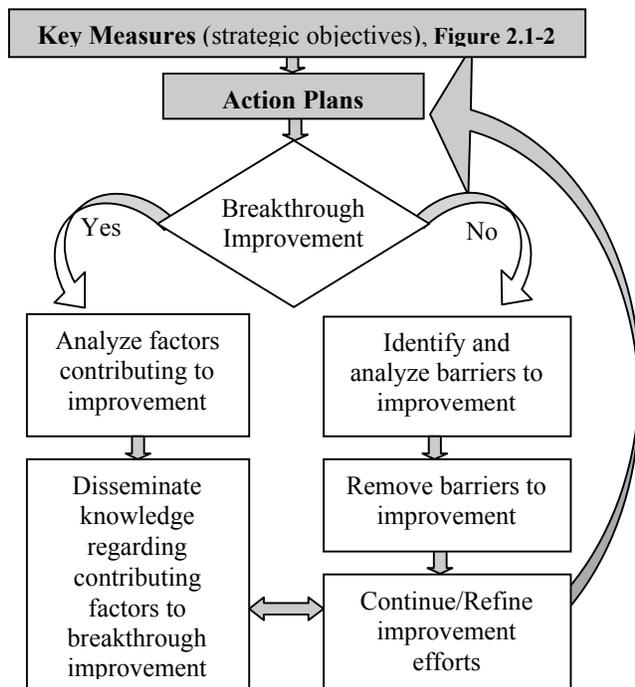


## 4.0 Measurement, Analysis, and Knowledge Management

### 4.1 Measurement, Analysis and Review of Organizational Performance

The Jenks Performance Measurement System for selecting, gathering, analyzing and deploying data and information is linked from the key measures (strategic objectives) developed in the Strategic Planning Process to the action plans which guide daily operations at the district, building and classroom levels and then returns in the cycle of refinement. It is fully deployed and has gone through multiple evaluation and improvement cycles.



**Figure 4.1-1 Jenks Performance Measurement System results in excellence.**

#### 4.1a (1) Performance Measurement

The District gathers and integrates data and information to monitor progress toward achieving goals and action plans, analyzing performance, and adjusting action plans and support for schools, classrooms and individual staff members. The criteria for data collection derive from the District’s key performance measures (strategic objectives) listed in **Figure 2.1-2** determined by the Cabinet and BOE, and CLEP component measures (**Figure 6.1-8**). The Information Services Committee is responsible for selecting the software tools used for data and information collection at the District level and at the school sites and classroom level. A variety of software packages shown in **Figure 4.2-1** collects and organizes data resulting from daily operations.

**Figure 4.1-3, Key Measurements and Analysis** contains the key measures (strategic objectives) and the data required to assess progress and/or to make data-based decisions. This comprehensive set of data provides the means by which

administrators analyze performance, make decisions, and plan innovative strategies for continuous and breakthrough improvement. Identifying and analyzing barriers to success provides the structure the District requires to make data-based decisions and mid-course adjustments which result in continuous improvement. Identifying and analyzing contributing factors (those which contribute to successful key measure attainment) build the knowledge base and ensure continuous improvement.

**4.1a(2)** The Stakeholder Inclusion Phase of the Communications/Stakeholder Relations Process referred to in **3.1a(2)** is a systematic approach to ensuring effective use of information and development of innovative ideas by including external stakeholders on many key decision-making committees. Cycle refinement is fully deployed on all key decision-making committees. Examples of key decision-making committees include, but are not limited to the: School Calendar Committee, Bond Issue Task Force, Title I Advisory Committee, Curriculum Development Committee, Community Education Advisory Council, Native American Education Advisory Council, and the Gifted Advisory Committee.

The Stakeholder Inclusion Phase begins by providing opportunities for stakeholders to volunteer to participate. Such opportunities occur at events such as Meet the Teacher, Back-to-School night, CAPS, and other student conference and enrollment days. In addition to these opportunities, district administrators solicit names of potential committee members from site principals. Once a list of potential external stakeholder participants is collected, committee leaders distribute written and E-mail invitations with details regarding topics, dates, times, and locations of meetings. At the conclusion of each event participants are asked to evaluate the proceedings. These evaluations result in refined proceedings for future events.

Another process used to ensure the effective use of key data and information from outside the District is the SSP process described in **2.1a (1)** and **(2)**.

Private schools (**3.2b(3)**), comparative school districts in Oklahoma, and Baldrige recipient schools provide benchmarking data for the District. The District also uses comparative data for fact-based operational decision-making. These types of data not only provide benchmarks for improvement but also the added benefits of cost savings and customer satisfaction. **Figure 4.1-2** depicts daily operational decision-making based on cost reduction and customer satisfaction.

**4.1a(3)** The District maintains a Performance Measurement System current with educational service needs and directions by using the Continuous Improvement Model and Process, by participating in national conferences such as the National Quality in Education Conference, by surveying staff and student needs, and by participating in state and local professional organizations.

Department/Level	Data Comparison
Warehouse/District	Product cost comparisons
Information Technology/District	Software & hardware performance & cost comparisons
Child Nutrition/District	Produce costs and quality comparisons
Transportation/District	Vehicle/vehicle maintenance cost comparisons
Maintenance/District	Building and materials cost & effectiveness
<b>Figure 4.1-2 Comparative data for cost savings and customer satisfaction guides operational decision-making.</b>	

**Figure 4.1-3** describes the District’s key measures (strategic objectives) and analysis methods. By reviewing data related to key measures (strategic objectives) on a periodic basis, administrators are able to see trends in leading indicators and make modifications in their respective action plans to influence results. In the event of a rapid or unexpected organizational or external change, the Superintendent meets with the Cabinet and other designated administrators to plan processes and strategies to address the situation as described in **2.2a(2)**.

#### 4.1b(1) Performance Analysis and Review

The District achieves excellence by performing organizational performance analysis and review as shown in **Figure 4.1-1**. At the District level, senior leaders review national and state assessment results, the District 90% reading and mathematics goals (**Figure 7.1-4**) which pertain to 90% of all third grade students reading on or above grade level and performance on or above grade level in mathematics, and end of instruction examinations. Other key performance measures (strategic objectives) reviewed on a semi-annual basis are percentage of students retained, achievement gaps for subgroups (race, economic, ELL, special education), attendance (**Figure 7.1-3**), drop-out rate (**Figure 7.2-4**), and graduation rate (**Figure 7.1-3**).

As a result of the federal laws pertaining to NCLB, the State of Oklahoma implemented a School Accountability Data Report, which addresses achievement for various subgroups (**Figure 7.1-2**). On an annual basis, the District receives such a report from the SDE. The District also receives the test results for third, fourth, fifth, sixth, seventh, eighth, and end of instruction each year from the SDE. End of Instruction tests pertain to United States History, English II, Algebra I, and Biology I (**7.1a**). **Figures 7.1-4, 7.1-5, 7.1-6, 7.1-7** and others provide snapshots of the excellence achieved by JPS students.

Before review by the Superintendent and the Cabinet, data must pass through the checks and balances depicted in **Figure 4.2-1**. Data regarding subgroups are disaggregated. Other types of analysis performed on the data include seeking root causes, viewing relationships or correlations, and viewing change over time (trend analysis). This analysis guides decision-making and refinement cycles.

The success of the organization is measured in terms of the accomplishment of, or progress toward attaining key measures (strategic objectives) and action plans. Another measure of organizational performance is provided when the District compares its performance to national statistics,

private schools and other comparable organizations, including previous Baldrige recipients. See **Figures 7.1-3, 7.1-5, 7.1-6, 7.1-7** and **7.1-8**.

Formal reviews seldom illuminate an unforeseen need or challenge because the District reviews leading indicator data to be alert to shifts in student demographics, changes in funding, staff and/or student concerns, and innovations in teaching and learning.

**4.1b(2)** Organizational performance review findings identify breakthrough improvement factors and barriers to improvement. Administrators share, discuss and analyze data to further develop or refine action plans which support improvement efforts and/or to remove barriers to improvement. **Figure 7.1-9** provides an example of cycle refinement in removing barriers to AP enrollment for students. School site and department leadership teams perform similarly. These meetings frequently result in opportunities for innovation, support the more formal CLEP Process and subsequently influence the modification of goals in the Strategic Planning Process. This results in a closed loop system.

**Figure 1.1-1** depicts the JPS goals alignment the District has established. This organizational alignment provides the framework necessary for prioritization, innovation and continuous improvement.

The Jenks Public Schools’ senior leaders and other staff members are invited to participate in county, regional, state and national professional and educational committees, as well as professional and civic organizations throughout the Tulsa area. As appropriate, these leaders provide relevant information regarding the District to partners and suppliers in formal presentations, E-mail messages, the newspaper, newsletters, meetings, and the District Web site <[www.jenksps.org](http://www.jenksps.org)> to ensure organizational alignment. Examples of partners and suppliers include: Carolina Biological, Glencoe/McGraw-Hill, Council of Oklahoma Secondary School Administrators, Tulsa Area Administrators for Instruction, SDE test development committees, Dell, MacIntosh, Oklahoma School Supply, University of Oklahoma, University of Tulsa, Oral Roberts University, Victory Christian School, Jenks Road Christian Academy, Town and Country Day School, Glenpool Public School, Tulsa Technology Center, and others.

<b>Key Measure (Strategic Objectives)</b>	<b>Measure 2.1-2</b>	<b>Data Collection Methods</b>	<b>Analysis Method</b>	<b>Owner</b>	<b>Review Frequency</b>
Increase JPS fund balance to 6%	Passage of the bond issue each year 7.3-7	Bond Election Results LA	Relationship between stakeholder satisfaction LE and bond issue results LA	Superintendent	*SA
Increase OK school funding by \$500,000 (2006)	Increase in OK school funding (2006) 7.3-6	Notes regarding meetings with state legislators LE	Relationship between lobbying efforts LE and school funding LA	Superintendent of Business and Finance, Executive Director of Finance	*SA/O
Improve utility efficiency by 5% each year	Water, electricity, and natural gas consumption vs. objective 7.3-9	Invoices from energy suppliers LA, new construction, associated costs LE	# of energy units consumed LA, square feet added to facilities LE – cause/effect, trends	Energy Manager and Associate Superintendent of Business and Finance	*M
Maintain accurate reporting of the financial condition of JPS	Maintain 100% compliance record	External auditor reports	% accuracy – relationship between support staff training LE, and errors made LA,	Executive Director of Finance	*M
Increase in revenue funding	Student/teacher ratio 7.3-8	Accreditation reports LA	Student/teacher ratio LE	Assistant Superintendents of Human Resources and Curriculum & Instruction	*Q
Expand the Dual Language Program by one grade level each year	Implementation of the DLP K-6 <sup>th</sup> grade (2006)	# of DLPs implemented each year LA	Relationship between # of DLPs implemented LA and school funding LE	Assistant Superintendent of Curriculum/School Improvement	*SA
Decrease # of bus accidents by 1% yearly	Decrease in # of bus accidents 7.5-16	School transportation accident reports LA	Relationship between # bus accidents LA and # drivers trained LE	Director of Transportation	*Q
Expand video security systems	# of monitoring systems	Maintenance reports	Relationship between # of monitoring systems installed LA and school funding LE	Director of Maintenance	*A
Improve test scores, including those of sub-groups to achieve the maximum API score of 1500 (2010)	API scores for all groups 7.1-1 & 7.1-2	Oklahoma State Department of Education API report and others LA	% increase in scores by subgroup LA - test item analysis LE, analysis of instructional strategies LE	Assistant Superintendents of Curriculum, Directors of Assessment and Curriculum, Principals	*A/O
Increase # of AP program course offerings to 35 (2009)	# of AP courses	Discovery student management software	# of AP classes offered to students LA and # of students enrolled in AP classes LE 7.1-8 & 7.1-11	Assistant Superintendent of Curriculum/Student Programs, Principals Counselors	*A
Continue to promote the inclusiveness of all students	API subgroup scores 7.1-2	Discovery student management software	% increase in subgroup scores LA –relationship between incorrect responses to test items and instructional strategies LE- trends	Assistant Superintendent of Curriculum/School Improvement, Directors of Assessment and Curriculum	*A/O
Each site meets or exceeds CLEP goals (90% reading and mathematics goals and EOI scores)	Meet or exceed CLEP goals each year 7.1-4, 7.1-5, 7.1-6, 7.1-7	Professional development management software report & data base	Relationship between EOI scores LA and # of staff trained in differentiation strategies LE 7.5-9	Assistant Superintendent of Curriculum & School Improvement, Principals	*SA
Maintain or improve the drop-out rate (1.1%)	Drop-out rate by subgroups	Enrollment Center report	Relationship between drop-out rate per group LA	Enrollment Center Coordinator, Director of Curriculum	*SA
Increase parent participation in CAPS from 95% to 99% (2008)	Increase in # of parents participating in the CAPS conferences each year	Edline parent portal software report and log of Phone Messenger	Relationship between Edline LE and # of parents participating in CAPS LA	HS Principals	*SA
Increase in # of certified staff trained in differentiation strategies to 75% (2008)	# trained in differentiation strategies 7.4-3	Professional development management software report & historical data base	Relationship between # of staff trained in differentiation strategies LE and student test scores LA	Directors of Curriculum & Professional Development	*Q
Increase in highly qualified teachers from 98% to 100% (2007)	# of highly qualified teachers by site/subject	Human Resources report	% of highly qualified teachers by site/subject LA	Assistant Superintendent of Human Resources	*A
Complete PK-12 grade curriculum development in all subject areas (2009)	Use the Curriculum, Instruction, Assessment & School Climate System to expand and complete the PK-12 curriculum development 7.5-1	Curriculum development committee progress and Essential Elements Process reports	# of subjects aligned LA and # of subjects and classes implementing the Essential Elements Process LA	Assistant Superintendent of Curriculum & School Improvement	*A/M/O

**Figure 4.1-3 The District achieves excellence through analyzing progress in achieving key measures (strategic objectives).**  
 \* – A (annually), SA (semi-annually), M (monthly), O (on-going), Q (quarterly), LA, (lagging indicator), LE (leading indicator)

## 4.2 Information and Knowledge Management

The Continuous Improvement Process provides the basis for the District’s systematic approach to excellence in information and knowledge management. The procedures, practices, and processes are fully deployed and have been through multiple cycles of refinement.

### 4.2a(1) Data and Information Availability

The District provides a local area network (LAN), a wide area network (WAN), and data warehouses (servers). While data warehouses are currently located at one site, Information Technology (IT) Department plans include additional data warehouses off-site in the future. **Figure 4.2-1** displays the Internet-based software packages that assist the District in collecting and organizing data, and making that data available upon demand to the appropriate personnel, parents, students, suppliers and partners. Data related to individual work are collected and organized on individual staff computers. Copies of individual data are stored in the data warehouse to ensure continued data availability. Local and wide area networks make data published by test publishers, national organizations, comparative school districts and the SDE easily accessible.

Information in the public domain is available via the school Web site, E-mail to all certified staff and most classified staff, on-line parent portals, or by requesting a hard copy from a Central Office administrator. Historical data regarding student learning, financial reports, personnel reports, salary schedules, and staff and student handbooks are published on the JPS Web site at <www.jenksp.org>. Other types of information and requests for confidential information require contacting a Central Office administrator.

**4.2a(2)** A district team provides leadership for data collection and communication methods. The director of information technology leads the Information Services Committee. The mission of the Information Services Committee is to provide administrative and student support services by; 1) coordinating technology resources with a systems focus; 2) being fiscally prudent; 3) providing information to the customer in an effective, accurate and timely manner; 4) establishing an information communication system which is user friendly, integrated, and co-existent; and 5) planning for future expansion and service.

Upon the recommendation of the Information Services Committee, and the Bond Issue Task Force, the BOE approved upgrading servers and wiring in the spring of 2004 and a new network was fully deployed during the 2004-2005 school year to assure reliable and speedy access. Actual Internet access speed increased dramatically as a result of these updates. (**Figure 7.5-13**)

Since the early 1990’s, JPS purchases of technology hardware required reliability as a key criterion. The issues of reliability, security and user friendliness are addressed in **4.2a(1)**. Computers, printers, servers, telephones, video monitors, and projectors are purchased from major manufacturers with a reputation for quality products and service. Computers are purchased directly from the manufacturer to ensure reliability and quality. Extended warranties are a part of each hardware purchase.

Aging hardware is upgraded if usable, or discarded when the useful life of the equipment has been exceeded. This process provides up-to-date and highly functional hardware throughout the system and assures that hardware reliability is

Adopted By	Purchasing Decisions	Software Title	Customers Served	Uses
District	IT/School Site	<b>Edline</b>	D/S/C/H	Parent portal to student records & E-mail to teacher
Curriculum & Instruction	IT/Curriculum Prof. Development	<b>LtoJ</b>	D/S/C	Charts student achievement progress weekly by subject, grade level, gender, ethnicity
School Sites	IT	<b>Discovery</b>	D/S/C	Enrollment, course planning, student accounting, reporting, student grades
Finance & Warehouse	IT/Finance	<b>E-APECS</b>	D/S/F	E-budgets, E-purchases, reports, vendor data, etc.
Professional Development	IT/Prof. Development Curriculum & Instruction	<b>CourseWhere</b>	D/I	Event promotion, E-registration, individual E-transcripts, reports
Maintenance	IT/Maintenance	<b>TMA</b>	D/S	Inventory, E-maintenance requests, job logs, tracking, reports
Human Resources	IT/Human Resources	<b>SearchSoft</b>	D/S/J	Applicants may view job openings and apply for jobs on-line. HR & principals select candidates on-line.

**Figure 4.2-1 Data collection software tools make data accessible and manageable.**

*D (district), S (school), C (classroom), H (home), I (individual staff), J (job applicant), F (fund managers)*

not a problem. All technology purchases are coordinated through the IT Department, which assists the District in maintaining the integrity and compatibility of the entire system.

**4.2a(3)** Digital information contained on all servers is copied to another storage device. Staff members are provided space on a server to back up the data on individual computers. Battery-powered surge protectors provide staff with additional time to back up data when all or part of the District experiences a power failure.

**4.2a(4)** The process for remaining current with information technology involves asking multiple faculty and staff members who have training and experience to view demonstrations provided by a variety of suppliers and recommend products to the IT Department. Teacher leaders and information technology staff attend the National Educational Computing Consortium (NECC) yearly to obtain current educational technology information. Vendors provide training locally to demonstrate new educational products. An additional asset to JPS is membership in the professional development technology consortium, the Eighth Floor. Eighth Floor staff members teach district employees how to use the latest hardware and software on the market. The Eighth Floor is a collaborative effort of public and private schools, three 4-year universities, the Tulsa Technology Center, and Tulsa Community College to combine resources to offer cutting-edge professional development regarding technology in the classroom. Trainers utilize best teaching practices and share the latest innovations in technology in their instruction.

Site computer contact teams recommend hardware and software purchases following peer review and product preview to ensure reliability, curriculum alignment, and user-friendliness. All hardware and software purchases must obtain final approval from the IT Department. Since the District is a dual-system district, running both DOS-based (PC) and MacIntosh computers, purchasing considerations are multiple and complex. Student and staff user safety and data security are enhanced by a state-of-the-art firewall that protects internal systems from hackers and protects students from unsuitable Web sites and undesirable information.

**4.2b Organizational Knowledge Management**

Knowledge is fully deployed through the Communications/ Stakeholder Relations Process. The District uses this system to communicate information quickly and responsibly and to collect and transfer knowledge among faculty and staff. As information enters the District, it is filtered through an administrator who has the responsibility of either forwarding

the information to the appropriate administrator, or of transferring the knowledge directly to faculty and staff members. Information pertaining to curriculum or to professional development must be approved by the Department of Curriculum and Instruction to ensure alignment before it can be disseminated.

A variety of methods are used to transfer information to faculty and staff, such as: E-mail, professional development events (staff only), meetings, Edline, Phone Messenger, publication in *Our Schools*, newspaper articles and the Web site. The same methods apply to communications with students, stakeholders and suppliers. Edline, the parent portal product provides easy and frequent E-mail communications between parents and teachers. Job openings, on-line applications, and BOE agendas are posted on the school Web site as well as student and staff handbooks, professional development events, and on-line registration. Bid opportunities are posted in the newspaper and mailed or faxed to suppliers. Oklahoma School laws govern the bidding process.

The Curriculum and Instruction Team is responsible for the rapid identification, sharing, and implementation of researched-based instructional strategies (best practices). This team, composed of instructional leaders from the District and from each school site, meets monthly to identify, plan and further develop a comprehensive plan to educate and support teachers regarding best practices and refine elements of current programs and practices.

**4.2c Data, Information and Knowledge Quality**

Confidential information is housed on an internal server. External access to confidential information on the server may be provided through encryption, authorization and password requirements. Edline is an example of confidential information housed on an internal server which is available to external users. An Internet filter monitors all network transactions. A cutting-edge firewall provides additional protection to internal customers and safeguards confidential information. Data not considered confidential may be housed on an external server and are the responsibility of the data owner. Board of Education Internet policies provide guidance and limitations.

The accuracy, integrity, and reliability demanded of the data, result from a system of checks and balances. **Figure 4.2-2** contains examples of the checks and balances system. Timeliness is assured by providing project time lines and clear expectations, and requesting results as due dates approach.

<b>Data</b>	<b>Origin</b>	<b>1<sup>st</sup> Check</b>	<b>2<sup>nd</sup> Check</b>	<b>3<sup>rd</sup> Check</b>
Test Scores	State Department	Director of Assessment	Assistant Superintendents, Director of C&I	Principals
Financial	Individual	E-APECS	Requisition Clerk	Accounts Payable
Grants	Individual	Grants Monitor	Requisition Clerk	Accounts Payable
Prof. Development Records	Individuals	Sign In Sheet	Director of Prof. Development	Individual

**Figure 4.2-2 Check and balances assure the accuracy, integrity and reliability of data.**