, learned a great deal from his action research exploring the ways a newly implemented inclusion model in his middle school affected regular education students. As a principal, Bracewell confronted tensions between (1) his knowledge of research that touted the implementation of an inclusion model as an important setting for special education students, (2) two teachers on his staff who were interested in trying the model and (3) parents and other teachers who were suspicious about how this model would affect regular education students in the inclusive classroom.

Bracewell used action research to gain insights into how this model was playing out at his school and what he, as principal, could do to foster it as an effective practice. He learned that the regular education students placed in the inclusive classroom performed as well or better than their counterparts on various measures of student achievement.

In addition, by surveying students in the class, Bracewell learned that contrary to popular belief, the regular education students in the inclusive classroom didn't feel inferior because they were in a class with two teachers. Rather, students reported they felt fortunate to have two individuals from whom they could learn.

Finally, by interviewing and observing the regular education and special education teachers who teamed to co-teach this class, Bracewell discovered that teachers teaming in an inclusion model need more time to plan what they are going to do.

Through action research, Bracewell gained valuable insights into the ways co-teaching between a special education and regular education teacher might play out in the classroom. He used the knowledge he gained through this inquiry to inform and educate other teachers on his faculty who were interested in co-teaching, and adjusted the schedule to allow more time for co-teachers to plan together. In the absence of Bracewell's action research, faculty enthusiasm for inclusion might not have received the administrative nurturing necessary for this innovation to expand and grow.

Click on any of the sites below for more examples of how schools are implementing Action Research projects:

<http://www.aasa.org/content.aspx?id=12826>

<http://education.ufl.edu/webapps/csi/search/index.php?pid=905&dc>

<http://www.coe.ufl.edu/web/?pid=907>

SCHOOL-BASED EBE: MAKING IT WORK

ORGANIZING YOUR WORK: CREATING A CALENDAR

Organizing data collection activities, goals, and analysis into a coherent work plan can help make using data a more manageable practice. A technique that can make an EBE project more effective is to apply the work plan to a calendar. In this way, details of the process are organized, transparent, and you can clearly decide when to make any necessary revisions to the plan. Once the details of the data use process have been established and a timeline can be developed, you're ready to create a visual work plan calendar.

You can use a toolkit template that best meets how you plan to map out when activities and assessments will take place, identify points in the process or project when particular outcomes should be met, and if not met, when needed revisions need to be made. All templates can be modified to fit your plan specifics.

- ❖ Prior to mapping out your work plan on a calendar, you should choose an appropriate approach for the task, project, or issue identified at your school and articulate the following:
 - Goals
 - Data collection activities
 - Data analysis methods
 - Expected outcomes and indicators for progress

- ❖ These work plan details will help guide calendar-planning decisions:
 - *Goals*: Are there multiple goals involved in the process? If so, they can take place at different points. For example, if various data collection activities are involved, goals for what types of data to collect may occur at different times in the process.
 - *Data collection activities*: You can include as many data collection activities as needed to result in the desired results. For example, if you are looking at collecting student work, you can identify times of year when particular artifacts are available (i.e. daily homework versus exit project work).
 - *Data analysis methods*: Depending on the information you expect to elicit, analyzing data can be a simple or complex task. It is important to consider the types of methods, resources, and time it will take to look at data to make decisions.
 - *Expected outcomes and indicators for progress*: Aligning outcomes and indicators with the goals and activities can help determine points in the process when revisions may need to be made to the plan. If it is decided that revisions are necessary, subsequent information laid out on the calendar can be modified to clearly indicate potential changes in activities and assessments, personnel roles, and time adjustments (i.e. process can be shortened/lengthened, need more time allotted for data collection, etc).

SCHOOL-BASED EBE: MAKING IT WORK
ORGANIZING YOUR WORK: CREATING A CALENDAR (Short Template)

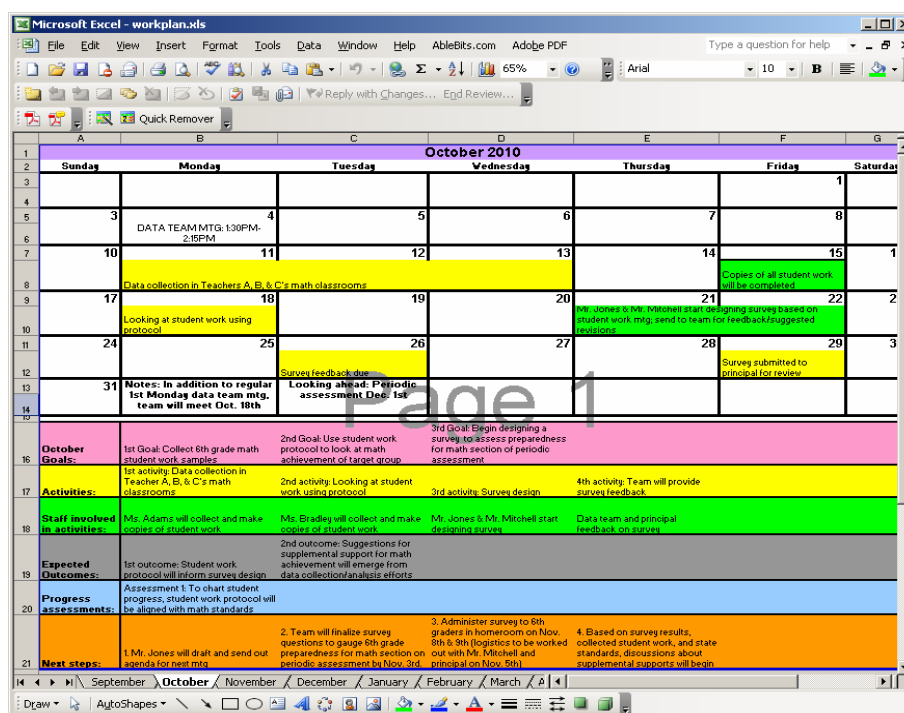
Project Title: _____				
Month	Goals	Activities & Assessments	Expected Outcomes	Notes on Progress
September				
October				
November				
December				
January				
February				

March				
April				
May				
June				

SCHOOL-BASED EBE: MAKING IT WORK

ORGANIZING YOUR WORK: CREATING A CALENDAR (EXCEL TEMPLATE)

The figure below is an example of a work plan. As each project will differ in scope, timelines can vary anywhere from a few days to a multi-year initiative. Whatever the needs of your project, developing a work plan to map out your project will help your team take a more organized approach to data use in decision-making. A visual map for the data use project can also make revisiting details and applying appropriate modifications to the plan a clear and efficient process. You can modify the template (used to create the figure below) to create a work plan using Microsoft Excel to fit specific needs relevant to your project.



1. Create a new workbook.
2. On the Tools menu, point to Macro, and then click Visual Basic Editor.
3. On the Insert menu, click Module.
4. Copy and paste ALL code in the Visual Basic for Applications grey box (separate page) into the module sheet.
5. On the File menu, click "Close and Return to Microsoft Excel."
6. Click the Sheet1 tab.
7. On the Tools menu, point to Macro, and then click Macros.
8. Click CalendarMaker, and then click Run to create the calendar.
9. You will need to click Protection in the Tools Menu to "Unprotect sheet" so you can customize your calendar.
10. In case Macros are disabled on your computer, click on Security in Macros menu, under the Tools menu and adjust the level of security. You may be prompted to Enable Macros to continue working in the spreadsheet.

Visual Basic for Applications: Copy and paste **ALL** code in the grey box into your Excel module sheet.

```

Sub CalendarMaker()

' Unprotect sheet if had previous calendar to prevent error.
ActiveSheet.Protect DrawingObjects:=False, Contents:=False, _
    Scenarios:=False
' Prevent screen flashing while drawing calendar.
Application.ScreenUpdating = False
' Set up error trapping.
On Error GoTo MyErrorTrap
' Clear area a1:g14 including any previous calendar.
Range("a1:g14").Clear
' Use InputBox to get desired month and year and set variable
' MyInput.
MyInput = InputBox("Type in Month and year for Calendar ")
' Allow user to end macro with Cancel in InputBox.
If MyInput = "" Then Exit Sub
' Get the date value of the beginning of inputted month.
StartDay = DateValue(MyInput)
' Check if valid date but not the first of the month
' -- if so, reset StartDay to first day of month.
If Day(StartDay) <> 1 Then
    StartDay = DateValue(Month(StartDay) & "/1/" & _
        Year(StartDay))
End If
' Prepare cell for Month and Year as fully spelled out.
Range("a1").NumberFormat = "mmmm yyyy"
' Center the Month and Year label across a1:g1 with appropriate
' size, height and bolding.
With Range("a1:g1")
    .HorizontalAlignment = xlCenterAcrossSelection
    .VerticalAlignment = xlCenter
    .Font.Size = 18
    .Font.Bold = True
    .RowHeight = 35
End With
' Prepare a2:g2 for day of week labels with centering, size,
' height and bolding.
With Range("a2:g2")
    .ColumnWidth = 11
    .VerticalAlignment = xlCenter
    .HorizontalAlignment = xlCenter
    .VerticalAlignment = xlCenter
    .Orientation = xlHorizontal
    .Font.Size = 12
    .Font.Bold = True
    .RowHeight = 20
End With
' Put days of week in a2:g2.
Range("a2") = "Sunday"
Range("b2") = "Monday"
Range("c2") = "Tuesday"
Range("d2") = "Wednesday"
Range("e2") = "Thursday"
Range("f2") = "Friday"
Range("g2") = "Saturday"
' Prepare a3:g7 for dates with left/top alignment, size, height
' and bolding.
With Range("a3:g8")
    .HorizontalAlignment = xlRight
    .VerticalAlignment = xlTop
    .Font.Size = 18
    .Font.Bold = True
    .RowHeight = 21
End With
' Put inputted month and year fully spelling out into "a1"
Range("a1").Value = Application.Text(MyInput, "mmmm yyyy")
' Set variable and get which day of the week the month starts.

```

BECOMING AN EBE SCHOOL
 SCHOOL-BASED EBE: MAKING IT WORK
 EBE MODELS: *ACTION RESEARCH*

```

DayOfWeek = WeekDay(StartDate)
' Set variables to identify the year and month as separate
' variables.
CurYear = Year(StartDate)
CurMonth = Month(StartDate)
' Set variable and calculate the first day of the next month.
FinalDay = DateSerial(CurYear, CurMonth + 1, 1)
' Place a "1" in cell position of the first day of the chosen
' month based on DayOfWeek.
Select Case DayOfWeek
  Case 1
    Range("a3").Value = 1
  Case 2
    Range("b3").Value = 1
  Case 3
    Range("c3").Value = 1
  Case 4
    Range("d3").Value = 1
  Case 5
    Range("e3").Value = 1
  Case 6
    Range("f3").Value = 1
  Case 7
    Range("g3").Value = 1
End Select
' Loop through range a3:g8 incrementing each cell after the "1"
' cell.
For Each cell In Range("a3:g8")
  RowCell = cell.Row
  ColCell = cell.Column
  ' Do if "1" is in first column.
  If cell.Column = 1 And cell.Row = 3 Then
    ' Do if current cell is not in 1st column.
    ElseIf cell.Column <> 1 Then
      If cell.Offset(0, -1).Value >= 1 Then
        cell.Value = cell.Offset(0, -1).Value + 1
        ' Stop when the last day of the month has been
        ' entered.
        If cell.Value > (FinalDay - StartDay) Then
          cell.Value = ""
          ' Exit loop when calendar has correct number of
          ' days shown.
          Exit For
        End If
      End If
      ' Do only if current cell is not in Row 3 and is in Column 1.
      ElseIf cell.Row > 3 And cell.Column = 1 Then
        cell.Value = cell.Offset(-1, 6).Value + 1
        ' Stop when the last day of the month has been entered.
        If cell.Value > (FinalDay - StartDay) Then
          cell.Value = ""
          ' Exit loop when calendar has correct number of days
          ' shown.
          Exit For
        End If
      End If
    End If
  Next

  ' Create Entry cells, format them centered, wrap text, and border
  ' around days.
  For x = 0 To 5
    Range("A4").Offset(x * 2, 0).EntireRow.Insert
    With Range("A4:G4").Offset(x * 2, 0)
      .RowHeight = 65
      .HorizontalAlignment = xlCenter
      .VerticalAlignment = xlTop
      .WrapText = True
      .Font.Size = 10
      .Font.Bold = False
      ' Unlock these cells to be able to enter text later after
      ' sheet is protected.
      .Locked = False
    End With
  Next

```

BECOMING AN EBE SCHOOL
SCHOOL-BASED EBE: MAKING IT WORK
ORGANIZING YOUR WORK: CREATING A CALENDAR

```
End With
' Put border around the block of dates.

With Range("A3").Offset(x * 2, 0).Resize(2, _
7).Borders(xlLeft)
.Weight = xlThick
.ColorIndex = xlAutomatic
End With

With Range("A3").Offset(x * 2, 0).Resize(2, _
7).Borders(xlRight)
.Weight = xlThick
.ColorIndex = xlAutomatic
End With
Range("A3").Offset(x * 2, 0).Resize(2, 7).BorderAround _
Weight:=xlThick, ColorIndex:=xlAutomatic
Next
If Range("A13").Value = "" Then Range("A13").Offset(0, 0) _
.Resize(2, 8).EntireRow.Delete
' Turn off gridlines.
ActiveWindow.DisplayGridlines = False
' Protect sheet to prevent overwriting the dates.
ActiveSheet.Protect DrawingObjects:=True, Contents:=True, _
Scenarios:=True

' Resize window to show all of calendar (may have to be adjusted
' for video configuration).
ActiveWindow.WindowState = xlMaximized
ActiveWindow.ScrollRow = 1

' Allow screen to redraw with calendar showing.
Application.ScreenUpdating = True
' Prevent going to error trap unless error found by exiting Sub
' here.
Exit Sub
' Error causes msgbox to indicate the problem, provides new input box,
' and resumes at the line that caused the error.
MyErrorTrap:
MsgBox "You may not have entered your Month and Year correctly." _
& Chr(13) & "Spell the Month correctly" _
& " (or use 3 letter abbreviation)" _
& Chr(13) & "and 4 digits for the Year"
MyInput = InputBox("Type in Month and year for Calendar")
If MyInput = "" Then Exit Sub
Resume
End Sub
```

Reference:
Microsoft Support (2010). How to create a monthly calendar in Excel.
<http://support.microsoft.com/kb/150774>.

SCHOOL-BASED EBE: MAKING IT WORK

ORGANIZING YOUR WORK: CREATING A CALENDAR (Excel Template Example)

To view the complete file, see Excel Calendar attachment

October 2010						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					1	2
3	4 DATA TEAM MTG: 1:30PM-2:15PM	5	6	7	8	9
10	11 Data collection in Teachers A, B, & C's math classrooms	12	13	14	15 Copies of all student work will be completed	16
17	18 Looking at student work using protocol	19	20	21 Mr. Jones & Mr. Mitchell start designing survey based on student work mtg; send to team for feedback/suggested revisions	22	23
24	25	26 Survey feedback due	27	28	29 Survey submitted to principal for review	30
31	Notes: In addition to regular 1st Monday data team mtg, team will meet Oct. 18th	Looking ahead: Periodic assessment Dec. 1st				

BECOMING AN EBE SCHOOL
 SCHOOL-BASED EBE: MAKING IT WORK
 EBE MODELS: *ACTION RESEARCH*

October Goals:	1st Goal: Collect samples of target students' work 6th grade math classrooms	2nd Goal: Use student work protocol to look at math achievement of target group	3rd Goal: Begin designing a survey based on student work to assess preparedness for math section of periodic assessment	
Activities:	1st activity: Data collection in Teachers A, B, & C's math classrooms	2nd activity: Looking at student work using protocol	3rd activity: Survey design	4th activity: Team will provide survey feedback
Staff involved in activities:	Ms. Adams will collect and make copies of student work	Ms. Bradley will collect and make copies of student work	Mr. Jones & Mr. Mitchell start designing survey based on student work mtg	Principal review of survey
Expected Outcomes:	1st outcome: Student work protocol will inform survey design	2nd outcome: Suggestions for supplemental support for math achievement will emerge from data		
Progress assessments:	Assessment 1: To chart student progress, student work protocol will be aligned with math standards			
Next steps:	1. Mr. Jones will draft and send out agenda for next mtg	2. Team will finalize survey questions to gauge 6th grade preparedness for math section on periodic assessment by Nov. 3rd.	3. Administer survey to 6th graders in homeroom on Nov. 8th & 9th (logistics to be worked out with Mr. Mitchell and principal on Nov. 5th)	4. Based on survey results and collected student work discussions about supplemental supports will begin

TELLING YOUR STORY, USING DATA

Every school needs to be able to tell others about its accomplishments. This is important in order to:

- Attract support
- Attract students
- Attract funders
- Attract partners and collaborators

In other words, you need to tell your story so that people will believe in, and support, your school and students. And stories are more believable and compelling when they include data.

NOTE: This is the time to brag about your accomplishments, not to share information that doesn't reflect well on your school.

This section of the toolkit includes:

Choose from four tools that every school should develop and regularly update. In each case, a template is provided that the school can adapt to align with its own needs and audiences.

The Elevator Speech: An elevator speech is a very short presentation that can be used with anyone who expresses interest in your school. It should be prepared and memorized (or paraphrased). Our template gives you a starting point.

The School Fact Sheet: There will be many situations when you need to have an attractive, short description of what your school is about. Our template allows you to talk about your school's model and provide evidence of your effectiveness.

A PowerPoint Presentation: This comes in handy when you need to share your work with groups of people. A good presentation includes facts as well as insights into the people involved with your school.

A Proposal Segment: You want to be ready when an opportunity arises to ask for money, for an award, or for someone's support. The template included here can be used to craft a statement about your school's accomplishments that will inspire others to become involved.

TELLING YOUR STORY: THE ELEVATOR SPEECH

[IDENTIFY YOURSELF, YOUR POSITION, AND YOUR SCHOOL]

My name is ____ and I am the ____ with ____ High School. Our mission at ____ HS is to provide rich and meaningful college prep experience for students in the ____ district.

[IDENTIFY YOUR STUDENT POPULATION]

____% of our students are eligible for free and reduced lunch and ____% are first-generation college students. [YOU MAY ALSO INCLUDE SOME OTHER STATEMENT THAT IS ESPECIALLY RELEVANT IN UNDERSTANDING THE NEEDS OF YOUR STUDENT POPULATION.]

[IDENTIFY IMPORTANT COLLEGE COURSE-TAKING STUDENT OUTCOMES.]

By the 11th grade ____% of our students have taken college courses, and by graduation ____% have earned at least ____ college credits – and more than ____% of our graduating students enroll directly in postsecondary education.

[IDENTIFY STATE AND/OR DISTRICT COMPARISON STUDENT OUTCOMES.]

____% of our students scored ____ on the ____ State Test compared to ____% of students in the district/state. [OR A SIMILAR STATEMENT QUOTING OTHER ACHIEVEMENT DATA] And ____% of our students graduate having completed ____ college credits.

We're excited about our work, and we think there is strong evidence to show that we are doing well in preparing our students for college. Hey, this is my floor!

TELLING YOUR STORY: THE SCHOOL FACT SHEET

[School Name] High School

___ District

___ County, State

1. Mission Statement

At ___ high school students have the opportunity to enroll in a four to five year program that allows them to earn both a high school diploma as well as credits toward a college degree. This provides our students with a distinct advantage when they continue in college or enter the job market. In addition, our students do not have to pay tuition, even for their college courses. Through the cooperation of the school systems in [name partnering LEAs], in partnership with ___ College, we are able to offer our students rich and meaningful post-secondary educational opportunities.

2. Who are ___ HS students?

- [School name] HS serves [#] students in grades ___ through ___ from the [district] and [district(s)]. [#]% of [School name] HS students will be first-generation college goers.
- [#]% of [School name] HS students are eligible for free and reduced lunch.
- [#]% of [School name] HS students are under-represented (in terms of racial-minority group participation) in higher education.

3. Core High School Course-taking

[School name] HS students take a rigorous high school curriculum that is designed to prepare them for college course-taking.

- List performance in benchmark high school courses [according to GPA, final letter mark, or final number mark] compared to the performance of students at schools with similar student profiles.
- List HS student performance at proficient or advanced levels on state tests compared to the performance of students at schools with similar student profiles.

You may choose to disaggregate by sub-group depending on the strength of the data.

4. College Course-taking

- List numbers of ___ HS students enrolled in college courses.
- List average number of college credits earned by grade.
- List average number of college credits earned at graduation.

5. Many majors have gateway courses which students must successfully complete in order to be eligible for further college coursework in a subject area. Our students perform as well or better than students traditionally admitted to the [College name] in [name benchmark gateway course].

- List performance of HS students [in terms of GPA, final letter mark, final number mark] of students taking benchmark and gateway college courses compared to regularly admitted college students.

6. ADD OTHER DATA THAT HELPS TO MAKE YOUR CASE

For more information, contact:

_____, Principal

Address

Email and phone

TELLING YOUR STORY: A POWERPOINT PRESENTATION

*To view the complete file, see **Telling Your Story PowerPoint attachment***

SLIDE 1

EXAMPLE ECHS

Who we are and how we are doing?

SLIDE 2

Our Mission

[School name] (ECHS) is a collaboration between [district] and [post-secondary partner].

Funded by [district] and [Gates Foundation and/or other major funding entities], [School name] ECHS is a bold and innovative approach to college preparation.

Early college high schools blend high school and college in a rigorous yet supportive program, compressing the time it takes to complete a high school diploma and the first two years of college.

SLIDE 3

School Profile

- [School name] ECHS was established in [year].
- [School name] ECHS serves [#] students in grades _____ through _____ from the [district] and [district(s)].
- [#]% of [School name] ECHS students will be first-generation college goers.
- [#]% of [School name] ECHS students are eligible for free and reduced lunch.
- [#]% of [School name] ECHS students are under-represented (in terms of racial-minority group participation) in higher education.

SLIDE 4

Core ECHS Components
Academic acceleration

[School Name] MCHS	[Comparison School]
• List performance in benchmark EC high school courses according to GPA, final letter mark, or final number mark.	• List performance in benchmark high school courses according to GPA, final letter mark, or final number mark at schools in district or with similar student profiles.

SLIDE 5

High School Success
[Disaggregated by group]

[Key Subject area]	[Comparison]
• List [ELL, racial-minority group, low-income, or other special population] ECHS student performance in key courses	• Show how students from the district or other schools so in these courses

SLIDE 6

SLIDE 7

College Course-taking

- List numbers of ECHS students enrolled in college courses by grade.
- List average number of college credits earned by grade.
- List average number of college credits earned at graduation.

College Course-taking [Benchmark/Gateway College Courses]

[Subject area]

- List performance of ECHS students [in terms of GPA, final letter mark, final number mark] of students taking benchmark and gateway college courses.

[Subject area]

- List performance of regularly admitted college students [in terms of GPA, final letter mark, final number mark] of students taking benchmark and gateway college courses.

SLIDE 8

Part of a national network

ECHS Supports Schools

- Conferences
- CFRs
- Student leadership initiative
- Special projects

ECHS Schools Support Each Other

- Peer learning
- Polilogue
- Mutual support

SLIDE 9

What our students say

Why I came to ECHS

- Quotes

What I've gained from ECHS

- Quotes

SLIDE 10

Contact Us

For more
information
about our school:

To find out if our
school is right for
you:

TELLING YOUR STORY: A PROPOSAL SEGMENT

[**School name**] High School (HS) is a collaboration between [**district**] and [**post-secondary partner**]. Funded by [**district**] and [**major funding entities**], [**School name**] HS is a bold and innovative approach to college preparation, based on the principle that academic rigor, combined with the opportunity to save time and money, is a powerful motivator for students to work hard and meet serious intellectual challenges. HS blends high school and college in a rigorous yet supportive program, compressing the time it takes to complete a high school diploma and the first two years of college.

Established in [**year**], [**School name**] HS serves [#] students in grades ____ through ____ from the [**district (s)**]. [#]% of [**School name**] HS students are first-generation college goers, [#]% are eligible for free and reduced lunch, and [#]% are under-represented (in terms of racial-minority group participation) in higher education.

Academic acceleration is a fundamental component of [**School name**] HS instruction and [#]% of our students take [**name benchmark high school course here**] to prepare them for college course-taking. In these demanding courses, [**School name**] HS students perform at proficient or advanced levels on state tests compared to [#]% of students from [**district, county, or local schools serving similar student populations**].

The [ELL, Latino, African American] students at [**School name**] HS out-perform their peers from [**district, county, or local schools serving similar student populations**], demonstrating our capacity to improve outcomes and reduce persistent high school achievement gaps for traditionally under-performing groups.

Further, [#]% of [**School name**] HS students are enrolled in college courses in the [**x**] grade. [#]% of [**11th**] grade students are enrolled in college courses; and [#]% of [**12th**] grade students are enrolled in college courses. The average [**School name**] HS student has earned [#] college credits by the end of their 3rd year, and by graduation, the average [**School name**] HS has earned [#] college credits toward a college degree.

The cumulative college GPA of [**School name**] HS students is [#] compared to [#] of traditionally admitted students at the college. In some of the more challenging benchmark and gateway courses, [**School name**] HS students have outperformed [**College name**] students. In [**semester and year**] for example, [**School name**] HS earned an average [**final letter mark; final number mark; or GPA**] of [#] in [**name course which is a gateway to challenging majors or a course with a particularly high-failure rate at the college**] compared to the regularly admitted student population whose [**final letter mark; final number mark; or GPA**] was [#].

Student data collected from the NC Senior Survey that ____th grade students at [**School name**] HS believe that they are college ready and have taken important steps in the college matriculation process. For examples, students say that [**fill in text**].

TELLING YOUR STORY: EBE STORIES AND EXPERIENCES (Example 1)

EARLY COLLEGE HIGH SCHOOL INITIATIVE

Profiles in Data Use



GREENVILLE TECHNICAL CHARTER HIGH SCHOOL GREENVILLE, SOUTH CAROLINA

What types of data does your school use when making school improvement decisions?

We use the standard performance data as required by the state for school report cards (i.e. End of Course Test, High School Exit Exam, graduation rates, parent/student surveys, attendance, and numerous indicators), data provided by NCREST (college course pass rates, student GPA, grade distribution, etc.), COMPASS/ACT, SAT along with high school grade distribution and success rates.

How is data used in making school improvement decisions (i.e. How is data collected? Analyzed?)

Student performance data is used to identify areas of success and needs improvement. Multiple indicators are used by faculty and staff to better inform instruction, placement, re-teaching for mastery and curriculum alignment or course mapping. Also, student performance data is maintained in the student e-portfolio and is part of Individual Graduation Plans.

How are members of your staff involved with data-driven decision making? How does the school support staff to participate in and develop understanding of data use processes?

Teacher leaders along with administrators are part of data analysis for school improvement plans. This includes NCREST data and other state or national assessments. Teachers by subject area use data benchmarks results for both individual and groups of students to modify curriculum, instruction and interventions/supports. Also, the reports provided by NCREST are shared with college instructors and academic deans.

Describe professional development around using data-informed decision-making at your school.

Our school is currently working with the Carolina First Center for Excellence to provide PD for the effective use of "quality tools" (consensogram, essential facts, PDSA, data notebooks, data walls, graphs, Lotus, etc) whenever working with data. Also, teachers participate in workshops using SAT, ACT and Compass for instructional planning.

What factors support or act as barriers to using data in your school?

1) Time, 2) Level of understanding data, 3) Proper interpretation of data, 4) Using action research

How is data shared with the school community?

We hold workshops and provide information regarding school data such as the School Report Card (AYP), NCREST reports and Annual Accountability Report to stakeholders.

TELLING YOUR STORY: EBE STORIES AND EXPERIENCES (Example 2)

EARLY COLLEGE HIGH SCHOOL INITIATIVE

Profiles in Data Use



THE QUEENS SCHOOL OF INQUIRY QUEENS, NEW YORK

What types of data does your school use in making school improvement decisions?

We look at the school's progress report. Parent and teacher feedback on these forms is helpful in determining areas in need of improvement. Student scores on the ELA and Math exams are only helpful when evaluating the needs of incoming students who we have not yet had the time to assess on our own. ECI and CUNY have provided the G.R.A.D.E. exam every year since we began. This test is given at the beginning and end of each school year. It is the one test that provides us with an overall picture of our students' reading abilities. The primary data used in making improvements to classroom instruction is student work, teacher observations and teacher made formative and summative assessments. Our teachers also use ATLAS to upload their curricula and map the scope-and-sequence for the year. This allows us to make decisions as we can see the way in which learning builds from year-to-year and overlaps to scaffold deeper understanding across the curriculum. Student grades, attendance, behaviors, etc. are input daily on snapgrades.com. We can print class and grade reports. It is also a snapshot of class assignments.

How is data used in making school improvement decisions?

We have a Data Manager who oversees, collects and distributes data. We have multiple Inquiry Teams made up of administrators and teachers who meet regularly to look at and discuss methods for implementing what we learn from the data. In the coming school year, we will be implementing a new system of dia-blogs (online dialogues between students and Advisors and Teachers and Administrators) and online student portfolios. This will allow us to track student progress and it will track students' college application process.

How are members of your staff involved with data-driven decision making? How does the school support staff to participate in and develop understanding of data use processes?

Teachers meet once per week. Teachers use this time to look at student work and to meet in teams to explore aspects of their practice they would like to improve.

If professional development around using data use has been offered at your school, how useful have these opportunities been? What further professional development around using data to make decisions do you feel your staff could benefit from?

We have had professional development around looking at data. We first had to define what data is. This was helpful because often we think of data solely as test scores. Once we had a common language for defining data, we were able to look at and analyze it. This year, one of our school-wide goals is to transition to standards-based grading. We will require PD around how to make this transition. In order to use standards-based grading effectively, teachers must use backward design as they plan. Backward design begins with assessment. Teacher must be clear as to what they are looking for and how to use the information they receive from the students to improve their practice and facilitate all students' journey toward mastery.

What factors support or act as barriers to using data in your school? What, if any, differences in approaching data use would you think about making?

We require a central port from where to access the data we use. Also, time and money are always barriers to meeting our goals. For example, the high school teachers meet once a week after school. This requires per session dollars to pay for teacher overtime.

How is data shared with the school community?

We share data during School Leadership Team meetings, common planning time and Inquiry Team times. Teachers have access to ARIS and we rely on email to distribute most messages.

COLLECTING YOUR OWN DATA

Using data in decision-making is a powerful practice. Data is available in various forms, involving numbers and statistics as well as qualitative information from surveys, interviews, and open-ended assessments. Collecting data systematically through the use of sound methods increases the usefulness of data in decision-making.



This section of the toolkit includes:

COMPILING AVAILABLE DATA: You will be provided with information and tools for identifying, collecting, and using available data. These data can be found in schools, through college-high school partnerships, and by tapping into district, state, and national data sets.

COLLECTING AND ANALYZING YOUR OWN DATA: Sometimes it is helpful to gather your own data to address topics that you are interested in learning more about. In this section, you will find tools for implementing data collection methods such as interviews, focus groups, surveys, transcript analysis, and use of common assessment.

COMPILING AVAILABLE DATA

Data is available in various forms, involving numbers and statistics as well as qualitative information from surveys, interviews, and open-ended assessments. Collecting data systematically through sound methods and from reliable sources increases the usefulness of data in decision-making (Barnett, 2009).



Before starting, take a look at the list of [Types of Available Data](#) as well as the [Selected Data Resources](#).

This section of the toolkit includes:

Data Audit Tool. Compiling and using available data can guide the development of school improvement goals. It is important to identify the data currently available to you and assess how it is being used. By using the data audit tool, you will be able to identify the following information:

- Data existing at your school, district, state, and national levels
- How often can this data can be compiled
- How these data are currently being used at your school
- Other ways that these data be used

To get you started in using the data audit tool, first you need to know what types of available data are useful in decision-making:

Achievement Data. Achievement data is not only available in the form of standardized tests. Rather, achievement data can also be compiled through the following sources:

- a) Large-scale assessment data (i.e. annual state exams) are usually used for accountability purposes and measure broad domains of knowledge.
- b) Periodic assessment data (i.e. standardized tests administered multiple times) can provide information on standards-based skills and performance at grade and content areas levels.

c) Classroom and college course data such as student work, portfolios, and presentations can provide ongoing and specific information about a student's performance.

Demographic Data. Demographic data provides information on the school population as a whole and helps identify problems and needs based on this information. Demographic information can be collected in areas such as gender, ethnicity, socio-economic status, mobility, parent involvement, and student attendance.

Program Data. Program data provides information about the kinds of programs available at the school. These data can answer questions about the quality and success of programs and help make connections between programs and student achievement.

Perception Data. Perception data highlights opinions, ideas, and feelings of stakeholders in the school community. These data can help identify what is most valued in the school and how structures affect the operation and success of the school.

COMPILING AVAILABLE DATA: TYPES OF AVAILABLE DATA

Student Achievement Data

- Norm-referenced achievement tests
- State criterion-referenced tests
- High school exit exams
- Interim assessments
- Classroom artifacts and alternative assessments (i.e. homework, projects, portfolios)
- Grade reports
- College entrance exams
- College transcripts
- College coursework artifacts and alternative assessments (i.e. homework, projects, portfolios)

Demographic Data

- Student characteristics
- Staff characteristics
- School-level outcome indicators
- Parents/community characteristics
- Student participation in supplementary education programs

Program Data

- Curriculum maps, guides and syllabi
- Standards alignment documents
- Scope and sequence resources
- Professional development plan
- Classroom observations
- Evaluation protocols
- Staff meeting minutes and agendas
- Technology plan
- Intervention system procedures
- Intervention monitoring results
- Online monitoring and interim reports

Perception Data

- Staff, student, or parent surveys
- Staff, student, or parent interviews
- Staff, student, or parent focus groups
- Student self-reflections

COMPILING AVAILABLE DATA: SELECTED DATA RESOURCES:

Early College High School *Student Information System (SIS)*

Launched in September 2004, SIS is an online data tool for collecting and storing data and providing reporting and analytical resources related to early college high schools. The system also supports stakeholders of the Early College High School Initiative (ECHSI), including funders, school community members, higher education partners, policy makers, education leaders, and ECHSI intermediaries and evaluators.

National Data Sets

Using Data for Policy Decisions

Data Quality Campaign

<http://www.dataqualitycampaign.org/survey/actions>

Tools and resources found on the Data Quality Campaign (DQC) site supports state policymakers in using data to effect student achievement. Based on the idea that improving the collection, available and use of high quality education data, the DQC helps states develop and utilize longitudinal data systems.

Data and College Course-taking Achievement

College Board

<http://www.collegeboard.com/>

The College Board, comprised of more than 5700 schools, college, universities and other educational organizations, connects students, parents, and educational leaders and policymakers with data and tools for increased college success through services including college readiness, admission, assessment, and financial aid information

- [SAT Report: 2006-2009 College-Bound Seniors](#)
Test scores are reported by race/ethnicity and gender. Additional information includes a demographic breakdown of test-takers, their course-taking patterns, K-12 achievement and self-reported college plans.
- [College Board AP Summary Reports: \(2005-2009\)](#)
AP score distributions for each subject test, disaggregated by race/ethnicity.
- [6th Annual AP Report to the Nation: State Reports](#)
Current and five-year trends, including AP participation and performance data, disaggregated by race/ethnicity.
- [ACT National Scores: 1997-2008 and ACT State Scores: 1994-2008](#)
Information is disaggregated according to race/ethnicity and gender.

National College Access Network

<http://www.collegeaccess.org>

This site provides a system for directing users to information and resources about over 250 organizations around the United States committed to advance student access to and success in college.

Pathways to College Network

<http://www.pathwaystocollege.net>

Pathways to College Network is a network of national organizations working together to increase college access and success for traditionally underserved students. Online tools and information are provided for policymakers, education leaders and practitioners, and community leaders to improve preparation, enrollment, and persistence to a college degree.

Accessing, Generating and Analyzing Data

K-12

Achieve.org: State Profiles

<http://www.achieve.org/node/318>

This site provides state data snapshots comparing academic achievement, high school graduation rates, and college enrollment rates to the national average. Additionally the Achieve survey results reports on each state's high school graduation standards alignment with specific college and work readiness indicators.

Alliance for Equitable Education: State Cards

http://www.all4ed.org/publication_material/CommonStandardsStateCards

Statistical snapshots of high school data for each state and the District of Columbia, including data on funding, teacher salaries, graduation rates, college readiness, and academic achievement are provided.

Center on Education Policy: State Test Score Trends Through 2007-08

<http://www.cep-dc.org/index.cfm?fuseaction=Page.viewPage&pageId=572>

Trends in state test scores are provided by the Center on Education Policy, a national, independent organization focused on the need to improve the quality of public education for all students.

Center on Innovation and Improvement State Data

<http://www.centerii.org/centerIIPublic/criteria.aspx>

State database of academic progress, policies, websites, and documents related to education services, restructuring, and school and district improvement.

Educational Needs Index

<http://www.educationalneedsindex.com/>

The Educational Needs Index (ENI) is a county-level study of educational, economic, and population conditions around educational policy and planning at local, regional, and state levels. The index introduces an econometric model assessing trends for all U.S. counties (or equivalents) and provides peer comparisons across a variety of indicators.

Institute of Education Sciences

IES is the research arm of the U.S. Department of Education. IES research informs national and international policy and practice. Users can locate local, state, and national data sets, data use tools, and publications. The centers listed below operate within IES listed below are part of IES, providing information on educational research, evaluation, development, assessment, and statistics:

- [The National Center for Education Statistics \(NCES\)](#)
 - o Data Tools <http://nces.ed.gov/datatools/>
 - o Quick Tables <http://nces.ed.gov/quicktables/>
 - o Fast Facts <http://nces.ed.gov/fastfacts/>
 - o NAEP Website Tools and Applications
<http://nces.ed.gov/nationsreportcard/about/naeptools.asp>
 - o Digest of Education Statistics <http://nces.ed.gov/programs/digest/>
 - o Condition of Education <http://nces.ed.gov/programs/coe/>
 - o Education Statistics Quarterly <http://nces.ed.gov/programs/quarterly/>
 - o National Education Data Resource Center
http://nces.ed.gov/das/library/nedrc_tables.asp
 - o Nation's Report Card <http://nces.ed.gov/nationsreportcard/>
 - o Common Core Data (K-12 Data) <http://nces.ed.gov/ccd/>
 - o Integrated Postsecondary Education Data System <http://nces.ed.gov/ipeds/>
 - o School District Demographics System (SDDS)
<http://nces.ed.gov/surveys/sdds/index.aspx>
- The National Center for Education Evaluation and Regional Assistance (NCEE)
What Works Clearinghouse
<http://ies.ed.gov/ncee/wwc/>
- [The National Center for Education Research \(NCRER\)](#)

The National Center for Higher Education Management Systems

<http://higheredinfo.org/datamaps.php>

The National Center for Higher Education Management Systems (NCHEMS), a private, not-for-profit organization provides information and data generation tools to make strategic data-informed decisions for state, national, and international higher education institutions.

New Visions for Public Schools

<http://newvisions.org>

Through years of working with New York City public schools, New Visions for Public Schools has developed the Knowledgebase, which includes information, tools and strategies around implementing data use in schools.

- [Basic Formulas & Tables with Summary Statistics](#)
- [Organizing Text in Excel](#)
- [Data Graphs in Excel](#)
- [Data Tools Resource Guide](#)
- [“Using Excel to Analyze Student Data”](#)
- [Beginner Excel Techniques for Data Analysis](#)
- [Advanced Excel Techniques for Data Analysis](#)

School Matters

<http://www.schoolmatters.com/schools.aspx/q/page=fnd>

Operated by the Council of Chief State School Officers, this site can help locate information about specific schools and provides tools for comparing data when multiple schools are selected.

Higher Education

The Education Trust

<http://www.collegeresults.org/>

The Education Trust produces publications and reports on higher education issues. Additionally, the site provides online college results giving users graduation data, with demographic breakdown options, that can be compared among all 4-year U.S. higher education institutions.

Measuring Up: The State-by-State Report Card for Higher Education

<http://measuringup.highereducation.org/>

Beginning in 2000, The National Center for Public Policy and Higher Education has published Measuring Up. Every two years, states are assessed along a number of key indicators in six areas (preparation, participation, affordability, completion, benefits, learning). These reports give overviews of state performance in the following areas: college preparation, college participation, college affordability, college completion, benefits of college, international comparisons, and state strengths and weaknesses.

National Association of State Student Grant and Aid Programs (NASSGAP)

<http://www.nassgap.org/index.aspx>

NASSGAP publishes the results of an annual state survey on state-sponsored student financial aid programs, including state expenditures for need and non-need based state financial aid programs.

National Student Clearinghouse

StudentTracker for High Schools

<http://www.studentclearinghouse.org/highschools/default.htm>

Established by the National Student Clearinghouse, *StudentTracker for High Schools* is a program providing high school districts and individual schools with graduated student data around college enrollment, information about colleges in which students matriculate, persistence in college, course of study, and degree attainment.

Postsecondary Opportunity

<http://www.postsecondary.org>

This site provides information on conditions influencing postsecondary education opportunities, including historical data on financial aid and college participation and completion, paying particular attention to low-income and minority students.

Regional Higher Education Compacts

Four regional higher education compacts provide higher education data and information to the participating states in their regions.

- Southern Regional Education Board www.sreb.org
- Western Interstate Commission for Higher Education www.wiche.edu
- Midwest Higher Education Compact www.mhec.org
- New England Board of Higher Education www.nebhe.org

State Higher Education Executive Officers (SHEEO)

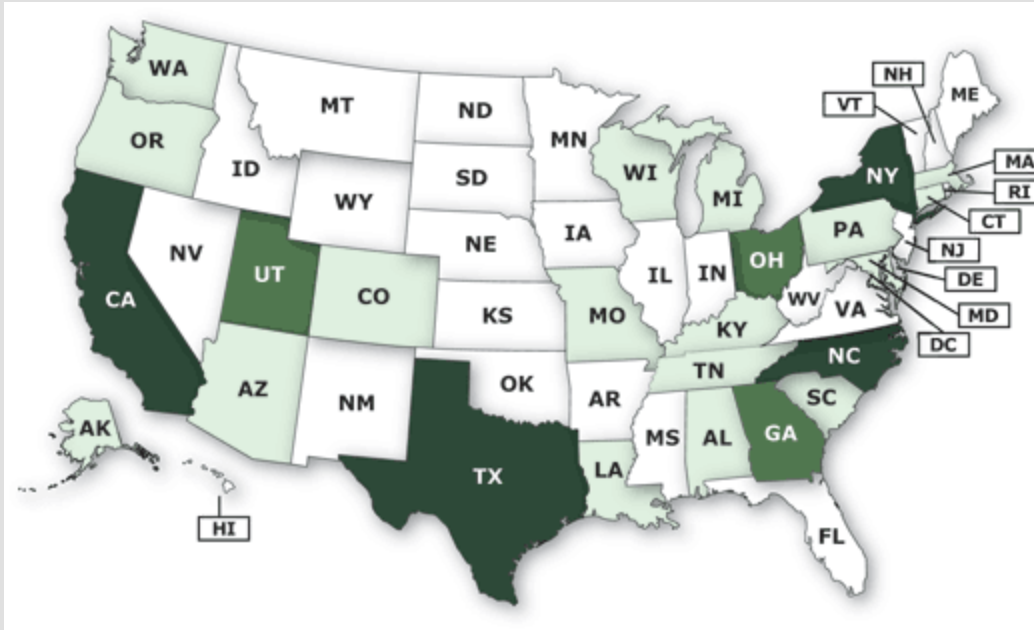
SHEEO provides publications for state higher education agencies and policymakers in areas of higher education assessment, accountability, finance, and other higher education-related topics. The annual State Higher Education Finance Survey produces comprehensive data and information on state higher education finance.

- SHEEO Publications http://www.sheeo.org/pubs/pubs_search.asp
- SHEEO State Higher Education Finance Survey
<http://www.sheeo.org/finance/SHEF%20FY05%20full.pdf>

References:

NCHEMS Information Center for Higher Education Policymaking and Analysis <http://www.higheredinfo.org/>
Nevada Department of Education (n.d.). SAGE school improvement guidebook. Retrieved from
http://nde.doe.nv.gov/SchoolImprovement/SageGuidebook/Introduction_Section.pdf
Pathways to College Network. <http://www.pathwaystocollege.net/>

State Department of Education Web Sites



[Alabama](#)

[Alaska](#)

[Arizona](#)

[Arkansas](#)

[California](#)

[Colorado](#)

[Connecticut](#)

[Delaware](#)

[District of Columbia](#)

[Florida](#)

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[Virginia](#)

[Washington](#)

[West Virginia](#)

[Wisconsin](#)

[Wyoming](#)

COMPILING AVAILABLE DATA: DATA AUDIT TOOL

Type of Data	Data sources		How often can this data be compiled?	Data Use	
				How are these data currently being used?	In what other ways can these data be used?
Achievement Data	Large-scale assessments				
	Periodic assessments				
	Classroom				
Demographic Data					
Program Data					
Perception Data					

COMPILING AVAILABLE DATA: DATA AUDIT TOOL (Example)

Type of Data	Data sources		How often can this data be compiled?	Data Use	
				How are these data currently being used?	In what other ways can these data be used?
Achievement Data	Large-scale	• Norm-referenced achievement tests • State criterion-referenced tests • High school exit exams	• June • March • June	• Graduation/promotion • Programming in math and English courses	• Putting together data sheets on specific student groups to track progress.
	Periodic	• Interim assessments • College transcripts • Grade reports	• 3 times a year (September, December, March)	• Programming in math and English courses • Progress reports	• Putting together data sheets on specific student groups to track progress.
	Classroom	• HS homework, projects, portfolios • College coursework and assessments	• Weekly • Bi-weekly (depending on course)	• Grading • Reading groups • Math groups • Scheduling in college courses	• Level reading lists • Develop goal-setting notebooks with students and parents
Demographic Data	• Student demographics (i.e. rosters, district data) • Daily attendance/tardiness • Free/reduced lunch status • After school participation attendance			• Record-keeping	• Grant applications • Further assessment about what after school programs are working? • What partnerships with CBOs can be forged ?

COLLECTING YOUR OWN DATA
COMPILING AVAILABLE DATA

Program Data	• Curriculum maps, guides and syllabi • Scope and sequence resources • Professional development plan • Classroom observations • Evaluation protocols • Staff meeting minutes and agendas • Technology plan • Intervention system procedures • Intervention monitoring results	• HS curriculum maps continuously revised – not collected, but kept by teachers and coaches; college syllabi collected at the beginning of each semester • October • Reviewed monthly	• Scope and sequence by content area • Annual school review by the district • Looking at how technology is being used and what we need • Designing and scheduling interventions • What groups of students are primarily involved in interventions? How do we schedule them in? Are they in the correct placements?	• Additional professional development opportunities • Grant applications • Effectiveness of interventions – possibly looking at target groups? • Assess the needs of teachers – what does the instruction look like? How can instruction be enhanced?
Perception Data	• Parent survey • Student survey • Teacher survey		• Advisory placement • Staff meetings agendas • Professional development • Non-teaching assignments • Enrichment/ intervention programming	• Will be used to inform school safety plan • Assessment of facility conditions • Parent/community outreach/involvement efforts

COLLECTING AND ANALYZING YOUR OWN DATA

Sometimes it is helpful to gather your own data to address topics that you are interested in learning more about. In this section, you will find tools for implementing data collection methods such as interviews, focus groups, surveys, transcript analysis, and use of common assessments.

This section of the toolkit includes:

When collecting and analyzing your own data, you will most likely encounter these key terms:

Interviews: Interviews are formal or semi-formal conversations between an interviewer and one or more participants. A question and answer format is used, guided by a set of pre-established questions.

Focus Groups: A focus group is a qualitative research methodology, whereby groups of individuals are asked questions on various topics, typically in an interactive setting in which participants freely contribute to the discussion.

Survey: A survey is a data collection method that is used when information about a group of people's opinions, behaviors, or knowledge is needed. Surveys can be given as written questionnaires, or can be administered online through email or a website, or over the phone.

Common Assessments: As a result of NCLB, there is now an abundance of student achievement data that results from common assessments. Common assessments are those that are given in a routine, consistent manner by the state, school district, or school to measure students' academic achievement.

Student Work Analysis: Looking at selected samples of student work through a systematic, reflective process is a way to inform instructional decisions and school improvement efforts. The use of a protocol to guide conversations about the work helps to keep a particular, agreed-upon focus.

Transcript Analysis: Analyzing high school or college transcripts is an effective way to measure student achievement outcomes. It can provide detailed information on students' progress toward a degree, their course-level and overall (GPA) performance, and the kinds of courses taken.

**COLLECTING AND ANALYZING YOUR OWN DATA:
DATA COLLECTION METHOD SUMMARY TABLE**

The table below identifies various data collection methods and the types of data each method can provide. Think about what information you would like to collect and identify an appropriate method (or use multiple methods) for data collection.

	TYPES OF DATA					
RECOMMENDED DATA COLLECTION METHOD	Anonymous	Individual	Perception	Performance	Program/ Process	Demographic
Interview		✓	✓			✓
Focus Group			✓		✓	✓
Survey	✓		✓		✓	✓
Common Assessment				✓		
Student Work Analysis	✓			✓		

COLLECTING AND SHARING YOUR OWN DATA: INTERVIEWS

Interviews are formal or semi-formal conversations between an interviewer and one or more participants. A question and answer format is used, guided by a set of pre-established questions.

I. Suggested Uses of Interviews:

- To obtain information from individuals about particular situations, problems or topics.
- To elicit responses to specific questions (structured interview) or to explore broad issues in a non-directive, non-threatening manner (semi-structured interview, with open-ended questions).

To allow participants to provide rich, contextual descriptions of events.

To bring to the surface the deeper factors that are at play in complex situations.

To build rapport with and buy-in from participants.

When flexibility or non-verbal information is important. Interviewer can adapt “on the fly.”

- When it is important for follow-up or clarifying questions.

II. Limitations of Interviews:

The quality of the data depends on the knowledge and experience of the respondent.

Time consuming to conduct, transcribe, and analyze.

May be difficult to schedule or costly.

Requires a skilled interviewer.

Data collected from unstructured interviews is difficult to quantify.

It's hard to generalize from interview data, because limited numbers are typically interviewed.

Respondents cannot remain anonymous, which may influence their answers.

Interruptions can occur.

- Responses may be influenced by the interviewer.

III. Interview Development and Administration

1. Determine goals for the interview and how you will use the results.
2. Decide who should be interviewed. Usually, you will interview people who have a history with a particular phenomenon you are interested in, someone who is currently involved in it, and someone who has time to participate.
3. Determine the topics that will be addressed, and the order in which they will be addressed. Generally, it is suggested that interviews begin with the most general topic and then become progressively more specific.
4. Develop interview questions (and possible follow up prompts).
 - Open questions: questions that allow for the interviewee to elaborate on responses, as they cannot be answered with a single word response. These questions may begin with stems such as how, in what ways, tell me (e.g. In

what ways is this school different than other schools you have attended?
How do you use the data from your classroom assessments?)

- Closed questions: questions that have a clear and apparent focus and require an explicit answer. These questions are typically yes/no, or begin with the stems with whom, when, where, which, does/did (e.g. what grade are you in? Where did you go to school before coming here?)
 - Avoid using confusing wording, double negatives, leading phrasing, and the use of acronyms or jargon in your questions.
5. Put your questions into an interview guide ([see example](#)). It should include everything you need to conduct the interview.
 6. Practice interviewing someone (who is similar to the intended audience), using your Interview guide. Get feedback based on the practice interview. Pay attention to both whether specific questions or wording were effective and how the logistics of the interview worked. Do you need reorder questions or use smoother transitions? Determine whether you will record the interview or take notes.
 7. Schedule and conduct the interviews. You may need to get permission from parents and/or the school district before you can conduct your interviews.
 8. After the focus group, make sure that you have a clear and clean set of notes. If you are able, transcribe the recordings (i.e., create a written record of everything that was said). Using the complete notes or transcription, read them carefully several times. Identify 5-10 big themes that many of the comments fit under. Summarize what was said under each major theme. Then identify 2-3 comments that illustrate an important point under each theme. These quotations are typically kept anonymous.
 9. Create a report in which each a header is used for each theme; a summary of the theme is offered; and the illustrative quotations follow. Provide the report to people interested in the topic. When possible, discuss the meaning of the report as well as any implications for practice.

References:

- Davies, M. (n.d.). Conducting an interview for data collection. Retrieved from http://tlu.ecom.unimelb.edu.au/pdfs/Conducting_an_Interview.pdf
- Griffiee, D.T. (2005). Research tips: Interview data collection. *Journal of Developmental Education*, 28 (3), 36-37.
- Salkind, N.J. (2003). *Exploring research* (5th ed.). Upper Saddle River, NJ: Prentice Hall.

**COLLECTING AND SHARING YOUR OWN DATA:
INTERVIEWS (Sample Principal/Program Administrator Protocol)**

Program Design
1. If you were describing your EC program to a colleague who knew nothing about it, what would you say? What do you see as the most important purposes of the program? <i>Probe: For whom is the program? What do you hope Early College is able to accomplish for its participants?</i> 2. In your view, what are the key pieces of your EC program? What structures/activities/programs are essential to reaching your EC goals? Who is involved in the planning and implementation of these structures/activities/programs? <i>Probe: What was your recruitment and selection process like? Who was involved? What methods for selection did you use and for what purposes?</i> 3. What high school courses, or other experiences, are required as preparation or pre-requisite to taking college course? What are the college courses taken and to what program are they articulated? 4. When will the high school diploma be awarded? What are your plans for the 13th year? How is going to be funded?
Pedagogy/Instruction and Assessment
1. The ECI has guiding principles for instruction for ECHSs. What instructional practices are promoted here in an effort to operationalize these principles? Would you provide from your observations an example of these instructional practices in use? <i>Probe: What were students asked to do? What were their reactions to the lessons? What resources were used by students and teachers in this representative lesson?</i> 2. How are students assessed? <i>Probe: What are the ways that you know that students are learning? How do students demonstrate/let you know that they are learning?</i> 3. What organizational structures are in place to sustain the kind of instruction and student support that you feel best represents your school's core values? <i>Probe: Length of class time, use of internships, community support</i>

Professional Development
What are the professional development opportunities available here to your faculty? <i>Probe: what is the focus of faculty and department meetings? Does student work inform decisions about professional development? If not, then what does inform these decisions? If yes, how? What other factors are considered when making decisions about professional development?</i>
Democratic School Governance
How would you describe the school governance structure here? <i>Probe: Is there a leadership team? Who is on the team? What decisions are made on the team? In what sorts of activities does the leadership team engage? Is there college representation on the leadership team? By whom? What has been the nature of the relationship between the high school and the college?</i>
Student Supports
What structures are in place to support students? Who is involved in the student supports? What access do students have to the supports? <i>Probe: is a regularly scheduled class or activity in which students participate to support them in their college course assignments? If so, what is its format/purpose? Teacher-student ratio? Frequency of meetings?</i>
Policy Issues
Are you aware of any existing local and state policies that either facilitate or constrain your EC program's goals? <i>Probe: For example? What is the origin/purpose of the policy? How has it influenced the design of your program (What are you able (or not able) to do as a result of this policy?</i>
Wrap-up
Is there anything else that you would like to share that was not covered during this interview? Thank you for your time.

**COLLECTING AND SHARING YOUR OWN DATA:
INTERVIEWS (Sample High School Faculty Protocol)**

Preliminary Statement: I am (name) from (role in school), I am working on a project documenting the Early College program at our school. I wanted to talk to you today about your knowledge of and experience with the program. Your responses are confidential, and will be used only by in our analysis of the program implementation.

Introduction

1. What subject(s) do you teach?
2. How long have you been teaching (in general/here at _____)?
3. Have you ever taught community college courses/taught at any level other than high school?
4. What is your role in the Early College Program?

Understanding of Early College

1. If you were describing the Early College program to a colleague who knew nothing about it, what would you say?
2. How would you describe the purpose of the program?

Structure of school day

1. In terms of scheduling, what is a typical week like for you? (block scheduling?)
2. Can you describe any internship opportunities or other off-campus opportunities that are available to EC students?

Recruitment/Student population

1. Do you know how were applicants recruited for the EC program?
2. How would you describe the students participating in the EC program?

Pedagogy/Curriculum

1. Can you describe how you normally tend to teach, what kinds of instruction you practice? *Prompt: What are three descriptive words you would use to explain your style of teaching? How often do you ask students to work in groups?*
2. Can you tell me a little about a recent unit you taught that illustrates the type of work you're most proud of?
3. Has teaching Early College students impacted your teaching/changed your approach to teaching in any way?
4. To your knowledge, how does your high school curriculum intersect with the community college courses EC students are taking?
5. From your perspective, what kinds of skills and knowledge do EC students need for their college classes?
6. How does the faculty here try to address those needs?
7. How have state-mandated test impacted what you teach?

Assessment
1. What kinds of assessment do you use to evaluate student work? <i>Prompt: Ask about portfolio if not mentioned</i> 2. Will you be using portfolio assessment and/or an oral defense to evaluate graduating seniors?
Professional Development
1. Did you participate in any professional development to prepare you for working with Early College students? 2. Do you think there should be training for new teachers working with Early College Students?
Support
1. What kinds of supports are available to help kids meet the demands of Early College? 2. From your vantage point, what conditions need to be in place for Early College students to succeed?
Policy
Are there any school policies or district policies that that have helped or hurt the Early College program? <i>Prompt: Is there an example you can share?</i>
Shared Governance
1. Can you describe the decision-making structure at your school? <i>Prompt: How are decisions made at your school? Who's included?</i> 2. Are the same stakeholders involved in making decisions about EC?
Wrap Up
1. What upcoming challenges do you anticipate for your Early College Program? 2. Is there anything else that you would like to share that was not covered during this interview? Thank you for your time.

INTERVIEW PROTOCOLS: STUDENT INTERVIEW (SAMPLE)

Preliminary Statement: My name is _____ and I am (role in school/organization) I am working on a data project documenting (state purpose). I'm hoping to talk to you today about your knowledge of and experience with the program. Your responses are confidential, and will be used only by in our analysis of the program implementation. No one else will have access to what you tell me.

Introduction

To begin with, I'm wondering if you would tell me a little bit about yourself. (Let student begin – you can prompt if student seems at a loss).

PROMPT: What year are you? What school were you at previously? Were you happy or unhappy there? Why? In general, do you like school? Did you like it before you came here? How did you find out about [SCHOOL NAME]? Why did you decide to come to [SCHOOL NAME]/participate in the Early College program?

Research Question #1: Background information on student & college course-taking

1. I'd like to understand more about what the school/program is like. Could you describe it to me?

- What is different about this school than other schools you have attended?
- What is it like being on a college campus?
- How does the part about taking college courses work? What do you have to do?
- Who helps you get into/choose courses and register?
- Think of a class in which you do well. What does the teacher do in that class that helps you to learn/do well?

If in a high school class: *Is that typical of what you experience in most of your high school classes?*

If taking college courses: *Do these things also occur in your college classes?*

2. What are the differences in general in the way that high school classes and college classes are taught, in your experience?

- Do the instructors use different teaching methods? (group work, lecture only.)
- How do the instructors manage the students? (If there are behaviors issues, how are they handled?)
- Are the types of assignments different? (project-based, term papers, homework, etc.)
- Will you leave once you earn your high school diploma or does the program provide for you to get an A.A. as well?

Research Question #2: General feelings about the program
We'll get back to graduation and your plans in a minute. In the meantime, can you tell me: • Who/what kind of students is this program for? • Are there specific qualities that make someone a good fit for this program? What are they?
Research Question #3: Student recruitment and admissions process
You had to apply to be here. Tell me a little bit about the application process: • Did you fill out an application form? What kind of information did they ask for? • Did you have an interview? With whom? (Did your parents also participate?) What kinds of questions were you asked? • Did you provide other sources of information about yourself, such as a portfolio, teacher recommendations, etc.)? • How did you feel during the application process? When you found out you were accepted?
Research Question #4: Supports needed to help students prepare for and undertake college level work
• When you need help with your classes or schoolwork, where or to whom do you go? • Can you go to a high school teacher and/or your college professor for help if you need it? • Are there resources, like a tutoring center or a study group, etc. that you can go to in order to get help with your course work if you need help? • When you need advice or need to talk to someone on a personal level, where or to whom can students go? • Is there a school counselor? Are they affiliated with the HS or college? • Are there other kinds of help that you can get from this program that you haven't mentioned? • Are there other supports that are not currently offered that you feel would benefit the program?
Research Question #5: What is the impact on students' sense of efficacy, aspirations for higher education, career ambition, and academic performance?
1. Efficacy/Academic Preparation • How did you arrange your class schedule? • Did you choose your own classes? • On what basis? (what you're good at, like, need for college, etc.) • Were they set for you? • How about in the past – have you chosen your courses?

2. Tell me about your study habits.

- Do you study alone? With friends?
- In a particular place or at a particular time?

3. Tell me a little about your time outside of school.

- Do you have a job? How many hours/days do you work?
- Do you have home chores? When do you do your chores, after school or on the weekends?
- Are there any other activities that you are involved in after school or on the weekend?
- Do these activities/chores/employment limit or constrain your study time? How do you manage/budget your time?

4. Aspirations for Higher Education: Can we discuss your thoughts about college for a few minutes?

- Do you want to go to college?
- When did you know you wanted to go to college?
- How do your friends and family feel about your going to college?
- Does anyone expect you to go to college?
 - Your family?
 - Teachers?
 - Friends?
 - Yourself?
- Do your friends plan to go to college?
- Did your parents go to college?
 - What kind of college (i.e., 2 or 4 year)?
 - In this country?
 - Did they finish and get a degree? What kind?
- What do you think a person needs to be successful in college?
- Is high school preparing you for college?
 - Explain: This program? Previous high school?
 - Are there things your high school should teach you that it hasn't?
- When you need help thinking about and planning for your education, to whom do you go?

5. Future Plans/Career Ambition

- With the help of this program, are you planning to earn your AA degree?
 - If no: what will you do once you get your high school diploma from this program?
 - If yes: will you then transfer to a 4-year institution?
- What do you plan to do when you finish with your education?
- Do you have a career/career path in mind now?

6. Early College experience

- So far, what has your experience of [SCHOOL NAME]/your Early College program been like?
 - What has been good?
 - What do you wish was different?
- Is there anything that is different from your previous school experience that you haven't already mentioned?
- On the basis of your experience, would you advise others to apply for/participate in the program? Why/why not?
- Now that you are part of this Early College program, do you think of yourself primarily as:
 - A high school student?
 - A college student?
 - An EXCEL student/OR/something in between high school and college?

WRAP UP

Is there anything else that you would like to share that was not covered during this interview?

Thank you for your time.

COLLECTING AND SHARING YOUR OWN DATA: FOCUS GROUPS

A focus group is a qualitative research methodology, whereby groups of individuals are asked questions on various topics, typically in an interactive setting in which participants freely contribute to the discussion.

I. Suggested Uses of Focus Groups:

- Encouraging expression of views that might normally be suppressed
- Gaining in-depth information about attitudes, perceptions, behaviors, and motivations
- Identifying needs, expectations, and potential reactions before launching a program
- Refining an ongoing program by understanding needs, problems, and ways to increase participation
- Evaluating a completed instructional program or innovation
- Providing insight to inform a subsequent survey or interview protocol
- Following up results from a survey to better understand interesting or unexpected findings

II. Limitations:

- Training facilitators, recruiting participants, conducting focus groups, and transcribing are time-consuming and can be expensive.
- Data analysis is often complex and time-consuming.
- Results do not generalize to others outside the group.
- Cannot determine causal effects.
- Not appropriate for faculty to facilitate groups with their own students or supervisors to facilitate groups with subordinates.

III. Conducting the focus group:

Participants

According to Goldenkoff (2004), "The key to focus groups is participant chemistry." To encourage participation and openness, select participants with common concerns or backgrounds who don't know each other. The American Statistical Association (1997) cautions, "Never put people together who are in the same chain of command," so don't include a professor and her student or an employee and his boss in the same group. It's not necessary to randomly select participants because results from a focus group are not meant to generalize to a larger population. The goal is to recruit enough participants to get a full range of opinion, but not so many as to discourage participation. When recruiting participants, Goldenkoff (2004) advises that you:

- Explain who your organization is and the purpose of the study,
- Invite people to a "discussion" or to "share their views" rather than to a "focus group,"
- Stress the value of the study, the importance of their opinions, and how you will use the information.

If possible, follow-up with an e-mail or note that restates the information given during the initial contact, provides directions to the focus group site, and identifies a contact person if they need to cancel or have questions. Give participants a reminder call or e-mail a day before. Expect that some people will change their mind or not show up, so invite more than your target number. Some incentive for attending is usually provided, such as food, a small amount of money, or gift certificates.

Setting

The setting should be convenient, comfortable, and relaxing. Rooms with one-way mirrors, conference tables, and microphones hanging from the ceiling may make participants feel like they are performing, so make the setting informal, because people are more likely to open up if they feel at home. If business operations are being discussed, a conference room may be fine, but for more personal topics, living room-style seating is better. Serving light snacks and beverages can create a friendly atmosphere. If you are using food as an incentive, however, serve it before or after the session, so it doesn't distract participants from the discussion.

Moderating

An effective moderator keeps the discussion focused without discouraging the sharing of ideas and gets all members to contribute while making sure that one or two members don't dominate. Moderators should develop qualities outlined by Kvale (1996) and Fern (2001):

- Knowledgeable: become thoroughly familiar with the topics of the focus group.
- Enthusiastic: value your work but remain impartial.
- Structuring: explain the purpose for the focus group; ask whether participants have questions.
- Clear: ask simple, easy, short questions without using jargon.
- Approachable: blend in; make sure the group can relate to you.
- Gentle: allow people to finish; give them time to think; tolerate pauses.
- Sensitive: listen attentively to what is said and how it is said; be empathic.
- Open and flexible: respond to what is important to the participants.
- Steering: keep the group focused; keep one or two members from dominating.
- Critical: prepare to politely challenge what is said. For example, you might question inconsistencies in participants' replies.
- Remembering and integrating: relate what is said to what has previously been said.
- Interpreting: clarify and extend meanings of participants' statements without changing the meaning.
- Inclusive: encourage reserved members to contribute by using eye contact, body language, and directly asking for their input.

The focus group discussion begins with an introduction that explains the purpose, ground rules, and duration (usually between 45 and 90 minutes) and conveys the expectation that everyone will contribute, all contributions will be valued and remain confidential, and the session will be tape-recorded. Recording increases the accuracy of your conclusions, so test your recording equipment immediately before each focus group.

Inform participants of any exceptions to confidentiality. For example, if a participant discloses details of child abuse or threats to his or her safety, you may be required by law to report this. You may need to get approval for the study from the university's [Institutional Review Board](#) and obtain an informed consent from participants, which explains potential risks or benefits of their participation. Anticipate possible emotional reactions from participants and how you will handle them.

After the introduction, the moderator typically has group members introduce themselves or uses an icebreaking exercise to get them involved. To preserve confidentiality and commonality, the moderator should ask members to introduce themselves by first name only and should avoid topics that emphasize differences in status that might threaten cohesion. For groups that focus on sensitive issues such as race or gender, the moderator's demographic background should match that of participants.

Skilled moderators use reinforcers and probes. Reinforcers communicate interest in what members share but don't suggest what is expected or acceptable. Use reinforcers like, "I see," or "Let me write that down," but avoid comments like, "Excellent response," or nodding your head after some responses but not others. Try to smile and appear open and friendly.

Be prepared to use probes such as, "Could you tell me some more about that?" "What do you mean by that?" or "Anything else?" Allow participants time to respond, using silence in moderation to encourage someone to expand on an answer. Nonverbal behaviors will help you judge whether a participant is uncomfortable or just thinking about an answer. When a participant rambles or does not state a clear point of view, ask an interpretive question, such as, "Do you mean that your priorities have shifted from developing programs to building support for programs?"

At the end of the discussion, summarize important points to ensure you have made the correct interpretation and to allow participants to elaborate. Always thank respondents for their participation and ask them if they have any questions for you.

References:

University of Texas, Department of Instructional Innovation and Assessment
http://www.utexas.edu/academic/diia/assessment/iar/how_to/methods/focus_groups.php

COLLECTING AND SHARING YOUR OWN DATA: FOCUS GROUPS (Sample Protocol 1)

Preparing for the Focus Group	• Consider the purpose of the focus group: What is the objective for the focus group? What type of information do you hope to acquire from the focus group? • Developing questions: ○ Think about what problem, issue or question the focus group is meant to address ○ Brainstorm questions you would like to ask the participants ○ Narrow questions down by: ○ Relevance to the objective of the focus group ○ Number of participants ○ Time allotted to conduct the focus group • Determine how responses will be documented (audio/video recording, computer transcription, paper and pencil note-taking) • Confirm space for the focus group. It should be held in an environment that invites participants to speak freely. • Create a time schedule for the focus group • Invite participants to the focus group • A helpful organizational tool is an agenda. You can create an agenda outlining the following features of the focus group for the participants: ○ Welcome ○ Overview of agenda ○ Goals for the focus group ○ “Rules” for participation ○ Structure of the question and answer session
Getting Started	• Introduce yourself, co-facilitators (if applicable) and your organization • Review the agenda and explain the purpose of the focus group meeting • Go over confidentiality and documentation (if applicable, discuss the use of recording tools and equipment) of focus groups • Establish “rules” to guide the flow of the focus group: ○ All participants are invited to respond to questions or prompts ○ Participants should listen to one another and allow each respondent to complete his or her answer ○ It is important to stay focused as each topic is discussed

Question and Answer Session	• If applicable, turn on recording devices • Ask participants to go around and say: ○ First name (for documentation purposes) ○ Any other pertinent information (role in school, job responsibilities, related discipline, etc) • After each response, you can opt to provide a brief summary of the response and/or ask a follow-up clarifying question • Encourage participation from <i>all</i> members of the group – you may need to call on volunteers if participants are reluctant to respond or certain members of the group are dominating the discussion
Wrapping Up	• When participants have responded to all questions and prompts, ask whether they have any questions • Thank members of the group for their participation, and explain next steps that will be taken with the information provided • Following the close of the session make any additional notes (e.g. clarifying responses, detailing the setting, observation of participants' behavior)

**COLLECTING AND SHARING YOUR OWN DATA:
FOCUS GROUPS (Sample Protocol with Script)**

Purpose
• To understand students' Early College experiences in terms of courses taken, other educational experiences, guidance and support received, and overall perceptions of the school and college. • To explore students' expectations about the future, especially regarding further education and employment, and how the school has prepared them for next steps.
Setting up the focus group
• Contact data point person at your school. Ask them to identify 5-7 students in the current graduating class (grades 12 or 13) and try for students 18 years or older. Try to include diversity on gender, race/ethnicity, place of origin, performance. • Provide following information to school point person: ○ Designate 5-7 students. ○ Focus group should last 1+ hours. ○ Students will receive small gift for participation (gift certificate, 5 dollar bill) or offer food (pizza, ice cream) • Decide on a date and time for the focus group • Permission form (provide by email to school)
Things for facilitator to bring to focus group
• Tape recorder, batteries and blank tape • Permission forms (parent must sign beforehand if student is under age 18) • Gift certificates for student participants or money to pay for food • Focus Group protocol
Conducting the focus group
1. Introduce yourself as students arrive and let them know you'll get started and talk about the purpose of the focus group once everyone's arrived. <i>My name is _____ and I'm a facilitator with _____. Your school is one of the many schools involved with the Early College Initiative. We are doing student focus groups at many Early College schools this semester.</i> <i>A focus group typically involves getting a group of people together and asking them about their attitudes towards something. Questions are asked in an interactive group setting where participants are free to talk with other group members.</i>

In this case, many of you guys are graduating and have had both high school and some college experience. The purpose of this focus group is to better understand your high school/college experiences and your plans for the future. Please feel free to chime in at any time with your thoughts and opinions.

*If that's okay, we typically tape record focus group interviews just because I can't write down everything. But if at any time you want me to stop recording just let me know. These interview tapes will not be shared with anyone at your school. We will produce a report that may use quotes from this focus group but will not identify any one in particular. And the permission slips outline this confidentiality (**collect permission slips**)*

2. Start recording; ask each student to go around and say: a) First name, b) when they expect to graduate from high school, and c) if they're also getting an Associates degree.

Sample Focus Group Questions

1. Describe your experience as an Early College student. For example, what did you and other students like about the experience/what worked for you?
(Probe: noteworthy educational experiences in high school and college).
2. When you think about what it was like to be both a high school and college student, what was easy and what was difficult about it?
(Probe: types of courses, instruction, teachers).
3. What was your experience like in Seminar (or other similar activity)? What impact, if any, did it have on your experience as a student? Did you have any experiences with other academic and social supports (HS and college)?
4. What are your plans after you complete the Early College program? What are your long term aspirations?
(Probe: Continue courses at the college? Go on to four year? Career/work?)
5. How have you gone about making decisions about next steps (college, work)? Who (at school and elsewhere) has helped with your decision-making process and how have they helped?
6. If you had some say in making the Early College student experience better, what would you change if you were in charge of running the school?

COLLECTING AND SHARING YOUR OWN DATA: FOCUS GROUPS (Sample Script)

Introduction

Thank you for agreeing to participate in this focus group interview of teachers for the _____.

This focus group interview is a part of a larger study funded designed to identify the characteristics of courses in schools that most effectively prepare students for college-level introductory courses. We are also interested in knowing more about the strategies and practices that teachers and schools use to accelerate the progress of students who are under-prepared in content areas.

You were selected for participation in this focus group because you either

1. answered questions on a teacher survey in a way which indicates that your practice and beliefs about teaching are consistent with the literature on best practices in college readiness; or
2. work in a school with a demonstrated success in student performance; or
3. work at a school with a special theme or emphasis which suggests that effective strategies for college preparation are present.

Our goal for this focus group interview is to explore several themes under the broad issue of college readiness and to hear from you about what is important and what works in getting students ready for college. This focus group phase of the study is preceded by a teacher survey and followed by school observations in the fall.

Your participation in this focus group is voluntary, and can be terminated at any time. Neither your name nor school affiliation will be revealed without your express permission. In all other cases, pseudonyms will be used to protect the anonymity of all participants in these focus group interviews.

Are there any questions about the study or how the data collected today will be used? You will also have an opportunity at the conclusion of the interview to ask any questions you may have.

Discussion Questions

1. What are the primary goals of your teaching? How would you describe or define your goals for your work with students?
2. Of the following categories of college readiness - content knowledge, cognitive skills, academic behaviors, contextual awareness - which one would you say is most important for you to teach to effectively prepare students for success in college-level, course-work?
3. Which categories of college readiness would you say are the most important?
4. What are the essential knowledge and skills that students must master to be successful in college-level coursework?

5. Most standardized assessments of student achievement emphasize Key Cognitive Strategies and Academic Knowledge and Skills. Do you feel the responsibility as an instructor to teach Academic Behaviors as well as Key Cognitive Strategies and Academic Knowledge and Skills? If yes, how is that accomplished?
6. How do you define *college-ready*? How do you know when students are ready for college-level coursework?
7. Of the following assessments, which is the most valid and useful in measuring student's academic performance?
 - Tests (multiple-choice, short answer, etc.)
 - Essays (multi-paragraph responses)
 - Reports
 - Projects (multi-step, requires some outside research, etc.)
 - Portfolios
8. Describe the instructional strategies you use that are most effective in preparing students for college-level work?
9. How is your content taught in conjunction with cognitive skills such as analysis and reasoning?
10. How would you describe the ambiance and/or culture of your school in support of student's success in your content area instruction?

**COLLECTING AND SHARING YOUR OWN DATA:
FOCUS GROUPS (Sample Student Consent Form)**

DATE

Dear Parents/Guardians,

Our school is working with the National Intermediary (NI) on a project to improve the education we provide for your student. NI is an organization that is made up of high schools across the U.S. that are located on college campuses and that support the education of high school students by offering students access to both high school and college classes.

In order to find out about the experiences and future plans of students at our Early College High School, NI is conducting small group interviews (focus groups) with students at our school with support from NCREST, a research group at Teachers College, Columbia University. An NI coach or NCREST researcher will come to our school to interview students who are about to graduate to understand more about their experiences.

In order to interview your student, we need consent from you. If you agree to allow NI to interview your student, please sign and return the attached form. The identity of any student interviewed will be kept confidential. Your student's name will not be used in any reports or publications that result from this documentation.

*Please note that **PARTICIPATION IS VOLUNTARY**. Your student's participation in the interview has no effect on your student's grades or other decisions about your student's education.*

If you have any questions, please feel free contact me at _____ or to contact NI Director, Jane Smith at (xxx) xxx – xxx or NCREST Researcher, Elisabeth Barnett at (212) 678 – 3719.

We thank you in advance for your cooperation.

Sincerely,
[Administrator's Name]

**COLLECTING AND SHARING YOUR OWN DATA:
FOCUS GROUPS (Sample Parent/Guardian Consent on Behalf of Student Form)**

**My child, _____ (student's name), MAY participate in an interview
about the Early College Program.**

Parents/Guardian Signature

Date

Parents/Guardian Name [Please print]

OR

I am 18 years of age or older and I agree to participate in this study.

Student's Signature

Date

Student's Name [Please print]

Please return this form to: _____ [Administrator's Name] by
_____ [date]

THANK YOU!

COLLECTING AND SHARING YOUR OWN DATA: FOCUS GROUPS (Sample Report)



STUDENT FOCUS GROUPS: Learning from Middle-Early College Graduating Seniors

Mary Elizabeth Murray-Wilson, with Elisabeth Barnett, Kate Spence and Jenny Kim
March 2008

BACKGROUND

The Middle College National Consortium (MCNC) is a non-for-profit organization committed to school reform efforts specifically designed to benefit historically underrepresented youth. MCNC supports its member schools in their efforts to provide their students with access to educational opportunities leading to post-secondary success. Middle-Early College high schools, located on community college campuses, create "blended institutions" where students enroll both high school and college courses, as they work to graduate with a high school diploma and an associate's degree or as many as 60 transferable college credits.

The National Center for Restructuring Education, Schools and Teaching (NCREST) is a research and evaluation partner to MCNC and provides the Consortium with ongoing data collection, analysis and technical assistance specific to the development and implementation of Middle-Early Colleges.

This brief is drawn from previous report entitled *Middle-Early College Graduating Seniors' Voices: A Summary of Student Focus Groups*, first distributed at MCNC's 2008 Leadership Conference in New Orleans.

Overview

During the spring of 2007, MCNC and NCREST conducted student focus groups to learn from the first Middle-Early College graduating seniors about their experiences, perspectives, and future plans.

Focus groups were used to gather qualitative information through a series of guiding questions designed to surface and share views; gain in-depth information about attitudes, perceptions and behaviors related to students' experiences; and

provide insights that would inform future data collection.

A total of twelve groups met across the Consortium, and approximately 60 students participated. MCNC coaches and NCREST researchers facilitated and audio recorded the one hour focus groups. NCREST researchers used the *constant comparison method* as they reviewed transcripts, identified emergent themes and recurring perspectives, and captured commentary from students (Baxter & DeGooyer, 2001; Grover & Nangle, 2003). Data in the form of student voices were analyzed and organized by topic and theme to provide information to Consortium leadership and member schools allowing them to continue to improve student experiences and outcomes.

Emergent Themes

The following themes emerged from the analysis of student focus group data: Self Discovery, Support, School Practices, Others' Perceptions, and Future Plans. Each theme is presented as a question and supported with evidence in the form of student quotes.

1. What have students learned about themselves?

Realizing New Interests: As a result of their participation in college coursework, students reported discovering themselves in a variety of ways. In some cases, students enrolled in courses that they were curious about, hoping to learn more about a topic or skill. In some schools, course choices were limited; even in these circumstances students reported identifying with course content in unexpected ways and being challenged to think about new ideas.

Before I took that class I didn't realize how much I loved art, photography and the whole

aesthetic...the appreciation of life. We didn't have a lot of choices. I begged my teachers to take it. The other class that opened my eyes was American National Government; we just talked a lot about the government and history.

Self-actualization: Students revealed their feelings when they achieved beyond expectation and how these achievements sometimes became self-reinforcing.

I thought there was no way I would go to college; no way I'd graduate high school. I'll be the first one to graduate from my family – and it's a big, big family – like 13 uncles, 12 aunts, none of my cousins ever graduated – nobody ever graduated – and they said school is just too hard, college is even harder – some went back for their GED's – my mom tried college and my adopted mom – I'm adopted – she tried college and she didn't make it – she said it's really hard; you have to be really smart and I was like, "If it's that hard, I'm never gonna make it." But now I'm here and it's not that hard. So that's what helped me and my adopted mom helped me – she pushed me the whole way – she supports me.

Self Advocacy: Students discussed times when they needed additional support and clarification from their college teachers. Accessing this form of support was not always easy for students, and required them to self assess, self advocate and express their learning needs.

Oh Lord, I didn't even know what was going on in that class – but all the other classes were fine – you just have to sit down and make yourself calm to actually go to the professor and ask for help – most of the professors here are really nice and they will help you...

Perseverance: Students shared unique and daunting obstacles to their success and described how they tapped internal resources and motivations and overcame their challenging circumstances

I got pregnant at 17, and I thought my life was over. I never thought I would be able to say "I'm going to graduate from both high school and college," and I did, and I'm doing it. The support was so limited, but I did it myself, and from the help of my high school and also the students and that pushed me a lot. I'm so happy.

Belonging: Students described their Middle-Early College high school as a place where they belong and fit in – unlike prior school experiences or schools that they would have enrolled in had they not attended the Middle-Early College. This was important to students because, for many of them, the choice to attend impacted their social circle – many of their neighborhood friends did not attend the same school.

I really found myself here. I went to my junior high school. Everyone was in the same world. Everyone was fighting, everyone was claiming something. The school was not academically driven. They didn't focus on academics and what you can do in life, like middle college. I was going to that school, but I knew that I didn't fit in that environment, and I feel so much more comfortable around people like me - smart, motivated, determined, have goals, etc. I feel comfortable here. I'm not the only one trying to do something.

2. What types of support did students identify and utilize?

Formal Supports: Students cited a variety of formalized school-based supports that they had accessed. These supports varied across MCNC schools existing on many campuses -but not all. These supports, including House, AVID, Seminar, College Counseling, Focus, and subject-specific seminars, vary in their purpose, structure and meeting frequency.

Seminar helped because they would apply the designs of the math in a way that you understood it and you would actually go home and understand it – and every time you didn't understand it you could go back and they would help you.

AVID was great last year because I know for me, we worked a lot on college stuff and we worked on personal statements a lot – and I ended up using one of my personal statements for my actual application – so that helped me – but with college – the resource I used would probably be the math lab...

Informal Supports: Students identified people in their lives, both at school and away from school, who helped them along the way. These sources of

informal support often helped students with specific needs, situations and challenges, and included classmates, teachers, family members and other adults.

My mom really pushed me for college and she actually went back and she'll graduate the same time I do with a degree in chemistry. She got a late start and she didn't want [me] to be like that.

3. What do students tell us about school structures and practices?

Communication: Students expressed a need to strengthen communication between high schools and colleges, particularly around improving student access to information regarding course selection and registration.

Well I think they should let us take one college class in 9th grade. I kind of had a late start taking classes – it was 11th grade when I started choosing my own thing – but I didn't really know that we could ... we had this one guy who was doing stuff in 9th grade already – and I was like, well what are you doing – and he was like, I'm getting ahead – I honestly didn't know we could do that yet until like 11th or 12th grade – so I kind of got a late start on that – so I wish they could have told us that in 9th grade.

Instruction: Students clearly and repeatedly articulated their instructional and learning preferences and described differences between their high school and college classes. Students across the Consortium preferred high school and college classes that included opportunities for student interaction such as group discussion and situations where students actively participated in learning. Students also valued relevance and applicability.

My favorite class was oral communications simply because we were talking the whole class... It was the total opposite from my English class. We were just in there. I didn't even know those people by the time I got out of there except one person. In my oral communication class I knew everybody when I got out of there.

She was so passionate about what she was teaching and her students. It transferred over in the teaching, in the lessons she taught. You can tell when people love what they're teaching.

When the teacher loves it, it makes an impression.

Transitions: Students discussed structures at their schools designed to minimize stress as students transitioned from high school to college. The strategy described most often was the grouping of high school students as they traveled together and navigated their college courses as a cohort. This strategy met with mixed reviews. Students appreciated staying together as ninth grade students; however many indicated that after ninth grade there was no need to travel as a high school pack to college classes. Students shared that this grouping practice reduced student choice of courses and placed students in courses for which they had insufficient interest or readiness, e.g., physics. Students also cited the advantages of heterogeneously grouping college and high school students. In general, students reported a preference for being grouped with other high school students earlier in their program and then later dispersing to pursue individual interests and opportunities.

Well for me, I thought it was okay for the first year and a half – just all of us in one class, but when they did it in 10th and 11th grade, I didn't like having all of us in there because some of us shouldn't have been in [there]. Like for physics, I didn't like physics. I mean, I went to class, but with all of us in there I don't think I got as much out of that class as I could have – with college students – so I didn't like that very much – the first year was good because if they had just put us in with the college students, I don't think I would have done very good – but after 9th grade, I don't think they should do that.

Guidance for Course Selection: Student responses to focus group questions underscore their need to make more informed course decisions. Students commented on the difficulties they had in accessing counselors at their schools. The amount of support and assistance students received and sought varied across groups. Students wished to be efficient in their course selections, and to enroll in those courses that would best position them for the future. Students expressed frustration about not knowing which courses they should take; which courses were more likely to transfer. Students spoke to the importance of achieving balance between what courses students needed to take and what courses students wished to take. On some campuses, students could choose any course only to later feel that they had “wasted their

time” and wished they had known what they “needed.” Participating students across the Consortium point to a need for more structure or a list of courses for students to choose from.

Before you ask people what classes you want to take, you should ask them what direction you want to head in. If they're really unsure, then you can start with the general ed. requirements – almost every associates needs to take writing, reading and math across the curriculum. When I graduate, those general education credits will be the only thing I don't have – so rather than finishing right away, I have one or two more semesters of those simple general education credits – whereas if I knew about those in 10th grade, I could have taken some of them in 10th grade and be done with them.

School Schedule: While some students described their college course schedules as flexible, offering sessions in the morning, afternoon and evening and requiring fewer meetings per week, schedules were often described as disjointed and difficult to manage because the college and high school schedules were not well aligned. In some schools the college and high school holiday and recess periods did not dovetail; students' high school classes would meet while the college was not in session and college classes would meet while the high school was not in session, requiring students to “go to school all of the time.” On other occasions – sometimes on a daily basis – students encountered direct conflicts when their college and high school courses met simultaneously. In these instances, students sometimes had to navigate these conflicts on their own and to keep up with work in both classes.

I like the higher flexibility of the scheduling – if we want to have our classes in the morning, or in the afternoon, or even at night if that's what works best for us – I really like that freedom and we can organize our time and decide what is best.

4. How do students see themselves through the eyes of others?

College Instructors: Students report a range of attitudes, expectations and assumptions held by their college instructors toward high school students; several students pointed to disturbing biases that created unnecessary obstacles. Some students did not

reveal their high school status while others displayed it proudly.

I let people know that I was a middle college student. I wore my middle college sweatshirt the first day.

College Classmates: Students tell us that college students willingly accept and respect high school students, expect them to take their coursework seriously and often challenge them.

They [college students] are paying for their courses, and so they are there strictly to get their money's worth – and so with us, we get in for free, so sometimes we forget we're taking everything for granted – since they're there for business, so it's like a whole other demeanor in the classroom – you're just like you have to be focused – and they treat you with that same respect – a lot of people won't know you're a high school kid unless you tell them – they all have the same objective to get their stuff done and so you do feel older because – since they are treating me older, I'm going to act older – I'm going to present myself in a different way. It does rub off on you and you do want to do better.

5. What do students tell us about their future plans?

School, Careers and Community: Throughout the focus groups, students spoke about their future plans. Although students were completing high school with varying numbers of college credits, several students spoke of their future plans using language that suggested that they did yet view themselves as “college students.” Many students expected their futures beyond college to include specific career plans which informed their choice of coursework. Impressively, many students expressed the desire to return to their communities and to give back after completing their education.

I have an internship with a law firm, which I'm really happy about. I plan on going to [name of university]...I'm going there because of my college credits, and I don't plan on spending more than 3 years there, which is cool. I can really spend 2 if I do more work. After that I want to go to DC and go to law school and travel for a little but I'm definitely coming back [here]. I plan on having an impact on my community. I

really have a passion for people and doing stuff. That's my plan.

If I didn't come to middle college, I would not have known half of the things I know now; I wouldn't have gotten into half of the programs or gotten so much knowledge of everything. There is so much I can do, and I would not have known that if I went to a regular school, [where they have] fights everyday... If I don't like something I will get upset and I would have gotten into a lot of fights, and everything would have been different. Middle college kept me focused on one track. College bound. I'm going to go to college.

Conclusion

This study examines data generated by focus groups conducted across the Consortium's member schools. Focus groups surfaced students' thoughts, experiences, perspectives, perceptions, preparedness, expectations and plans for the future in the words of the students themselves. Participating students, members of the first graduating class of Middle-Early College High Schools, will likely serve as a baseline of comparison, to be referenced often, as occupants of an important position in the organization's history - The First Graduating Class.

While the relevant literature cautions against generalizing focus group findings, data in the form of authentic student voices captures strengths, weakness and variability across schools and are intended to serve as a springboard for inquiry and dialogue within the Consortium and its membership. It is anticipated that member schools will reflect on the themes and questions presented herein to spark rich and reflective dialogue.

Mary Elizabeth Murray-Wilson is a Research Assistant at NCREST.

Elisabeth Barnett is a Senior Research Associate at NCREST

Jenny Kim is a Research Associate at NCREST

Kate Spence is a Research Associate at NCREST

In addition to this brief and the report from which it is excerpted, *Middle-Early College Graduating Seniors' Voices: A Summary of Student Focus Groups*, additional data are available in the NCREST report entitled *MCNC Graduating Student Survey*

Data: Early College High Schools 2006-2007. Based on the analysis of NCREST's 2006-2007 graduating student survey, this report provides information on students' perceptions of and experiences with the Middle-Early College initiative. Several overlapping areas from these two reports have been identified and include: Feelings of Self-Efficacy, Student Support, Sense of Belonging, Instruction at the High School and College (Rigor and Relevance), Learning and Instructional Preferences, and Future Plans. It is anticipated that these data sets, when considered together, will be more robust than they are individually in their potential to inform the Consortium and member schools' of students' Middle-Early College High School experiences.

In addition, it would be beneficial to continue to gather focus group data from future senior classes at Middle-Early College High Schools and/or Middle College High Schools to understand how student experiences change over time.

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The National Center for Restructuring Education, Schools, and Teaching (NCREST) is a research and development organization at Teachers College, Columbia University, co-directed by Jackie Ancess and Thomas Hatch.

525 West 120th Street, Box 110 New York, NY 10027 212.678.3432

COLLECTING AND SHARING YOUR OWN DATA: SURVEYS

A survey is a data collection method that is used when information about a group of people's opinions, behaviors, or knowledge is needed. Surveys can be given as written questionnaires, or can be administered online through email or a website, or over the phone. Surveys can be analyzed using quantitative methods.

I. Suggested Uses of Surveys:

- When identifying needs or preferences, especially of a large or geographically diverse group of people.
- When assessing people's satisfaction.
- When identifying or prioritizing problems to address.
- When evaluating proposed changes.
- When determining whether a change was successful.
- To monitor changes in student satisfaction over time.
- When you want to be able to quantify responses easily.
- When you want to make use of technology such as Google Forms (free), Survey Monkey (free for surveys under 10 questions long, or \$19.95/month for unlimited access) or Zoomerang (free for 100 responses to surveys under 12 questions long, or \$199/year for unlimited) to collect responses to questions.

II. Limitations of Surveys:

- Data are self-reported (this is also true of interviews and focus groups), so poor memory, misunderstanding the question, or intentional deception can lead to inaccuracies in the data.
- Response rates may be low or may represent a particular subsection of the group you're interested in.
- Data analysis may be complex and time-consuming.
- There is no opportunity for follow-up questions.
- Conducting a survey creates expectations for change. Do not survey if action will not or cannot be taken as a result.

III. Survey Development and Administration

1. Determine goals for the survey and how you will use the results.
2. Decide who should be surveyed. If you are not surveying the entire population, define the sample group (e.g. all 9th and 11th graders, every 5th student on the roster in grades 9-12, all parents who attend a school event).
3. Decide on the most appropriate type of survey (e.g. paper, online, phone). There are many inexpensive or free survey platforms online (e.g. Google forms [docs.google.com](https://docs.google.com/forms), surveymonkey www.surveymonkey.com) that have step-by-step directions on how to develop the survey. These platforms also compile the responses into a basic database as the data is collected.

4. Decide whether the survey's answers will be
 - Closed, e.g., numerical rating, numerical ranking, yes/no, multiple choice,
 - Open-ended, with respondents writing answers in their own words, or
 - A mixture.

Type of Question	Best Used for . . .
Open-ended	When the respondent's own words are important; when the surveyor doesn't know all the possible answers or doesn't want to guide respondents. Open-ended questions provide primarily qualitative data (e.g. The best part of my experience at this school this year has been . . . What do you plan to do after graduating from high school?). Consider how many questions you ask because they take longer to analyze.
Multiple choice	When there are a finite number of responses to a question (e.g. What is your gender?; Have you filled out a financial aid form?)
Likert scale	To assess a person's feelings about something (strongly disagree, disagree, agree, strongly agree) (e.g. math is easy for me; I would recommend this school to others)
Ordinal	To rate or rank things in relation to other things (1, 2, 3, 4, 5) (e.g. Please identify the top five reasons for students leaving this high school)
Numerical	For real numbers, like age, number of months, etc. (e.g. How many days per week do you play sports? What is your GPA?)

5. Develop questions and list possible answers for multiple choice questions.
 - Keep questions simple. Use simple wording and provide clear, concise instructions.
 - Make it interesting. Vary the question format.
 - Keep the survey short. For each question, ask yourself, "how will I use this data?"
 - Consider including demographic information about your respondents, such as gender, race/ethnicity, or grade level.
6. Test the survey with a small group to collect feedback.
 - Which questions were confusing?
 - Were any questions redundant?
 - Were answer choices clear? Were they interpreted in the way you expected?
 - Did the respondents want to give feedback about topics that were not included?
 - Approximately how long did it take the respondent to complete the survey?
 - Were there any typos or printing errors?
7. Test the process of tabulating and analyzing the survey results.
8. Revise the survey based on the feedback and test analysis.
9. Administer the survey. Include clear overall instructions and a specific timeframe for survey completion. Send reminders halfway through the survey timeframe and right before the end of the survey timeframe.

IV. Survey Analysis and Reporting

1. Closed survey questions can be analyzed by tallying the number and percent of each type of response. For example, there might be 150 “yes” answers (75% yes) and 50 “no” answers (25%) to a question. Display the number and percent of the responses following each survey question. Graphs and charts can be used to make interpretation easier.
2. Open survey questions should be analyzed by grouping the responses to each question. Look for clusters of responses that fit together and summarize what they say. You may want to use some direct quotes that illustrate a point or provide extra insight into respondents’ views.
3. Create a report that sums up the responses of those who completed the survey. Provide the report to people interested in the topic. When possible, discuss the meaning of the report as well as any implications for practice.

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**COLLECTING AND SHARING YOUR OWN DATA:
SURVEYS (Example - 3 of 24 pages are displayed)**

To view the complete file, see Survey Sample PDF attachment

Welcome

Your school is a member of the Middle College National Consortium (MCNC), an organization committed to strengthening high schools that partner with colleges around the country. To help with this process, they have asked researchers from Teachers College at Columbia University to survey senior students. The purpose is to understand more about you, your opinions, your goals, and your future plans. By completing this survey, you will help to us collect this information.

The survey will not be used to grade you or to make any decisions about you, and no individual information from any student will be used.

WHEN YOU SUBMIT YOUR SURVEY, ALL INFORMATION IS SENT DIRECTLY TO TEACHERS COLLEGE. YOUR SURVEY RESPONSES WILL NOT BE SHARED WITH YOUR TEACHERS AND SCHOOL ADMINISTRATORS.

Your information is very important so please take your time in providing your true opinions. There are no right or wrong answers. We just want to know what you really think.

THANK YOU FOR YOUR HELP!

Demographic

5. Gender

☐ Male ☐ Female

6. What grade are you in?

☐ 9th ☐ 10th ☐ 11th ☐ 12th ☐ 13th (5th year)

7. Racial/Ethnic Background (please check one)

☐ African-American/Black

☐ Caucasian/White

☐ Asian/Pacific Islander

☐ Latino/a

☐ Native American

☐ Other (please specify)

8. What is your birthdate?

MM DD YYYY

Please enter the month, date and year of your birth / /

High School Courses

The following questions are going to ask you to think about your experiences in high school over this 2009-2010 school year.

9. How often have you done the following in your HIGH SCHOOL courses?

	Never	A few times a year	Once or twice a month	Once or twice a week	Almost every time class meets
a. Collected and summarized information or data.	☐	☐	☐	☐	☐
b. Worked on a paper or project that required integrating ideas or information from various sources.	☐	☐	☐	☐	☐
c. Written a paper or report 5 or fewer pages long.	☐	☐	☐	☐	☐
d. Written a paper or report more than 5 pages long.	☐	☐	☐	☐	☐
e. Defended my own point of view or ideas in writing or in a discussion.	☐	☐	☐	☐	☐
f. Asked questions in class or contributed to class discussions in my high school courses.	☐	☐	☐	☐	☐
g. Explained my thinking	☐	☐	☐	☐	☐
h. Applied what I've learned to solve a new problem	☐	☐	☐	☐	☐
i. Engaged in in-depth discussions about what I have read or learned	☐	☐	☐	☐	☐
j. Worked in a group with other students	☐	☐	☐	☐	☐
k. When I work on a topic at school, I am able to spend enough time on it to understand it really well.	☐	☐	☐	☐	☐

10. How often did the following things happen in your HIGH SCHOOL courses?

	Never	Once in a while	Half the time	Most of the time	All the time
a. I got frustrated and gave up when my schoolwork became too hard.	☐	☐	☐	☐	☐
b. When my schoolwork became difficult, I found a way to get help.	☐	☐	☐	☐	☐
c. I gave extra effort to challenging assignments or projects.	☐	☐	☐	☐	☐
d. I kept trying to do well on my school work even when it wasn't interesting to me.	☐	☐	☐	☐	☐
e. I tried really hard to do a good job on my school work.	☐	☐	☐	☐	☐
f. I really found my school work interesting.	☐	☐	☐	☐	☐
g. I really did not care too much about my schoolwork.	☐	☐	☐	☐	☐
h. I asked teachers for help when I got stuck in schoolwork.	☐	☐	☐	☐	☐

COLLECTING YOUR OWN DATA
COLLECTING AND SHARING YOUR OWN DATA: *SURVEYS*

**COLLECTING AND SHARING YOUR OWN DATA:
SURVEYS (Sample Report - 4 of 18 pages are displayed)**
To view the complete file, see Survey Report PDF attachment

2009-10 MCNC Senior Student Survey Data

NCREST, *Draft, June 2010*



2009-10 MCNC Senior Student Survey Data

Early College High Schools

NCREST
Teachers College, Columbia University

Draft

June 2010

About the Survey

- Administered in late April 2010
- Administered electronically (using SurveyMonkey) to 16 schools & paper form to 1 school
- All graduating students were asked to be given the opportunity to complete the survey.

Participants

School Name	12th grade	13th grade	Total
School B	58	1	59
School C	79	19	98
School D	47	1	48
School E	55	0	55
School F	0	47	47
School H	59	0	59
School I	79	1	80
School J	67	0	67
School K	73	0	73
School M	94	0	94
School N	18	0	18
School O	46	4	50
School Q	61	23	84
School R	65	0	65
School S	105	0	105
School T	27	0	27
School U	69	0	69
Total	1002	96	1098

List of Figures

Demographics: Page 2

- Gender
- Race/Ethnicity
- Free Lunch Status
- Days Absent in Past Four Weeks
- Place of Birth
- Age Arrived in U.S.
- Enrollment in ESL Classes in High School
- Language Spoken at Home
- Parental Education Attainment
- Reported Use of Time After School
- High School GPA

College Readiness: Page 4

- Completed College Coursework
- Participation in Activities on the College Campus
- College Readiness

College Plans: Page 5

- Post High School Aspirations and Expectations
- Post High School Aspirations and Expectations: College Level Education
- College Plans
- College Plans: Standardized Tests
- College Plans: Application Process

Self-Efficacy: Page 7

- Self-Efficacy in School
- Self-Efficacy in Subject Areas: Math and Writing

Student Engagement and Perseverance: Page 7

- Student Engagement in High School and College Courses

Teaching and Learning: Page 8

- High School and College Instructor Expectations

Instructional Rigor and Relevance: Page 9

- Instructional Assignments
- Instructional Expectations
- Instructional Relevance

Student Support: Page 10

- Number of Adults Providing Support
- Student Participation in Support Services
- Perception of Helpfulness of Support Services
- Reasons for Not Participating in Support Services
- Reasons for Not Participating in Support Services

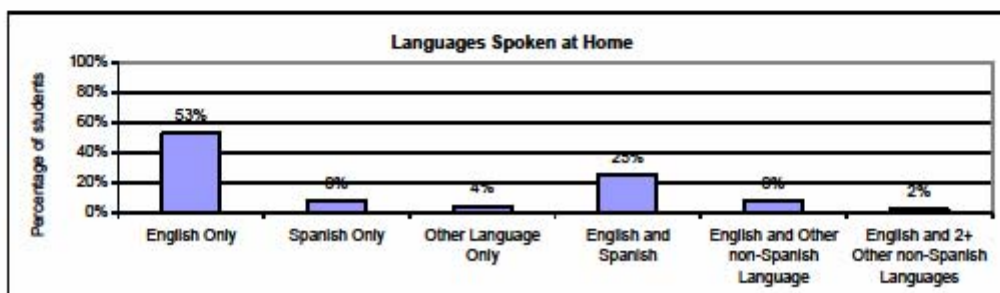
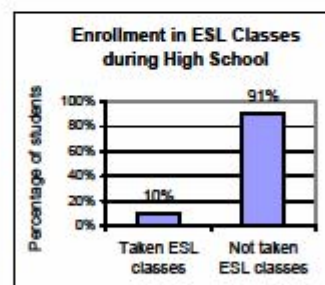
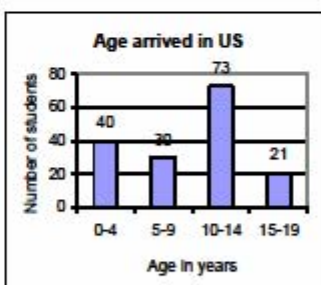
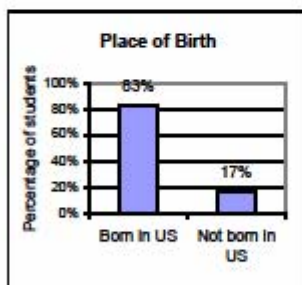
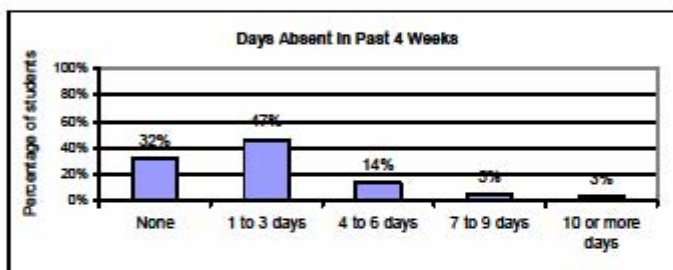
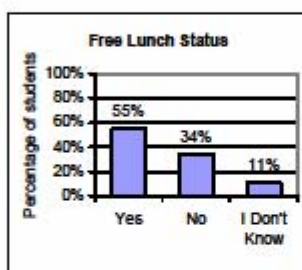
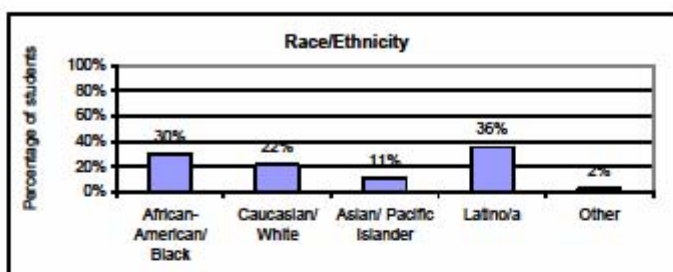
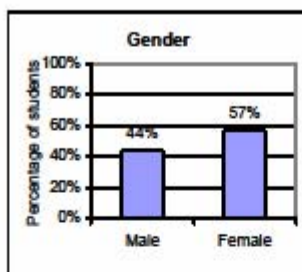
Student Satisfaction: Page 12

- Sense of Belonging
- Selected Response: The three most important things about high school for me are...
- Selected Response: Five top reasons why students leave this high school are...
- Student Satisfaction with the High School

Appendix A: Page 14

- Open Response: "If you have decided where you will go to college next year, which college will you attend?"

Demographics



COLLECTING AND SHARING YOUR OWN DATA: COMMON ASSESSMENTS

As a result of NCLB, there is now an abundance of student achievement data that results from common assessments. Common assessments are those that are given in a routine, consistent manner by the state, school district, or school to measure students' academic achievement. Examples of these assessments include annual statewide tests, commercially-produced tests (e.g. interim assessments, early-grade reading assessments) that are given periodically throughout the school year, end of course tests administered across schools or districts, and interim tests developed by districts or schools (e.g. quarterly writing or math prompts).

I. Suggested Uses of Common Assessments:

- To monitor student progress.
- To tailor instruction to meet individual needs of students.
- To make instructional changes in an attempt to improve student achievement.
- To measure effectiveness of classroom lessons.

II. Limitations of Common Assessments:

- Annual and interim assessments vary widely in their reliability and level of detail.
- No single assessment provides all necessary information to make informed instructional decisions.
- There is no conclusive evidence that using common assessment data leads to improved student achievement.

III. Common Assessment Development and Administration:

- Many schools are currently administering either state or commercially-developed common assessments. Therefore, no new assessment development or administration actions are needed. School, classroom, and individual student assessment data are frequently available to schools through databases developed on the state, district, or school district level.
- In other cases, schools may want to develop their own common assessments. Steps in the process for designing your own assessments are included in the text box.

IV. Analysis of Assessment Data

Data from common assessments are generally entered into a spreadsheet such as the one included HERE. Frequently, items are grouped according to what they measure. Then, a report should be created that is easy to read and reflect on.

Design and Develop Assessment

If developing and administering an additional, school-level common assessment is the goal, steps in this process follow:

PLANNING

- Identify priority standards using state and district standards, and school curricula to plan what students should know and be able to do
- Design questions, tasks, or problems that will measure student knowledge and ability on standards/outcomes.
- Develop scoring guide or rubric that includes indicators of student success for each standard/outcome
- Schedule collaborative time for teachers to use the data from each Periodic Assessment for determining future instruction/intervention
- Review and experience sample *Periodic Assessments* by having teachers take assessments collaboratively in order to map the concepts/skills students are expected to demonstrate; teachers should either collaboratively take the assessment they plan to give or collaboratively analyze the assessment on a question by question basis to determine what concepts and skills the assessment actually measures
- In planning to administer the periodic assessment, also plan for the use of any necessary support materials and resources.

ADMINISTRATION

- Administer school/classroom measures as scheduled by the school/district.
- Score student work on Common Assessment. Some parts of the assessment may be scored centrally (e.g. multiple choice) while other parts are best scored by teachers (e.g. performance/constructed response/writing sample)
- Evaluate data reports and provide timely feedback to students.

V. Use data

Common assessment data is used to inform instruction. Follow the steps below to use the common assessment data. Individually or as a group, conduct an analysis of individual test items that answers the following questions:

- Are there skills and content that our textbooks, adopted curriculum, or instruction did not adequately cover?
- What are the skills or content that need to be re-taught differently?
- Was there a common, incorrect student response to one or more questions?
- As an individual teacher, what can I learn from other team members who may have experienced greater instructional success on a tested concept?
- Are there common skills/concepts that should be retested in an upcoming formative assessment?

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COLLECTING YOUR OWN DATA
 COLLECTING AND SHARING YOUR OWN DATA
 COMMON ASSESSMENTS

COLLECTING AND SHARING YOUR OWN DATA: COMMON ASSESSMENTS (Sample Tool)
To view the complete file, see Common Assessments Excel attachment

	A	B	C	D	E	F	G	H	I	J	K
1	Student Name / Criteria	Meaning	Development	Organization	Language Use	Conventions	Holistic				
2		3	4	3	4	3	3				
3		0	0	0	0	0	0				
4		4	3	4	4	4	4				
5		5	4	4	4	4	5				
6		5	4	4	5	5	5				
7		6	5	5	5	5	5				
8											
9											
10		2	2	2	3	3	2				
11		5	5	5	4	3	5				
12		4	4	4	4	4	4				
13		4	3	4	3	4	4				
14		5	4	5	4	4	5				
15		4	4	4	4	4	4				
16											
17											
18		2	3	3	3	3	3				
19		4	4	3	3	4	4				
20		4	4	4	4	4	4				
21											
22		3	3	4	4	4	4				
23		3	3	4	3	4	3				
24		5	4	5	4	5	5				
25		3	3	3	4	3	3				
26		1	1	1	3	3	1				
27		5	4	4	5	5	5				
28		3	3	3	2	2	3				
29		3	2	2	3	2	2				
30		2	2	2	3	3	2				
31											
32		3	3	3	3	4	3				

COLLECTING YOUR OWN DATA
COLLECTING AND SHARING YOUR OWN DATA
COMMON ASSESSMENTS

**COLLECTING AND SHARING YOUR OWN DATA:
COMMON ASSESSMENTS (Sample Report 1)**



**Sample ISA Writing Performance
Assessment**

**Fall 2009 & Spring 2010
Grade 9**

XYZ School

ELA DYO, Grade 9 (XYZ School)
All Assessments Summary Results School
Year: 2009-2010

		Fall	Winter	Spring
Position		3/4	3/4	3/4
	No. Assessed	67	53	60
	Average Score	2.6	2.7	2.8
	Four	11.9%	5.7%	18.3%
	Three	47.8%	56.6%	48.3%
	Two	31.3%	37.7%	25%
	One	9%	0%	8.3%
Evidence		3/4	3/4	3/4
	No. Assessed	67	53	60
	Average Score	2.3	2.4	2.8
	Four	7.5%	3.8%	20%
	Three	29.9%	32.1%	46.7%
	Two	43.3%	60.4%	26.7%
	One	19.4%	3.8%	6.7%
Organization & Format		3/4	3/4	3/4
	No. Assessed	67	53	60
	Average Score	1.8	2.4	2.6
	Four	7.5%	5.7%	21.7%
	Three	16.4%	39.6%	38.3%
	Two	26.9%	45.3%	20%
	One	49.3%	9.4%	20%
Language Use & Style		3/4	3/4	3/4
	No. Assessed	67	53	60
	Average Score	2.0	2.3	2.5
	Four	3%	5.7%	3.3%
	Three	17.9%	24.5%	50%
	Two	52.2%	64.2%	40%
	One	26.9%	5.7%	6.7%
Conventions		3/4	3/4	3/4
	No. Assessed	67	53	60
	Average Score	2.1	2.4	2.5
	Four	0%	3.8%	6.7%
	Three	28.4%	39.6%	43.3%
	Two	56.7%	49.1%	41.7%
	One	14.9%	7.5%	8.3%
Holistic		3/4	3/4	3/4
	No. Assessed	67	53	60
	Average Score	1.8	2.3	2.5
	Four	1.5%	3.8%	5%
	Three	17.9%	28.3%	51.7%
	Two	41.8%	64.2%	36.7%
	One	38.8%	3.8%	6.7%

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ELA DYO, Grade 9 (XYZ School) Holistic
Subgroup: Gender
School Year: 2009-2010

		Fall	Winter	Spring
		3/4	3/4	3/4
Female	No. Assessed	31	23	29
	Average Score	2.1	2.5	2.4
	Four	3.2%	4.3%	6.9%
	Three	22.6%	39.1%	41.4%
	Two	51.6%	56.5%	41.4%
	One	22.6%	0%	10.3%
Male	No. Assessed	36	30	31
	Average Score	1.6	2.2	2.6
	Four	0%	3.3%	3.2%
	Three	13.9%	20%	61.3%
	Two	33.3%	70%	32.3%
	One	52.8%	6.7%	3.2%
All Students	No. Assessed	67	53	60
	Average Score	1.8	2.3	2.5
	Four	1.5%	3.8%	5%
	Three	17.9%	28.3%	51.7%
	Two	41.8%	64.2%	36.7%
	One	38.8%	3.8%	6.7%

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ELA, Grade 9 (XYZ School)
Holistic Subgroup: English Learner
School Year: 2009-2010

		Fall	Winter	Spring
		3/4	3/4	3/4
No	No. Assessed	65	50	57
	Average Score	1.8	2.3	2.6
	Four	1.5%	4%	5.3%
	Three	18.5%	28%	52.6%
	Two	43.1%	64%	36.8%
	One	36.9%	4%	5.3%
Yes	No. Assessed	2	2	3
	Average Score	1.0	2.0	2.0
	Four	0%	0%	0%
	Three	0%	0%	33.3%
	Two	0%	100%	33.3%
	One	100%	0%	33.3%
Other/Unknown	No. Assessed		1	
	Average Score		3.0	
	Four		0%	
	Three		100%	
	Two		0%	
	One		0%	
All Students	No. Assessed	67	53	60
	Average Score	1.8	2.3	2.5
	Four	1.5%	3.8%	5%
	Three	17.9%	28.3%	51.7%
	Two	41.8%	64.2%	6.7%
	One	38.8%	3.8%	6.7%

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ELA DYO, Grade 9 (XYZ School)
Holistic Subgroup: Special Ed.
School Year: 2009-2010

		Fall	Winter	Spring
		3/4	3/4	3/4
No	No. Assessed	52	41	45
	Average Score	2.0	2.4	2.7
	Four	1.9%	4.9%	6.7%
	Three	23.1%	31.7%	60%
	Two	44.2%	61%	31.1%
	One	30.8%	2.4%	2.2%
Yes	No. Assessed	15	11	15
	Average Score	1.3	2.0	2.1
	Four	0%	0%	0%
	Three	0%	9.1%	26.7%
	Two	33.3%	81.8%	53.3%
	One	66.7%	9.1%	20%
Other/Unknown	No. Assessed		1	
	Average Score		3.0	
	Four		0%	
	Three		100%	
	Two		0%	
	One		0%	
All Students	No. Assessed	67	53	60
	Average Score	1.8	2.3	2.5
	Four	1.5%	3.8%	5%
	Three	17.9%	28.3%	51.7%
	Two	41.8%	64.2%	36.7%
	One	38.8%	3.8%	6.7%

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ELA DYO, Grade 9 (XYZ School)
Holistic Subgroup: Ethnicity
School Year: 2009-2010

		Fall	Winter	Spring
		3/4	3/4	3/4
African American/Black	No. Assessed	61	47	54
	Average Score	1.8	2.3	2.6
	Four	1.6%	4.3%	5.6%
	Three	16.4%	27.7%	53.7%
	Two	42.6%	63.8%	35.2%
	One	39.3%	4.3%	5.6%
Hispanic	No. Assessed	5	4	5
	Average Score	1.8	2.0	2.0
	Four	0%	0%	0%
	Three	20%	0%	20%
	Two	40%	100%	60%
	One	40%	0%	20%
Unknown	No. Assessed	1	2	1
	Average Score	3.0	3.0	3.0
	Four	0%	0%	0%
	Three	100%	100%	100%
	Two	0%	0%	0%
	One	0%	0%	0%
All Students	No. Assessed	67	53	60
	Average Score	1.8	2.3	2.5
	Four	1.5%	3.8%	5%
	Three	17.9%	28.3%	51.7%
	Two	41.8%	64.2%	36.7%
	One	38.8%	3.8%	6.7%

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ELA DYO, Grade 9 (XYZ School)
Holistic Subgroup: Free/Reduced Lunch
School Year: 2009-2010

		Fall	Winter	Spring
		3/4	3/4	3/4
No	No. Assessed	39	28	36
	Average Score	1.8	2.3	2.6
	Four	2.6%	3.6%	2.8%
	Three	17.9%	25%	58.3%
	Two	33.3%	64.3%	36.1%
	One	46.2%	7.1%	2.8%
Yes	No. Assessed	28	24	24
	Average Score	1.9	2.4	2.5
	Four	0%	4.2%	8.3%
	Three	17.9%	29.2%	41.7%
	Two	53.6%	66.7%	37.5%
	One	28.6%	0%	12.5%
Other/Unknown	No. Assessed		1	
	Average Score		3.0	
	Four		0%	
	Three		100%	
	Two		0%	
	One		0%	
All Students	No. Assessed	67	53	60
	Average Score	1.8	2.3	2.5
	Four	1.5%	3.8%	5%
	Three	17.9%	28.3%	51.7%
	Two	41.8%	64.2%	36.7%
	One	38.8%	3.8%	6.7%

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COLLECTING AND SHARING YOUR OWN DATA: COMMON ASSESSMENTS (Sample Report 2)

Class Benchmark Report for Teacher Demo (Section 1)

HM Reading
HM Grade 5
Theme 1
All Students
Enrollment Year: 2008-2009
Assessment Year: 2008-2009
School: Cesar Chavez Elementary

<https://secure.oarsaccess.net>

Please type in a name for your Intervention Group

Fluency Practice Intervention Group

Cancel OK

Create New Group Add To Existing Group...

☐	Student ID	Student	Fluency 1	Fluency 2	Avg. Fluency	Reading Comp.	Checking Skills	Spelling	Vocabulary	Writing
			110	110	110	8/10	8/10	8/10	8/10	3/4
☒	159593	Dxxxxx, Exxxxx	29	29	29	3	0	3	5	
☒	161045	Pxxxx, Wxxxx	39	32	35.5	1	4	1	2	
☒	157096	Rxxx, Sxxx	32	43	37.5	2	10	2	1	
☒	159564	Mxxxxx, Exxxxx	44	66	55	9	9	8	9	
☒	159613	Sxxxxxx, Bxxxxxx	51	62	56.5	6	5	9	1	
☒	160302	Axxxxxxx, Gxxxxxxx	61	61	61	2	1	7	3	
☒	159609	Axxxx, Fxxxx	72	75	73.5	8	8	7	10	
☒	159552	Rxxxxx, Nxxxxx	66	83	74.5	3	1	5	6	
☒	160411	Dxxxxx, Rxxxxx	73	89	81	10	6	9	3	
☐	164582	Gxxxx, Axxxx	87	84	85.5	7	10	8	7	
☐	175413	Bxxxx, Bxxxx	87	87	87	6	6	7	4	
☐	159585	Axxxxxx, Yxxxxxx	89	88	88.5	5	4	8	5	
☐	166999	Cxxxx, Axxxx	87	91	89	6	6	8	8	
☐	159702	Mxxxx, Axxxx	89	90	89.5	4	3	6	4	
☐	159530	Axxxx, Kxxxx	90	95	92.5	10		9	10	

COLLECTING YOUR OWN DATA
COLLECTING AND SHARING YOUR OWN DATA: *COMMON ASSESSMENTS*

Individual Student Report
Created on Sunday, February 21, 2010 at 08:24:39 PM

Student Information (2008-2009)

Student:	Fxxxx Axxxx	Student ID:	159609
School Name:	Cesar Chavez Elementary	Grade:	5

Demographics and Program Participation (2008-2009)

Instructional Program:	Mainstream	Language Proficiency:	RFP
CELDI:	Early Advanced	Special Ed.:	Not Receiving Services
GATE:	Not Applicable	Gender:	Female
Ethnicity:	Hispanic	Home Language:	Spanish
Migrant:	Migrant Education		

Course/Enrollment Information (2008-2009)

Section/Period	Teacher	Course (If Applicable)
1	Teacher Demo	

California English Language Development Test (CELDI)

Beginning	Early Int.	Intermediate	Early Advanced	Advanced
-----------	------------	--------------	----------------	----------

Assessment Area	2008-2009		2007-2008		2006-2007		2005-2006	
	Scale Score	Prof. Level	Scale Score	Prof. Level	Scale Score	Prof. Level	Scale Score	Prof. Level
Listening	523	3-Interm.	526	4-Early Adv.	489	3-Interm.	511	
Speaking	604	5-Advanced	494	3-Interm.	515	4-Early Adv.	509	
Listening & Speaking					502		509	3-Interm.
Reading	555	3-Interm.	524	3-Interm.	472	2-Early Int.	488	3-Interm.
Writing	555	4-Early Adv.	567	4-Early Adv.	465	2-Early Int.	517	4-Early Adv.
Overall	559	4-Early Adv.	527	3-Interm.	485	3-Interm.	505	3-Interm.

California Standards Test (CST)

Far Below Basic	Below Basic	Basic	Proficient	Advanced
-----------------	-------------	-------	------------	----------

Subject Area	2008-2009 (Grade 5)			2007-2008 (Grade 4)			2006-2007 (Grade 3)		
	Test	Scale Score	Perf. Score	Test	Scale Score	Perf. Score	Test	Scale Score	Perf. Score
Reading	Grade 5	323	3-Basic	Grade 4	361	4-Prof.	Grade 3	317	3-Basic
Math	Grade 5	379	4-Prof.	Grade 4	486	5-Adv.	Grade 3	415	5-Adv.
Science	Grade 5	293	2-BB						
Life Science									
End-of-course Science									
History/Social Science									
World History									

Explanation of Abbreviations: FBB=Far Below Basic, BB=Below Basic, Prof.=Proficient, Adv.=Advanced

COLLECTING AND SHARING YOUR OWN DATA: STUDENT WORK ANALYSIS

Looking at selected samples of student work through a systematic, reflective process is a way to inform instructional decisions and school improvement efforts. The use of a protocol to guide conversations about the work helps to keep a particular, agreed-upon focus.

I. Suggested Uses of Student Work:

- To monitor student progress.
- To reflect on student learning and development.
- To determine the effectiveness of curriculum and instruction.
- To develop shared standards.

II. Limitations of Student Work:

- Teachers may be defensive about student work or assignments generated from their classrooms.
- Teachers may only want to share their best student work.
- Looking at student work requires blocks of time for collaboration and is most effective when sustained over time.

III. Selecting Student Work

While every teacher spends a great deal of time grading and reading student work, many schools use a process of analyzing student work for a different purpose. These schools choose samples of student work to analyze collaboratively as a way of raising questions about teaching and learning. This collaborative analysis often follows explicit and agreed upon guidelines, called protocols.

If participating in such an analysis of student work, steps in this process follow:

1. Identify the purpose, focus, or goal for looking at student work. Examples follow:
 - Collaboratively developing standards.
 - Reflecting on evidence of student learning or purpose of assignments.
 - Examining evidence of effective teaching.
 - Developing shared knowledge bank amongst teachers.
2. There are many different ways to select samples of student work, each dependent upon the goal of the analysis process. Some possibilities include choosing:

- Several samples from different students.
 - Samples from one student over time.
 - Randomly selected samples.
 - Representative samples of low-medium-high quality work.
 - Representative samples of specific student misconception.
 - Samples that represent an area of confusion or question for the teacher.
3. Sometimes teachers are tempted to only provide their best student work. This challenge can be overcome by providing guidelines about which work to provide from students. Examples of guidelines include:
- 2 samples that show the student gets it.
 - 2 samples that show the student does not get it.
 - 2 confusing samples.
 - 2 interesting or unusual samples.
4. Analyze the student work by engaging in facilitated discussion (using protocols) of participants' interpretations and understanding of the student work samples. See the protocols section on the *Looking at Student Work* Website for many examples: <http://www.lasw.org/index.html>
- Select a protocol related to the goal or purpose of looking at student work.
 - Participate in the process through an "inquiry stance;" be open to learning.
5. Reflect on the implications and applications of what is learned to teaching.

References:

The Charles A. Dana Center (2004). Examining student work.

<http://www.utdanacenter.org/highered/alg2/downloads/V-CourseFollow-up/V-A-5-StudentWorkSlideText.pdf> and accompanying PowerPoint

www.utdanacenter.org/highered/alg1/.../V...up/V-A-5-StudentWork.ppt

The Chicago Learning Collaborative & The Annenberg Institute. (nd). Looking at student work.

<http://www.lasw.org/welcome.html>

Tarwater, J. (2006). Analyzing student work: National board candidate support.

COLLECTING AND SHARING YOUR OWN DATA: STUDENT WORK ANALYSIS (Template 1)

Pick three pieces of student work to look at. What does this student work show us about their literacy and inquiry needs?

What are strengths in this piece of the work?	What are weaknesses in this piece of work?

What are strengths in this piece of the work?	What are weaknesses in this piece of work?

What are strengths in this piece of the work?	What are weaknesses in this piece of work?

Common Strengths (Literacy or Inquiry)	Teaching Strategies to address +/-

Common Weaknesses (Literacy or Inquiry)	Teaching Strategies to address +/-

COLLECTING AND SHARING YOUR OWN DATA: STUDENT WORK ANALYSIS (Template 2)

This template should be used for professional development around looking at student work. Multiple examples of an individual student's work should be included in the session. Data should support all responses. These data include formal and informal assessments collected over a specific time frame (i.e. unit of study, course, semester, marking period).

Desired Outcomes	
Quality of Work What standards for "good work" will this work address (i.e. what are the content standards, course/program objectives, etc)?	Learning Goals • What knowledge (facts, concepts, principles) and skills (processes, procedures, strategies) should the student have had to meet the learning standards? • What knowledge and skills should the student acquire from the work?

Student Progress				
Evaluation	Type of Assessment(s)	When will the assessment be conducted?	Approaching Mastery	
			Knowledge	Skills
1			Student will...	Student will...
2				
3				

*Evaluation # _____ Date: _____				Student Learning		Instruction	
Quality of Work In what ways does the work meet “good work” standards? In what ways, does the work fall short?	Student Understanding What about the work tells you how well the student understood the task? What about this work indicates areas for student improvement?	Student Effort In what ways does this work indicate student engagement? Where in the work did the student put the most effort? To what extent did the student challenge him/herself?	Student Growth How does the range of work for this single student demonstrate growth over time?	In what ways can the tasks and instruction be modified to address this student's progress toward the learning goals? What additional supports (i.e. tutoring, extra credit) may the student need?			

* If student work assessment includes more than one evaluation interval, you will need to make additional copies of the template

Evaluation # ____ Date: _____				Student Learning		Instruction	
Quality of Work In what ways does the work meet “good work” standards? In what ways, does the work fall short?	Student Understanding What about the work tells you how well the student understood the task? What about this work indicates areas for student improvement?	Student Effort In what ways does this work indicate student engagement? Where in the work did the student put the most effort? To what extent did the student challenge him/herself?	Student Growth How does the range of work for this single student demonstrate growth over time?	In what ways can the tasks and instruction be modified to address this student's progress toward the learning goals? What additional supports (i.e. tutoring, extra credit) may the student need?			

Evaluation # ____ Date: _____				Instruction
Student Learning				
Quality of Work In what ways does the work meet “good work” standards? In what ways, does the work fall short?	Student Understanding What about the work tells you how well the student understood the task? What about this work indicates areas for student improvement?	Student Effort In what ways does this work indicate student engagement? Where in the work did the student put the most effort? To what extent did the student challenge him/herself?	Student Growth How does the range of work for this single student demonstrate growth over time?	In what ways can the tasks and instruction be modified to address this student’s progress toward the learning goals? What additional supports (i.e. tutoring, extra credit) may the student need?

Adapted from:

Looking Together at Student Work. (1999). Blythe, T., Allen, D., & Powell, B. New York: Teachers College Press *and* Understanding by Design, 2nd Ed. (2005). Wiggins, G. P., & McTighe, J. Alexandria, VA: Association for Supervision and Curriculum Development

**COLLECTING AND SHARING YOUR OWN DATA:
STUDENT WORK ANALYSIS (Sample Report 1)**

Student Performance Assessment
ISA WRITING ASSESSMENT
FINAL REPORT 9TH Grade
2009 - 2010

XYZ School

**ISA Student Performance Assessment:
WRITING 2009-2010**

XYZ School

**Summary of 9th Grade ISA
Writing Assessment Results Fall 2009**

Number of Students Assessed

		Fall 2009		Spring 2010	
Total Number of Students		80	100%	80	100%
Total Number of Students Assessed		67	84%	60	75%
Gender	Male	36	54%	31	52%
	Female	31	46%	29	48%
ELL	No	65	97%	57	95%
	Yes	2	3%	3	5%
Special Ed.	No	52	78%	45	75%
	Yes	15	22%	15	25%
Race	Black	61	91%	54	90%
	Hispanic	5	7%	5	8%
	Unknown	1	1%	1	2%
Free/Reduced Lunch	No	39	58%	36	60%
	Yes	28	42%	24	40%

Of a total of 80 ninth grade students, 67 (84%) took the writing assessment. Of that number, 54% were male, and 46% were female. There were 2 students (3%) classified as English Language Learners, while 15 students (22%) were classified as Special Education students. The majority of students (91%) were Black/African American, and there were 5 Hispanic students (7%). One student's race/ethnicity information was unknown. More than two-fifths of students (42%) were classified as free/reduced lunch eligible.

Spring 2010

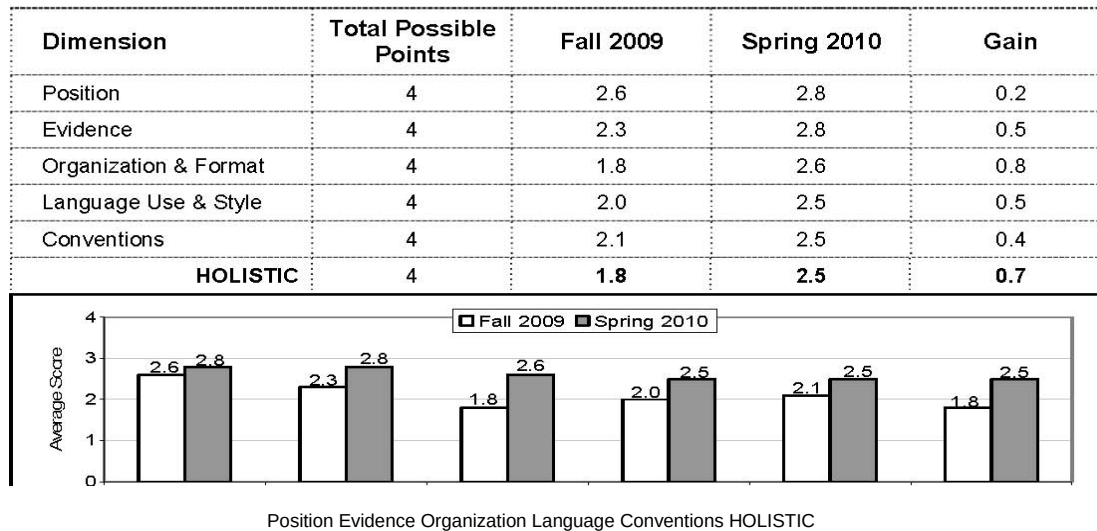
Of a total of 80 ninth grade students, 60 (75%) took the writing assessment. Of that number, 52% were male, and 48% were female. There were 3 students (5%) classified as English Language Learners, while 15 students (25%) were classified as Special Education students. The majority of students (90%) were Black/African American, and there were 5 Hispanic students (8%). One student's race/ethnicity information was unknown. Two-fifths of students (40%) were classified as free/reduced lunch eligible.

**ISA Student Performance Assessment: WRITING
2009-2010**

XYZ School

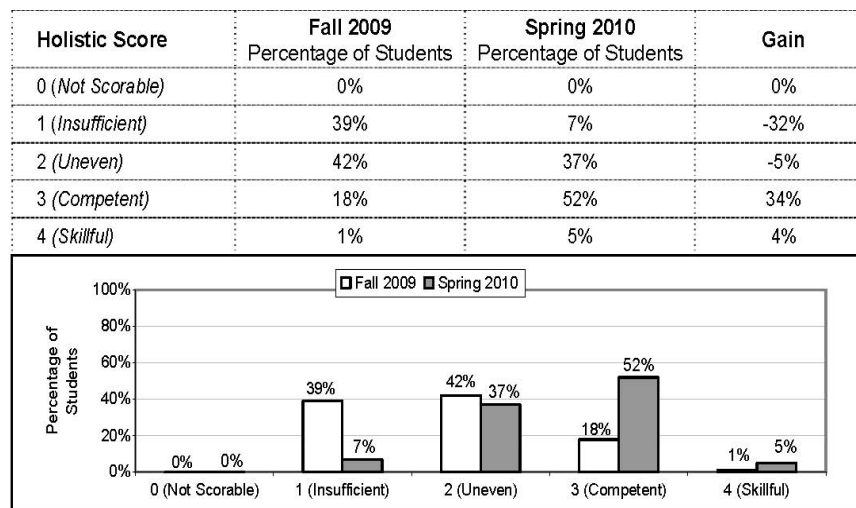
Average Dimension and Holistic Scores

The table and chart below show the 9th grade average scores and gains on the dimensions. Students' average holistic score increased by 0.7 from fall 2009 to spring 2010. Students on average showed gains from their baseline scores on all dimensions, with the highest gain on *Organization & Format* (0.8).



Distribution of Students by Holistic Score

The table and chart below show the distribution of students based on the holistic score that they received on the writing assessment. The percentage of students who received a 1 (*Insufficient*) and a 2 (*Uneven*) decreased by 32% and 5%, respectively, from fall 2009 to spring 2010, while the percentage of students receiving a 3 (*Competent*) and a 4 (*Skillful*) increased by 34% and 4%, respectively. There were no students who scored a 0 (*Not Scorable*) in both fall and spring.



Total percentages may be slightly higher or lower than 100% due to rounding.

**ISA Student Performance Assessment:
WRITING: 2009-2010**

On average, students who were not classified as free/reduced lunch eligible had a larger holistic score gain (0.8) compared to those who were eligible (0.6).

XYZ School
9th Grade Average Holistic Score by Subgroup

The following describes students' average total scores according to their various demographic characteristics.

Subgroup		Average Score		Gain
		Fall 2009	Spring 2010	
Gender	Male	1.6	2.6	1.0
	Female	2.1	2.4	0.3
ELL Student	No	1.8	2.6	0.8
	Yes	1.0	2.0	1.0
Special Ed.	No	2.0	2.7	0.7
	Yes	1.3	2.1	0.8
Race	Black	1.8	2.6	0.8
	Hispanic	1.8	2.0	0.2
	Unknown	3.0	3.0	0.0
Free/Reduced Lunch	No	1.8	2.6	0.8
	Yes	1.9	2.5	0.6

On average, both male and female students showed the average holistic score gains from fall 2009 to spring 2010, and male students' gain (1.0) was larger than female students' gain (0.3).

ELL students had a larger average holistic score gain (1.0) compared to non-ELL students (0.8).

Special Ed. students had a larger score gain holistically (0.8) than non-Special Ed. students (0.7) from fall to spring.

There were differences in students' average holistic score gains from fall 2009 to spring 2010 based on their race/ethnic background. Black students had a larger holistic score gains (0.8) from fall to spring than Hispanic students (0.2). Students whose race/ethnicity was unknown received the same holistic scores of 3.0 in both fall and spring.

COLLECTING AND SHARING YOUR OWN DATA: TRANSCRIPT DATA

Analyzing high school or college transcripts is an effective way to measure student achievement outcomes. Data from transcripts can provide detailed information on students' progress toward a degree, their course-level and overall (GPA) performance, and the kinds of courses taken.

I. Suggested Uses of Transcript Analysis

- To monitor student progress.
- To provide additional student outcome data.
- To identify trends and patterns in student academic performance.

II. Limitations of Transcript Analysis

- If done manually, time consuming data input and clean up process.
- Requires some degree of skills with numerical databases.

III. Data Collection and/or Data Entry

A. Direct **ELECTRONIC** upload from student transcript computer system.

- Representatives of the high school and college should first meet to discuss specific variables to be uploaded, student academic years of interest, and anticipated timeframe. Transcript data collection/analysis once a year is probably most manageable.
- Basic variables from college transcript system to upload should include:

High school code (colleges typically have a variable for this)
Student last name
Student first name
Student middle name
Student date of birth
Student college ID number
Cumulative GPA (fall through to summer term)
Cumulative credits attempted (fall through to summer term)
Cumulative credits earned (fall through to summer term)
Term (fall, spring, winter, summer)
Year (2008, 2009, 2010)
Course name (ENG 101: English Composition)
Course ID (Some systems list ID & name separately [i.e. ENG 101; English Comp])
Course credits attempted (Not always available; use college catalog for reference)
Course credits earned
Course grade
Other student demographic variables typically not included on college transcripts (i.e. grade level, gender, ethnicity, and other relevant variables).

- Provide the college with a document variable list to avoid any confusion; ask for a “cumulative upload,” meaning all college coursework data for given school year of students (i.e. all 2009-10 high school students who enrolled in college courses). The data spreadsheet should be in PER COURSE listing format, meaning that any given student may have multiple rows of course information. This allows for easy adding of future coursework to your database and easier analyses of the data.
- Ask that data be uploaded/imported into Microsoft excel or other statistical program and then saved to a CD disk.

B. Manual data entry from PAPER transcripts

- Request cumulative paper transcripts from the college for given school year of students (i.e. 2009-10 high school students who enrolled in college courses).
- Enter the specified transcript variables listed above into an excel spreadsheet. Data should be input as a PER COURSE listing format, meaning that any given student may have multiple rows of course information. This makes the process of adding, organizing and analyzing future coursework to your database easier.
- TIP: For variables such as student name, GPA, and credits – those that will be the same value for a given student – only input the data value once. You can later group those variable columns together and do a mass copy/paste into subsequent cells.

IV. Organizing and Analyzing the Data

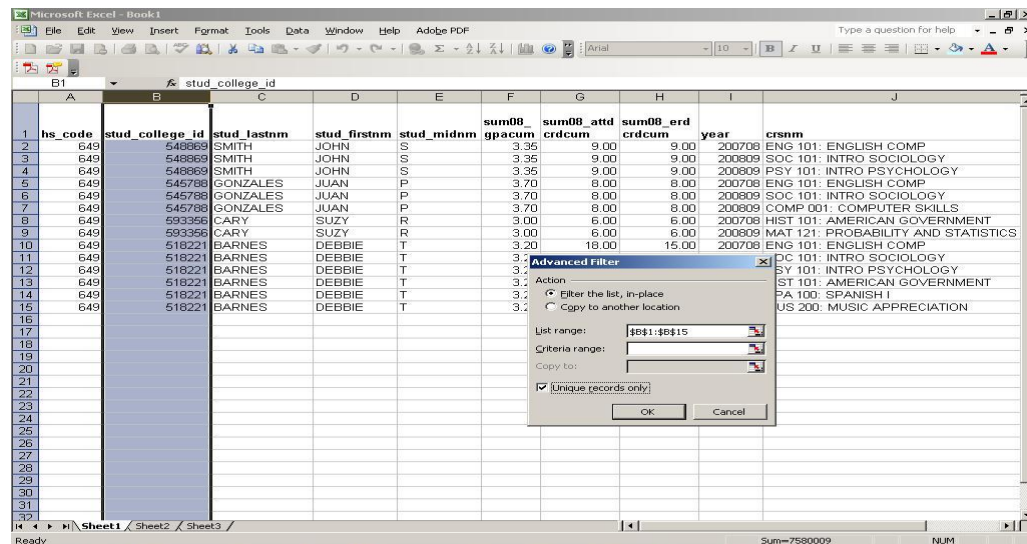
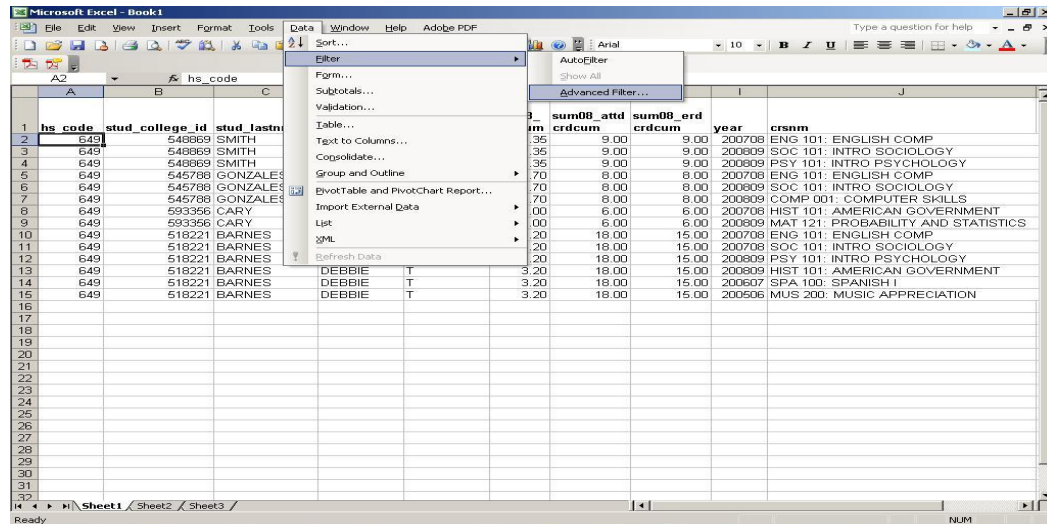
- A. Cleaning up the data and preparing for analysis (this will take some time and is an ongoing process). Suggestions for reviewing the data upload or data entry for accuracy:
- Depending on the number of students in the database, check ALL the information entered in the database against the paper transcript for every 10th or so student.
 - Make corrections as necessary.
 - Sort individual variables to clean up any values as needed.
 - Use the sort function (in Excel or a statistical software programs, such as SPSS) to check the data entry values for each of the variables. For example, if you sort by GPA, the range should only fall between 0-4.00, and anything higher would mean a data entry error. Also with student course names, you should be able to see cases in which the names were misspelled or entered in correction.
 - Using statistical software programs, such as SPSS, for this clean up process is most efficient, as you can run basic frequencies and check for unexpected items in the output.
- B. Aggregate the data
- To make the data easy to use for analysis, aggregating A PER COURSE database and creating an additional PER STUDENT database and PER SCHOOL YEAR database is important.
 - The PER COURSE database (the original database up to this point) will be used to extract specific course and grade information. It lists multiple rows of course information for any given student.

COLLECTING YOUR OWN DATA

COLLECTING AND SHARING YOUR OWN DATA: *TRANSCRIPT DATA*

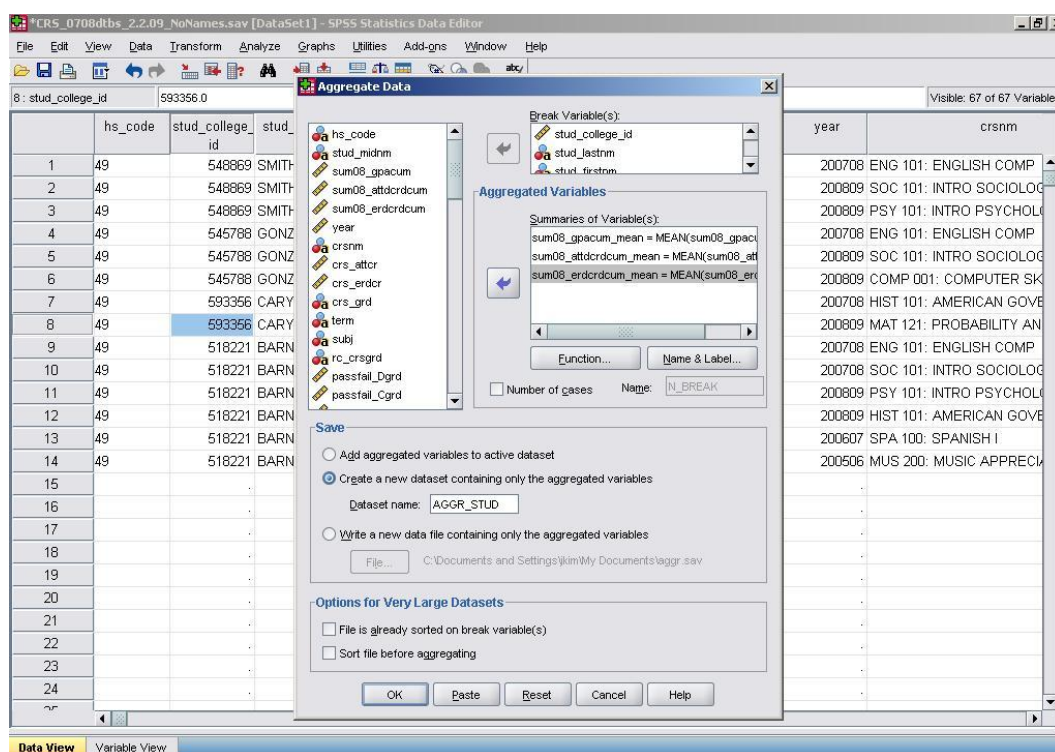
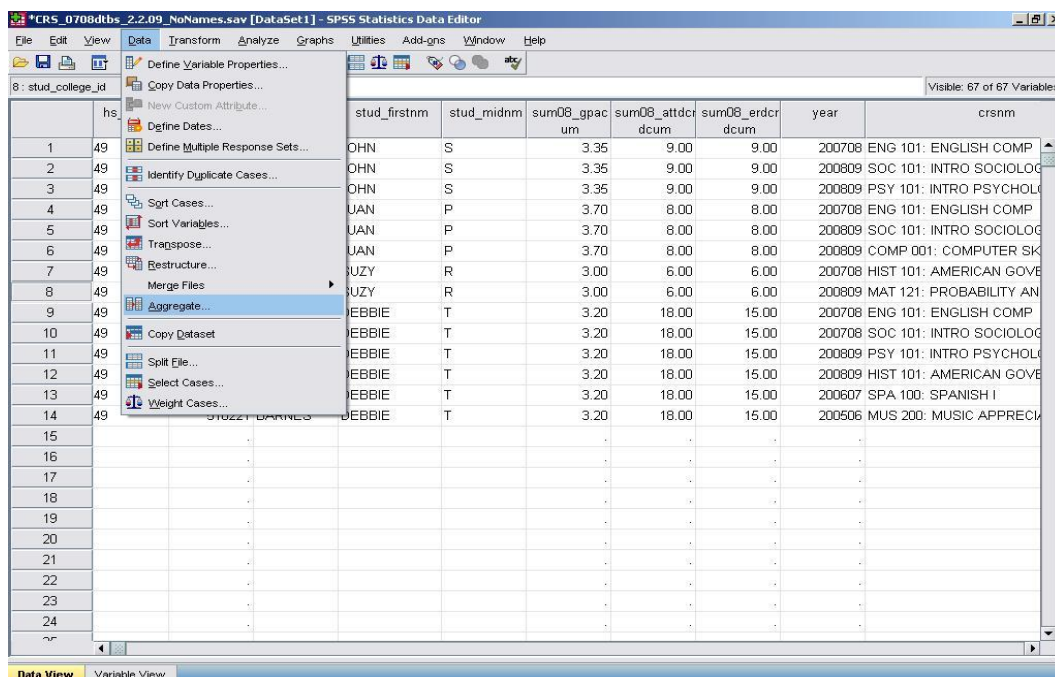
- The PER STUDENT database should be aggregated/filtered from the PER COURSE database. This PER STUDENT database will list one row of information for any given student. This is the database you want to use when running overall averages/means.

USING MICROSOFT EXCEL. Use the “advanced filter” function. See screen captures below.



COLLECTING YOUR OWN DATA
COLLECTING AND SHARING YOUR OWN DATA: *TRANSCRIPT DATA*

USING STATISTICAL SOFTWARE. With software such as SPSS, you can also use the “aggregate” function. See screen captures below.



V. Transcript Analysis Reporting

- Data points that may be of interest for inclusion in a report include:
 - Summary college course data such as GPA, credits, and pass rate by grade cohort, which may be calculated overall, by grade cohort, by gender, by racial/ethnic group, by lunch status, etc.
 - Grade cohort snapshots
 - Average college credits per student
 - College course grade results
 - Distribution of course grades
 - Number of course enrollments by subject area
 - All Students
 - College course pass rate, cumulative
 - Number of course enrollments and earned credits by subject area
 - List of college courses by subject area, cumulative
- Visual data representations (Refer to [graph/table template](#) to share your data)

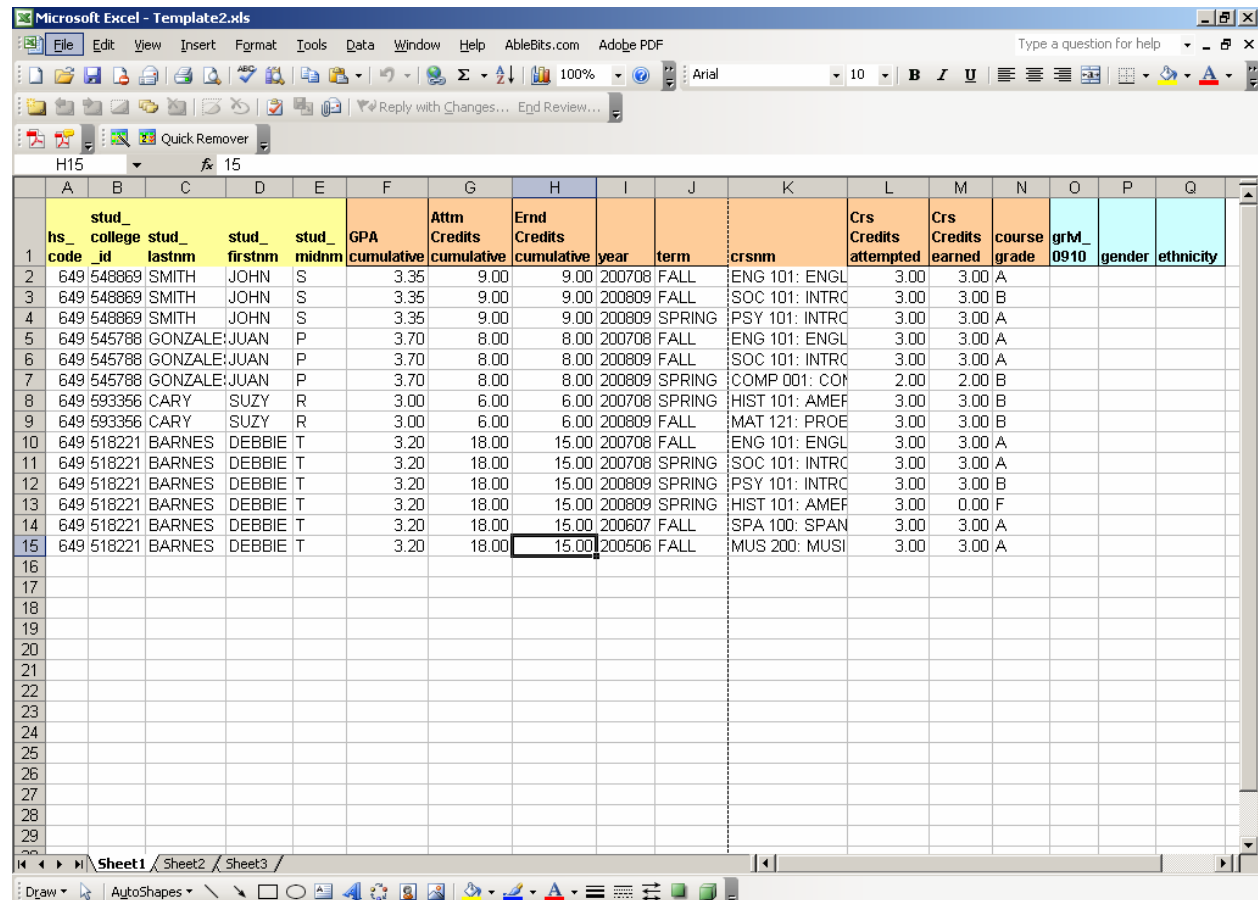
COLLECTING YOUR OWN DATA

COLLECTING AND SHARING YOUR OWN DATA: *TRANSCRIPT DATA*

COLLECTING AND SHARING YOUR OWN DATA:

TRANSCRIPT DATA (Graphs/tables to share your data template)

To view the complete file, see Transcript Analysis Excel attachment



	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
	hs_	college	stud_	stud_	stud_	GPA	Attm	Ernd				Crs	Crs	course	grrM_		
1	code	_id	lastnm	firstnm	midnm	cumulative	cumulative	cumulative	year	term	crsnm	attempted	earned	grade	0910	gender	ethnicity
2	649	548869	SMITH	JOHN	S	3.35	9.00	9.00	200708	FALL	ENG 101: ENGL	3.00	3.00	A			
3	649	548869	SMITH	JOHN	S	3.35	9.00	9.00	200809	FALL	SOC 101: INTRC	3.00	3.00	B			
4	649	548869	SMITH	JOHN	S	3.35	9.00	9.00	200809	SPRING	PSY 101: INTRC	3.00	3.00	A			
5	649	545788	GONZALEZ	JUAN	P	3.70	8.00	8.00	200708	FALL	ENG 101: ENGL	3.00	3.00	A			
6	649	545788	GONZALEZ	JUAN	P	3.70	8.00	8.00	200809	FALL	SOC 101: INTRC	3.00	3.00	A			
7	649	545788	GONZALEZ	JUAN	P	3.70	8.00	8.00	200809	SPRING	COMP 001: COM	2.00	2.00	B			
8	649	593356	CARY	SUZY	R	3.00	6.00	6.00	200708	SPRING	HIST 101: AMEF	3.00	3.00	B			
9	649	593356	CARY	SUZY	R	3.00	6.00	6.00	200809	FALL	MAT 121: PROE	3.00	3.00	B			
10	649	518221	BARNES	DEBBIE	T	3.20	18.00	15.00	200708	FALL	ENG 101: ENGL	3.00	3.00	A			
11	649	518221	BARNES	DEBBIE	T	3.20	18.00	15.00	200708	SPRING	SOC 101: INTRC	3.00	3.00	A			
12	649	518221	BARNES	DEBBIE	T	3.20	18.00	15.00	200809	SPRING	PSY 101: INTRC	3.00	3.00	B			
13	649	518221	BARNES	DEBBIE	T	3.20	18.00	15.00	200809	SPRING	HIST 101: AMEF	3.00	0.00	F			
14	649	518221	BARNES	DEBBIE	T	3.20	18.00	15.00	200607	FALL	SPA 100: SPAN	3.00	3.00	A			
15	649	518221	BARNES	DEBBIE	T	3.20	18.00	15.00	200506	FALL	MUS 200: MUSI	3.00	3.00	A			
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COLLECTING AND SHARING YOUR OWN DATA: TRANSCRIPT DATA (Sample Report)

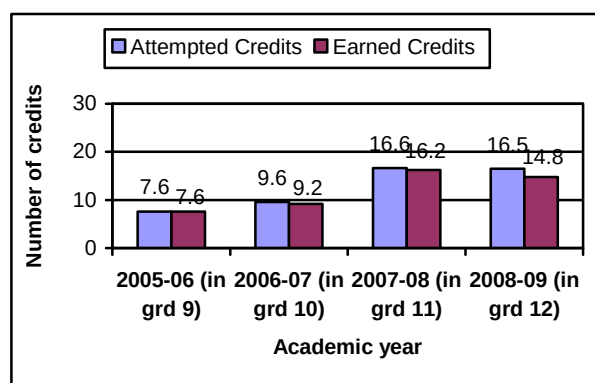
GPA, Credits, and Passrate by Grade Cohort

2008-09 Cohort	On School Roster	Enrolled in college coursework	Cumulative Average			
			College GPA	Earned Credits	Courses Taken	Course Passrate*
9th graders	108	23 22%	3.57	3	1	100%
10th graders	109	85 78%	3.35	9	3	98%
11th graders	107	88 82%	3.26	20	7	99%
12th graders	118	117 99%	3.12	22	8	97%
Total	442	313 71%	3.25	17	6	98%

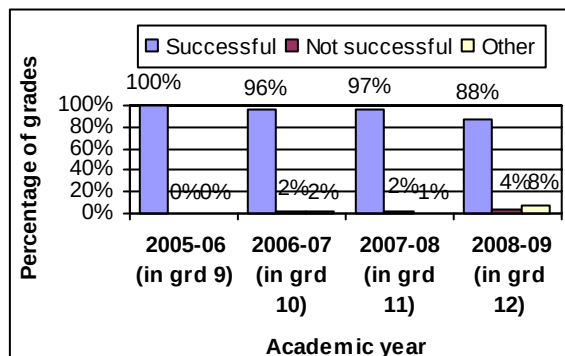
* Course passrate = percent of course grades resulting in a D grade or higher, out of all the coursework students took during high school that resulted in A, B, C, CR, D, and F grades.

2008-09 12th graders:

Average college credits per student

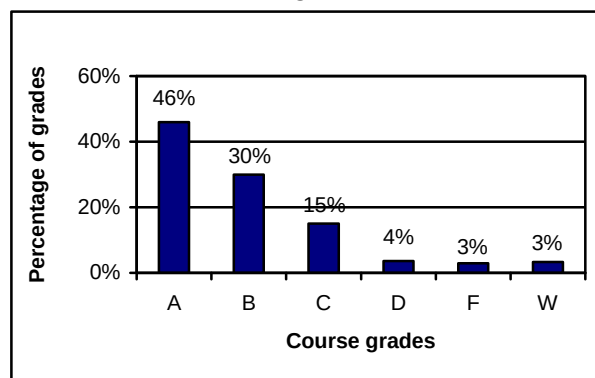


College course grade results

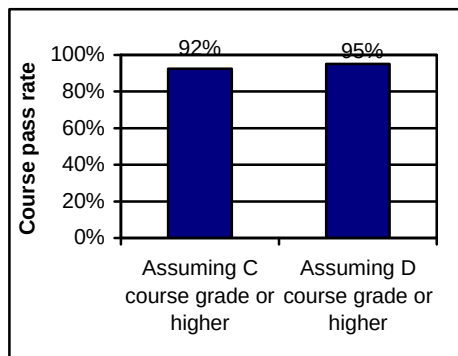


Successful = A, B, C, D, CR grades
Not successful = F or NC grades
Other = All other grades such as W (Withdrawal), I (Incomplete), etc.

Distribution of course grades, cumulative



All students: College course pass rate, cumulative

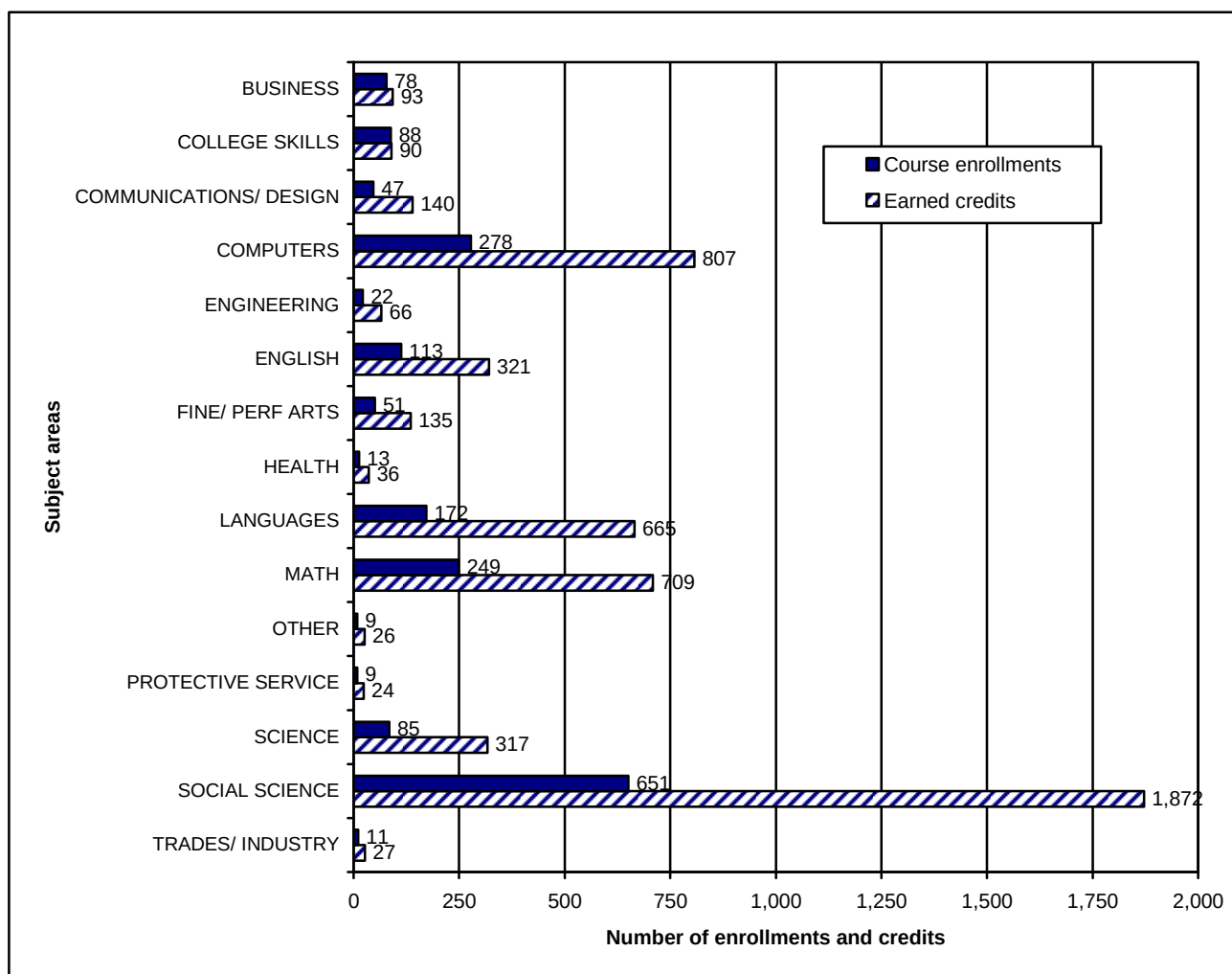


$$\text{Course Pass rate \%} = \frac{\text{\# of A, B, C, D, CR grades}}{(\text{\# of A, B, C, D, CR grades}) + (\text{\# of F, NC grades})}$$

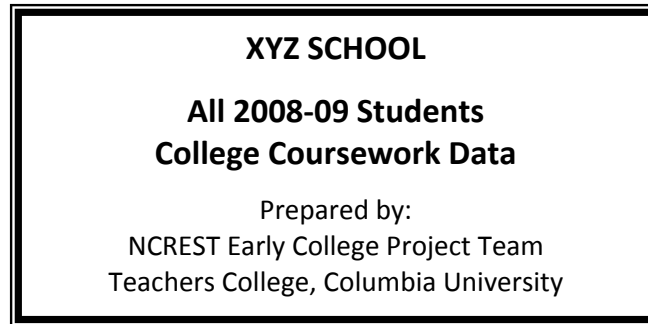
Typically, other grades such as W (Withdrawal) and I (Incomplete) are not included when calculating course pass rates.

Calculation applies to Course pass rate = D course grade or higher.

All students: Number of course enrollments and number of earned credits by subject area, cumulative



TRANSCRIPT ANALYSIS REPORT (EXAMPLE)



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Appendix C: College Coursework Student Summary Data, 2007-08 Students (from previous year)

Student Summary Data

Table 1: Students included in the 2008-09 college course database

2008-09 Cohort	On School Roster	Enrolled in college coursework*	Gender	
			Male	Female
9th graders	44	33 75%	15	18
10th graders	41	41 100%	16	25
11th graders	47	47 100%	18	29
12th graders	49	49 100%	21	28
Total	181	170 94%	70	100

* Enrolled in college coursework = the number of students who have enrolled in at least one college course during high school.

Table 2: GPA, Credits, and Passrate by Grade Cohort

2008-09 Cohort	On School Roster	Enrolled in college coursework*	Cumulative Average			
			College GPA	Earned Credits	Courses Taken	Course Passrate*
9th graders	44	33 75%	3.65	7	2	100%
10th graders	41	41 100%	3.38	13	4	99%
11th graders	47	47 100%	2.97	23	8	97%
12th graders	49	49 100%	2.88	30	11	94%
Total	181	170 94%	3.17	19	7	96%

* Course passrate = percent of course grades resulting in a D grade or higher, out of all the coursework students took during high school that resulted in A, B, C, CR, D, and F grades.

Table 3: GPA, Credits, and Passrate by Gender

2008-09 Cohort	Enrolled in college coursework	Cumulative Average		
		College GPA	Earned Credits	Course Passrate
Male	70	3.11	20	97%
Female	100	3.21	19	95%
Total	170	3.17	19	96%

2008-09 9th Grader Cohort

Figure 1: Average college credits per student

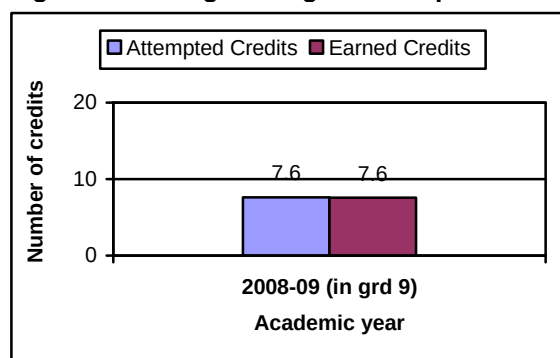


Figure 2: College course grade results

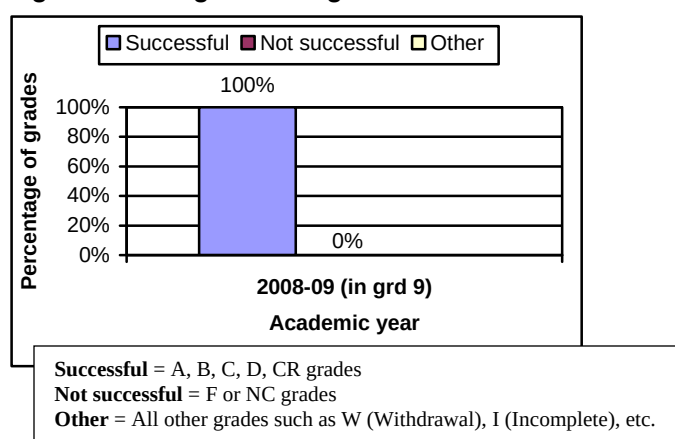
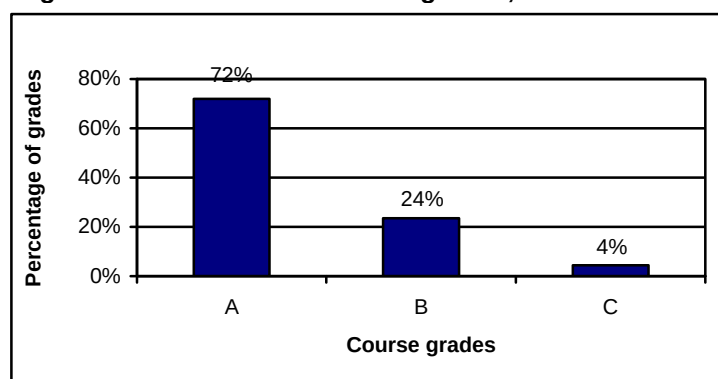


Figure 3: Distribution of course grades, cumulative



Crsgrd	Frequency	Percent
A	49	72.1
B	16	23.5
C	3	4.4

Table 4: Number of course enrollments by subject area, cumulative

Subject area	Number of Enrollments	Percent of Enrollments
COLLEGE SKILLS	33	48.5
COMMUNICATIONS/ DESIGN	3	4.4
COMPUTERS	5	7.4
LANGUAGES	24	35.3
PE	2	2.9
SOCIAL SCIENCE	1	1.5
Total	68	100.0

2008-09 10th Grader Cohort

Figure 4: Average college credits per student

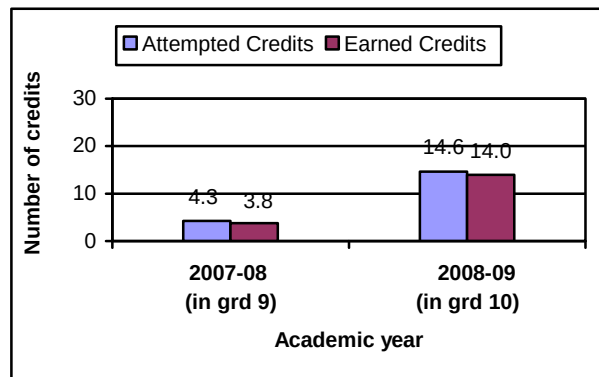
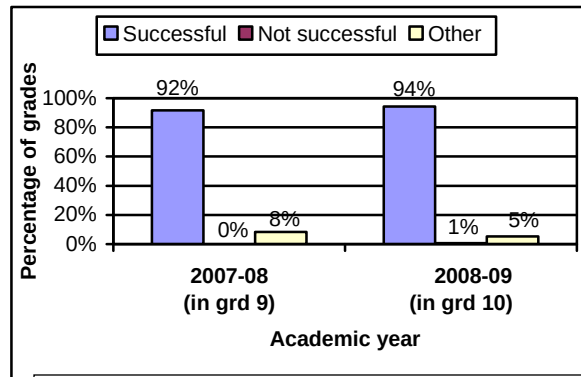
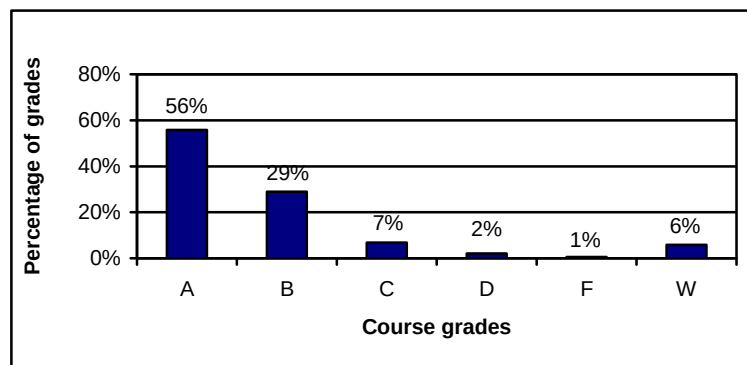


Figure 5: College course grade results



Successful = A, B, C, D, CR grades
Not successful = F or NC grades
Other = All other grades such as W (Withdrawal), I (Incomplete), etc.

Figure 6: Distribution of course grades, cumulative



Crsgrd	Frequency	Percent
A	106	55.8
B	55	28.9
C	13	6.8
D	4	2.1
F	1	.5
W	11	5.8

Table 5: Number of course enrollments by subject area, cumulative

Subject area	Number of Enrollments	Percent of Enrollments	In gr 9	In gr 10
COLLEGE SKILLS	43	22.6	27	16
COMMUNICATIONS/ DESIGN	25	13.2	2	23
COMPUTERS	17	8.9	4	13
FINE/ PERF ARTS	17	8.9	0	17
LANGUAGES	33	17.4	0	33
OTHER	1	.5	0	1
PE	16	8.4	2	14
SOCIAL SCIENCE	38	20.0	1	37
Total	190	100.0	36	154

2008-09 11th Grader Cohort

Figure 7: Average college credits per student

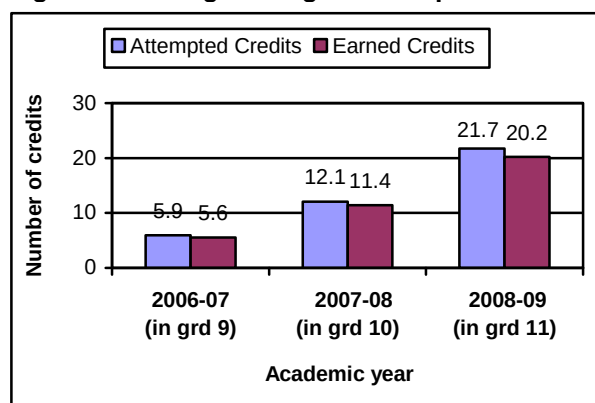
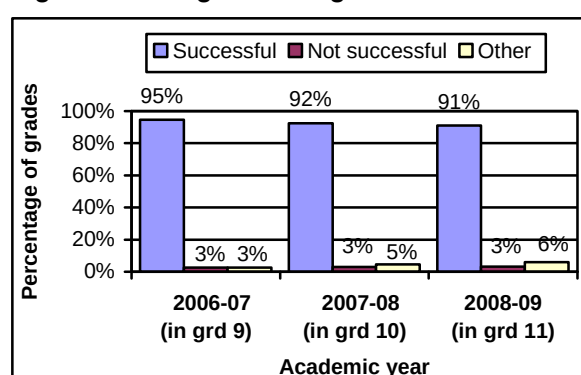


Figure 8: College course grade results

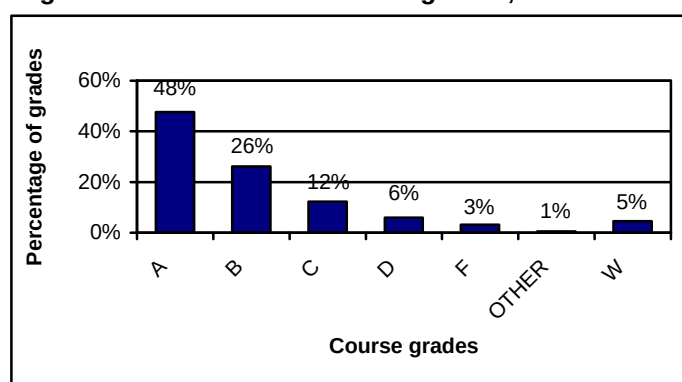


Successful = A, B, C, D, CR grades

Not successful = F or NC grades

Other = All other grades such as W (Withdrawal), I (Incomplete), etc

Figure 9: Distribution of course grades, cumulative



Crsgrd	Frequency	Percent
A	182	46.5
A#	4	1.0
B	102	26.1
C	47	12.0
C+	1	.3
D	20	5.1
D+	3	.8
E	2	.5
F	12	3.1
W	18	4.6

Table 6: Number of course enrollments by subject area, cumulative

Subject area	Number of Enrollments	Percent of Enrollments	In gr 9	In gr 10	In gr 11
BUSINESS	2	.5	0	1	1
COLLEGE SKILLS	50	12.8	21	24	5
COMMUNICATIONS/ DESIGN	30	7.7	1	13	16
COMPUTERS	34	8.7	7	21	6
ENGLISH	29	7.4	0	2	27
FINE/ PERF ARTS	34	8.7	0	15	19
LANGUAGES	54	13.8	2	26	26
MATH	4	1.0	0	0	4
PE	22	5.6	2	10	10
PUBLIC SERVICE	1	.3	0	0	1
SCIENCE	6	1.5	0	2	4
SOCIAL SCIENCE	125	32.0	5	18	102
Total	391	100.0	38	132	221

2008-09 12th Grader Cohort

Figure 10: Average college credits per student

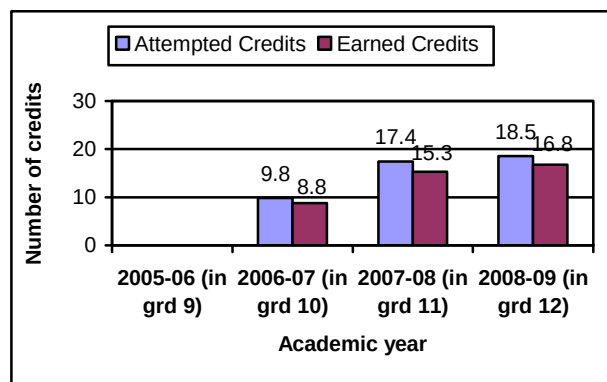
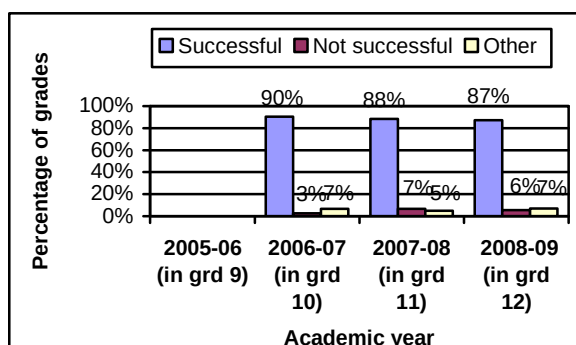
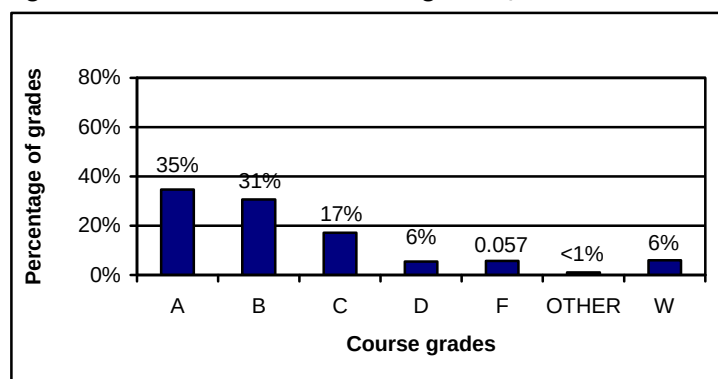


Figure 11: College course grade results



Successful = A, B, C, D, CR grades
Not successful = F or NC grades
Other = All other grades such as W (Withdrawal), I (Incomplete), etc.

Figure 12: Distribution of course grades, cumulative



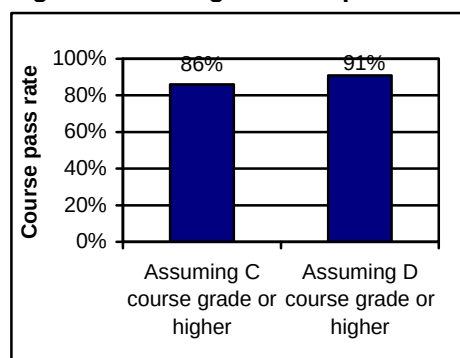
Crsgrd	Frequency	Percent
A	188	34.4
A#	2	.4
B	166	30.3
B#	2	.4
C	90	16.5
C#	4	.7
D	29	5.3
D+	1	.2
E	1	.2
F	31	5.7
W	33	6.0

Table 7: Number of course enrollments by subject area, cumulative

Subject area	Number of Enrollments	Percent of Enrollments	In gr 10	In gr 11	In gr 12
BUSINESS	4	.7	1	2	1
COLLEGE SKILLS	51	9.3	21	28	2
COMMUNICATIONS/ DESIGN	46	8.4	9	20	17
COMPUTERS	29	5.3	15	8	6
EDUCATION	2	.4	0	1	1
ENGLISH	68	12.4	0	25	43
FINE/ PERF ARTS	42	7.7	4	26	12
LANGUAGES	53	9.7	13	22	18
MATH	9	1.6	0	0	9
PE	24	4.4	1	17	6
SCIENCE	18	3.3	0	1	17
SOCIAL SCIENCE	200	36.6	9	92	99
TRADES/ INDUSTRY	1	.2	0	0	1
Total	547	100.0	73	242	232

All 2008-09 Students

Figure 13: College course pass rate, cumulative

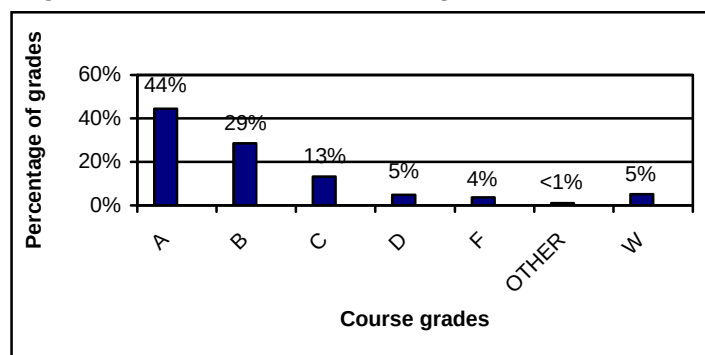


$$\text{Course Pass rate \%} = \frac{\text{\# of A, B, C, D, CR grades}}{(\text{\# of A, B, C, D, CR grades}) + (\text{\# of F, NC grades})}$$

Typically, other grades such as W (Withdrawal) and I (Incomplete) are not included when calculating course pass rates.

Calculation applies to Course pass rate = D course grade or higher.

Figure 14: Distribution of course grades, cumulative



Crsgrd	Frequency	Percent
A	525	43.9
A#	6	.5
B	339	28.3
B#	2	.2
C	153	12.8
C#	4	.3
C+	1	.1
D	53	4.4
D+	4	.3
E	3	.3
F	44	3.7
W	62	5.2

Table 8: Number of course enrollments by subject area, cumulative

Subject area	Number of Enrollments	Percent of Enrollments
BUSINESS	6	.5
COLLEGE SKILLS	177	14.8
COMMUNICATIONS/ DESIGN	104	8.7
COMPUTERS	85	7.1
EDUCATION	2	.2
ENGLISH	97	8.1
FINE/ PERF ARTS	93	7.8
LANGUAGES	164	13.7
MATH	13	1.1
OTHER	1	.1
PE	64	5.4
PUBLIC SERVICE	1	.1
SCIENCE	24	2.0
SOCIAL SCIENCE	364	30.4
TRADES/ INDUSTRY	1	.1
Total	1196	100.0

Figure 15: Number of course enrollments and number of earned credits by subject area, cumulative

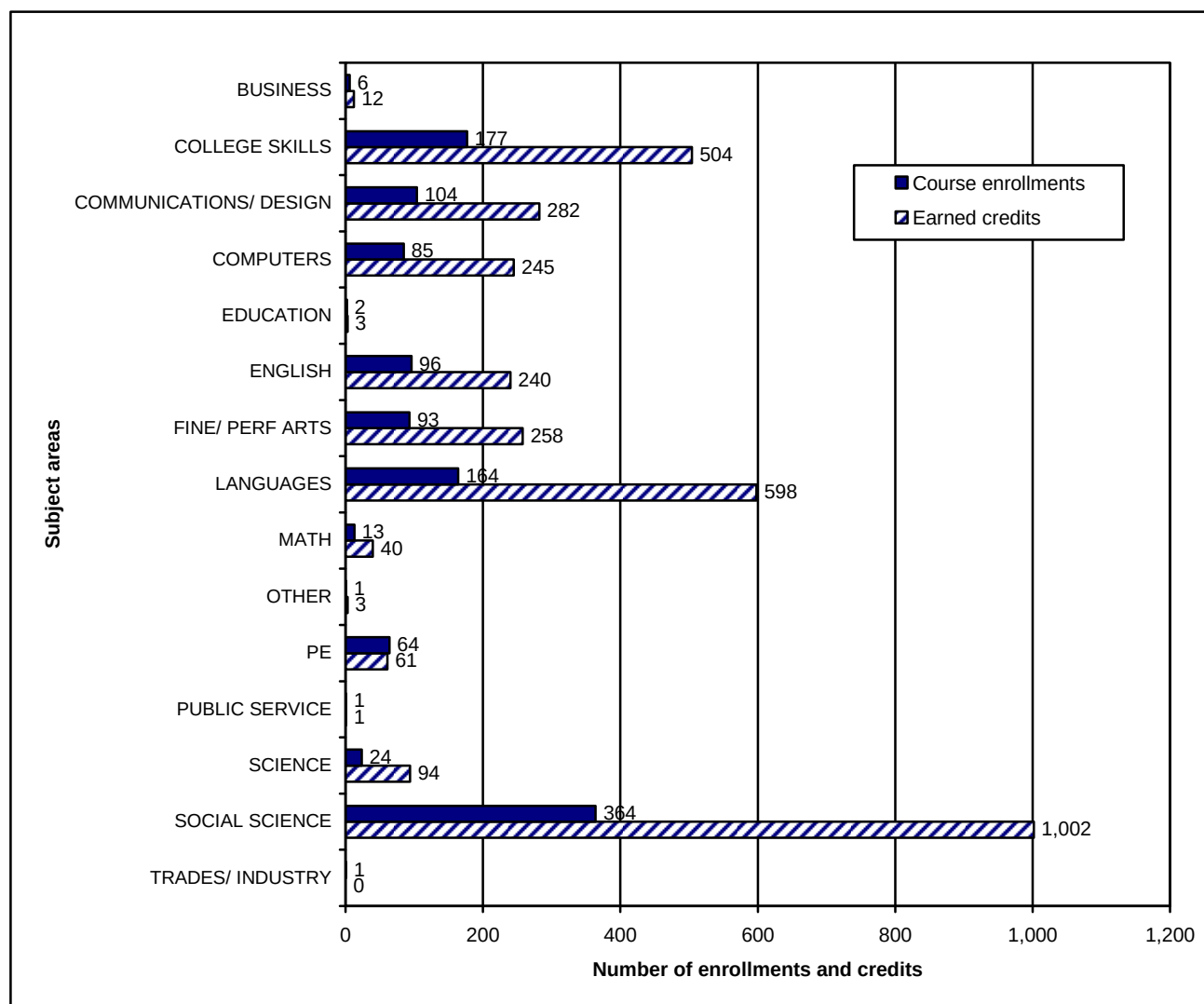
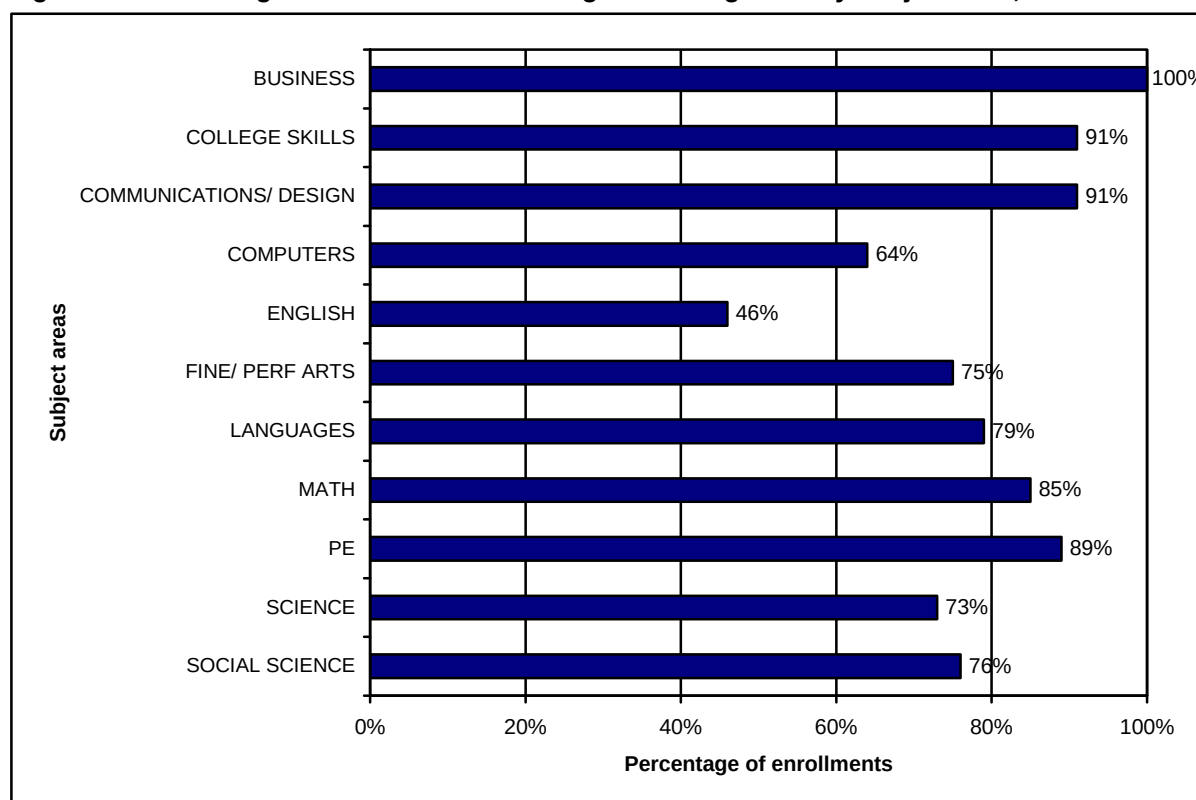


Table 9: Number of course enrollments resulting in A, B, C, D, or F grades by subject area, cumulative

Subject area	Number of enrollments	Number of course enrollments resulting in A, B, C, D, or F grades
BUSINESS	6	4
COLLEGE SKILLS	177	172
COMMUNICATIONS/ DESIGN	104	97
COMPUTERS	85	80
EDUCATION	2	1
ENGLISH	97	87
FINE/ PERF ARTS	93	88
LANGUAGES	164	156
MATH	13	13
OTHER	1	1
PE	64	61
PUBLIC SERVICE	1	1
SCIENCE	24	24
SOCIAL SCIENCE	364	345
TRADES/ INDUSTRY	1	1
Total	1196	1131

Figure 16: Percentage of enrollments resulting in A or B grades by subject area, cumulative



* Only enrollments resulting in A, B, C, D, F grades were included in the percentages.

Appendix A
List of college courses by subject area, cumulative

Subject area Listed alphabetically and based on classification system used by NCES.	College course name Listed alphabetically; 2007-08 students were enrolled in these courses at some point during their high school years.	Number of enrollments For the course	Percent of enrollments For the course within given subject area
BUSINESS	BUSI 1301: INTRO TO BUSINESS	3	50.0
	MRKG 1311: PRINCIPLES OF MARKETING	2	33.3
	MRKG 1302: PRINCIPLES OF RETAILING	1	16.7
	Total	6	100.0
COLLEGE SKILLS	HDEV 1310: CAREER EXPLORATION/PLANNING	171	96.6
	DREA 0091: DEV READING	2	1.1
	DREA 0093: DEV READING	2	1.1
	DMAT 0093: INTER ALGEBRA	1	.6
	DREA 0090: DEV READING	1	.6
	Total	177	100.0
COMMUNICATIONS / DESIGN	SPCH 1311: INTRO SPE COMM	82	78.8
	SPCH 1144: SPEECH COMMUNICATION WORKSHOP I	5	4.8
	ARTC 1302: DIGITAL IMAGING I	4	3.8
	IMED 1416: WEB DESIGN I	4	3.8
	IMED 2415: WEB DESIGN II	2	1.9
	SPCH 1145: SPEECH COMMUNICATION WKSHP II	2	1.9
	ARTC 1305: BASIC GRAPHIC DESIGN	1	1.0
	ARTV 1351: DIGITAL VIDEO	1	1.0
	ARTV 2401: 2-D ANIMATION 1	1	1.0
	IMED 1415: WEB DESIGN II	1	1.0
	SPCH 2145: SPEECH COMMUNICATION WORKSHOP IV	1	1.0
	Total	104	100.0
COMPUTERS	POFT 1329: BEGINNING KEYBOARDING	56	65.9
	ITNW 1492: SPC TPC/COM SYS NETWK/TELECOM	12	14.1
	BCIS 1405: BUSINESS COMPUTER APPLICATIONS	10	11.8
	COSC 1300: COMPUTER LITERACY	3	3.5
	ITSW 1401: INTRO TO WORD PROCESSING	2	2.4
	ITSW 1404: INTRODUCTION TO SPREADSHEETS	2	2.4
	Total	85	100.0
EDUCATION	EDUC 1301: INTRO TO THE TEACHING PROFESSION	2	100.0

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ENGLISH	ENGL 1301: COMPOSITION I	64	66.0
	ENGL 1302: COMPOSITION II	27	27.8
	ENGL 2323: BRITISH LIT	4	4.1
	ENGL 2327: AMERICAN LITERATURE	1	1.0
	ENGL 2333: WORLD LITERATURE	1	1.0
	Total	97	100.0
FINE/ PERF ARTS	MUSI 1300: FOUNDATION MUSIC	24	25.8
	MUSI 1306: MUSIC APPRECIATION	17	18.3
	DRAM 1310: INTRODUCTION TO THE THEATER	15	16.1
	ARTS 1311: 2D DESIGN	13	14.0
	HUMA 1315: FINE ARTS APPRECIATION	10	10.8
	ARTS 1301: ART APPRECIATION	5	5.4
	ARTS 1312: 3D DESIGN	2	2.2
	DRAM 1336: TELEVISION PRODUCTION I	2	2.2
	DRAM 2366: FILM APPRECIATION	2	2.2
	ARTS 1316: DRAWING I	1	1.1
	DRAM 1351: ACTING 1	1	1.1
	MUSI 1314: MUSIC APPRECIATION	1	1.1
	Total	93	100.0
LANGUAGES	SPAN 1411: BEGINNING SPANISH I	97	59.1
	SPAN 1412: BEGINNING SPANISH	49	29.9
	FREN 1411: BEGINNING FRENCH I	8	4.9
	SPAN 2311: INTERMEDIATE SPANISH I	5	3.0
	SPAN 1141: BEGINNING SPANISH	2	1.2
	FREN 1412: BEGINNING FRENCH II	1	.6
	FREN 2311: INTERMEDIATE FRENCH 1	1	.6
	SPAN 2312: INTERMEDIATE SPANISH II	1	.6
	Total	164	100.0
MATH	MATH 1314: COLLEGE ALGEBRA	8	61.5
	DMAT 0093: INTER ALGEBRA	4	30.8
	MATH 1414: COLLEGE ALGEBRA	1	7.7
	Total	13	100.0
OTHER	LGLA 1313: INTRO TO PARALEGAL STUDIES	1	100.0
PE	PHED 1164: BEGINNING PHYSICAL FITNESS	61	95.3
	PHED 1110: BEG TENNIS	2	3.1
	PHED 1137: INTER TENNIS	1	1.6
	Total	64	100.0
PUBLIC SERVICE	SERVICE LEARNING II	1	100.0

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SCIENCE	BIOL 1406: BIOLOGY FOR SCIENCE MAJORS I	12	50.0
	GEOL 1401: EARTH SCIENCE	4	16.7
	PHYS 1401: GEN PHYSICS	3	12.5
	PHYS 1402: GEN PHYSICS	3	12.5
	BIOL 2401: ANA & PHY	1	4.2
	GEOL 1404: HIST GEOLOGY	1	4.2
	Total	24	100.0
SOCIAL SCIENCE	GOVT 2301: AMERICAN GOVERNMENT	67	18.4
	SOCI 1301: INTRO TO SOCIOLOGY	55	15.1
	ECON 2301: PRIN ECON	50	13.7
	HIST 1301: HIST U.S.	50	13.7
	HIST 1302: HIST U.S.	46	12.6
	PSYC 2301: INTRO TO PSYCHOLOGY	41	11.3
	GOVT 2302: AMERICAN GOVERNMENT	33	9.1
	PHIL 1301: INTRODUCTION TO PHILOSOPHY	14	3.8
	RELI 1304: MAJOR WORLD RELIGIONS	3	.8
	ECON 2302: PRINCIPLES OF ECONOMICS	2	.5
	HIST 2321: WORLD CIVILIZATION	2	.5
	ECON: 2301 PRIN ECON	1	.3
	Total	364	100.0
TRADES/ INDUSTRY	CHEF 1301: BASIC FOOD PREPARATION	1	100.0

Appendix B:
2008-09 12th Graders – Distribution of cumulative college credits earned

Cumulative earned credits	Number of students	Percent of students	Cumulative percent
10	1	2.0	2.0
11	3	6.1	8.2
12	1	2.0	10.2
13	1	2.0	12.2
14	1	2.0	14.3
16	2	4.1	18.4
17	1	2.0	20.4
18	2	4.1	24.5
19	1	2.0	26.5
20	2	4.1	30.6
21	1	2.0	32.7
24	1	2.0	34.7
25	1	2.0	36.7
26	2	4.1	40.8
27	3	6.1	46.9
28	4	8.2	55.1
29	1	2.0	57.1
30	1	2.0	59.2
31	5	10.2	69.4
32	1	2.0	71.4
34	1	2.0	73.5
35	2	4.1	77.6
37	1	2.0	79.6
42	1	2.0	81.6
43	1	2.0	83.7
45	2	4.1	87.8
54	1	2.0	89.8
56	1	2.0	91.8
62	1	2.0	93.9
63	1	2.0	95.9
64	1	2.0	98.0
69	1	2.0	100.0
Total	49	100.0	

Appendix C
College Coursework Student Summary Data, 2007-08 Students (from previous year)

Student Summary Data

Table 1: Students included in the 2007-08 college course database

2007-08 Cohort	On School Roster	Enrolled in college coursework*	Gender	
			Male	Female
9th graders	40	35 (88%)	16	19
10th graders	50	49 (98%)	18	31
11th graders	49	49 (100%)	21	28
12th graders	32	28 (88%)	11	17
Total	171	161 (94%)	66	95

* Enrolled in college coursework = the number of students who have enrolled in at least one college course during high school. These numbers reflect college transcripts submitted by the school for analyses and does not include any incomplete student transcripts.

Table 2: GPA, Credits, and Passrate by Grade Cohort

2007-08 Cohort	On School Roster	Enrolled in college coursework	Cumulative Average		
			College GPA	Earned Credits	Course Passrate*
9th graders	40	35 (88%)	3.51	3.3	100%
10th graders	50	49 (98%)	3.16	10.8	97%
11th graders	49	49 (100%)	3.00	17.2	94%
12th graders	32	28 (88%)	2.58	20.6	94%
Total	171	161 (94%)	3.08	12.8	95%

* Course passrate = percent of course grades resulting in a D grade or higher, out of all the coursework students took during high school that resulted in A, B, C, CR, D, and F grades.

Table 3: GPA, Credits, and Passrate by Gender

2007-08 Cohort	On School Roster	Enrolled in college coursework	Cumulative Average		
			College GPA	Earned Credits	Course Passrate
Male	71	66 (93%)	2.93	14.1	94%
Female	100	95 (95%)	3.20	11.9	97%
Total	171	161 (94%)	3.08	12.8	95%

PROFESSIONAL DEVELOPMENT AROUND EVIDENCE-BASED EDUCATION



This section of the toolkit includes:

Structured as modules that can be used individually or in sequences in professional development workshops or sessions, you will find resources for facilitating professional development around data use. Included in each module are facilitator guides, templates and handouts.

Becoming a Evidence Based Education (EBE) School Module

- Intro to the EBE School Model
- DDDM 101
- Data Dashboards
- Action Research
- Telling Your Story Using Data

Data Collection Modules

- Online Surveys
- Interviews and Focus Groups
- Student Work Analysis

Additional Modules

- Creating an Early College Data Profile
- Using Data in the High School-College Partnership
- Involving Students in School Improvement

PROFESSIONAL DEVELOPMENT AROUND EVIDENCE-BASED EDUCATION: TIPS FOR EFFECTIVE PROFESSIONAL DEVELOPMENT (PD) AROUND EVIDENCE-BASED EDUCATION

Schools need to establish a culture of data use whereby making decisions informed by data can become a school wide norm (Hamilton, et al, 2009). Systematic use of evidence requires not only access to useful data but also skills in data use. Research indicates that targeted professional development on data-driven decision-making needs to be offered regularly. Professional development should focus on how data can inform individual teachers' practice and planning as well as larger school improvement decisions.

1. Setting the stage

Clear expectations. Establish goals for each session. *What should participants leave knowing?* Articulate how each professional development session can contribute to both individual practice and the school as a whole.

Collaborative inquiry. It should be made clear that those involved evidence-based education play important roles in the data use process and can become resources for one another. Professional learning communities using data-driven dialogue can emerge.

2. Exploring the data use process

Existing knowledge. Data is everywhere, but not everyone knows what data are useful or how data can be used to inform decision-making. Participants can take a quiz, survey, or other “ice-breaker” activity to discern what they already know about data, how they are using data, and how they can use data. Address, questions, concerns, and misconceptions about using data and help participants learn to identify useful data, how to analyze data, data interpretation, and connecting data to instructional strategies. These activities can help identify gaps in information and can inform other professional development activities.

Garet, et al. (2001) identified 3 core features of professional development activities shown to have significant positive effects on teachers' self-reported increase in knowledge and skills and changes in practice:

- *focus on content knowledge*
- *opportunities for active learning*
- *coherence with other learning activities.*

When these features inform how PD is delivered in terms of activity format, collective participation of teachers, and duration of the activity significant impact on teacher learning results.

Developing questions. Give participants a voice by asking them what questions they want answered. While participants may already have a topic, problem, or overarching issue in mind, brainstorming questions or sub-questions can assist in clarifying the core question or issue. Illustrate ways that new questions and answers can be uncovered by looking at data.

Data literacy. Specifically, it is important to design professional development activities and provide resources and tools to help participants develop knowledge around the following:

- Data Collection: Familiarize participants with key data terminology and concepts, systematic ways to access and identify useful data, designing and implementing data collection methods, and manipulating data to derive desired information.
- Analyzing Data: Demonstrate ways to manipulate and interpret existing data by reflecting on results, discriminating important information, and connecting results to questions and goals of the project. Participants also need to learn how to create assessments for progress, and how use assessment data in instruction and decision-making.
- Using Findings: Participants need to make sense of the findings and their own – and others' – reactions to those findings. How will the findings be applied in the classroom? What are the steps toward using data to modify decisions about instruction and planning? Can findings be used to effect school change? Data results should be used in a timely way so that participants see how its use relates to their own practice and larger decision-making occurring in the school.

Real-world application. Working with real problems can increase participant engagement and sense of ownership of the data use process. Ask participants to contribute real problems based on their own experiences and lead them through steps to making data-informed decisions. You can also incorporate hypothetical or real data scenarios or real case studies involving data use by educators. These scenarios can help participants practice using the concepts and skills necessary for evidence-based education.

3. Creating sustainability

Leadership. To make data use a regular practice, participants need to feel supported by school leadership. School leaders should be able to model data use in decision-making. What professional development opportunities do leaders need so they can become data use resources to staff? Does the school professional development plan include ongoing, targeted assistance around data use? Are staff members given the time to make data-informed decision-making part of their practice? Help leaders communicate the importance of data use in building a culture of continuous improvement and ways to develop systems and structures for supporting staff.

Start small, think big. Show participants how data use projects can start small (e.g. tracking one student’s math progress for a month), but can increase in scope to impact broader school decisions (e.g. revisions to grade level math curriculum).

Data experts. Identify emerging data experts in the school who can support colleagues and showcase best practices in using data. In what ways can these experts be incorporated into professional development facilitation?

Sharing findings. Telling the story of data use can help to foster a culture of data-informed decision-making and evidence-based education. In what ways can findings be shared with students, colleagues, and other members of the educational community? Making the process transparent can increase the comfort level for those wary of using data in their own instructional decisions.

Create a data use library. Help the school build a repository of information around using data. Provide help with finding district, state, and national resources for accessing data systems and tools that facilitate the data-informed decision-making process.

Means, et al. (2009) looked at teacher access, supports and use of data-informed decision-making in schools. They reported that teachers would like professional development around the following kinds of data use:

- *Ways to develop diagnostic assessments (58%)*
- *How to use data to inform curricular and instructional practices (55%)*
- *Identifying data to use in measuring progress against school improvement goals (50%)*
- *Proper interpretation of test score data (48%)*
- *How to use available data systems (44%)*
- *Formulating questions that can be addressed with data (38%)*
- *Techniques for collaborating with colleagues on data use (37%).*

References:

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PROFESSIONAL DEVELOPMENT AROUND EVIDENCE-BASED EDUCATION: USING THE PROFESSIONAL DEVELOPMENT DATA USE MODULES

A set of modules on data use have been included that draw on the resources that are shared elsewhere in this data toolkit. These modules can be used either individually or together, either at the individual school level or by intermediary organizations providing training on a broader scale.

- The modules are structured so that each could last approximately 1 ½ to 2 hours, a timeframe that is typical at PD conferences. However, the modules could also be linked together as part of a longer 1-2 day retreat on data use.
- Each module has a facilitator's guide that follows the same format: goals, materials needed, introduction, work time, and conclusion. With the exception of school data, the materials referenced in the "materials needed" section are provided as part of the data toolkit. However, facilitators should not feel bound to use the materials that have been developed and posted. In many cases, it will be appropriate for the facilitator to modify the materials to suit the specific goal of the session presented or the specific context being addressed.
- In addition, it may be appropriate for facilitators to set specific goals and expectations about next steps or follow up. However, these kinds of expectations will vary greatly depending on context, so they have not been included in the modules themselves. Individual facilitators should work with the participating schools and intermediaries to determine what follow-up is appropriate for each individual context.

BECOMING AN EBE SCHOOL: FACILITATOR'S GUIDE

Goal(s) for Session(s):

- Participants will understand what it means to be an Evidence-Based Education school.
- Participants will assess their school's readiness, determine who will participate in data team, and select a focus area.

Materials Needed:

- *Short readiness assessment OR in-depth readiness assessment*¹
- *Data sources handout*
- *Developing a team handout*
- *Developing a team template*
- *Choosing the focus area*
- *Exploring the focus area*
- *Creating a work plan how to (either short or in-depth) and templates*
- Sample work plans for each of the three approaches to data use

Activity	Timeframe
Introduction	
1. Say a few sentences about what it means to be an Evidence-Based Education school. 2. Begin discussion about a) what counts as data? b) what data sources are available within the school? c) what does it mean to be evidence-based? 3. Group people by school teams.	15 Minutes
Work Time	
1. Discuss necessity of assessing school for data use readiness. Each of the tools is intended to prompt school review, reflection, discussion, and ultimately, action aimed at the improvement of data-driven decisions. The shorter version will obviously take less time. a. Allow school groups time to individually take whichever assessment seems more appropriate. b. Ask school teams to share responses within the teams with the goal of reaching an overall sense of readiness. c. Given this readiness level, determine necessary next steps before beginning data work.	30 Minutes

¹ Heretofore, italicized gray font text represents materials presented in earlier sections of the document.

2. Discuss necessity of developing a data team and creating overall staff buy-in, using the how to handout as a guide. (Note that the membership of the data team may depend on individual capacity as well as on anticipated focus of data use process). a. Distribute template for developing a team. b. Provide time for school groups to complete developing a team template. 3. Facilitator should monitor time and prompt groups to progress appropriately. 4. Introduce the idea of developing a work plan. (Note that schools may be best prepared to develop a work plan once they've determined an approach that they plan to use and a focal area.) Share two different work plan templates, noting key differences in the "how to" of each plan.	20 Minutes
5. The next step for school teams to take is to begin to determine their focal area; facilitator should share the choosing the focus area template and the exploring the focus area template. 6. School teams will begin to complete the choosing the focus area template (first 3 boxes). 7. Facilitator should discuss taking the focus area templates back to the entire school community.	20 Minutes
8. Introduce the idea of developing a work plan. (Note that schools may be best prepared to develop a work plan once they've determined an approach that they plan to use and a focal area.) Share two different work plan templates, noting key differences in the "how to" of each plan.	10 Minutes

Conclusion	
1. Facilitator should ask for 1-2 groups to share sample work plans (either using the different templates or different focal areas, or different data use approaches). 2. Facilitator should debrief process with entire group and discuss next steps.	15 Minutes

DATA-DRIVEN DECISION-MAKING MODEL: FACILITATOR’S GUIDE

Goal(s) for Session(s):

- Participants will leave with an approach to using data for improving students’ experiences and outcomes.
- Participants will gain comfort with finding, interpreting and using data.

Materials Needed:

- *Choosing a Focus Area Tool*
- *Exploring the Focus Area Tool*
- *Planning for School Improvement Tool*
- School-specific data
- Suggested: Sample Case

Activity	Timeframe
Introduction	
1. Facilitator should introduce the goals of the session and provide an overview of the activities that will occur in the course of the session. Facilitator should distribute or have participants take out data and should distribute necessary tools. 2. Participants should be seated in school teams for this discussion/work session.	5 Minutes
Work Time	
1. Review the Choosing a Focus Area Tool and Exploring the Focus Area Tool (if using sample case, share this with participants). 2. Provide school teams with a short period of time (not more than 10 minutes) to discuss and select a focus area. 3. Facilitator should prompt all school teams to move to the Exploring the Focus Area tool after 10 minutes. 4. Participants should utilize their school data to complete the tool. 5. Facilitator(s) should circulate to provide support.	20-30 Minutes

6. Direct groups to begin to plan for school improvement based on their exploration of the focus area. Participants should define a problem within their focus area (based on their exploration) and should consider contributing factors and data sources that either confirm or disconfirm these factors as being related to the problem. Participants should continue to utilize their school data to complete the tool.	20-30 Minutes
7. Facilitator should direct groups to create a goal statement based on the problem and their contributing factors. School teams should plan strategies that they will use to attain the goal and will map out indicators for success for both the goals and the strategies.	10 Minutes

Conclusion	
1. Facilitator should pair school teams based on focus area and problem statement and have groups share their problem, contributing factors, and goal statement for feedback. 2. Groups should provide feedback on strategies they plan to use to address similar problem or to attain similar goal.	10 minutes

DATA DASHBOARD MODEL: FACILITATOR'S GUIDE

Goal(s) for Session(s):

- Participants will understand the types and uses of data dashboards.
- Participants will create Building Blocks that can be used in creating Data Dashboards.

Materials Needed:

- PowerPoint presentation with a range of examples of dashboards
- *Building Block templates*
- *Examples of three types of dashboards.*

Activities	Timeframe
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Introduction	
1. Say a few sentences about what data dashboards are used for. Emphasize the idea that they are used to display data; the data that they will display should provide a window into something that is very important to the school. 2. Ask participants how they might come up with the data points to be displayed (<i>elicit: in a school or faculty planning process; based on important goals</i>). 3. Project several different types using an LCD projector (or show them on handouts. Ask people why someone might choose one over another. 4. Introduce the idea of Building Blocks. Show some examples.	15 Minutes

Work Time	
1. Group people by school teams; if school groups are not present, group people by role (e.g. math teachers, counselors, etc.) 2. Have them identify major goals (hypothetical or real) that a school would be concerned with. 3. Then have them pick out indicators that can be used in creating Building Blocks for a data dashboard. They should ideally be: 1) quantifiable, 2) using data that is easy to find, 3) able to be measured now [baseline] and later [check ins], 4) a good indicator of progress toward the goal.	45 Minutes

4. Allow the groups time to create at least two Building Blocks. 5. Facilitator should ask for each group to share one of their Building Blocks. Feedback should be given using the four criteria in #3 above. 6. The facilitator should show how each might be used in a dashboard using the three dashboard types.	
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Conclusion	
1. Facilitator should discuss the need to make discussion of data dashboards a part of the regular meeting schedule at the school. 2. Finally, debrief the process with entire group and address questions and areas of concern.	10 Minutes

ACTION RESEARCH MODEL: FACILITATOR'S GUIDE

Goal(s) for Session:

- a. Participants will leave with increased knowledge of Action Research as a data use and school improvement process.
- b. Participants will develop a plan for an Action Research Project at their school.

TELLING YOUR STORY: FACILITATOR'S GUIDE

Goal(s) for Session(s):

- To learn about a range of possible data sources to use in finding data points to use in telling a positive story.
- To use the templates provided to develop tools that can be used in garnering support for the school.

Materials Needed:

- Existing data sources
- *The School Fact Sheet template*
- *The PowerPoint Presentation template*
- *The Elevator Speech template*
- *The Proposal Segment template*

Activities	Timeframe
Introduction	
1. Facilitator should review goals for the session and reasons schools might want or need to tell their own story (alternate data sources may provide a fuller picture of life at the school; school may measure success in alternate ways, etc.). 2. Facilitator should have participants seated in small groups at tables. School and/or district-specific data should be distributed or taken out.	5 Minutes
Work Time	
1. Each small group should work together to examine their existing data and selecting two or more data points that they would like to be more widely known. The facilitator(s) should assist in this process. 2. Groups should share their data points with each other and provide feedback (What is the data point? What is the data source? Why these are the most important to celebrate? Etc.). The facilitator(s) should circulate and assist in this process.	20 Minutes

3. The facilitator should share the four templates for telling the school's story, walking participants through the differences and similarities of each template. Schools should be encouraged to prepare all four for use in garnering support for their school. • Fact Sheet: Useful for sharing with stakeholders or funders as a printed, easily accessible summary of the school • Elevator Speech: Useful for on-the-spot conversations with stakeholders or funders. • PowerPoint Presentation: Useful for more formal presentations to stakeholders or funders. • Proposal Segment: Useful for including data in grants or funding proposals. 4. Each small group should select one of the four templates and begin filling it in, using their own data.	30 Minutes
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Conclusion	
1. Facilitator should select 4 groups to present their draft in its current state. Each group will have 5 minutes to present their story and receive feedback. 2. Facilitator will explain expectations or ways this work will be used in the future (this will vary depending on overall scope of work).	20 Minutes

ONLINE SURVEY: FACILITATOR’S GUIDE

Goal(s) for Session(s):

- Participants will create an online survey using surveymonkey.

Materials Needed:

- Computers with internet access
- [SurveyMonkey@](https://www.surveymonkey.com) (Free Version)
- Projector for facilitator’s computer

Activity	Timeframe
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Introduction	
1. Review the session goals 2. Check that everyone has logged on and it connected to the Internet	10 Minutes

Work Time	
1. Facilitator should project his/her computer so participants can see where/what to select and should allow for participants to ask questions. 2. Facilitator should walk participants through the basics of developing an online survey, following the steps listed below: • Log on using www.surveymonkey.com • On right side of page, go to “Sign Up for Free” and fill out form and select time zone. Click on “Create New Account” • When screen changes, look for black bar across the top and click on “Create Survey”. You will see that “Create Survey from Scratch has already been selected. • Below that, enter the title of the survey, e.g. “Demographic Survey” and click on “Create Survey” • “Changing the Look” has to do with background colors and we will skip that for now. • Look at “Page #1 – Default Section”. Next to this, Click on “Edit Page”. This allows you to give a title and brief description of the purpose of the survey. • On the new screen, go to “Page Title” and fill in. Below, find “Page Description” and fill in. Click on “Save Page”. You will now see the page title and description on the survey. For corrections, go to “Edit Page”.	30 Minutes

- Now go to “Add Question” and click. The new screen will ask you to choose a question type. For purposes of this workshop we will limit ourselves to three types: Multiple Choice – one answer per row; Matrix of Choices – Multiple answers per row; and Comment/Essay Box. To find directions for other types, see “Select a Type of Question – Examples” on the top row. Click on and types of questions will be displayed. Move the cursor to the question type you are interested in and an example will be displayed.
- Multiple Choice – one answer per row will be our first type of question. Go to “Choose Question Type” and move cursor to that type. A new screen will appear.
- Fill in the Question Text Box – e.g. “Please indicate the type of middle school you are”. Now go to “Answer Choices” and you might (using separate rows for each) public, private, charter, home school. When finished, click on save changes and the question will appear on your survey. To make changes, click on “Edit Question”. Now click on “Add Question” for the next type.
- This time select “Matrix of Choices (Multiple Answers per Row)”. In the Question Box, please type “Please indicate the percentage of your students in the listed categories that go on to attend [School Name].”
- Go to “Row Choices” and indicate on separate lines something like “less that 25%”; “between 25 and 50%” etc.
- Use down arrow and go to “Column Choices” and indicate (on separate lines) the student categories, e.g. “students with one or more failures in 8th grade” etc.
- Sometimes, we want to allow the respondent to add a comment. Use the down arrow again to locate “Comment Field”. Change “Field Label” to “Comments”. In the “Comment Box Size” field, change rows and width. Click on “Save Changes” and the new question will appear.
- Click on “Add Question”. For the third question, we will select “Comment/Essay Box” from the “Choose Type” selections. Fill in the “Question Text”, e.g. “What suggestions do you have for ...”. Go to “Change Question Size and Placement” box and adjust “Box Size”. Click on “Save Changes”.

3. Facilitator should direct participants to work either independently or with a partner to develop a sample school survey. 4. Facilitator should gather whole group’s attention and discuss how to preview survey, collect results, and analyze results using the following steps: • Assuming a survey has been complete, direct participants to the upper right side of the screen to find “Preview Survey” and click on. You will now see how the survey will look. Changes can be made by using the edit tools. • Show participants the tabs at the top and click on “Collect Results” tab. A link will have been created. Use the “Edit” functions on your toolbar to “Copy” the link. Now an email can be composed with a “pasted” link to the survey. • When the surveys have been completed, participants will be able to use the “Analyze” function.	10 Minutes
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Conclusion	
Facilitator should provide an opportunity for questions from participants.	10 Minutes

DATA COLLECTION MODULES: FOCUS GROUP OR INTERVIEW FACILITATOR’S GUIDE

Goal(s) for Session(s):

- Participants will leave with deeper understanding of the reasons for using focus groups and interviews.
- Participants will participate in a sample focus group interview.

Materials Needed:

- Multiple Facilitators (1 per focus group)
- *Focus Group How To Handout*
- *Sample Script for Focus Group*
- *Sample letter of consent*

Activity	Timeframe
Introduction	
1. Say a few sentences about why we’re doing the focus group training to the whole group and explain how conducting an interview is similar or different to the focus group process. 2. Ask people to count off 1 to 4. Need 4 different rooms for this activity. Each group should go to a different room, with their respective facilitators. [If only one facilitator is available, this can be run as a “fishbowl” exercise. Have one group role-play, while the others watch and then join in the discussion.]	5 Minutes
Work Time	
1. Pass out the Focus Group/Interview How To Handout 2. Ask them to read the summary silently, underlining and noting important items. 3. After, ask people to talk about some of the things that stood out to them; or you can walk through the main topics of the document and discuss them. 4. Role play – Student Focus group 5. Pass out the SAMPLE Conducting Focus Group/Interview document. Tell them to fold the paper in half below the chart; this way it focuses them on Getting Started portion. 6. Go over the chart and read over the sample script. 7. Spend extra time on issues around recording and confidentiality if necessary – stressing the importance that student responses are confidential (share sample letter of consent).	15-20 Minutes

8. Tell participants to unfold sheet as role play will now begin. • Facilitator = Focus Group Interviewer • Rest of the group = Students 9. Ask reinforcing questions, “Can you tell me more about that?”	15 Minutes
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Conclusion	
Accept any questions about the focus group process or uses and return to point about how the focus group process is similar to and different from the individual interview process	5 Minutes

STUDENT WORK ANALYSIS: FACILITATOR’S GUIDE

Goal(s) for Session(s):

- Participants will develop a shared understanding of mastery for a particular type of student work.
- Participants will participate in a scoring and analyzing student work.

Materials Needed:

- *How To Look at Student Work handout*
- *Table for tracking student work scores*
- Sample student work for norming
- Student work for scoring (e.g. high, medium, low performing student on 1 assignment)
- Rubric for scoring student work
- Possible protocols for looking at student work (see <http://www.lasw.org/> for helpful resources)

Activity	Timeframe
Introduction	
1. Say a few sentences about why we’re looking at student work and what the focus of the looking at student work process will be. Explain that this focus may vary depending on type of work, focal question, or goal of the PD. 2. Review “how to” handout for looking at student work—include steps of the process that would be implemented at school before the actual looking at work process begins (including setting goal, determining timeframe, determining type of work, etc.) 3. Discuss ground rules for looking at student work, including using non-judgmental language and providing evidence to support observations.	5 Minutes
Work Time	
1. Pass out the sample student work for norming and rubric. (This step will work if multiple teachers have given the same assignment). Otherwise, group people first and allow each individual teacher who brought work the opportunity to discuss the assignment and rubric with the group of teachers who will be looking at the work with him/her. 2. Discuss key criteria in the rubric.	15-20 Minutes

3. Ask people to score one sample piece of student work. Discuss how people scored the individual piece of work. 4. Repeat with 1-2 additional samples.	
1. Group people into 4s, making sure each individual has 2. Provide time for people to individually score student work using rubric. 3. Scores should be recorded on table. 4. People should discuss each piece of student work individually, and then discuss commonalities and differences across the pieces. 5. Facilitator should monitor time and prompt groups to progress appropriately.	30 Minutes
1. Discuss instructional implications. People should consider instructional implications that result from commonalities and differences between pieces of student work. <i>PROMPTS:</i> <i>What teaching strategies might be used to meet needs of the struggling students?</i> <i>How might strong students continue to be pushed?</i>	20 Minutes
Conclusion	
1. Presenting teacher provides feedback to the group about what was useful about the process. 2. Facilitator should debrief process with entire group and discuss next steps.	10 Minutes

CREATING AN EARLY COLLEGE PROFILE: FACILITATOR'S GUIDE

Goal(s) for Session(s):

- Participants will leave with increased knowledge about- and an approach to- using data to better tell their story.
- Participants will leave with increased knowledge of- and an approach to- using data for improving students' experiences and outcomes.
- Participants will gain comfort with finding, interpreting and using data.

Materials Needed:

- Data sources (this list will need to be modified depending on schools and available data sources)
 - SIS reports
 - School report cards
 - School-collected data
- Scavenger Hunt (Facilitator will need to modify/create this based on data sources being used in the PD)
- Conditions for Data Use handout
- Key Questions about My Early College (Facilitator will need to modify/create this based on data sources being used in the PD and core beliefs guiding the schools)
- Laptops and internet access
- Prizes for winning teams (i.e. chocolates, office supplies)

Activity	Timeframe
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Introduction	
1. Facilitator will introduce the session and explain its purpose and the activities that will be pursued. (Guide people through opening each of the data sources and finding a piece of data pertaining to their own EC, using a scavenger hunt approach. Facilitators should help people who are struggling. Chocolates will go to “winners.”).	10 Minutes
2. The facilitator should briefly review available data sources.	

Work Time	
1. Participants should be seated in small groups (all members from each school should be grouped together. Data sources should be distributed to each small group.	5 Minutes
2. Facilitator should guide participants through directions for completing the scavenger hunt.	30 Minutes
3. Facilitator should reward “winners” and begin a discussion about data using the following questions: • What data do we trust? • What data are useful? • Who controls the data (YOU; internal vs. external data)? • How do you know when the data is showing success (growth, progress to a target, comparison to a similar school, gut reactions, etc.)? • What are the limitations of the data?	15 Minutes
4. Facilitator should distribute Key Questions About My Early College. 5. Facilitator should briefly describe the purpose: Key Questions about My Early College allows you to self-assess your school’s alignment with Early College goals and design principles. (Depending on how this is modified, the Key Questions Template could serve as a self-assessment on achieving any intermediary or school goals and design principles).	10 Minutes
6. Participants should use their own knowledge and various data sources to fill in the template. Facilitator(s) should circulate and support school teams where necessary.	30 Minutes

Conclusion	
1. Facilitator should ask for 1-2 school teams to share “aha” moments about the “Key Questions” Templates. 2. Facilitator should discuss next steps (which will vary depending on context).	20 Minutes

CREATING AN EARLY COLLEGE PROFILE: HANDOUT

Early College Scavenger Hunt

The first one to find these data points for their EC wins a prize.

1. School Report Card: How does the % of your students passing the ELA exit exam in 2009 compare to your district?
2. Great Schools: How do parents rate your early college?
3. School Report Card: How did your boys compare to your girls on passing the state math exam in 2009?
4. SIS: How do your students compare in terms of socio-economic status with students in other nearby high schools?
5. School Report Card: How does your early college's average class size compare to the district?
6. School Report Card: How many of your boys tested proficient or above on the Algebra II (or equivalent) test in 2009?
7. SIS: What high school subject were your 10th graders most likely to pass with an A or B?
8. SIS: What percentage of your 11th graders are taking credit-bearing college courses?

CREATING AN EARLY COLLEGE PROFILE: HANDOUT

Conditions that Facilitate Data Use in Early Colleges

The items below have been identified in the literature as important for schools that want to make data use part of their practice. Mark the ones you think are in place in your school.

In My Early College...	Not True	Somewhat True	Very True
We have a teacher who is knowledgeable on data management and analysis; he/she serves as a data-person/mentor at the school.			
We have teachers, organized into school improvement teams/study groups, who develop data-driven improvement plans.			
All teachers and administrators are involved in process of data analysis.			
The principal leads and supports the use of data.			
We have allocated time so that teachers/teams of teachers can analyze and reflect upon data and plan revisions to their curricula and teaching practices.			
We use multiple indicators and pieces of data to make decisions and gauge outcomes.			
We have a philosophy that supports data use and continual growth on the part of students, teachers, and administrators.			
Conversations on data are focused on 1) improvement, not blame, and 2) what the data show, not what the staff think should be done to solve the problems.			
Conversations guard against early conclusions about why the data look like they do.			
We have a mechanism to analyze and disaggregate data quickly.			

Reference:

Spence, K. (2006). *Data driven decision making: A mini lit review*. New York: Teachers College, NCREST.

CREATING AN EARLY COLLEGE PROFILE: HANDOUT

ANSWERING KEY EARLY COLLEGE QUESTIONS

DATA USE FOR SUSTAINABILITY

Achieving EC goals

According to the website of the ECHSI, “Early college high schools are small schools designed so that students can earn both a high school diploma and an Associate’s degree or up to two years of credit toward a Bachelor’s degree. Early college high schools have the potential to improve high school graduation rates and better prepare students for high-skill careers by engaging all students in a rigorous, college preparatory curriculum and compressing the number of years to a college degree” (<http://www.earlycolleges.org/overview.html#basics1>).

TOPIC	QUESTIONS	SOME DATA SOURCES
Graduation from high school	How many of my early college students attain high school diplomas?	SIS
USEFUL DATA/EVIDENCE		
Accumulation of up to two years of college credit	How many of my early college students earn up to two years of college credit toward a Bachelors degree by the time they complete their early college education?	SIS
USEFUL DATA/EVIDENCE		
Completion of college degrees in a compressed time frame	1. How many of my early college students earn associates degrees though early college? 2. How many of my early college students earn postsecondary degrees after graduating from early college?	SIS National Student Clearinghouse
USEFUL DATA/EVIDENCE		

Academic progress- opportunities and outcomes

To achieve the EC goals, students need opportunities to engage in rigorous courses and they need to successfully complete them. In the case of ECs, these courses are at both the high school and college level.

TOPIC	QUESTIONS	SOME DATA SOURCES
Course-taking	1. Do my early college students take the high school courses that are needed for a rigorous college-prep curriculum as defined by ACT. ¹ Or by the UC and CSU system? 2. Do my early college students complete any college credits? [How many take at least 20 college credits by graduation (a “momentum” point)? How many take transferable courses?]	SIS
USEFUL DATA/EVIDENCE		
Academic performance	1. How do my early college students do in their courses [course grades, GPAs]? 2. How do my early college students do on standardized tests (state exit exams, others)? 3. What other indicators of academic performance would help me understand my students’ performance?	SIS School Report Card School/college data-course assessments, portfolios, etc.
USEFUL DATA/EVIDENCE		
Academic progress	1. Are my early college students accumulating high school credits at the rate needed to graduate? 2. Are my early college students accumulating college credits?	SIS
USEFUL DATA /EVIDENCE		

Student support- opportunities and outcomes

Early colleges believe that students can succeed when they are given the right opportunities and supports. These lead to students' feeling confident, engaged, and able to take on challenges such as engaging in college courses.

TOPIC	QUESTIONS	SOME DATA SOURCES
Support from key adults	Do my early college students feel supported by the adults in their schools and colleges?	School-generated data
USEFUL DATA /EVIDENCE		
College readiness	Are students exhibiting behaviors associated with college readiness and success?	SIS
USEFUL DATA /EVIDENCE		
Types of supports offered	Is the mix of supports offered by our early college the best we can make it? How does it compare with those at other early colleges? With what is emphasized in research? ²	Student supports charts (from JFF survey)
USEFUL DATA /EVIDENCE		

ECHSI Core Principles

Early colleges may want to reflect on the extent to which they are aligned with the ECHSI Core Principles, developed by national ECHSI leadership in 2008. This can allow them to make decisions about ways to strengthen school designs, classroom instruction, and student outcomes.

Core Principle 1: Early college schools are committed to serving students underrepresented in higher education.

TOPIC	QUESTIONS	SOME DATA SOURCES
Student Demographics	Is my early college recruiting low-income students, racial and ethnic minorities, first-generation college goers, male students, and English language learners?	SIS
USEFUL DATA /EVIDENCE		
Student Risk Factors	Is my early college recruiting students at risk of dropping out of high school, not attending college, or not completing a degree (e.g., poor attendance, struggling learners, overage and under-credited).	SIS
USEFUL DATA/EVIDENCE		
School admissions policies and procedures	Do my early college admissions decisions depend a lot on prior academic performance?	JFF School survey Participants' knowledge
USEFUL DATA/EVIDENCE		

Core Principle 2: Early college schools are created and sustained by a local education agency, a higher education institution, and the community, all of whom are jointly accountable for student success.

TOPIC	QUESTIONS	SOME DATA SOURCES
Formal agreements	Does my early college have formal agreements that provide students with access to college courses?	
USEFUL DATA/EVIDENCE		
Joint responsibility	What evidence is there that the stakeholders in my early college feel responsible for student success?	
USEFUL DATA/EVIDENCE		

Core Principle 3: Early college schools and their higher education partners jointly develop an integrated academic plan so all students earn one to two years of transferable college credit leading to college completion.

TOPIC	QUESTIONS	SOME DATA SOURCES
Academic plan	Have early colleges' secondary and higher education partners aligned high school and college requirements and curricula, and co-developed an academic plan that incorporates opportunities for dual credit?	Written academic plans
USEFUL DATA/EVIDENCE		
College credit accumulation	Are early college students earning one to two years of transferable college credit by the time they graduate from the school?	SIS
USEFUL DATA/EVIDENCE		

Core Principle 4: Early college schools engage all students in a comprehensive support system that develops academic and social skills as well as the behaviors and conditions necessary for college completion.

TOPIC	QUESTIONS	DATA SOURCES
Support plan	Does my early college have a pro-active support plan that includes multiple academic and social supports to ensure students' progression through college?	Plan exists
USEFUL DATA/EVIDENCE		
Overcoming barriers	Does my early college address barriers to students' learning and academic achievement inside and outside of school?	
USEFUL DATA/EVIDENCE		

Core Principle 5: Early college schools and their higher education and community partners work with intermediaries to create conditions and advocate for supportive policies that advance the early college movement.

TOPIC	QUESTIONS	DATA SOURCES
Demonstrating effectiveness	Are early colleges collecting and sharing data with initiative partners to help demonstrate effectiveness at the local, state, and national level?	
USEFUL DATA/EVIDENCE		
Communications	Do early colleges and their intermediaries develop communication plans that further the objectives of the movement?	
USEFUL DATA/EVIDENCE		
Advocacy	Do early colleges and their intermediaries work collectively to influence state and national policy, including legislation, regulations, and allocation of funds?	
USEFUL DATA/EVIDENCE		

CREATING AN EARLY COLLEGE PROFILE: HANDOUT

THINGS TO BRAG ABOUT

THINGS TO BE CONCERNED ABOUT

CREATING AN EARLY COLLEGE PROFILE: HANDOUT

Early College High School Initiative Core Principles

Core Principle 1: *Early college schools are committed to serving students underrepresented in higher education.*

1. Early college schools recruit low-income students, racial and ethnic minorities, first-generation college goers, and English language learners.
2. Early college schools recruit students at risk of dropping out of high school, not matriculating to college, and not completing a degree, e.g., poor attendance, struggling learners, overage and under-credited.
3. Student admission is not based on prior academic performance.

Core Principle 2: *Early college schools are created and sustained by a local education agency, a higher education institution, and the community, all of whom are jointly accountable for student success.*

1. A formal, written agreement is in place such that the school has full access to college courses, facilities, and support services.
2. Dedicated representatives from all partner organizations meet regularly to review data, provide guidance, and make key decisions regarding planning, implementation, and sustaining the early college school.
3. Faculty, staff, and community partners develop deep collaborations and participate, according to their role, in data-driven activities that advance instructional practice, curriculum development, staff development, and student support in order to build a college-going culture.
4. All partners are actively engaged in developing sustainable funding for the early college school.

Core Principle 3: *Early college schools and their higher education partners jointly develop an integrated academic plan so all students earn one to two years of transferable college credit leading to college completion.*

1. Secondary and higher education partners have aligned high school and college requirements and curricula, and co-develop an academic plan that incorporates opportunities for dual credit.

2. The academic plan ensures that students strive for two years and complete a minimum of one year of college credit in the core disciplines.
3. There are strategies and structures in place that provide students with the opportunity to complete a four-year degree, e.g., a graduation plan, transfer or articulation agreements.

Core Principle 4: Early college schools engage all students in a comprehensive support system that develops academic and social skills as well as the behaviors and conditions necessary for college completion.

1. Early college schools develop and implement a pro-active support plan that includes multiple academic and social supports to ensure students' progression through college, that articulates how and where services are delivered, and that clearly describes the roles and responsibilities of staff and partners in their implementation.
2. Early college schools address barriers to students' learning and academic achievement inside and outside of school.

Core Principle 5: Early college schools and their higher education and community partners work with intermediaries to create conditions and advocate for supportive policies that advance the early college movement.

1. Early college schools collect and share data with initiative partners to help demonstrate effectiveness at the local, state, and national level.
2. Early college schools work with their intermediaries to develop a communications plan that furthers the objectives of the movement.
3. Early college schools and their intermediaries work collectively to influence state and national policy, including legislation, regulations, and allocation of funds.
4. Early colleges, with their partners, are involved in preparing teachers and leaders to effectively meet the unique mission of the early college movement.

USING DATA IN THE HIGH SCHOOL-COLLEGE PARTNERSHIP: FACILITATOR’S GUIDE

Goal(s) of the session(s):

- To share a beginning framework for thinking about high school-college partnerships
- To analyze existing data on high school-college partnerships in small groups using questions and a template
- To begin problem-solving around ways to strengthen HS-college partnerships

Materials Needed:

- Factors Influencing High School-College Partnerships
- Current Status Templates (Organizational, Academic, Attitudinal)
- Strengths/Challenges Template
- Data folders with data on Organizational Factors (e.g. MOUs, budgetary data, integrated schools survey data; academic plans; perception data)
- Data folders with data on Academic Factors (e.g. college course enrollment data; credit accumulation; course pass rates; academic plans; integrated schools survey data; perception/student survey data)
- Data folders with data on Attitudinal Factors (e.g. student focus group data; student survey data; faculty/staff perception data)

Activity	Timeframe
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Introduction	
1. Introduce session and goals for the day. 2. Share framework for considering high school-college partnerships. 3. Distribute and review Factors Influencing High School-College Partnerships handout. 4. Participants should be seated in small groups. The composition of the table groups will depend on the data that is being used for this session. If sample data from across an organization or intermediary are being used, it would be most productive for table groups to be made of mixed teams (from various schools) so participants gain from each others’ experiences. If school-college specific data are being used, table groups should be school-specific.	10 Minutes

Work Time	
1. Facilitator should direct each table group to review one of the three factors influencing partnerships (all factors should be represented within the room if sample data are being used. If school specific data are being used, schools should be given data on all three factors, but participants should focus on one single factor for this session. 2. Participants should collaboratively review data by topics in framework—The Current Status Template should guide the review of data and table conversation. At least one person at the table should act as the official scribe. a. Organizational b. Academic c. Attitudinal 3. Facilitator should circulate to support conversations.	30 Minutes
1. Facilitator should direct table groups to begin to address strengths and challenges in connection to the partnership. Distribute and review Strengths/Challenges Template. 2. Participants should formulate of strategies to address current status of high school-college partnerships in connection to particular topics. These strategies should be based on the needs that emerged from the current status template. One person at the table should scribe for the group.	20 Minutes
Conclusion	
1. Facilitator should guide a whole group conversation where groups report out: a. Successes and challenges? b. Strategies to make progress? c. What inputs contribute to the successful outcomes EC schools are accomplishing? 2. Participants at other table groups should participate in the conversation about strategies for addressing challenges that have worked at their particular schools. 3. Facilitator should guide a whole group conversation considering next steps for this work.	45 Minutes

USING DATA IN THE HIGH SCHOOL-COLLEGE PARTNERSHIP: HANDOUT

Factors Influencing High School-College Partnerships

Organizational

1. Financial
 - a. Funding of coursework
 - b. Textbooks and course materials
 - c. Budget cuts
 2. Formality of partnerships
 - a. Existence of formal written document outlining understandings in regard to facilities, resources, finances, etc.
 - b. Breadth of involvement of faculty
 - c. Visibility of high school on college campus
 - d. Degree of awareness and participation by college faculty
 3. Level administrative involvement and support
 - a. Leaders from high school and college in equally senior positions in respective institutions
 4. Presence of liaison/cultural translator
 5. Opportunities for college course-taking
 - a. Access to courses
 - b. Entrance requirements/pre-requisites
 - c. Dual enrollment opportunities
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Academic

1. Connection between high school and college faculty, including frequency and types of opportunities for interaction
 - a. Formality of arrangements for common planning between high school and college faculty
2. Responsibility for educational outcomes of students

Attitudinal

1. Degree of faculty support from the college
 - a. Involvement of tenured v. non-tenured faculty
 - b. Reward structure for faculty—service, teaching, research
2. Cultural differences between high school and college
 - a. Autonomy over time and work
 - b. Approach to teaching practice
 - c. Hierarchical relationship between college faculty and high school faculty
3. Willingness to teach high school students
 - a. Management/behavioral issues
 - b. Maintenance of rigor while teaching high school students
 - c. Awareness and willingness to work with high school standards and assessments

Strengthening High School-College Partnerships
Current Status of Organizational Factors

Formal agreement between HS & college	Equal representation of HS and college members on governing board
Joint financial investment by HS & college	Presence of liaison
Articulation agreement	Access to college courses
Participation of students in college courses	Faculty involvement
Access to college facilities and services	Other

USING DATA IN THE HIGH SCHOOL-COLLEGE PARTNERSHIP: HANDOUT

**Strengthening High School-College Partnerships
Current Status of Academic Factors**

Formal opportunities for collaboration between HS and college faculty	Presence of rigor & relevance in HS and college coursework
Degree of “college readiness”	Appropriate support for academic success
Alignment of courses at HS and college levels	Participation of students in college courses
Student performance in college courses	Other

USING DATA IN THE HIGH SCHOOL-COLLEGE PARTNERSHIP: HANDOUT

**Strengthening High School-College Partnerships
Current Status of Attitudinal Factors**

Faculty involvement	HS and college faculty expectations for students
Student engagement & perseverance	Appropriate support for academic success
Student satisfaction	Student self-efficacy & belonging
Student participation on campus	Other

USING DATA IN THE HIGH SCHOOL-COLLEGE PARTNERSHIP: HANDOUT

Strengthening High School-College Partnerships

ASPECTS OF STRONG PARTNERSHIP	EVIDENCE
<i>What we THINK is working</i>	<i>Evidence of what is working</i>
	<i>Other evidence we need before sharing it...</i>
CHALLENGES	EVIDENCE
<i>What we THINK is a challenge</i>	<i>Evidence that led you to think so</i>
<i>Possible strategies to address challenge</i>	<i>Other evidence we need that would help us decide what to do</i>
<i>What we THINK is a challenge</i>	<i>Evidence that led you to think so</i>
<i>Possible strategies to address challenge</i>	<i>Other evidence we need that would help us decide what to do</i>

RESOURCES

Data is all around us! This section provides information on publications around data use, resources for organizing, generating, and analyzing data, the Student Information System (SIS) to access data about students in specific Early College schools, and tools for obtaining data at the district, state, and national levels.

EBE RESOURCES: PUBLICATIONS

TEACHING AND LEARNING

Implementing Data-Informed Decision Making in Schools: Teacher Access, Supports and Use (2009)

Barbara Means, Christine Padilla, Angela DeBarger, & Marianne Bakia for SRI International

This SRI International report for the U.S. Department of Education discusses how teachers can have access to and be assisted in using student data systems and other data sources. The report identifies how a data use system must be implemented and used by administrators and teachers for data use to become a practice that impacts lesson and assessments. Drawing on case study information about how schools are using data, the authors provide examples of how teachers collect, interpret, organize, and use data, and the types of support they need when facing challenges for effectively using data.

Making the Numbers Add Up: A Guide for Using Data in College Access and Success Programs (2009)

Lumina Foundation

OMG Center for Collaborative Learning, evaluators of two initiatives supported by the Lumina Foundation, present a report describing how these programs have developed systems and partnerships that prepare traditionally under-represented students for college. The report outlines how data can be collected and used to improve student outcomes.

Performance Management Report (2009)

Michael and Susan Dell Foundation

Highlighting the power of data-driven performance management in improving student achievement, this report discusses how school districts are collecting and sharing data with schools in efforts to identify needs early on and inform instructional and curricular decisions. This report describes how performance management provides schools with access to information and tools needed to respond to student needs.

Data Wise: A Step-by-Step Guide to Using Assessment Results to Improve Teaching and Learning (2008)

Kathryn Parker Boudett, Elizabeth A. City, & Richard J. Murnane

The editors present a variety of ideas and tools to help school administrators look at student achievement data. Resources provided in the book can assist school leaders in developing a culture of data-informed instructional and curricular decision-making. This book can be a springboard for school community discourse around looking for ways to bridge data and instruction that improves teaching and learning.

Teachers' Use of Student Data Systems to Improve Instruction (2007) & Teachers' Use of Student Data Systems to Improve Instruction: 2005 to 2007 (2008)

Barbara Means, Lawrence Gallagher, & Christine Padilla for SRI International

In a 2 part series, evaluators from SRI International for the U.S. Department of Education present findings from a study surveying over 6000 teachers and 1000 district technology coordinators on the prevalence of K-12 teachers' access to and use of student data systems. This study was framed by the following questions: 1) How broadly are student data systems being implemented in districts and schools? 2) Within these systems, how prevalent are tools for generating and acting on data?, and 3) How are school staff using student data systems?

Student Action Research: Reaping the Benefits for Students and School Leaders

Beth C. Rubin and Makeba Jones

The authors describe how the practice of involving students in research is increasing. Benefits found by the authors include contributing to the development of academic, social and civic skills in students. By describing different action research projects led by or involving student participation, this report shows school administrators and teachers how these projects may be implemented in their schools.

Data Driven Decisions For Academic Achievement (2006)

Ohio Department of Education

How can data systems enhance academic achievement? This report highlights using data to improve teaching and learning by using a K-16 data system, and profiles school in Ohio who have implemented this type of system.

Guiding School Improvement with Action Research (2000)

Richard Sagor

This publication provides a seven-step process – including examples, research tools, and strategies for using data – schools can implement to improve teaching and learning. When using action research in schools, the author finds that practitioners are empowered to explore and modify their own practice.

SCHOOLWIDE IMPROVEMENT

A Practical Framework for Building a Data-Driven District or School: How a Focus on Data Quality, Capacity, and Culture Supports Data-Driven Action to Improve Student Outcomes (2010)

David Ronka, Robb Geier, & Malgorzata Marciniak for Public Consulting Group

Citing data quality, data capacity, and data culture as key elements in shaping policy, program, and practice decisions, this report explores the role of data in schools. The authors argue that in this age of accountability, schools need to make data use a part of the school culture, and district, state, and national offices need to assist them in these efforts. Information on case studies of schools, looking at the quality, capacity, and cultural conditions, data use focus areas (i.e. policy, program, placement, practice), and whether they meet student outcome goals and policy conditions is also provided.

Data-Driven Districts: Building the Culture and Capacity To Improve Student Achievement (2009)

Edgar Sanchez and Diane Kline, APQC Education

Elizabeth Laird, National Center for Educational Achievement, Data Quality Campaign

“The Data Quality Campaign (DQC) collaborated with APQC, a nonprofit, member-based organization working to help educators improve district processes, to conduct a benchmarking study, *Best Practices in Data-Driven Decision Making*. The 69 participating districts, including eight best-practice districts from across the nation, collaborated for six months to identify and understand what distinguishes characteristics of districts that are excelling at using data for making key operational and instructional decisions.” Synopsis taken from the Data Quality Campaign site: <http://www.dataqualitycampaign.org/resources/details/446>

Show Me the Proof!: Tools and Strategies to Make Data Work for You (2005)

Steven H. White

This book discusses the importance of making data-informed school improvement decision-making a practice involving multiple education stakeholders. Included in the book are descriptions of how superintendents, principals, teachers, and parents can contribute to making data use a sustainable school effort.

Data Analysis for Comprehensive Schoolwide Improvement (2004)

Victoria Bernhardt

The author presents examples of K-12 schools that make data use a regular practice, leading to successes in reform efforts. The types of logistical and policy barriers schools may face are described, and detailed steps for overcoming these challenges to implement effective data use are discussed. Strategies and information presented in the book include 1) why data are important and what data to gather, 2) how to collect, analyze and use data, 3) communicating and sharing results, and 4) evaluation methods.

Data-Driven Decision Making: A Powerful Tool for School Improvement (2004)

Sagebrush Corporation

The authors provide a framework outlining how to 1) identify and collect appropriate data, 2) analyze data, and use and share the results in a timely manner that can be used for schools implementing data-driven decision making as a tool for making key school improvement decisions.

Data Use in Urban High Schools (2004)

Mary Ann Lachat and Stephen Smith

This report discusses how schools need to use data to support student success and school improvement. Profiling five under-performing urban high schools, the authors discuss how data use for continuous improvement is key for systemic reform. The case study presents successes as well as challenges school face when implementing data use to track school performance toward meeting student achievement benchmarks.

Guide to Using Data in School Improvement Efforts: A Compilation of Knowledge from Data Retreats and Data Use at Learning Point Associates (2004)

Learning Point Associates

This report illustrates how incorporating systematic data-driven processes for school improvement efforts can produce highly effective results and explores the questions of what are the different types of data, how do you collect data, and how can data inform decisions that address school improvement questions.

Using Data: Two Wrongs and Right (2003)

Robert J. Marzano

The author describes how schools need to know how to use data and how to create plans for using data in order to make useful school improvement decisions. Specifically, the article discusses how two key factors, *establishing direct measures for learning* and *using an appropriate model for data analysis and interpretation* makes data meaningful, thereby helping schools generate solutions to problems or issues they face.

Using Data to Close the Achievement Gap: How to Measure Equity in our Schools (2002)

Ruth S. Johnson

This publication presents six key roles data play in schools: 1) improving the quality of criteria used in problem solving and decision making, 2) describing processes, practices, and progress in schools and districts, 3) examining belief systems underlying assumptions and behaviors, 4) involving the school community in making changes, 5) monitoring implementation of changes, and 6) accountability measures.

PROFESSIONAL DEVELOPMENT AROUND DATA USE

This School Works for Me: Creating Choices to Boost Achievement (2010)

Bill and Melinda Gates Foundation

This publication is written as a guide for data analysts when using data to inform key decisions about student achievement, meeting the needs of students, and the economic value of school and program options. This report can be a resource for professional development by providing examples of the types of available data, what data help explore specific types of problems, and tools for data analysis.

A Guide to Actionable Measurement (2010)

Bill and Melinda Gates Foundation

Actionable measurement is a framework used by the Bill and Melinda Gates Foundation guiding the organization's data collection and analysis practices. This report describes how actionable measurement, based on principles of 1) the importance of decisions and actions informed by measurement, 2) measuring what is most important, and 3) using data to advance its initiatives and strategies, has helped the organization determine best uses for time and resources in data use efforts.

Coaching MCNC Schools on Data Use (2009)

Elisabeth Barnett for the National Center for Restructuring Education, Schools and Teaching

This publication discusses how a national intermediary, supporting a network of Early College high schools, provides data use coaching to the schools. The report gives an overview of the types of data, data tools and sources of data that can assist the schools in data informed decision-making.

Data Tools Resource Guide (2009)

New Visions for Public Schools

New Visions for Public Schools, an organization that has worked in nearly 800 New York City public schools, has created a resource guide to support its schools in planning and implementing data informed school improvement plans. With tools and information for developing action plans, the resource guide gives step-by-step instructions and templates for using data to look at performance patterns, set goals, and track progress toward meeting goals.

The Data Coach's Guide to Improving Learning for All Students: Unleashing the Power of Collaborative Inquiry (2008)

Nancy B. Love, Katherine E. Stiles, Susan E. Mundry, & Kathryn DiRanna

Data coaches are powerful agents for change in schools searching for ways to improve on various levels. This book provides resources (e.g. templates, handouts, presentation slides) to schools and districts looking to implement data use as a school wide practice. By forging a collaborative culture that uses data continuously and effectively, improvements in teaching and learning can emerge. The authors present a field-tested data model shown to 1) narrow achievement gaps between students in all content areas and grade levels, 2) achieve steady gains in math, science, and reading assessments, 3) drive discourse on key school issues, and 4) help develop shared ideas for developing a data-informed school culture.

Information Dashboard Design: The Effective Visual Communication of Data (2006)

Stephen Few

As an emerging tool for communicating information, dashboards emphasize the value of making data visual. This publication describes how to design dashboards that are clear and provides useful information in decision making.

Software Enabling School Improvement through Analysis of Student Data (2004)

Jeffrey C. Wayman & Sam Stringfield, Johns Hopkins University

Mary Yakimowski, Baltimore City Public School System

Although important at the district, state, and national level, the authors find that data use software and technologies need to be provided to school leaders and teachers to improve student achievement at the school and classroom level. This report will help professional development facilitators provide information to schools about advances in data warehousing and communication that can help schools efficiently use data.

Using Data About Classroom Practice and Student Work to Improve Professional Development for Educators (2003)

NEA Foundation for the Improvement of Education

This publication explores data analysis as a focus of professional development and the impact on teacher learning. Specifically, this brief outlines how data can inform professional development by 1) serving as a basis for making decisions about the content, delivery, and frequency of professional development to impact instruction, and 2) creating opportunities for educators to gather together to look at student work and explore its implications in their own practice.

Building an Automated Student Record System: A Step-by-Step Guide for Local and State Education Agencies (2000)

Barbara S. Clemens for Evaluation Software Publishing Inc.

National Center for Education Statistics, Office of Educational Research and Improvement
U.S. Department of Education

Student record systems are meant to be methods for giving educators information about students in timely and organized ways. As a guide for local and state education agencies, this report provides information provides guidelines, checklists, and examples of how student record systems have been implemented, and how these tools can be used to design new automated student record systems.

Data, Well Done. (2000)

Priscilla Pardini

The author describes examples of schools and districts using data-informed decision making to inform professional development. The case studies highlight how data-focused professional development has impacted teacher education, literacy education, and monitoring student achievement.

Developing Data Mentors (2000)

Beverly W. Nichols & Kevin P. Singer

This publication profiles a case study of two educators working to gather and analyze student assessment data and use it to help teachers and administrators inform classroom instruction. The authors specifically draw on the success of implementing data notebooks and data mentor programs to help staff develop data use skills.

Achieving Your Vision of Professional Development (1998)

David Collins

This publication is a “how-to” guide offering information and tools for implementing successful professional development opportunities for teachers to grow professionally and improve instruction to advance student learning. The authors present strategies at each step in creating an effective professional development system: developing a vision, creating a context for change, planning, investing resources, providing continual assistance, and assessing and monitoring progress.

Tools for Accountability Project: Using Data For School Improvement

Report on the Second Practitioners' Conference for Annenberg Challenge Sites (1998)

Lorraine Keeney for the Annenberg Institute for School Reform at Brown University

This report can be used in professional development for schools using data in student performance improvement efforts. Profiling schools taking part in a two-day colloquium, the author describes how these schools approach data collection, use results to inform decision-making, and communicate what they have learned from making data use a practice in their schools.

DATA USE AND PRIVACY LAWS

Maximizing the Power of Education Data while Ensuring Compliance with Federal Student Privacy Laws: A Guide for State Policymakers (2006)

Data Quality Campaign

Restrictions around disclosing student identifying information is an important consideration when using data in decision making practices. Timely and meaningful data systems are powerful tools used by policymakers, educators and researchers, but are subject to privacy laws. This publication describes permissible uses of longitudinal data systems under FERPA laws that consider the privacy rights of students and their families.

Guidelines for the Release of Data (2009)

The College Board

As a widely used resource for test preparation services, the College Board has collected aggregated data at institutional, district, and individual levels. This publication, produced by the College Board, details how they provide information at each data level while adhering to privacy laws.

NATIONAL DATA SETS

Using Data for Policy Decisions

Data Quality Campaign

<http://www.dataqualitycampaign.org/survey/actions>

Tools and resources found on the Data Quality Campaign (DQC) site supports state policymakers in using data to effect student achievement. Based on the idea that improving the collection, available and use of high quality education data, the DQC helps states develop and utilize longitudinal data systems.

Data and College Course-taking Achievement

College Board

<http://www.collegeboard.com/>

The College Board, comprised of more than 5700 schools, college, universities and other educational organizations, connects students, parents, and educational leaders and policymakers with data and tools for increased college success through services including college readiness, admission, assessment, and financial aid information

- [SAT Report: 2006-2009 College-Bound Seniors](#)
Test scores are reported by race/ethnicity and gender. Additional information includes a demographic breakdown of test-takers, their course-taking patterns, K-12 achievement and self-reported college plans.
- [College Board AP Summary Reports: \(2005-2009\)](#)
AP score distributions for each subject test, disaggregated by race/ethnicity.
- [6th Annual AP Report to the Nation: State Reports](#)
Current and five-year trends, including AP participation and performance data, disaggregated by race/ethnicity.
- [ACT National Scores: 1997-2008 and ACT State Scores: 1994-2008](#)
Information is disaggregated according to race/ethnicity and gender.

National College Access Network

<http://www.collegeaccess.org>

This site provides a system for directing users to information and resources about over 250 organizations around the United States committed to advance student access to and success in college.

Pathways to College Network

<http://www.pathwaystocollege.net>

Pathways to College Network is a network of national organizations working together to increase college access and success for traditionally underserved students. Online tools and information are provided for policymakers, education leaders and practitioners, and community leaders to improve preparation, enrollment, and persistence to a college degree.

Accessing, Generating and Analyzing Data

K-12

Achieve.org: State Profiles

<http://www.achieve.org/node/318>

This site provides state data snapshots comparing academic achievement, high school graduation rates, and college enrollment rates to the national average. Additionally the Achieve survey results reports on each state's high school graduation standards alignment with specific college and work readiness indicators.

Alliance for Equitable Education: State Cards

http://www.all4ed.org/publication_material/CommonStandardsStateCards

Statistical snapshots of high school data for each state and the District of Columbia, including data on funding, teacher salaries, graduation rates, college readiness, and academic achievement are provided.

Center on Education Policy: State Test Score Trends Through 2007-08

<http://www.cep-dc.org/index.cfm?fuseaction=Page.viewPage&pageId=572>

Trends in state test scores are provided by the Center on Education Policy, a national, independent organization focused on the need to improve the quality of public education for all students.

Center on Innovation and Improvement State Data

<http://www.centerii.org/centerIIPublic/criteria.aspx>

State database of academic progress, policies, websites, and documents related to education services, restructuring, and school and district improvement.

Educational Needs Index

<http://www.educationalneedsindex.com/>

The Educational Needs Index (ENI) is a county-level study of educational, economic, and population conditions around educational policy and planning at local, regional, and state levels. The index introduces an econometric model assessing trends for all U.S. counties (or equivalents) and provides peer comparisons across a variety of indicators.

Institute of Education Sciences

<http://ies.ed.gov/>

IES is the research arm of the U.S. Department of Education. IES research informs national and international policy and practice. Users can locate local, state, and national data sets, data use tools, and publications. The centers listed below operate within IES listed below are part of IES, providing information on educational research, evaluation, development, assessment, and statistics:

- [The National Center for Education Statistics \(NCES\)](#)
 - Data Tools <http://nces.ed.gov/datatools/>
 - Quick Tables <http://nces.ed.gov/quicktables/>
 - Fast Facts <http://nces.ed.gov/fastfacts/>
 - NAEP Website Tools and Applications
<http://nces.ed.gov/nationsreportcard/about/naeptools.asp>
 - Digest of Education Statistics <http://nces.ed.gov/programs/digest/>
 - Condition of Education <http://nces.ed.gov/programs/coe/>
 - Education Statistics Quarterly <http://nces.ed.gov/programs/quarterly/>
 - National Education Data Resource Center
http://nces.ed.gov/das/library/nedrc_tables.asp
 - Nation's Report Card <http://nces.ed.gov/nationsreportcard/>
 - Common Core Data (K-12 Data) <http://nces.ed.gov/ccd/>
 - Integrated Postsecondary Education Data System <http://nces.ed.gov/ipeds/>
 - School District Demographics System (SDDS)
<http://nces.ed.gov/surveys/sdds/index.aspx>
- [The National Center for Education Evaluation and Regional Assistance \(NCEE\)
What Works Clearinghouse](#)
- [The National Center for Education Research \(NCER\)](#)

The National Center for Higher Education Management Systems

<http://higheredinfo.org/datamaps.php>

The National Center for Higher Education Management Systems (NCHEMS), a private, not-for-profit organization provides information and data generation tools to make strategic data-informed decisions for state, national, and international higher education institutions.

New Visions for Public Schools

<http://newvisions.org>

Through years of working with New York City public schools, New Visions for Public Schools has developed the Knowledgebase, which includes information, tools and strategies around implementing data use in schools.

- [Basic Formulas & Tables with Summary Statistics](#)
- [Organizing Text in Excel](#)
- [Data Graphs in Excel](#)
- [Data Tools Resource Guide](#)
- [“Using Excel to Analyze Student Data”](#)
- [Beginner Excel Techniques for Data Analysis](#)
- [Advanced Excel Techniques for Data Analysis](#)

School Matters

<http://www.schoolmatters.com/schools.aspx/q/page=fnd>

Operated by the Council of Chief State School Officers, this site can help locate information about specific schools and provides tools for comparing data when multiple schools are selected.

Higher Education

The Education Trust

<http://www.collegeresults.org/>

The Education Trust produces publications and reports on higher education issues. Additionally, the site provides online college results giving users graduation data, with demographic breakdown options, that can be compared among all 4-year U.S. higher education institutions.

Measuring Up: The State-by-State Report Card for Higher Education

<http://measuringup.highereducation.org/>

Beginning in 2000, The National Center for Public Policy and Higher Education has published Measuring Up. Every two years, states are assessed along a number of key indicators in six areas (preparation, participation, affordability, completion, benefits, learning). These reports give overviews of state performance in the following areas: college preparation, college participation, college affordability, college completion, benefits of college, international comparisons, and state strengths and weaknesses.

National Association of State Student Grant and Aid Programs (NASSGAP)

<http://www.nassgap.org/index.aspx>

NASSGAP publishes the results of an annual state survey on state-sponsored student financial aid programs, including state expenditures for need and non-need based state financial aid programs.

National Student Clearinghouse

StudentTracker for High Schools

<http://www.studentclearinghouse.org/highschools/default.htm>

Established by the National Student Clearinghouse, *StudentTracker for High Schools* is a program providing high school districts and individual schools with graduated student data around college enrollment, information about colleges in which students matriculate, persistence in college, course of study, and degree attainment.

Postsecondary Opportunity

<http://www.postsecondary.org>

This site provides information on conditions influencing postsecondary education opportunities, including historical data on financial aid and college participation and completion, paying particular attention to low-income and minority students.

Regional Higher Education Compacts

Four regional higher education compacts provide higher education data and information to the participating states in their regions.

- Southern Regional Education Board www.sreb.org
- Western Interstate Commission for Higher Education www.wiche.edu
- Midwestern Higher Education Compact www.mhec.org
- New England Board of Higher Education www.nebhe.org

State Higher Education Executive Officers (SHEEO)

SHEEO provides publications for state higher education agencies and policymakers in areas of higher education assessment, accountability, finance, and other higher education-related topics. The annual State Higher Education Finance Survey produces comprehensive data and information on state higher education finance.

- SHEO Publications http://www.sheeo.org/pubs/pubs_search.asp
- SHEEO State Higher Education Finance Survey
<http://www.sheeo.org/finance/SHEF%20FY05%20full.pdf>

References:

NCHEMS Information Center for Higher Education Policymaking and Analysis

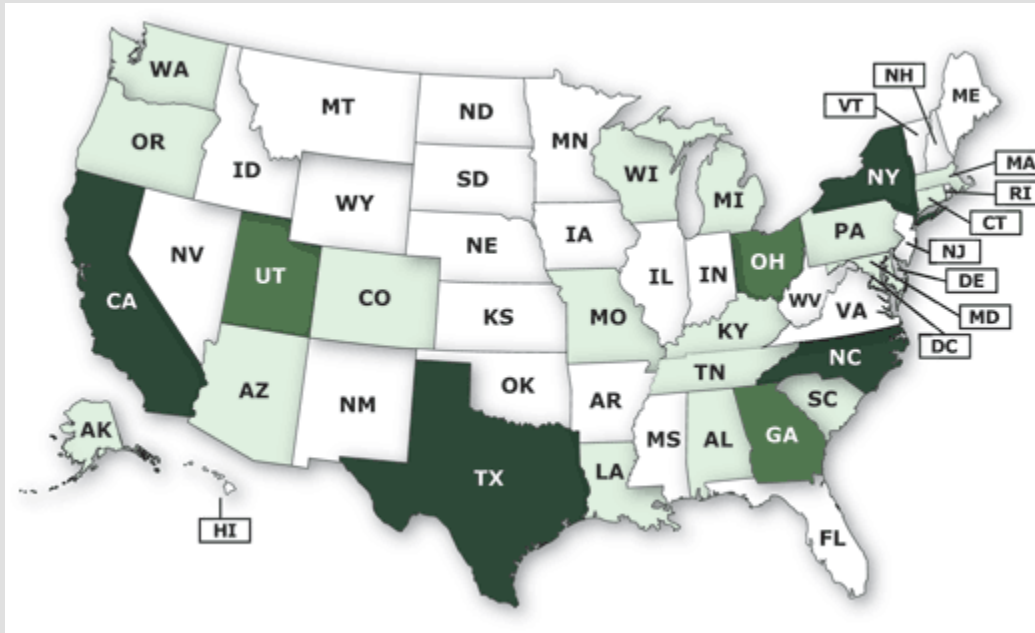
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http://nde.doe.nv.gov/SchoolImprovement/SageGuidebook/Introduction_Section.pdf

Pathways to College Network. <http://www.pathwaystocollege.net/>

STATE DATA SETS



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