1: Project Goal

A: To increase faculty and staff involvement in the College's culture of evidence by making pertinent data available for timely online, ad hoc reporting through a data warehouse.

2: Reasons For Project

A: As of May 2010, Pulaski Technical College has a one-person institutional research, planning and effectiveness department. The College also currently participates in the national, institutional research-intensive Achieving the Dream: Community Colleges Count initiative. Numerous state, federal and grant-related reporting requirements dictate the work load and time restraints of the office, while the office must also coordinate accreditation and short-range and long-range institutional planning. Often, ad hoc data requests from other college departments must be prioritized low in the work schedule due to state, federal, grantor and accrediting agency deadlines that must be taken care of first because of high stakes ramifications of late reporting. With this action project, Pulaski Technical College will implement a newly purchased data warehouse and dashboard software to facilitate end-user generated data reporting in an intuitive, online environment.

3: Organizational Areas Affected

A: Organizational areas involved in implementing the technical and data aspects of the online data warehouse are the office of institutional research, planning and effectiveness, the registrar's office and the office of administrative computing. Pulaski Technical College's Center for Teaching Excellence will help the office of institutional research, planning and effectiveness schedule and deliver college-wide training on the data warehouse once it is operational. Potentially, all college offices will be affected by the data warehouse as information previously coded and stored in the student information system will be readily accessible in an understandable format for important decision-making processes.

4: Key Organizational Process(es)

A: This action project will minimize time delay in accessing college data important to planning and budgeting in academic and administrative areas. Examples of likely reports include grade distributions of concluded courses and live enrollment updates during registration, and any of these reports may be disaggregated by a myriad of pertinent demographic data or tracked over time for historical trends.

5: Project Time Frame Rationale

A: Pulaski Technical College currently uses POISE and Jenzabar products as the basis of its student information system. In spring 2010, the College purchased the Estudias Enterprise Suite by ZogoTech that includes a data warehouse and dashboard module.

As of September 2010, the office of institutional research, planning and effectiveness, the registrar's office and the office of administrative computing have started the process of data cleaning necessary to launch the data warehouse. As of December 2010, the College has contracted with our student information system vendor, Educational Systems Products (ESP), to have two on-site consultants help with the extensive data clean-up required for this project. The office of institutional research, planning and effectiveness will continue to work closely with both the office of administrative computing and the registrar's office on data cleansing.
but will expand involvement to key personnel in all departments within the division of student services before the ESP consultants arrive on-site in March 2011. The proposed date for data cleansing completion is mid-to-late May 2011. A limited live launch of the data warehouse will take place in June 2011 as the office of institutional research, planning and effectiveness and the office of the registrar will pilot the data warehouse for their internal data-related purposes. Also during July and August 2011, development of training curriculum will occur. After several validity and reliability checks, the data warehouse should be ready to launch campus-wide during the fall 2011 semester. The office of administrative computing will continue to work with the office of institutional research, planning and effectiveness to implement data security protocols and issue user names and passwords for the system.

The second phase of this action project will involve college-wide training sessions on using the data warehouse. The office of institutional research, planning and effectiveness will work with the Center for Teaching Excellence to schedule and deliver training during the months of September 2011 through May 2012. Both on-site and on-line training methods will be investigated. Several on-site training sessions will be scheduled, including multiple sessions on main campus and at least one session each at the College's Little Rock-South and Little Rock-West sites. The office of institutional research, planning and effectiveness also plans for the need for ongoing training on the data warehouse even after the end of this action project.

Usage statistics and outcome evaluations will be monitored over the initial launch period of September 2011 through May 2012 for improvement needs with interventions to be implemented as soon as possible. During the second year of the action project, usage statistics and outcome evaluations will continue to be monitored regarding college-wide usage; in addition, three academic departments (one from general education, one from an occupational education area and one from developmental education) and one student services-related department will be tracked for case-study data regarding best practices. The office of institutional research, planning and effectiveness will compile and share effectiveness reports on the data warehouse both during and at the end of the action project’s timeline.

## Project Success Monitoring

### A:

As described in item 5, usage statistics and outcome evaluations will be monitored both during the initial launch and into the second year. Any needed improvements will be acted upon as soon as possible and may extend the timeline depending upon the nature of the problem. During the second year, best practices data will be assembled and shared college-wide potentially in both written and training formats.

## Project Outcome Measures

### A:

High usage statistics and mostly positive evaluation feedback will indicate a successful outcome for this project. The office of institutional research, planning and effectiveness will specifically track whether high volume requestors from the timeframe prior to the data warehouse are actively using and are satisfied with it. Eighty percent or more of these experienced departments should be using the data warehouse during the two-year period; furthermore, overall satisfaction among this group should rate as satisfied to highly satisfied for 75 percent or more of these departments at the end of the two-year period.

Also, the office will track the extent to which offices new to the use of data in a culture of evidence are using and satisfied with the data warehouse. Sixty percent or more of these departments will have used the data warehouse by the end of the two-year period; furthermore, overall satisfaction among this group should rate as satisfied to highly satisfied for 75 percent or more of these departments at the end of the two-year period.

## Project Update

### 1: Project Accomplishments and Status

#### A:

In spring 2011, two on-site consultants from the College’s student information system vendor, Educational Systems Products (ESP), spent four days working with the offices of Institutional Research, Administrative Computing, and key personnel in all departments within the Division of Student Services on an extensive data clean-up project. The consultants, the office of Institutional Research, Planning, and Effectiveness, and the office of Administrative Computing were able to clean two major data files and updated several code tables necessary for the initial step of harvesting the data from the College’s student information system to the ZogoTech data warehouse. The office of Institutional Research, Planning, and Effectiveness and the office of Administrative Computing have made significant progress on the first phase of this project. Weekly online meetings have been held with the Associate Director of...
Institutional Research, the Programming Analyst in the office of Administrative Computing, and a Systems Engineer consultant from ZogoTech to ensure progress is made on each task of the ZogoTech implementation timeline. Data is now being downloaded each night from the College’s student information system to the ZogoTech data warehouse. The data runs through a series of checks where warnings are generated indicating data quality issues. The Associate Director of Institutional Research and the Program Analyst monitor generated warnings and will continue to address all data quality issues. Weekly meetings with the Zogotech consultant will continue through full-scale deployment.

2: Institution Involvement

A: The Associate Director of Institutional Research (previously served as the Institutional Research Associate) is currently leading the project, while working closely with the Programming Analyst in the office of Administrative Computing. The Associate Director of Institutional Research, the new Director of Institutional Research, Planning, and Effectiveness, and the Programming Analyst continue to collaborate with the offices of Admissions & Records, Enrollment Services, and Financial Aid to run validity and reliability checks, and address any data quality issues. The Associate Director of Institutional Research has also began working to identify data silos across the institution to ensure the data collection efforts that take place are integrated into the data warehouse.

3: Next Steps

A: The next steps for this action project involve completion of phase one, which includes continued data quality efforts through resolution of warnings generated by ZogoTech, review of all dimension values within the data tables to ensure that all data elements are represented for the creation of precision reporting, implementation of data security protocols, creation of the data dictionary, and the limited live launch of the data warehouse for pilot by the office of Institutional Research, Planning, Effectiveness, the Registrar’s office, and one academic unit to be determined. After completion of phase one, the Associate Director of Institutional Research will begin phase two of the project, which involves development of training materials and launch of campus-wide training.

4: Resulting Effective Practices

A: Since this action project is still in development phase, there are none to date; however, we hope that tracking case studies of departmental usage will demonstrate several effective practices regarding the data warehouse.

5: Project Challenges

A: While many tasks have been accomplished in the past year on this Action Project, PTC still faces challenges with the college-wide launch and training of the ZogoTech system. This project has proved to be very time consuming due in part to one of the major challenges that PTC has faced and still faces in having a limited number of staff that have the required knowledge of the institution’s data files in order to implement this project successfully and ensure data integrity. PTC has had a complete change of staff in the office of Institutional Research, Planning, Effectiveness, which is the office responsible for leading this project. A new Institutional Research, Planning, and Effectiveness Director and Associate Director have been hired within the last year. The office has been expanded from one staff member to three staff members to address staffing shortages. While one of the IR positions is still vacant, expanding the IR Office has been one of PTC’s priorities. Limited Administrative Computing staff has also been a challenge for this project. The IR Office has partnered with the Administrative Computing Staff for IT support on this project. Recently a new Director for Academic Computing has been hired, but the position was vacant for a period of time during the last year leaving only one staff member to handle many projects going on across campus. The hiring of the new Director of Academic Computing has helped with making this Action Project an IT priority.

College personnel feel that the time investment on this project will be very beneficial in supporting data-driven decision-making. This project also will ultimately free up institutional research resources in the future as campus users will be able to query a readily accessible and intuitively understandable data warehouse themselves.
Update Review

1: Project Accomplishments and Status

A: This is an important action project and connects with AQIP Category (7) Measuring Effectiveness. Your project explains the need and desire for more effective ways to collect and use important data within your college. This will make you more efficient on many future projects. You also are incorporating AQIP Categories (9) Building Collaborative Relationships and (5) Leading and Communicating as individuals from different areas in your college meet on a weekly basis to develop your work towards efficiently generating quality data. This project goes along with AQIP’s Principles of High Performance in the areas of Information and Foresight (by putting the process online).

2: Institution Involvement

A: These are excellent steps to get the input and support of the institution’s employees in the areas that frequently use the data (AQIP Category (4) Valuing People). Your frequent meetings kept the process moving at a good rate. Again, AQIP Category (9) Building Collaborative Relationships seems to continue to be a key factor to the success of the project as many individuals work together on your new data system.

3: Next Steps

A: You are using true collaboration as you bring this project into the test phase. Testing on a smaller level then moving into developing training materials is a great way to keep the project on track. It appears this will help you get feedback from users and help to implement any possible changes that might need to be made in the system (AQIP Category (8) Measuring Continuous Improvement).

4: Resulting Effective Practices

A: You have noted that it is important to keep track of how the departments are using the data from the data warehouse being developed. As you monitor the usage and make sure the data is valid, AQIP Principles of Collaboration, Involvement, and Information are all being used in your effort to keep the data accurate and usable for many purposes at your college. Your target date for completion is set for May 31, 2013. It appears that this institution has achieved great progress towards the completion of the project as you implement the first phase. The feedback you get from the first phase should help as you move the project to a wider scale.

5: Project Challenges

A: It appears you are facing two of the biggest challenges: time and manpower. It is important that those involved see the importance of having a data warehouse where needed information can be obtained easily by any area of your college. Hopefully, filling all of your vacated positions will help keep the process moving in a timely manner. Congratulations to you on your research and work. Please keep AQIP apprised of your movement towards your completed project. Your work with a data warehouse and collecting information online might serve as a valuable model for other schools needing to improve this process.