



# Documentation for the 2015 Evidence-Based Analysis (EBA)

December 2015

Nebraska Department of Education

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# Chapter 1. Overview

The Accountability for a Quality Education System Today and Tomorrow (AQuESTT) Evidence-Based Analysis (EBA) is conducted by the Nebraska Department of Education (NDE) in order to collect data from public schools and districts across Nebraska in support of processes associated with school accountability (79-760.06 and 79-760.07 R.S.S.) EBA items pertain to policies, practices and procedures related to the six AQuESTT tenets, as well as needed areas of support and models of best practice.

### Background

Since 1953, the Nebraska State Board of Education has operated as the policy-forming, planning, and evaluative body for the state school program (Neb. Rev. Stat. Section 79-301-(2)). Although the Nebraska Legislature has over the past sixty years set forth numerous duties for the State Board to act, it remains the responsibility of the State Board to take each of those prescribed duties and set forth policy, planning and evaluation systems to ensure that Nebraska's school program is the best it can be. As such, Nebraska State Board Policy G19, Standards, Assessment, and Accountability (SAA) Belief Statements adopted in 2012 and most recently LB 438, The Quality Education and Accountability Act, frame the foundation for AQUESTT.

The drivers for development of this accountability model included: fairness and sensitivity to change; transparency; ability to support school and district improvement and student achievement; multiple indicators derived from key tenets of successful schools and districts; incorporation of trend data; and grounded in student growth.

Following is the conceptual framework established by the State Board as the framework for AQuESTT.

### Table 1. AQuESTT Tenets

### Positive Partnerships, Relationships & Student Success

The State Board believes that student engagement through positive partnerships and relationships are fundamental to successful schools and districts. The State Board seeks to support schools and districts to implement best practices in student, parent/guardian and community engagement to enhance educational experiences and opportunities.

• Individualized or Personalized Learning Plans

• Attendance and Participation

• Family Engagement

• Community and Support Services

### Transitions

The State Board believes that quality educational opportunities focus on supports for students transitioning between grade levels, programs, schools, districts and ultimately college and careers.

Areas of Focus:

• Early Childhood-Elementary

Areas of Focus:

• Elementary-Middle School • Middle School-High School High School-Post High School **Educational Opportunities and Access** The State Board believes that all students should have access to comprehensive instructional opportunities to be prepared for postsecondary education and career goals. Areas of Focus: • Early Childhood Education • Comprehensive Learning Opportunities • Expanded Learning Opportunities • Blended Learning Opportunities **College & Career Ready** The State Board of Education believes that every student upon completion of their secondary education shall be prepared for postsecondary educational opportunities and to pursue their career goals. Areas of Focus: • Rigorous College & Career Ready Standards for All Content Areas • Technological & Digital Readiness • Support for Career Awareness and Career/College Goals Assessment The State Board believes the results of multiple assessment sources (national, state, and classroom-based) should be used to measure student achievement of college and career ready standards, and be used as an integral part of the instructional process. Areas of Focus: • Individualized/Adaptive Assessments Classroom Based Assessments • State Assessments • National/International Assessments Educator Effectiveness The State Board believes that students should be surrounded by effective educators throughout their learning experiences such that schools and districts develop effective teachers and leaders that establish a culture of success. Areas of Focus: Nebraska Teacher & Principal Performance Framework Professional Development • Building Leadership Supports • Effective Local Policy Makers & Superintendents

Based on this framework, AQuESTT exceeds the minimum statutory requirements for accountability (79-760.06-.07 R.S.S). These statutory requirements include the performance

classification of all public schools and districts and the designation of up to three priority schools. AQUESTT also aligns with Nebraska's requirements for public school and district accreditation (Rule 10). AQUESTT supports the effective use of data and professional learning for educators into a comprehensive system focused on continuous school improvement.

### Origins of the Evidence-Based Analysis

Statutory requirements (79-760.06 R.S.S.) prescribe indicators of performance that must be included in the AQUESTT classification model: status on the Nebraska state assessments (NeSA); measures of NeSA improvement, growth, and participation; graduation rate; and "other indicators of the performance of public schools and school districts as established by the state board." With input from the NDE Assessment and Accountability Task Force and approval from the State Board, an additional indicator included in the AQUESTT classification model relates to student nonproficiency measured by NeSA.

To further align the performance classification model to the AQuESTT tenets, the State Board chose to include additional indicators of school quality and student success that are aligned to the six tenets into the model for classifying school and district performance. The method approved by the State Board for collecting data related to additional indicators is the AQUESTT Evidence-based Analysis (EBA).

### Purpose and Content of the AQuESTT Evidence-Based Analysis

The overall purpose of the EBA is to obtain information about measures of the six tenets to support statutory requirements of school and district classification and the designation of priority schools. Additionally, the EBA is designed to obtain information to inform the strategic development and prioritization of statewide systems of support for schools and districts.

The 2015 EBA included two questionnaires - one for public *schools* and one for public school *districts*. The school EBA employed variations in item wording across school types in acknowledgement of the distinct circumstances and best educational practices recommended across different levels of student development (i.e., elementary grades, middle grades, high school grades). These variations are represented in questionnaire items with the prefix "E" for elementary grades, "M" for middle grades, and "H" for high school grades (see Appendix A. 2015 EBA Questionnaires).

### **District Evidence-Based Analysis**

The 2015 District EBA includes seven sections – one for each of the six tenets of AQuESTT and one for the Rule 10 Assurances Statement associated with requirements for school and district accreditation. Following is an outline of the District EBA.

- Section I Rule 10 Assurance Statement
  - o Subsection I.I Mandatory Requirements for Legal Operation
  - Subsection I.II Curriculum and Standards
  - Subsection I.III Statewide System for Assessment of Student Learning and Reporting the Performance of School Districts
  - Subsection I.IV Media and Technology Resources
  - o Subsection I.V Instructional Staff
  - o Subsection I.VI Administrative Staff
  - o Subsection I.VII Continuous School Improvement

- Subsection I.VIII Accountability Reporting
- o Subsection I.IX School Environment
- o Subsection I.X School System Governance
- Subsection I.XI Appendix F (School Board has an Americanism Committee to carry out §79-724)
- Section II Positive Partnerships, Relationships, and Student Success
  - o Subsection II.I Policies, Practices, and Procedures
  - o Subsection II.II System of Support
  - Subsection II.III Other Resources (conditionally displayed)
- Section III Transitions
  - o Subsection III.I Policies, Practices, and Procedures
  - Subsection III.II System of Support
  - Subsection III.III Other Resources (conditionally displayed)
- Section IV Educational Opportunities and Access
  - o Subsection IV.I Policies, Practices, and Procedures
  - Subsection IV.II System of Support
  - Subsection IV.III Other Resources (conditionally displayed)
- Section V College and Career Ready
  - o Subsection V.I Policies, Practices, and Procedures
  - o Subsection V.II System of Support
  - Subsection V.III Other Resources (conditionally displayed)
- Section VI Assessment
  - o Subsection VI.I Policies, Practices, and Procedures
  - Subsection VI.II System of Support
  - Subsection VI.III Other Resources (conditionally displayed)
- Section VII Educator Effectiveness
  - o Subsection VII.I Policies, Practices, and Procedures
  - o Subsection VII.II System of Support
  - Subsection VII.III Other Resources (conditionally displayed)

### School Evidence-Based Analysis

The 2015 School EBA included six sections – one for each of the six tenets of AQuESTT. Following is an outline of the School EBA.

- Section I Positive Partnerships, Relationships, and Student Success
  - o Subsection I.I Policies, Practices, and Procedures
  - o Subsection I.II System of Support
  - Subsection I.III Other Resources (conditionally displayed)
- Section II Transitions
  - Subsection II.I Policies, Practices, and Procedures
  - Subsection II.II System of Support
  - o Subsection II.III Other Resources (conditionally displayed)
- Section III Educational Opportunities and Access
  - Subsection III.I Policies, Practices, and Procedures

- Subsection III.II System of Support
- Subsection III.III Other Resources (conditionally displayed)
- Section IV College and Career Ready
  - o Subsection IV.I Policies, Practices, and Procedures
  - o Subsection IV.II System of Support
  - Subsection IV.III Other Resources (conditionally displayed)
- Section V Assessment
  - o Subsection V.I Policies, Practices, and Procedures
  - o Subsection V.II System of Support
  - Subsection V.III Other Resources (conditionally displayed)
- Section VI Educator Effectiveness
  - o Subsection VI.I Policies, Practices, and Procedures
  - Subsection VI.II System of Support
  - Subsection VI.III Other Resources (conditionally displayed)

### **Target Populations**

The target populations for the 2015 EBA are described below.

- *Public School Districts.* The target population included all public school districts that operate in Nebraska other than Interim, State Operated, ESU, and Non-Public schools. For a full description, see the 2015 AQUESTT Final Classification Business Rules document located at <a href="http://aquestt.com/resources/">http://aquestt.com/resources/</a>.
- *Public Schools.* The target population included all public schools other than wholly SPED, wholly prekindergarten programs, and wholly alternative programs. Schools buildings are split into schools according to the process outlined in the 2015 AQuESTT Final Classification Business Rules located at <a href="http://aquestt.com/resources/">http://aquestt.com/resources/</a>.

### Periodicity of the Evidence-Based Analysis

The data collection and processing cycle for the AQuESTT EBA is designed to occur annually, beginning in August 2015.

## Chapter 2. Evidence-Based Analysis Preparation

Prior to the 2015 administration of the EBA, a series of processes was conducted to support the development, preparation and fielding of questionnaires. The State Board and the NDE conducted these processes.

### Public Policy Forums on Accountability

In the fall of 2014 the State Board conducted a series of statewide public policy forums on accountability for public schools and districts. Table 2. AQUESTT Public Policy Forums provides a summary of forum dates, locations, and participants.

Dates	Locations	Number of Participants (including facilitators/recorders)	Participant Representation Overall	
September 25	North	44	Superintendents - 37	Community
	Platte		Principals - 34	Members 21
October 20	Scottsbluff	56	Teachers -22	ESU
October 21	Kearney	48	Directors	representatives
October 23	Norfolk	51	(Curr/Sped/Student	- 39
October 27	Omaha	41	Services) - 22	NDE - 21
October 29	Lincoln	52	Higher Ed -12	Other - 26
November 14	Lincoln	30	Students -30	State Board - 6
		Total 282	]	

### Table 2: AQuESTT Public Policy Forums

The purposes of the public policy forums were to: provide a general overview of the AQuESTT framework for accountability (i.e., college and career ready; assessment; educator effectiveness; positive partnerships, relationships & student success; transitions; and educational opportunities and access) and to invite public input. The input, collected in the form of informal table discussions facilitated by NDE staff, was guided by three questions, which yielded the following general themes:

- 1) Should future versions of the accountability system be expanded to include other indicators of a quality education system? *Major themes Future versions should include indicators such as growth, improvement, mobility, attendance, and teacher effectiveness.*
- 2) Do the AQUESTT tenets represent the key areas of investment to allow students and educators to be successful? Should there be others? Major themes No additional tenets are needed. The following areas of focus could be added to the existing tenets: Military as a career path, out of home placement, juvenile justice, migrant, military, alternative education programs, life skills, financial literacy, human relations skills, early childhood and equity of resources. The benefit to students should be obvious throughout the tenets.
- *3)* How can we best unite state, district, community, and business efforts to advance the mission of excellence for all educational systems, resulting in learning, earning, and living for all

Nebraskans? Major themes – Communication and engagement. A comprehensive plan to include all stakeholders – education, business, community, policy makers – is needed.

A summary of participant response themes collected from the AQuESTT policy forums is contained in Appendix B. 2014 State Board of Education Public Policy Forums Participant Response Themes.

### Nebraska State Board of Education Policy on Accountability

Informed by input gathered from the AQuESTT Public Policy Forums, the State Board policy on accountability states:

Building an accountability system is literally, the least we can do. The State Board believes that the opportunity to integrate components of accountability, assessment, accreditation, career education, and data into a system of school improvement and support is imperative for the good of Nebraska students and for the state to have a vibrant and economically successful future. It is upon this foundation that the policy of Accountability for a Quality Education System, Today and Tomorrow (AQuESTT) is created.

The State Board believes that AQuESTT include tenets that ensure:

- 1. Every student upon completion of the secondary education shall be prepared for post-secondary education opportunities and to pursue their career goals;
- 2. Results of multiple assessment sources (national, state, and classroom-based) should be used to measure student achievement of college and career ready standards and be used as an integral part of the instructional process;
- 3. Student engagement through positive partnerships and relationships are fundamental to successful school and districts, and the State Board seeks to support schools and districts to implement best practices in student, parent/guardian and community engagement to enhance educational experiences and opportunities;S
- 4. Students be surrounded by effective educators throughout their learning experiences such that school and districts develop effective teachers and leaders that establish a culture of success;
- 5. Quality educational opportunities focus on supports for students transitioning between grade levels, programs, schools, districts, and ultimately college and careers; and
- 6. All students should have access to comprehensive instructional opportunities to be prepared for postsecondary education and career goals.

This policy statement from the State Board defines the tenets of AQuESTT and, as a result, the constructs identified for measurement in the EBA.

### Nebraska State Board of Education AQuESTT Committee Work

Guided by these policy statements, the State Board in 2014-2015 participated in a series of monthly AQuESTT tenet work sessions, October 2015 through April 2015, to identify indicators of school and district performance beyond those mandated in statute (79-760.06 R.S.S.). The goal of this work was to ensure the classification of schools and districts should be based on indicators of performance represented by the six tenets of AQUESTT. As part of this work, NDE staff also

assisted Board members in determining whether data collection methods existed for potential classification indicators. Table 4. State Board Recommendations for AQUESTT Classification Indicators contains a summary of potential indicators recommended by State Board members for inclusion in the classification of schools and districts and the designation of priority schools.

Tenet	Recommended Indicators	Include in	Include in Priority
		Classification	School Designation
College & Career Ready	Alignment and implementation of state- approved standards for all content areas (as described in Rule 10)	Yes	Yes
	Implementation of Nebraska Career Readiness Standards	Yes	Yes
	Student participation in and/or completion of Career Education Programs of Study	Yes	Yes
Educator Effectiveness	Percent of classes taught by appropriately endorsed staff	Yes	Yes
	Utilization of a research-based instructional model	Yes	Yes
	Formal evaluation process to monitor and ensure effective instruction	Yes	Yes
	Continuous program of needs driven professional learning (for staff)	Yes	Yes
	Use of data for continuous improvement	Yes	Yes
Assessment	NeSA – Status NeSA – Growth NeSA – Improvement NeSA - Participation	Yes	Yes
	Status/Growth on National Tests	Yes	No
	Interim Assessments	Yes	Yes
Positive	Safe, secure learning environment	Yes	Yes
Partnerships,	Family and community engagement	Yes	Yes
Relationships	Individualized learning plans	Yes	Yes
& Student	Attendance Rate	No	Yes
Success	Discipline Rate	Yes	Yes
Educational Opportunities & Access	<ul> <li>Early Childhood Education Programs</li> <li>P-K</li> <li>Kindergarten</li> </ul>	No	Yes
	Supplemental Program Support (e.g. SIG, 21 <sup>st</sup> Century Learning Grant, Migrant Education resources, HAL, Dual Credit, AP, IB)	No	Yes
Transitions	Graduation Rate	Yes	Yes
	Processes for Addressing Mobility	No	Yes
	Dropout Rate	No	Yes
	All children make successful transition	Yes	Yes

 Table 3. State Board Recommendations for AQuESTT Classification Indicators

from early childhood to kindergarten		
All children make successful transition	Yes	Yes
from elementary school/elementary		
programs to middle school/middle school		
programs		
All students make successful transition	Yes	Yes
from middle school/middle school		
programs to high school/high school		
programs		

Sample indicators identified during this process were included in subsequent efforts to develop the EBA including the logic modeling portion of the EBA development.

### Literature Review

In order to gather additional information relevant to the purposes of AQuESTT and to measure the tenet-related indicators recommended by the State Board, a search of literature via the Google Scholar search engine was conducted on the following key concepts: "school accountability," "school accreditation," "school improvement," and "school assessment."

The search produced a compilation of numerous journal articles, manuals and technical reports ranging from academic research studies to school accreditation systems from other states and school accountability systems of other countries. Some examples include the New York State Education Department's Diagnostic Tool for School and District Effectiveness and the Teaching and Learning School Improvement Framework by the Queensland Department of Education and Training. While the literature review is not exhaustive, it was decided to prioritize the review based on factors most relevant to the tenets of AQUESTT.

A summary of the literature reviewed was then produced. See Appendix C. Summary Findings from Literature Review. Importantly, several main themes emerged from the comprehensive list of constructs and indicators identified during this process, including:

- The necessity of collecting other school measures apart from student achievement scores,
- The importance of the learning environment, and
- The value and importance of using data to guide and support continuous school improvement.

From this list of constructs and indicators, information reflected in the State Board policy on accountability, and the State Board's AQuESTT tenet and indicator committee work, a series of logic models was developed to better understand the relationships between potential tenet-related indicators and positive student outcomes.

### Logic Modeling

Designed to graphically depict and share an understanding of the relationships among program/initiative elements, the logic modeling process is a widely used for and adopted method for program planning and evaluation (Ackoff 1989, Frechtling 2007, Shedroff 1994, Wyatt Knowlton

and Phillips 2009, Zeleny 1987). The premise behind logic modeling was to establish a better understanding of the various relationships between and among tenet-related indicators defined as "resources" or "inputs", "activities", "outputs" and "outcomes".

As a part of the logic modeling process, the constructs and indicators identified during previous EBA development processes (e.g. public policy forums, board policy development, State Board committee work, and the literature review) were categorized as follows: inputs, activities, outputs and outcomes. Then, each indicator was included into a graphical logic model. Next, based on discussions with subject matter experts within NDE and inputs from other AQUESTT stakeholders, connections were made to depict the causality between inputs, activities, outputs and outcomes.

An example of logic modeling depicted graphically from the W.K. Kellogg Foundation Logic Model Development Guide follows:

Inputs	Activities	Outputs	Outcomes/impacts
what resources go into a program	what activities the program undertakes	what is produced through those activities	the changes or benefits that result from the program
e.g. money, staff, equipment	e.g. development of materials, training programs	e.g. number of booklets produced, workshops held, people trained	e.g. increased skills/ knowledge/ confidence, leading in longer-term to promotion, new job, etc.

Following is a summary of the iterative steps employed as part of the EBA logic modeling process:

- Creation of an initial logic model including 326 indicators categorized by AQuESTT tenet (see Appendix C. AQUESTT Logic Modeling Artifacts)
- Redundant indicators were filtered and overlapping indicators were collapsed to reduce the overall model size.
- Indicators for which data were already being collected through administrative data collections (e.g. NSSRS and the NDE CDC) were noted.
- A final logic model was developed to support the selection of indicators used to inform EBA item development. See Appendix D. AQUESTT Logic Modeling Artifacts.

### Format and Response Options

The 2015 EBA is not an academic assessment. Rather, the EBA is a standardized questionnaire designed to collect data on the extent to which policies, practices and procedures are performed in Nebraska public schools and districts and the types of support that are needed, as reported by school and district leadership.

The EBA questionnaires are divided into six sections, one for each of the six AQuESTT tenets: positive partnerships, relationships, and student success; transitions; educational opportunities and access; college and career ready; assessment; and educator effectiveness. The district EBA contains an additional section that includes the Rule 10 Assurances Statement. The tenet-based sections each contain three subsections or banc of items: five items related to policies, practices and procedures for the tenet; five items related to systems of support for the tenet; and five conditionally displayed, open-ended response options for respondents to indicate a need for "other resources."

The response options employed for the policies, practices, and procedures subsections utilize a fourpoint Likert scale labeled as follows: "Never (Not At All)", "Seldom (To a Limited Extent)", "Sometimes (To a Moderate Extent)", and "Usually (To a Great Extent)". Response options were modeled after those used in the Managerial Practices Survey (MPS).

# A summary overview of the MPS is provided in *The Comprehensive Handbook of Psychological Assessment, Industrial and Organizational Assessment (Volume 4)* by Thomas and Hersen (2003, 232):

This instrument, as the name suggests, is more a measure of managerial behavior than of leadership. It was initially called the Managerial Behavior Survey and originated from a program of research started in 1975 to identify and measure categories of managerial behavior associated with managerial effectiveness (Yukl, Wall, & Lepsinger, 1990). The MPS is based on the resulting taxonomy of managerial behaviors involving 11 categories. The initial version of the MPS (1982) had 115 items in 23 scales; the 1986 version had 110 items in 13 scales, with the wording of items changed to address dyadic relationships and thus reduce ambiguity. The 11 categories addressed are: informing, consulting and delegating, planning and organizing, problem solving, clarifying roles and objectives, monitoring operations and environment, motivating, recognizing and rewarding, supporting and mentoring, managing conflict and team building, and networking. The response choices for each item in these categories of behavior are: 1 ("Never, Not at All"), 2 ("Seldom, To a Limited Extent"), 3 ("Sometimes, To a Moderate Extent"), 4 ("Usually, To a Great Extent"), NA ("Not Applicable"), and ("Don't Know"), Internal consistency reliabilities, measured by Cronbach's alpha, ranged from .80 to .93 over four different samples.

# Chapter 3. Data Collection

The 2015 AQuESTT EBA employed a web-mode design for both school and district data collections. The school and district data collections occurred separately. For an overview of the purpose and content of each questionnaire, see Chapter One. See also Appendix A. Questionnaire Availability.

### Advance Work with Schools and Districts

The 2015 Administrator's Days Conference in Kearney, NE marked the first detailed communication by NDE with educators about the implementation of AQuESTT processes for the classification of schools and districts and the designation of priority school, including the administration of the EBA. The purposes, format, sample items, and timing of the EBA were included in two presentations on July 29, 2015 at the conference. The presentations in their entirety were also posted on <u>www.aquestt.com</u>.

In addition to the Administrator's Days Conference, members of the State Board and NDE staff participated in nine regional meetings of the Nebraska Association of School Boards (NASB) in order to explain to members the AQUESTT processes, including the EBA. The following represents the dates, times, and locations of the NASB regional meetings in the fall of 2015.

Date	Location	State Board Member Attending	NDE Staff Attending
August 25, 2015	Meeting Site: Valentine Community Schools / 431 North Green St., Valentine, NE	Molly O'Holleran	Dr. Sue Anderson
August 26, 2015	Meeting Site: Gering Civic Center / 1050 M St, Gering, NE	Molly O'Holleran	Dr. Sue Anderson
August 27, 2015	Meeting Site: Holiday Inn / 110 South 2 <sup>nd</sup> Avenue, Kearney, NE	Maureen Nickels	Aprille Phillips
September 9, 2015	Meeting Site: York High School / 1005 Duke Drive, York, NE	Maureen Nickels and Rachel Wise	Matt Heusman
September 16, 2015	Meeting Site: Omaha (Regency) Marriott / 10220 Regency Circle, Omaha, NE	Patrick McPherson, Glen Flint, Rachel Wise, and John Witzel	Dr. Matt Blomstedt and Dr. Deb Frison
September 23, 2015	Meeting Site: Lifelong Learning Center (Community College) / 801 E. Benjamin	Rachel Wise	Donlynn Rice

Table 4. NASB Regional Meetings: 2015

	Avenue, Norfolk, NE		
September 30, 2015	Meeting Site: Sandhills Convention Center / 2102 S. Jeffers St., North Platte, NE	Molly O'Holleran	Freida Lange
October 7, 2015	Meeting Site: Nebraska City Public Schools / 215 N 12 <sup>th</sup> St., Nebraska City, NE	Rachel Wise	Brian Halstead
October 14, 2015	Meeting Site: Fremont Middle School / 540 Johnson Road, Fremont, NE	Lillie Larsen	Dr. Sue Anderson

### Timing of School and District Data Collection

The schedule for administering the of the District and School EBA data collections, August 18-November 1, 2015, is presented in Table 5 below.

Date		Activity	Comments
District	School		
August 3	August 10	Pre-notice of AQuESTT	Pre-notice emails sent to district
		EBA	superintendents and school
			principals
August 18	August 19	Email Invitation to	AQuESTT EBA links emailed to
		AQuESTT EBA	district superintendents and school
			principals
September 15	September 15	Email Reminder #1 for	Reminder emails sent to non-
		AQuESTT EBA	respondents
October 13	October 13	Email Reminder #2 for	Reminder emails sent to non-
		AQuESTT EBA	respondents
October 16	October 16	Pre-notice of AQuESTT	Pre-notice emailed to district
		Raw Classification Results	superintendents and school
			principals
October 21	October 21	Notification of AQuESTT	Notice emailed to district
		Raw Classification	superintendents and school
			principals
October 23	October 26	Final Email Reminder for	Final reminder emails sent to non-
		AQuESTT EBA	respondents
October 23	October 27	Phone Call Reminder for	Follow-up phone call reminders
		AQuESTT EBA	made to non-respondents
November 1	November 1	Closure of AQuESTT EBA	EBA deactivated (consistent with
			Rule 10 assurances submission
			date)

Table 5. Data collection schedule for District and School EBA: 2015

November 4	November 4	Update to AQuESTT Raw	Update emailed to district
		Classification	superintendents and school
			principals
November 25	November 25	Notification of AQuESTT	Notice emailed to district
		Final Classification	superintendents and school
			principals
December 4	December 4	Update on AQuESTT Final	Update emailed to district
		Classification Report	superintendents and school
			principals

### **Details of School District Data Collection**

The AQUESTT EBA data collection procedure utilized the method of multiple contacts, which has been consistently shown in the survey research literature to greatly improve response rates (Dillman, Smyth, & Christian, 2009). Beginning in August and ending in November, district superintendents and school principals received several emails consisting of the pre-notice, the survey invitation, and follow-up reminders. Each email sent was personalized by including the respondent's name and associated district or school name, along with a unique link to the AQUESTT EBA. All contact materials were sent via NDE.AQUESTT@nebraska.gov and authorized by Nebraska's Commissioner of Education, Matthew L. Blomstedt, Ph.D.

### Pre-notice to Schools and Districts

On August 3 and August 10, pre-notice emails were sent to district superintendents and school principals, respectively. The purpose of the pre-notice was to inform respondents of the upcoming request to participate in the AQUESTT EBA.

### **Questionnaire Delivery and Reminder Messages**

On August 18 and 19, district superintendents and school principals were sent an email invitation to the AQUESTT EBA. Accompanying the link to the EBA was information on the purposes of the EBA and instructions on how to complete the EBA. The deadline for submitting the EBA, November 1, was also stated in bold font to ensure that respondents were aware of the deadline. Respondents were given more than two months from the time of the email invitation to respond to the EBA. During these two months, email reminders were sent at various times to district superintendents and school principals who had not yet completed their EBA. Details of the reminders are provided in the following section.

### Nonresponse Follow-up of Schools and Districts

One month following the invitation, on September 15, the first email reminder was sent to district superintendents and school principals who had not yet completed the EBA. Then, one month after the first reminder, a second reminder was emailed on October 13. This second email reminder also included a quick guide for non-respondents to successfully complete their respective EBA questionnaires.

On October 23 and October 26, a final email reminder was sent out to the remaining nonrespondents of the District EBA and School EBA, respectively. The effort to reach out to nonrespondents for the last time also involved using a different mode of contact, which has been shown to increase response rates (Dillman, Smyth, & Christian, 2009). Thus, phone calls were made to district superintendents and school principals who had not yet completed the EBA one day after the final email reminders were sent out.

Similar to the pre-notice and email invitation, all reminders were personalized with the respondent name and corresponding district or school name in the body of the email, and included the unique link to the AQUESTT EBA for convenience.

# Chapter 4. Data Use and Data Quality

On December 17, 2015 the NDE presented the EBA questionnaires and a draft of the documentation report for the EBA to the Governor's Technical Advisory Committee (TAC). TAC members reviewed the EBA questionnaire items and provided favorable responses as to the comprehensive nature of EBA items and their relationship to issues of school quality and student success. The TAC also offered suggestions for additional documentation to be included in the documentation report related to methods used for including the EBA responses into the final classification model. In addition, TAC members provided suggestions for ways to strengthen the reliability of responses in future administrations of the EBA, which may include:

- Broaden the EBA target populations to include a wider range of education stakeholders
- Use data currently collected by the NDE (e.g., program evaluation plans, grants reports, and school improvement plans) as supporting evidence for how schools and districts implement policies, practices, and procedures related to the AQuESTT tenets.

See Appendix F. Technical Advisory Committee Meeting Agenda for 12.17.2015.

The NDE continues its review of the quality of data from the 2015 EBA to inform subsequent EBA administrations and AQUESTT classification and priority school designation processes.

Part of this review included a series of empirical analyses relating to the reliability and validity of the EBA. Initial results are presented below.

### Data Use

### **Response Scale**

Information gained from the first subsection of each EBA section – the policies, practices, and procedures group of EBA items for each of the six tenets – was used to develop a scale for use in the final AQUESTT classification model. Additional information contained in the second two subsections – systems of support and "other resources" – was used for use during the priority school designation phase of AQUESTT, as well as to inform and prioritize ongoing NDE efforts in the creation of statewide systems of support for schools and districts.

A single additive scale of responses about school "activities" was established as follows:

- For each EBA item from the policies, practices and procedures subsection: Never = 0, Seldom = 1, Sometimes = 2, Usually = 3.
- Add up the values for each item of the policies, practices and procedures subsection of the EBA (5 items/tenet X six tenets) to yield a final scale range of 0 90.

The EBA scale score was included in the final AQuESTT classification model in order to provide an opportunity for an increase in a school's final AQuESTT classification level. In other words, schools were eligible to receive an upward adjustment if:

- Raw Classification\* of Great (3):
  - EBA scale score at the 95th percentile (88 scale score) or higher amongst schools classified as Great

- Raw Classification\* of Good (2):
  - EBA scale score at the 90th percentile (84 scale score) or higher amongst schools classified as Good
- Raw Classification\* of Needs Improvement (1):
  - EBA scale score at the 80th percentile (83 scale score) or higher amongst schools classified as Needs Improvement

\*Raw classification is based on NeSA status, growth, improvement, participation, nonproficient students, and graduation rate.

For a full description, see the 2015 AQuESTT Final Classification Business Rules document located at <u>http://aquestt.com/resources/</u>.

### Data Quality

#### **Preliminary Analyses**

Reliability analyses were conducted for the EBA scale developed from the 30 policies, practices, and procedures items (five items for each of the six AQuESTT tenets) used to support the final AQUESTT classification model and processes. Results from a preliminary analysis of internal consistency reliabilities for the 2015 EBA are presented below.

### Reliability

Cronbach's alpha (often referred to as coefficient alpha or alpha) is a commonly used measure of scale reliability. This measure was used to analyze the internal consistency of the EBA, which evaluates how closely the items are related to each other. The Cronbach's alpha coefficient ranges from 0, representing no consistency, to 1, representing perfect consistency. In general, higher reliabilities are expected for instruments that are used to make high-stakes decisions with acceptable values typically ranging from 0.8 to 0.9 (Carmines and Zeller 1979) Supportive reliability evidence was demonstrated for both the school and district EBAs. The school EBA (alpha = .90) and the district EBA (alpha = .95) were both found to be highly reliable.

In addition to quantitative reliability analyses, the trustworthiness of the qualitative portion of the EBA was considered. In the 1980s, Guba and Lincoln substituted the terms reliability and validity – commonly referenced as quantitative terminology – with the concept of "trustworthiness" for qualitative data (Creswell, 2007). Trustworthiness contains four aspects: (1) credibility, (2) transferability, (3) dependability, and (4) confirmability (Creswell, 2007; Shenton, 2004). Because qualitative data and analyses assume that realities are constructed and constantly changing, concerns with internal and external validity must be addressed. The following methods were used to establish the trustworthiness of the qualitative portion of the EBA: (1) triangulation of data sources, (2) frequent debriefing sessions within the NDE AQUESTT Classification and Priority School Designation Project Team (3) peer scrutiny of the Project Team's work (4) examination of previous research to frame findings, (5) background, qualifications, and experience of the Project Team, (6) in-depth methodological description to allow the work to be replicated, and (7) the reflective appraisal of the project (Shenton, 2004). Members of the Project Team were: Sue Anderson, Accountability Coordinator; Matt Hastings, Administrator Data, Research and Evaluation; Aprille Phillips, Student Achievement Coordinator; Max Reiner, IT Application Developer Senior; Matt

Heusman, Research and Evaluation/Trainer; Russ Masco, Research and Evaluation Lead; Kunal Dash, Research Specialist; Justine Yeo, Research Specialist; Katie Bieber, Director of Communication; Brian Halstead, Assistant Commissioner; Deb Frison, Deputy Commissioner, Matt Blomstedt, Commissioner; Atwell Mukusha, Project Manager.

# Appendix A. 2015 EBA Questionnaires

### Online, Downloadable PDF Files

Questionnaires for both the school and district 2015 AQuESTT EBA are available online as downloadable files at:

http://aquestt.com/resources/

### Appendix B. 2014 State Board of Education Public Policy Forums Participant Response Themes

**Key Question:** The State Board has established AQuESTT as a framework for a next generation accountability system to be developed and phased in over time. It begins with the implementation of the Quality Education Accountability Act revised by the Nebraska Legislature (LB 438) that will rely on data collections available for the 2014-15 school year including student participation and performance data on statewide assessments and graduation rate. *Should future versions of the accountability system be expanded to include other indicators of a quality education system?* 

Forum Location	North Platte	Scottsbluff	Kearney	Norfolk	Omaha	Lincoln
(Date)	(September 25)	(October 20)	(October 21)	(October 23)	(October 27)	(October 29)
Summary of Responses	<ol> <li>Mobility rate needs to be a part of the accountability system.</li> <li>Assessment scores should not be tied to teacher evaluations in a single year, but trends should be examined for success/failure of instruction.</li> <li>Need a P20 Data System that is linked into HHS and juvenile justice.</li> </ol>	<ol> <li>Consider mobility and impact of poverty.</li> <li>Assessment results should provide only the baseline indicators.</li> <li>Consider comparing schools with similar demographics.</li> </ol>	<ol> <li>Growth should be included.</li> <li>Look beyond performance on a single test.</li> <li>Resources available to schools should be a factor.</li> <li>Use the concepts behind the tenets to classify schools.</li> </ol>	<ol> <li>Other indicators should include growth, improvement, and attendance.</li> <li>Additional indicators: growth, mobility, 5-6 year graduation rate, and teacher effectiveness.</li> <li>Growth and improvement should consider students who have been enrolled for 6 consecutive semesters.</li> </ol>	<ol> <li>Growth and improvement should be included; growth should be the focus.</li> <li>Attendance and mobility should be considered.</li> <li>The indicators should be aspects over which schools have control.</li> <li>Teacher performance should be included.</li> </ol>	<ol> <li>Student growth should be an indicator.</li> <li>Other measure of effective schools should include the social and emotional heath of students and school safety.</li> <li>Mobility is an important indicator.</li> </ol>

Forum Location	North Platte	Scottsbluff	Kearney	Norfolk	Omaha	Lincoln
(Date)	(September 25)	(October 20)	(October 21)	(October 23)	(October 27)	(October 29)
Forum Location (Date) Summary of Responses	<ul> <li>North Platte (September 25)</li> <li>1) Tenets should be part of the classification process</li> <li>2) Elements of early childhood fit in all of these tenets.</li> <li>3) Add military as a career path (Tenet 1);</li> <li>4) Tenet 5- Transitions – include out of home placement</li> <li>5) Missing the voice of birth to three in this process</li> </ul>	Scottsbluff (October 20) 1) Embed fiscal and community resources in every tenet. 2) Consider the numbering and ordering of the tenetsthey shouldn't be ranked or weighted. 3) Tenet 6 is important but schools may not have equitable access to opportunities. 4) In Tenet 5, watch for other transition such as migrant, juvenile justice, alternative education, military.	<ul> <li>Kearney (October 21)</li> <li>1) Early childhood should be embedded throughout the tenets.</li> <li>2) Teacher preparation is key to Tenet 4.</li> <li>3) Is there a better term than assessment for Tenet 2? Perhaps student achievement.</li> <li>4) Establishing the research base for the tenets would be important.</li> </ul>	Norfolk (October 23) 1) No additional tenets needed. 2) Yes, tenet 6 is very important to ensure equitable opportunities. 3) Tenet 1, life skills, financial literacy, and human relations skills.	(October 27)         1)       Additional tenets are not needed.	<ul> <li>Lincoln (October 29)</li> <li>1) NO need for additional tenets, but some could be expanded to address such areas as: curriculum and safe schools.</li> <li>2) Assessment should have meaning to students, such as ACT, MAP.</li> <li>3) The tenets need to reflect allocation and equity of resources</li> <li>4) This model could show more than even the current accreditation process.</li> <li>5) Make sure consumers see the balance/interpla y between the</li> </ul>

Key Question: AQuESTT includes six tenets for a quality educational system in Nebraska. Do these tenets represent the key areas of investment to allow students and educators to be successful? Should there be others?

Forum Location (Date)	North Plat (September 25)	-	Scottsbluff October 20)	(	Kearney October 21)		Norfolk (October 23)		Omaha (October 27)		Lincoln (October 29)
Summary of Responses	<ol> <li>We want offer creat to district offering AP/DC Courses</li> <li>Help communi understan the purpo of this ne accountal ty system.</li> <li>NDE nee to provid resources and suppo to develop training a model courses th students and school can use to help meet some of these concepts.</li> </ol>	e 3) C i fi 2) In e 3) C i le b b c b b c b c b c b c b c c le s 4) C c t c h s s 4) C t c h s s s s c c c c c c c c c c c c c	For schools in the Panhandle to buy- n, they need to eel valued. It will take everyone: schools, pusiness, community, egislature. Communities need o work with chool districts to nelp develop successful career pathways. Communication must be shared with all takeholders. Need more connections with ocal businesses. Provide more support to schools in making positive connections with families.	<ol> <li>1)</li> <li>2)</li> <li>3)</li> <li>4)</li> </ol>	Support the connections between schools that will help all improve. Continue the conversations and communication with all stakeholders. An effective statewide plan to improve all schools must have the flexibility to allow for differences among schools and communities. Improve communication between NDE and local school boards.	1) 2) 3) 4)	Communities and schools should collaborate to address mutual needs. A good example is via career academies. Communication and collaboration between schools and businesses are critical. Create a statewide communication plan to inform all stakeholders. This needs to be part of a statewide vision for education.	<ol> <li>1)</li> <li>2)</li> <li>3)</li> <li>4)</li> <li>5)</li> <li>6)</li> </ol>	Develop a comprehensive communication plan to include key stakeholders. We MUST engage all stakeholders to ensure authentic career readiness opportunities are available. Important to unite, but not mandate. Communication is KEY. Re-tool career ed so that education and businesses are communicating. Build ownership among all stakeholders.	1) 2) 3) 4)	Communication, communication, communication. business, education community, and policy makers must work collaboratively to develop a shared vision. Validate all parts of the larger education ecosystem – education at any place at any time Communicate the framework well with the community.

**Key Question:** How can we best unite state, district, community, and business efforts to advance the mission of excellence for all educational systems, resulting in learning, earning, and living for all Nebraskans?

# Appendix C. Summary Findings from Literature Review

- 1. AdvancED<sup>TM</sup> Self-Assessment Workbook for Schools: Concept Maps
  - a. Part of the AdvancED<sup>TM</sup> accreditation process
  - b. Based on the 5 AdvancED<sup>™</sup> Standards for Quality (see #2 below)
  - c. Helps school identify strengths and areas in need of improvement
  - d. Each standard has multiple indicators with 4 performance levels per indicator
  - e. Following each standard is a narrative section that asks about areas of strength, areas in need of improvement, and plans for improvement
  - f. Since there is more than 1 additional statement from one level to the next, AdvancED<sup>TM</sup> suggests several methods for determining an "overall" rating for any given indicator:

"You may wish to compute some type of arithmetic average based on the level of the statements you have selected. Another method you may choose is to have stakeholders examine the selected concept statement and the evidence holistically and make a determination based on the preponderance of scores and evidence. Whatever method you choose, make sure that workgroups for all Standards use one method consistently."

- 2. AdvancED<sup>TM</sup> Standards for Quality Schools
  - a. Five standards with multiple indicators under each standard, and 4 levels of performance under each indicator
  - b. The 5 standards are: Purpose and Direction, Governance and Leadership, Teaching and Assessing for Learning, Resources and Support Systems, and Using Results for Continuous Improvement
- 3. Arizona 2015 New Accountability System for Public Schools and Districts
  - a. To meet the requirements of: 1) identifying schools with "below average levels of performance", 2) a state-developed accountability system
  - b. Schools and public will receive reports of students' and schools' achievement relative to other schools statewide
  - c. School Labels:
    - i. Reward schools: Highest performing in multiple areas or show high progress in key areas
    - ii. Focus schools: Must address identified achievement gaps within school or among subgroups
    - iii. Priority schools: Lowest performance in the state based on several measures
    - iv. "Based on severity, Focus and Priority criteria include accountability for persistently Low Graduation Rates"
  - d. Provides new criteria for all schools including classification models

- e. Data considered: proficiency, graduation rate, growth and bottom 25% subgroup, new indicators
- 4. ASSC Assessment School Climate Survey
  - a. School Climate Quality Analytic Assessment Instrument and School-based Evaluation/Leadership Team Assessment Protocol
  - b. 8 constructs with 79 question items (many of which are double- and triple-barreled)
- 5. Audit of Principal Effectiveness Survey An 80-item questionnaire for teachers to respond to on the effectiveness of their principal's ability and skill for each item.
- Creswell, J. 2007 *Qualitative inquiry and research design: Choosing among five approaches.* Thousand Oaks, CA: Sage Publications. The terms reliability and validity – commonly referenced as quantitative terminology – may be substituted with the concept of "trustworthiness" for qualitative data.
- 7. Edward Crowe 2010 Measuring What Matters: A Stronger Accountability Model for Teacher Education
  - a. To standardize the accountability system for teacher education across all states
  - b. The proposed new accountability model can give access to educators, policymakers, schools, and parents to measures of preparation program quality
- 8. Linda Darling-Hammond 2006 Assessing Teacher Education: The Usefulness of Multiple Measures for Assessing Program Outcomes
  - a. Research and assessment strategies to evaluate teacher education program outcomes
  - b. Perceptual data (from surveys and interviews) as well as independent measures (data from tests, assessments, observations)
- 9. Dr. Russell A. Dusewicz and Dr. Francine S. Beyer 2014 Dimensions of Excellence Scales Manual
  - a. To help gather reliable information on school performance to "diagnose problems, identify strengths, and improve school operations"
  - b. The instrument measures 8 dimensions, with several indicators in each dimension
  - c. Involves 3 surveys (school staff, parent, student) with multiple items
- 10. Diagnostic Tool for School and District Effectiveness (DTSDE): School Final Report Template
  - a. A diagnostic tool by the New York State Education Department (NYSED) to compare a district and school to optimal learning conditions
  - b. Focuses on 6 tenets: District Leadership and Capacity, School Leader Practices and Decisions, Curriculum Development and Support, Teacher Practices and Decisions,

Student Social and Emotional Developmental Health, Family and Community Engagement

- c. A template for the school report comprising of several sections like school information, rating for each tenet, and recommendations for improvement
- 11. Diagnostic Tool for School and District Effectiveness (DTSDE): Revised Self-Assessment Document
  - a. A self-assessment tool for schools and districts
  - b. For each tenet, there are several statements of practice for schools to reflect on
  - c. Under each statement, the school/district has to list down evidence of work, evidence of impact, and next steps
- 12. Diagnostic Tool for School and District Effectiveness (DTSDE): Scoring Guide for School Reviews with District Oversight
  - a. One of four ratings that schools will receive: Highly Effective, Effective, Developing, Ineffective
  - b. The scoring guide explains how statement ratings can be turned into statement of purpose (SOP) ratings, and how SOP ratings in turn can be calculated to form conceptual frame ratings
  - c. Most involve averaging the ratings
- 13. Gary D. Gottfredson 2011 The Effective School Battery: Interpretive Report
  - a. Gathers information on school climate and school students and teachers for program planning and the evaluation of the effectiveness of school improvement programs
  - b. Based on student and teacher surveys that measure the school's psychosocial climate and the teacher and student characteristics
- 14. David Figlio and Susanna Loeb 2011 School Accountability
  - a. School accountability can be addressed in many ways and exists in varying systems, with the most common one using administrative data to increase student achievement
  - b. School-based accountability takes the school as the unit of analysis and emerged due to the desire to measure performance, and the notion that more effective monitoring can help improve student outcomes
  - c. District-based accountability can potentially mask the heterogeneity in school performance across schools within a district, especially a larger school district
  - d. School accountability systems often focus on easily measurable outcomes and ignore other valued academic outcomes
  - e. Two measures of school performance: "status" measures, based on levels of performance (average test score, percentage of students in a given proficiency level)

and "gain scores/value-added" measures, based on students' test performance from one year/semester to the next

- f. Both measure different outcomes: "status" measure encourages schools to focus on low-performing students and is more transparent, "growth" measure encourages schools to improve student performance independently of absolute level of achievement
- g. Accountability systems should also consider which students should be included when evaluating student learning in order to address fairness and attribution
- h. Increasing the time period for evaluation using multiyear moving averages reduces measurement error and the instability of school performance measures over time
- i. Accountability affects outcomes other than student test scores, but also has an impact on labor market outcomes and even the housing market
- 15. Guide to Using Data in School Improvement Efforts
  - a. Reflective collaboration and continual exposure to data can help educators learn to use information for decision-making and problem-solving
  - b. The school improvement cycle involves 4 activities: plan, do, study, and act
  - c. Using data is key throughout the cycle and can help identify needs and allocate resources accordingly
  - d. There are multiple measures of data: achievement data, demographic data, program data, and perception data
  - e. Other steps involved in maximizing the benefits of using data include setting goals, designing strategies, and defining evaluation criteria
- 16. Illinois Regional Superintendent of Schools: School Evaluation Form
  - a. A cross-reference tool by the Illinois Association of School Boards (IASB)
  - b. To check if districts adhere to policies and administrative procedures
  - c. Covers several sections: Governance and Operations, General Health and Safety, Personnel, Instructional Program and Services, Transitional Program Instruction (TPI) and Transitional Bilingual Education (TBE), Instructional Program – Districts with Elementary Schools, Instructional Program – Districts with High Schools, Special Education
- 17. Lorrie L. Hoffman, Cynthia J. Hutchinson, and Elayne Reiss 2009 On Improving School Climate: Reducing Reliance On Rewards And Punishment
  - a. A study testing the effects of Conscious Discipline, an emotional intelligence and classroom management program
  - b. The program is designed to help teachers enhance students' social and emotional skills, and the school climate overall
  - c. Teachers, after undergoing the training, showed an increase positive feeling about school climate, improvement in student-teacher relations, and greater mutual support among teachers

- Shenton, A. (2004). Strategies for ensuring trustworthiness in qualitative research projects. *Education for Information, 22,* 63-75. Trustworthiness contains four aspects: (1) credibility, (2) transferability, (3) dependability, and (4) confirmability.
- 19. Thomas J. Kane and Douglas O. Staiger 2001 Improving School Accountability Measures
  - a. A study examining the weakness of using annual school-level test scores in school accountability systems and proposing a method for "discerning signal from noise" in report cards
  - b. Two sources contributing to the imprecision of test score measures:
    - i. Sampling variation
    - ii. One-time factors that aren't sensitive to sample size (e.g. dog barking on test day, severe flu season, etc.)
  - c. Once accounting for the variance in test scores due to the 2 aforementioned sources, there is substantial heterogeneity in test performance gains for different classrooms in the same school, suggesting classroom effects (like teacher) on student performance
  - d. The study suggests that the heterogeneity in teacher quality accounts for big between-school differences in performance
  - e. Using past performance to predict future levels of performance can be a more sound foundation for an accountability system
  - f. However, schools have to have several years of sustained improvement before the prediction can show any significant improvement
  - g. Care is needed when using gain scores because there is relatively more variation arising from non-persistent factors, as compared to using test score levels
- 20. James S. Kim and Gail L. Sunderman 2005 Measuring Academic Proficiency Under the No Child Left Behind Act: Implications for Educational Equity
  - a. Accountability requirements in the NCLB Act rely on mean proficiency scores which create selection bias and place high-poverty and racially diverse schools at a disadvantage
  - b. AYP failure rates increase as schools have to meet additional subgroup performance targets
  - c. If mean proficiency score is the only indicator used to measure performance, student achievement is unlikely to improve with the given AYP requirements
  - d. Alternative accountability systems should include multiple measures of student and school performance like improvement in proficiency levels over time and whether state-mandated performance goals are met or not
- 21. Xin Liang, Bin He, and Richard Landry Content Validation of a School Effectiveness Measurement for Accreditation Purpose

- a. A study to test the validity of an instrument –whether an instrument is measuring what it is supposed to measure so that accurate decisions can be made using accurate data
- b. Using statistical testing, the 5 sub-content domains in the North Central Association School Improvement Questionnaire (NCASIQ) were found to only measure 2 of the 5 NCA Commission on Schools standards
- c. The study also showed that administrators can use the traditional validation approach to accurately interpret data
- 22. Robert L. Linn 1998 Assessments and Accountability
  - a. Providing an overview of major changes in educational assessment and accountability in the United States since the 1950s
  - b. Raises the question on whether the assessment-based accountability models has been shown to improve education
  - c. The intent of the models should be to aspire to the *same* high standards for *all* students
  - d. The choice of data source and summary statistic used matter a great deal
  - e. Basic models can employ various kinds of data:
    - i. Current status
    - ii. Comparisons of cross-sectional cohorts of students at different grades in the same year
    - iii. Comparisons of cross-sectional cohorts of students in a fixed grade from one year to the next
    - iv. Longitudinal comparisons of school aggregate scores without matched individual data
    - v. Longitudinal comparisons based only on matched student records
  - f. Most commonly reported approach is current status scores
- 23. Geoff N Masters 2012 Measuring and Rewarding School Improvement
  - a. Paper by the Australian Council for Educational Research
  - b. Arguing for the use of 'practice-based' measures of school improvement to complement 'outcomes-based' measures
  - c. Necessity of reliable measures of student outcomes, measures of context factors like socioeconomic status, measures of 'inputs' like financial resources, contextualized value-added measures, and measures of core work in schools like quality of classroom teaching or school leadership
  - d. To develop credible metrics, several questions have to be answered on:
    - i. School self-monitoring
    - ii. Student outcome measures
    - iii. Measures of school practice
    - iv. Existing school review processes

- v. Fair comparisons
- e. Outcomes-based accountability measures school performance using standardized test scores and has little focus on how improved results can be achieved
- f. Practice-based accountability evaluates school performance through school inspections and reviews
- g. Student outcomes result from both school practices and contextual influences, thus a school's effectiveness should not primarily informed by mean scores and proficiency levels
- h. Measures of performance and improvement over time should include multiple outcome measures incorporating both student outcome measures and school practice measures
- i. Indicators of quality practice in highly effective schools include:
  - i. Positive learning climate
  - ii. Strong student achievement orientation
  - iii. Implemented curriculum of high quality
  - iv. Professional staff collaboration
  - v. High quality school leadership
  - vi. Regular assessments and evaluations of progress
  - vii. Use of data in planning
  - viii. Quality and implementation of school programs
- j. The Teaching and Learning School Improvement Framework by the Queensland Department of Education and Training includes 8 key domains, with 4 performance levels (Outstanding, High, Medium, Low) under each:
  - i. An explicit improvement agenda
  - ii. Analysis and discussion of data
  - iii. A culture that promotes learning
  - iv. Targeted use of school resources
  - v. An expert teaching team
  - vi. Systematic curriculum delivery
  - vii. Differentiated classroom learning
  - viii. Effective teaching practices
- k. Six other school improvement frameworks used across Australia are also given
- 24. NE School Improvement Frameworks Handbook
  - a. The Nebraska model for continuous improvement include the following cyclical steps:
    - i. Creating the profile
    - ii. Setting the goals
    - iii. Planning to improve
    - iv. Implementing the plan
  - b. The 4 areas critical to high performance schools:

- i. Curriculum alignment
- ii. Appropriate instructional strategies
- iii. Family and community engagement
- iv. Assuring equity and addressing diversity
- c. The school profile provides information on student performance, school and community demographics, school programs, and student and adult perceptions of the school and its programs
- d. Data sources should include student performance data, demographic data, program data, and perceptual data
- 25. Wilson 1985 School Assessment Survey

	ool Climate Dimensions Me					
SAS DIMENSION	DEFINITION	RESEARCH BASE School Effectiveness School Improvement				
GOAL CONSENSUS	Agreement among teachers on which student skills and characteristics should receive most attention for development.	When staff agree on the importance of basic skills instruction in urban schools achievement increases: • Brookover and others, 1979.	Goal consensus plus the belief that an innovation facilitates meeting valued goals leads to implementation: • Wilson & Corbett, 1983.			
FACILITATIVE LEADERSHIP	Actions of the principal that encourage and support the professional behavior of the teaching staff.	This measure of principal leadership contributes to student achievement both directly and by working through teaching behavior when controlling for student SES: • Calif. State Dept. of Ed., 1980.	Principal support for an innovation contributes to its implementation: • Berman & McLaughlin, 1977.			
CENTRALIZATION OF INFLUENCE: CLASSROOM INSTRUCTION	The ability of the principal to get teachers to carry out his or her wishes with respect to teaching activities.	Strong principal influence that is not dictatorial promotes higher achievement: • Wellisch and others, 1978.				
ENTRALIZATION OF INFLUENCE: CURRICULUM AND RESOURCES	The ability of the principal to get teachers to carry out his or her wishes with respect to courses, schedules, staff assignments, and the allocation of resources.	Strong principal influence that is not dictatorial promotes higher achievement: • Edmonds, 1979.				
PRTICAL COMMUNICATION	The extent to which information about instruction is shared between teachers and administrators.	Frequent communication between teachers and administrators about instruction promotes higher achievement: • Wellisch and others, 1978.				
ORIZONTAL COMMUNICATION	The extent to which information about instruction is shared among teachers.		Frequent communication leads to the spread of change and promotes the effectiveness of instruction: • Little, 1982			
TAFF CONFLICT	The frequency of disputes about school-related matters.		Conflict reduces the chance of the implementation and spread of change: • Corbett and others, 1984.			

STUDENT DISCIPLINE	The presence of an orderly environment in the school.	A sense of order that is fair, consistent, and encourages responsibility will promote higher achievement: • Rutter and others, 1979.	
TEACHING BEHAVIOR	Actions of teachers that enhance the quality of instruction for all students in their classrooms.	High quality teaching of all children promotes student achievement: • Gross & Herriott, 1965.	

### 26. Key Measures of School Development:

- a. School Leadership
  - i. Teacher Principal Trust
  - ii. Teacher Influence
  - iii. Instructional Leadership
  - iv. Program Coherence
- b. Parent and Community Partnerships
  - i. Parent Involvement in School
  - ii. Teacher Outreach to Parents
  - iii. Teacher Parent Trust
  - iv. Knowledge of Student's Culture
  - v. Parent Support for Student Learning
  - vi. Human and Social Resources in the Community
- c. Student Centered Learning Climate
  - i. Safety
  - ii. Student Classroom Behavior
  - iii. Incidence of Disciplinary Action
  - iv. Classroom Personalism
  - v. Student Teacher Trust
  - vi. Peer Support for Academic Work
- d. Professional Capacity
  - i. Peer Collaboration
  - ii. Reflective Dialogue
  - iii. Collective Responsibility
  - iv. School Commitment
  - v. Innovation
  - vi. Teacher Teacher Trust
  - vii. Quality Professional Development
- e. Quality Instructional Program
  - i. Academic Engagement
- f. Technology Use and Support
  - i. Access to Computers: Student reports
  - ii. Availability of Technology: Teacher reports
  - iii. Human Resource Support for Technology
  - iv. Professional Development in Technology

- v. Student Use of Technology: Student reports
- vi. Student Use of Technology: Teacher reports
- vii. Teacher Use of Technology
- 27. A Framework of Essential Supports and Contextual Resources for School Improvement
  - a. Leadership Acting as a Catalyst for Change
    - i. Inclusive Leadership focused on instruction
    - ii. Faculty/Parent/Community Influence
    - iii. Strategic Orientation
  - b. Parent Community Ties
    - i. Teachers Learn about Student Culture and Local Community
    - ii. Staff Engages Parents and Community in Strengthening Student Learning
  - c. Student Centered Learning Climate
    - i. Safety and Order
    - ii. Press toward Academic Achievement Coupled with Personal Concerns for Students
  - d. Professional Capacity
    - i. Quality of Human Resources
    - ii. Values and Beliefs about Teacher Responsibility for Change
    - iii. Quality of Professional Development
    - iv. Professional Community
  - e. Ambitious Instruction
    - i. Curricular Alignment
    - ii. Intellectual Challenge
  - f. Key outcomes of the above:
    - i. Enhanced Student Engagement
    - ii. Expanded Academic Learning
- 28. Arizona School Improvement Survey (What does the survey measure?)
  - a. 32 questions measuring the following constructs:
    - i. Teacher Practices
    - ii. School Practices
    - iii. School Climate
    - iv. School/Community Partnerships
- 29. CASE School Climate Survey (What does the survey measure?) Comprehensive Framework for School Improvement
  - a. Leadership
  - b. Professional Development
  - c. Culture
  - d. Organization
  - e. Curriculum

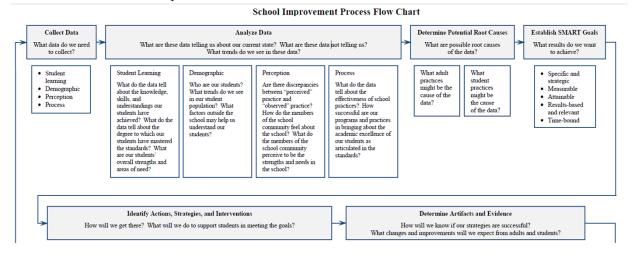
- f. Instruction
- g. Assessment
- h. Relationships
- i. Equity
- 30. Georgia's School Improvement Fieldbook A Guide to Support College and Career Ready Graduates, based on Marzano, R.J. & Waters, T. (2009). District leadership that works: striking the right balance. Mid-continent Research for Education and Learning. Solution Tree Press. IN. and Marzano, R.J., Waters, T., McNulty, B. A. (2005). School leadership that works: from research to results. Association for Supervision & Curriculum Development. Alexandria, VA.)
  - a. 11 factors that appear to have the greatest effect on student achievement and grouped according to school, teacher, and student levels:
    - i. School-Level Factors
      - 1. Guaranteed and Viable Curriculum
      - 2. Challenging Goals and Effective Feedback
      - 3. Parent and Community Involvement
      - 4. Safe and Orderly Environment
      - 5. Collegiality and Professionalism
    - ii. Teacher-Level Factors
      - 1. Instructional Strategies
      - 2. Classroom Management
      - 3. Classroom Curriculum Design
    - iii. Student-Level Factors
      - 1. Home Environment
      - 2. Learned Intelligence and Background Knowledge
      - 3. Student Motivation
  - b. 9 high impact classroom instructional strategies that work:

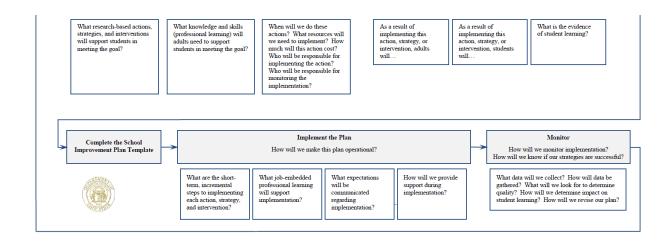
Instructional Strategies				
Identifying Similarities and Differences				
Summarizing and Note Taking				
Reinforcing Effort and Providing Recognition				
Homework and Practice				
Nonlinguistic Representations				
Cooperative Learning				
Setting Objectives and Providing Feedback				
Generating and Testing Hypotheses				
Cues, Questions, and Advance Organizers				

- c. 21 leadership responsibilities which are desirable
  - 1. Affirmation: The extent to which the principal recognizes and celebrates school accomplishments and acknowledges failures

- 2. Change Agent: The extent to which the principal is willing to and actively challenges the status quo
- 3. Communication: The extent to which the principal establishes strong lines of communication with and among teachers and students
- 4. Contingent Rewards: The extent to which the principal recognizes and rewards individual accomplishments
- 5. Culture: The extent to which the principal fosters shared beliefs and a sense of community and cooperation
- 6. Curriculum, Instruction, and Assessment: The extent to which the principal is directly involved in the design and implementation of curriculum, instruction, and assessment practices
- 7. Discipline: The extent to which the principal protects teachers from issues and influences that would detract from their teaching time or focus
- 8. Flexibility: The extent to which the principal adapts his or her leadership behavior to the needs of the current situation and is comfortable with dissent
- 9. Focus: The extent to which the principal establishes clear goals and keeps those goals to the forefront of the school's attention
- 10. Ideals/Beliefs: The extent to which the principal communicates and operates from strong ideals and beliefs about schooling
- 11. Input: The extent to which the principal involves teachers in the design and implementation of important decisions and policies
- 12. Intellectual Stimulation: The extent to which the principal ensures that faculty and staff are aware of the most current theories and practices and makes the discussion of these a regular aspect of the school's culture
- 13. Knowledge of Curriculum, Instruction, and Assessment: The extent to which the principal is knowledgeable about current curriculum, instruction, and assessment practices.
- 14. Monitors/Evaluates: The extent to which the principal monitors the effectiveness of school practices and their impact on student learning
- 15. Optimizer: The extent to which the principal inspires and leads new and challenging innovations
- 16. Order: The extent to which the principal establishes a set of standard operating procedures and routines
- 17. Outreach: The extent to which the principal is an advocate and spokesperson for the school to all stakeholders
- 18. Relationship: The extent to which the principal demonstrates an awareness of the personal aspects of teachers and staff
- 19. Resources: The extent to which the principal provides teachers with materials and professional development necessary for the successful execution of their jobs

- 20. Situational Awareness: The extent to which the principal is aware of the details and undercurrents in the running of the school and uses this information to address current and potential problems
- 21. Visibility: The extent to which the principal has quality contact and interactions with teachers and students
- d. District level responsibilities that affect student achievement
  - i. Collaborative goal-setting
  - ii. Non-negotiable goals for achievement and instruction
  - iii. A board of education that is aligned with and supports the district's nonnegotiable goals for achievement and instruction
  - iv. Continuous monitoring of district progress toward student achievement and instructional goals
  - v. Necessary resources (e.g., time, money, personnel, materials, etc.) allocated to achieve the district's goals
  - vi. length of the superintendent's tenure in a district
- e. Other Research based efforts important towards school improvement
  - i. Using diagnostic assessments to plan for instruction and flexible grouping
  - ii. Using formative assessment data to provide feedback and adjust instruction
  - iii. Using benchmark assessments to monitor student and sub-group progress
  - iv. Using summative assessment data to report student progress toward meeting standards
  - v. Using assessment data to plan for continuous school improvement
  - vi. Professional learning should be in-depth, long-term, and job-embedded.
  - vii. Differentiated approaches such as study groups, collaborative lesson planning, examining student work, peer observations, and modeling should be employed.
  - viii. Collaborative teams can serve as a powerful platform for adult learning.
  - ix. The evaluation of professional learning should be based upon changes in adult behavior and student learning.
- f. School Improvement Process Flowchart





- 31. School Culture Triage Survey: (What does the survey measure?)
  - a. Professional Collaboration
    - i. instructional strategies and curriculum issues
    - ii. working together to develop the school schedule
    - iii. involved in the decision-making process with regard to materials and resources
  - b. Affiliative Collegiality
    - i. celebrations that support the school's values
    - ii. collaboration and company
    - iii. sharing of new ideas
    - iv. celebration of holidays, events and recognition of goal attainment
  - c. Self-determination/efficacy
    - i. Prediction and prevention of school issues
    - ii. Interdependencies
    - iii. Instructional decision making
  - d. 17 questions in total asked to measure above mentioned elements
- 32. Organizational Health Inventory: (What does the survey measure?)
  - a. Interoperability and discussion
  - b. Community engagement
  - c. Students' functioning
  - d. Possible effect of citizen groups
  - e. Parental effects and engagement
  - f. Superintendent's impact
- 33. 2002 Complexity, Accountability and School Improvement (Kinds of School-Based Accountability tensions and problems)
  - a. Problem 1: The school is the unit of intervention, yet the individual is the unit of action. The first of these problems concerns the relationship between collective

accountability and individual action. School accountability by definition targets the school unit for monitoring, intervention, and change. But schools are collections of individuals, and to the extent that the needed change involves the behavior of the members of the organization, it must occur ultimately at the individual level. That is, individual teachers, administrators, and parents must in some way change what they are doing in the hope that this will change what students do (individually and in interaction with teachers) in such a way as to increase or deepen student learning. School level accountability approaches bank on school members' identification and interaction with their organizational environment to motivate and direct individual action. In other words, such policies assume that targeting the school unit will generate the necessary and desired changes in the behavior of individuals within that unit. This assumption leads to two questions: How will school accountability mechanisms reach beyond the collective level to mobilize such changes among individuals? What conditions need to be in place for this connection to occur?

- b. External control seeks to influence internal operations. Just as individuals operate within schools, schools are nested within larger systems and environments. New accountability approaches, by their very nature, seek to influence from the outside what goes on inside schools. Moreover, such policies assume that external forces can play a determining role in changing the internal workings of schools. The limitations of such assumptions, however, have provided grist for the vast literature on policy implementation in education.
- c. Information is both problematic in schools and essential to school improvement. The third problem in school accountability concerns the nature and role of information in school improvement. Indeed, information is the life-- blood of all accountability mechanisms: one accounts to someone for something, and this accounting is done by conveying information. Current school accountability policies, such as public reporting of student test scores, assume that, armed with accurate information about the achievement of students in the school, stakeholders and participants in the instructional process will take whatever action is necessary to improve learning outcomes. But again, this simple assumption raises a host of questions, the answers to which are anything but straightforward. What are the most effective forms and uses of information in the school improvement process? What is the potential for the external accountability system to generate and disseminate the information needed to accomplish the accountability goals? What are the motivational and learning links between information on the one hand and individual and collective action?

## Appendix D. AQuESTT Logic Modeling Artifacts

A logic model is useful in evaluating the effectiveness of a program. Logic modeling helps create a systematic and visual way to present and share an understanding of the relationships among the various resources needed to operate a program, the activities planned, and the changes or results hoped to be achieved." (W.K. Kellogg Foundation).

Logic modeling is useful in studying the underlying theory of change. Using words and pictures, one can describe the sequence of activities thought to bring about change and how these activities are linked to the results the program is expected to achieve (<u>The Pell Institute</u>).

A logic model helps understand why and how a program will work. From the point of view of program evaluation, a logic model will help understand gaps in the whole sequence of activities – meaning what among a certain sequence of input, activity, output and outcome is absent. It should be noted that logic models are also referred to as blueprints for change or chain of causation or a pathways roadmap.

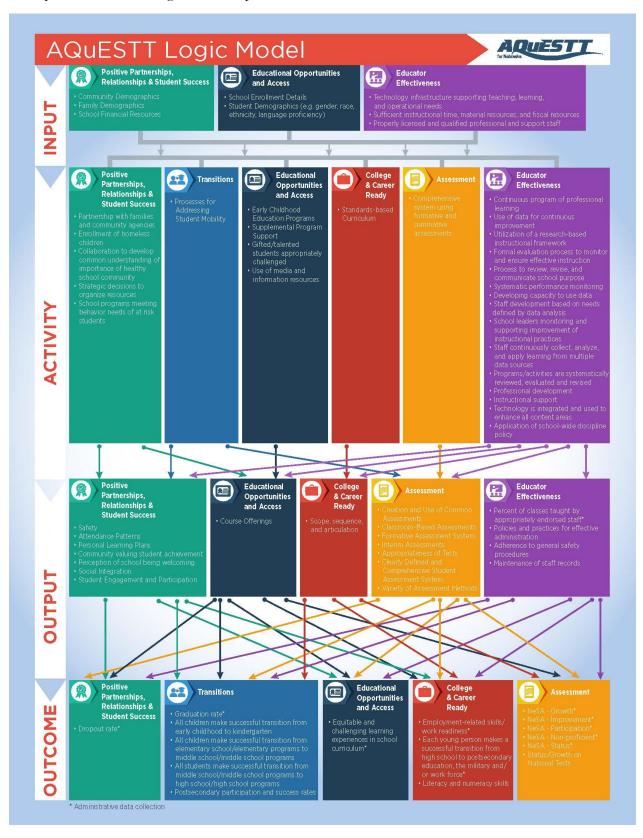
#### Logic Model Development

A snapshot of the process used to develop the initial logic model is provided below:

Indicators	Source	Level of Analysis 🔹	Logic Component	AQuESTT Tenet	Existing Collection
Race, ethnicity	The Nebraska Framework	Students	Input	Educational Opportunities	Yes
	Illinois Regional Superintendent of Schools: School				
School staff properly licensed and qualified	Evaluation Form	Staff	Input	Educator Effectiveness	Yes
	Australian Council for Educational Research: Measuring and		Sec. 1	S. ( 18	
Systematic performance monitoring	Rewarding School Improvement	Administrative	Activity	Educator Effectiveness	No
(Developing) district/school capacity to use data	AdvancED Standards for Quality	Continuous School Improvement	Activity	Educator Effectiveness	No
Staff development based on needs defined by data analysis	Dimensions of Excellence Scales Manual	Continuous School Improvement	Activity	Educator Effectiveness	No
School leaders monitoring and supporting improvement of					
instructional practices	AdvancED Standards for Quality	Continuous School Improvement	Activity	Educator Effectiveness	No
Staff continuously collecting, analyzing, and applying learning from					
(multiple types of data and a variety of sources) data sources	AdvancED Standards for Quality	Continuous School Improvement	Activity	Educator Effectiveness	No
Evaluation - (School program evaluation) Program and activities are					
systematically reviewed and revised in accordance with needs and					
proven effectiveness.	Dimensions of Excellence Scales Manual	Continuous School Improvement	Activity	Educator Effectiveness	No
Professional development	The Nebraska Framework	Continuous School Improvement	Activity	Educator Effectiveness	No
Instructional support	Dimensions of Excellence Scales Manual	Instructional	Activity	Educator Effectiveness	No
Technology is integrated and used to enhance all content areas	AdvancED Standards for Quality	Organizational Processes	Activity	Educator Effectiveness	No
Application of school-wide policy	ASSC – Assessment – School Climate Survey	Organizational Processes	Activity	Educator Effectiveness	No
and the second	Illinois Regional Superintendent of Schools: School	and the second			
Adherence to general safety procedures	Evaluation Form	Organizational Processes	Output	Educator Effectiveness	No
	Illinois Regional Superintendent of Schools: School		5 10		
Maintenance of staff records	Evaluation Form	Organizational Processes	Output	Educator Effectiveness	No
Sufficient qualified professional and support staff	AdvancED Standards for Quality	Staff	Input	Educator Effectiveness	Yes
	Illinois Regional Superintendent of Schools: School				
Enrollment of homeless children	Evaluation Form	Administrative	Activity	Positive Partnerships, Rela	Yes
	North Central Association School Improvement				
Community valuing student achievement	Questionnaire	Community	Output	Positive Partnerships, Rela	No
Community data	The Nebraska Framework	Community	Input	Positive Partnerships, Rela	No
Second	Australian Council for Educational Research: Measuring and				
Language spoken at home	Rewarding School Improvement	Families	Input	Positive Partnerships, Rela	Yes
Collaboration to develop common understanding of importance of					
healthy school community	Diagnostic Tool for School and District Effectiveness (DTSDE)	Organizational Processes	Activity	Positive Partnerships, Rela	No

#### **Final Logic Model**

A snapshot of the final logic model is presented below:



#### Appendix E. Annotated Bibliography

AdvancED<sup>TM</sup>. (2011). Standards for quality schools. Alpharetta, GA.

The five standards with multiple indicators and performance levels are laid out in this document. The five standards are: Purpose and Direction, Governance and Leadership, Teaching and Assessing for Learning, Resources and Support Systems, and Using Results for Continuous Improvement. This is a quick reference for an important part of AdvancED's<sup>TM</sup> accreditation process.

#### AdvancED<sup>TM</sup>. (2012). Self-assessment workbook for schools: Concept maps. Alpharetta, GA.

This document details the performance levels of AdvancED's<sup>TM</sup> five Standards for Quality. Each standard has multiple indicators with four performance levels per indicator, and is followed by a narrative section that asks about areas of strength, areas in need of improvement, and plans for improvement. Since there is more than one additional concept measured from one level to the next, AdvancED<sup>TM</sup> suggests several methods for determining an overall rating for any given indicator.

Alliance for the Study of School Climate. (2014). *School climate survey*. Retrieved from <u>http://web.calstatela.edu/centers/schoolclimate/assessment/school\_survey.html</u>

This survey instrument was created by the Alliance for the Study of School Climate (ASSC) at California State University in Los Angeles. It is used to assess the quality of school climate and to evaluate the school leadership team. There are eight constructs within the survey: physical appearance, faculty relations, student interactions, leadership/decisions, discipline environment, learning/assessment, attitude and culture, and community relations.

Arizona Department of Education. (2015). Arizona's transition to a new accountability system for public schools and districts [PowerPoint slides]. Retrieved from <u>http://www.azed.gov/accountability/files/2015/05/2015-arizona%E2%80%99s-</u> transition-to-a-new-accountability-system-for-public-schools-and-districts.pdf

This presentation describes the Arizona Department of Education's transition to a new school accountability system. This state-developed accountability system will identify schools with "below average levels of performance" and provides new criteria and classification models for all schools. School labels used are reward schools, focus schools, and priority schools. The data considered include proficiency, graduation rate, growth and bottom 25% subgroup, and other new indicators.

Australian Council for Educational Research. (2012). *Measuring and rewarding school improvement*. Australia: Masters, G. N.

This discussion paper by the Australian Council for Educational Research argues for the use of 'practice-based' measures to complement 'outcomes-based' measures of school improvement. Student outcomes result from both school practices and contextual influences, thus a school's effectiveness should not be primarily informed by mean scores and proficiency levels. Measures of performance and improvement over time should include multiple outcome measures incorporating both student outcome measures and school practice measures. Several school improvement frameworks used across Australia are also attached to this paper.

Center for the Study of Evaluation. (1998). Assessments and accountability. Los Angeles, CA: Linn, R. L.

This technical report provides an overview of the major changes in educational assessment and accountability in the United States since the 1950s, and raises the question of whether assessment-based accountability models have been shown to improve education. The intent of the models should be to aspire to the same high standards for all students. Moreover, the choice of data source and summary statistic used matter a great deal. It was found that the most commonly reported approach in accountability models is using current status scores.

Consortium on Chicago School Research. (2004). Key measures of school development. Chicago, IL: Sporte, S. E., Luppescu, S., & Nanjiani, K.

This report from the Consortium on Chicago School Research provides several key measures of school development that were identified from survey responses by all Chicago public school teachers and 6<sup>th</sup>- through 10<sup>th</sup>-grade students. These key measures are grouped under five essential supports for student learning, namely, school leadership, parent and community partnerships, student-centered learning climate, professional capacity, and quality instructional program. When these essential supports are implemented and frequently monitored, their research showed that student learning improves.

Consortium on Chicago School Research. (2006). *The essential supports for school improvement*. Chicago, IL: Sebring, P. B., Allensworth, E., Bryk, A. S., Easton, J. Q., & Luppescu, S. This research report describes in great detail the five essential supports for student learning as identified by the Consortium on Chicago School Research. The framework of contextual resources is also given since features of the local school context play a significant role in a school's community. This research seeks to establish a comprehensive and empirically based practice for all school stakeholders in the quest to improve student learning.

Crowe, E. (2010). *Measuring what matters: A stronger accountability model for teacher education*. Retrieved from https://www.americanprogress.org/issues/education/report/2010/07/29/806

https://www.americanprogress.org/issues/education/report/2010/07/29/8066/me asuring-what-matters/

This report published by the Center for American Progress argues for the need to standardize the accountability system for teacher education across all states. The proposed new accountability model can provide access for educators, policymakers, schools, and parents to important measures of the quality of preparation programs. Some key measures in this redesigned system include K-12 student learning, the development of classroom-teaching skills by teachers, graduate and employer feedback, and tests of teacher knowledge and skills unique to teaching and student learning.

Darling-Hammond, L. (2006). Assessing teacher education: The usefulness of multiple measures for assessing program outcomes. *Journal of Teacher Education, 57*, 120-138.

This research article by the *Journal of Teacher Education* describes research and assessment strategies used to evaluate teacher education program outcomes. Strategies include using perceptual data from surveys and interviews as well as independent measures from test data, assessments, and observations. It was found that multiple measures are useful in providing a comprehensive understanding of teacher candidate learning and the contribution of programs to their improvement.

Figlio, D., & Loeb, S. (2011). School accountability. In E. A. Hanushek, S. Machin & L. Woessmann (Eds.), *Handbooks in economics* (pp. 383-421). The Netherlands: North-Holland.

This chapter in the book "Handbooks in Economics" focuses on school accountability. School accountability can be addressed in many ways and exists in varying systems, with the most common one using administrative data to increase student achievement. These systems often focus on easily measurable outcomes and ignore other valued academic outcomes. Accountability systems should also consider which students ought to be included when evaluating student learning in order to address fairness and attribution. Moreover, accountability affects outcomes other than student test scores; it also has an impact on labor market outcomes and even the housing market.

Georgia Department of Education. (2012). Georgia's school improvement fieldbook: A guide to support college and career ready graduates. Atlanta, GA.

This guide by the Georgia Department of Education is designed to assist with the planning, implementation, and monitoring of school improvement strategies. Georgia's accountability system and research base for the school framework are given, along with their nine-step school improvement process. Educators can refer to this fieldbook as a resource when designing and delivering quality learning experiences for their students.

Gottfredson, G. D. (2011). The effective school battery: Interpretive report. Retrieved from https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rj a&uact=8&ved=0ahUKEwjHwPvcpKfJAhVKWx4KHZOGBpsQFggdMAA&url= https%3A%2F%2Fwww.education.umd.edu%2FCHSE%2Fresources%2FAssessme nt%2Fschoolassess%2FTools%2FESB%2FESBsample-UMD.pdf&usg=AFQjCNECkf2neuv\_XGu-X74uuZKyyhsP1g&sig2=gXgo\_pTXE-Cg3679pKtckg&bvm=bv.108194040,d.dmo

This report describes the Effective School Battery (ESB) and what it is used for. The ESB gathers information on school climate, and students and teachers. This information is useful for program planning and evaluating the effectiveness of school improvement programs. The ESB exists in the form of student and teacher surveys, which measure the school's psychosocial climate and teacher and student characteristics.

Hoffman, L. L., Hutchinson, C. J., Reiss, E. (2009). On improving school climate: Reducing reliance on rewards and punishment. *International Journal of Whole Schooling*, *5*, 1-12.

This article is based on a study testing the effects of Conscious Discipline, an emotional intelligence and classroom management program. The program was designed to help teachers enhance students' social and emotional skills, and the school climate overall. Teachers, after undergoing the training, showed an increase in positive feelings about school climate. There was also an improvement in student-teacher relations, and a greater mutual support among teachers.

Hoy, W. K. (2003). Organizational health inventory. Retrieved from http://www.waynekhoy.com/ohi-m.html

This survey instrument assess the health of the school organization. It contains 45 question items, which measure a few constructs like community engagement, student functioning, parental engagement, faculty relations, and student engagement.

Illinois Association of School Boards. (2014). Regional superintendent of schools: School evaluation form. Retrieved from <u>http://isbe.net/recognition/pdf/school-eval-procedure-cross-ref-tool.pdf</u>

This school evaluation form is a cross-reference tool prepared by the Illinois Association of School Boards (IASB). Its purpose is to check if districts adhere to policies and administrative procedures, and covers several sections: Governance and Operations, General Health and Safety, Personnel, Instructional Program and Services, Transitional Program Instruction (TPI) and Transitional Bilingual Education (TBE), Instructional Program – Districts with Elementary Schools, Instructional Program – Districts with High Schools, and Special Education.

Kim, J. S., & Sunderman, G. L. (2005). Measuring academic proficiency under the No Child Left Behind act: Implications for educational equity. *Educational Researcher*, *34*, 3-13.

This article discusses the overlooked adverse effects of the No Child Left Behind (NCLB) Act on certain schools. Since accountability requirements in the NCLB Act rely on mean proficiency scores, high-poverty and racially diverse schools face a disadvantage. This is because adequate yearly progress (AYP) failure rates increase as these schools have to meet additional subgroup performance targets. If mean proficiency score is the only indicator used to measure performance, student achievement is unlikely to improve with the given AYP requirements. Alternative accountability systems should include multiple measures of student and school performance like improvement in proficiency levels over time and whether statemandated performance goals are met or not.

Learning Point Associates. (2004). Guide to using data in school improvement efforts. Naperville, IL.

According to this guide, reflective collaboration and continual exposure to data can help educators learn to use information for decision-making and problem solving. Using data is key throughout the school improvement cycle as it can help identify needs and allocate resources accordingly. Common measures of data include: achievement data, demographic data, program data, and perception data. The benefits of using data can also be maximized by setting goals, designing strategies, and defining evaluation criteria.

Liang, X. (n.d.) Content validation of a school effectiveness measurement for accreditation purpose (Doctoral dissertation). University of Akron, OH.

This research study was designed to test the content validity of the North Central Association School Improvement Questionnaire (NCASIQ). The questionnaire was developed to measure school effectiveness for the North Central Association of Commission on Schools (NCA COS). Using exploratory factor analyses and item analyses, the five sub-content domains in the NCASIQ were found to only measure two of the five NCA COS standards. The study also showed that administrators can use the traditional validation approach to accurately interpret data and make informed decisions.

National Association of Secondary School Principals. (n.d.). Comprehensive assessment of school environment survey. Retrieved from <u>http://www.nassp.org/School-</u> <u>Improvement/Tools-for-School-Improvement/Breaking-Ranks-CASE-Survey.aspx</u>

This survey by the National Association of Secondary School Principals is a tool to collect data on student, teacher, and parent satisfaction with the school environment and culture. It is also used to identify school strengths and weaknesses, as well as assisting in the design of school improvement plans. The survey items are organized around three core areas: collaborative leadership, personalization, and curriculum, instruction and assessment.

National Bureau of Economic Research. (2001). *Improving school accountability measures*. Cambridge, MA: Kane, T. J., & Staiger, D. O.

This paper describes a study examining the weakness of using annual school-level test scores in school accountability systems. Two sources contributing to the imprecision of test score measures were identified as sampling variation and one-time factors that are not sensitive to sample size (e.g. dog barking on test day, severe flu season). Results of the study show that there was substantial heterogeneity in test performance gains for different classrooms in the same school, suggesting classroom effects (like teacher) on student performance. Thus, using past performance to predict future levels of performance can be a more sound foundation for an accountability system. However, schools need to have several years of sustained improvement before the prediction can show any significant improvement.

National Institute for Urban School Improvement. (2006). *School improvement survey*. Retrieved from <u>http://glec.education.iupui.edu/equity/School\_Improvement\_Survey.pdf</u>

This survey by the National Institute for Urban School Improvement contains 32 question items which measure four constructs: teacher practices, school practices, school climate, and school/community partnerships.

Nebraska Department of Education. (2012). The Nebraska framework: A handbook for continuous improvement in Nebraska schools. Lincoln, NE.

This handbook presents the Nebraska model for continuous improvement in schools. It includes the following cyclical steps: creating the profile, setting the goals, planning to improve, and implementing the plan. The purpose of the model is to help Nebraska schools coordinate and align school improvement initiatives for increased learning quality, which is in line with Section 009.01A of Rule 10.

New York State Education Department. (2015). *Diagnostic tool for school and district effectiveness* (DTSDE): Revised self-assessment document. Retrieved from <u>http://www.p12.nysed.gov/accountability/diagnostic-tool-</u> <u>institute/DTSDEResources.html</u>

This self-assessment document is part of NYSED's diagnostic tool for schools and districts. For each of the six tenets, several statements of practice are provided for schools to reflect on. Under each statement, the school or district has to list down evidence of work, evidence of impact, and next steps. This completed document will then be used by the NYSED review team for scheduled school reviews.

New York State Education Department. (2015). *Diagnostic tool for school and district effectiveness* (DTSDE): School final report template. Retrieved from <u>http://www.p12.nysed.gov/accountability/diagnostic-tool-</u> institute/DTSDEResources.html

This diagnostic tool was created by the New York State Education Department (NYSED) to compare districts and schools to optimal learning conditions. It focuses on six tenets: District Leadership and Capacity, School Leader Practices and Decisions, Curriculum Development and Support, Teacher Practices and Support, Student Social and Emotional Developmental Health, and Family and Community Engagement. This template for the school report comprises of several sections like school information, rating for each tenet, and recommendations for improvement. New York State Education Department. (2015). *Diagnostic tool for school and district effectiveness* (DTSDE): Scoring guide for school reviews with district oversight. Retrieved from <u>http://www.p12.nysed.gov/accountability/diagnostic-tool-</u> <u>institute/DTSDEResources.html</u>

Also part of NYSED's diagnostic tool, this brief document provides a scoring guide for school reviews. The guide explains how sub-statement ratings can be turned into statement of purpose (SOP) ratings, and how SOP ratings in turn can be calculated to form conceptual frame ratings. Most involve averaging the ratings and schools will receive one of four ratings: Highly Effective, Effective, Developing, and Ineffective.

O'Day, J.A. (2002). Complexity, accountability, and school improvement. *Harvard Educational Review, 72*, 1-36.

This article explores the mechanisms in accountability models. Using the framework of complexity theory, the author explains that the existence and usage of information relevant to teaching and learning is key for school improvement. Besides that, combining administrative and professional accountability can potentially create a more lasting impact for school reform efforts.

Research for Better Schools. (2014). *Dimensions of excellence scales manual*. Philadelphia, PA: Dusewicz, R. A., & Beyer, F. S.

This manual developed by the *Research for Better Schools* seeks to identify problems, strengths, and methods for improvement by gathering reliable information on school performance. It involves three surveys (for school staff, parents, and students, respectively), and measures eight major dimensions: school climate, leadership, teacher behavior, curriculum, monitoring & assessment, student discipline, staff development, and parent involvement.

Valentine, J. W., & Bowman, M. L. (1986). *Audit of principal effectiveness survey*. Retrieved from https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=2&ved=0 ahUKEwjb5NqFoKfJAhXMuB4KHevrDxoQFgglMAE&url=https%3A%2F%2Fm ospace.umsystem.edu%2Fxmlui%2Fbitstream%2Fhandle%2F10355%2F3567%2FA uditPrincipalEffectiveness.pdf%3Fsequence%3D1&usg=AFQjCNFnid6OhRZbNG -dbup-SoCbUVDauw&sig2=35nYn6u28yb14oUJTrhscA&bvm=bv.108194040,d.dmo&cad =rja

This 80-item questionnaire measures the effectiveness of the abilities and skills demonstrated by principals. Respondents to this questionnaire are teachers since they

work most closely with principals when compared to other professional groups. Each item states a specific skill which is rated, anonymously, on a nine-point scale from (1) 'not effective' to (9) 'very effective.'

Wagner, C. R. (2006). The school leader's tool for assessing and improving school culture. *Principal Leadership*, 7, 41-44.

School culture or climate is an often overlooked aspect in school improvement planning. One instrument for determining the current status of school culture is the School Culture Triage Survey, used by schools across the United States and Canada. It specifically addresses three constructs: professional collaboration, affiliative collegiality, and self-determination/efficacy. Survey respondents consist of teachers and administrators only.

Wilson, B. L. (1985). The school assessment survey. Educational Leadership, 50-53.

This article describes the School Assessment Survey (SAS) which was designed to assess school conditions and provide feedback for school staff. This teacher survey contains several organizational dimensions like goal consensus, facilitative leadership, staff conflict, student discipline, and teaching behavior. When used alongside programs focusing on a specific school needs, the SAS instrument can help schools meet their improvement objectives.

## Appendix F. Technical Advisory Committee Meeting Agenda for 12.17.2015

## **Technical Advisory Committee**

## Nebraska Department of Education December 17, 2015 Cornhusker Marriott Hotel Lincoln, NE 8:30 am-3:00 pm Agenda

8:30 a.m. Welcome and Introductions

8:40 a.m. Item 1: Approve Minutes of June 30, 2015 (Document 1)

#### 8:40-9:20 a.m. Item 2: ELA Assessment, Sections A-D (Document 2)

- A. NeSA-ELA Test Designs
- B. NeSA-ELA Tables of Specifications
- C. NeSA-English Language Arts Reporting Categories
- D. Weight of Text-Dependent Analysis

In September 2014, the Nebraska State Board of Education adoption of Nebraska College and Career Ready Standards of English Language Arts in September 2014. Since that time NDE Assessment Team has been engaged in developing test designs of high technical quality, Tables of Specifications that adequately cover the standards at the depth indicated by the standards, and reportable sub-scores, including the weighting of the text-dependent analysis.

#### 9:20-9:35 a.m. Break

#### 9:35-10:10 a.m. <u>Item 3: NeSA-ELA Assessment Text-Dependent Analysis, Sections A-B (Document 3)</u>

- A. Holistic Scoring of TDA/ Analytic Scoring of TDA-Research
- B. TDA Pilot at 3<sup>rd</sup> and 4<sup>th</sup> grades-Research

**Section A.** Included in the NeSA-English Language Arts test is one text-dependent analysis at each grade 5-8 and 11. NDE would then like to determine if scoring the essays with an analytic rubric provides valuable information about students' performance on the three domains.

**Section B.** NDE is partnering with DRC to provide an online pilot TDA to 3<sup>rd</sup> and 4<sup>th</sup> graders. The pilot will include a passage (or paired passages), selected response items—multiple choice, evidence-based selected responses and technology enhanced. Students will also be given a single prompt to address that is a Text-Dependent Analysis. NDE and DRC proposes conducting research on the pilot.

#### 10:10- 10:50 a.m. <u>Item 4: NeSA-ELA Alignment Study</u> (Document 4)

In late August or early September 2016, the forms will be constructed for the first operational NeSA-English Language Arts assessment in grades 5-8 & 11. A partially transitioned NeSA ELA for grades 3 and 4 will be administered. An alignment study to the College and Career Ready Standards of English Language Arts will be conducted.

#### 10:50-11:30

# Item 5: English Language Learner accommodations for NeSA-English Language Arts (Document 5)

The Nebraska College and Career Ready Standards of English Language Arts standards include some changes in language that affect accommodations for English Language Learners for statewide testing.

#### 11:30-12:30 Lunch

### 12:30-1:00 p.m. Item 6: NeSA-Math Transition (Document 6)

With the adoption of the Nebraska College and Career Ready Standards for Mathematics for grades 3-8 and 11 at the August 2015 State Board of Education meeting, NDE and DRC have collaborated to provide transition of the NeSA-Mathematics test to measure the adopted Nebraska College and Career Ready Standards for Mathematics the revised math standards.

#### 1:00-1:45 p.m.

#### Item 7: AQuESTT Accountability, Raw Classification-Sections A-B (Document 7)

- A. Raw Classification-Changed Business Rules
- B. Discussion of possible changes to Raw Classification

**Section A.** Raw Classification refers to the current calculations and data release of classification of schools based on NeSA scores-status, improvement and growth, participation and graduation rates. The Prototype Raw Classification, based on 2013-2014 data was released to school districts July 2015. The Raw Classification based on 2014-2015 was released in October 2015. Some business rules changed between the two releases.

#### Section B: Discussion of possible changes to Raw Classification.

#### Section B1 Sensitivity in the school/district classification calculations

Sensitivity in the school/district classification calculations resulted in some unpredicted Raw Classification level changes. Due to this effect, NDE explored possible changes to the Raw Classification business rules

Section B2. Raw Classification- Proposed possible change for inclusion of Recently Arrived Limited English. NDE was interested in exploring a change to its Raw Classification system, whereby the scores of Recently Arrived Limited English would be included differently in the calculations than they currently are.

#### 1:45-2:00 p.m. Break

#### 2:00-2:45 p.m.

#### Item 8: AQuESTT Accountability- Evidence-Based Analysis (Document 8)

State statutory requirements for Nebraska public school and district accountability (79-760.06 R.S.S.) prescribe indicators of performance that must be included in the AQuESTT classification model for accountability (i.e., NeSA status, improvement, growth, participation, and graduation rate) "and other indicators of the performance of public schools and school districts as established by the state board."

The Nebraska State Board of Education directed measures of school quality and student success related to the AQUESTT tenets (i.e., college and career ready; assessment; educator effectiveness; positive partnerships, relationships and student success; transitions; and educational opportunities and access) should be included in the final AQUESTT classification model. The Nebraska State Board of Education authorized that data related to these constructs be collected from public schools and districts using the AQUESTT Evidence-based Analysis (EBA).