Report of the External Review Team for Mississippi School for the Deaf

1253 Eastover Drive Jackson MS 39211 US

Dr. Sandra Edwards

Date: February 7, 2017 - February 9, 2017



Copyright (c) 2017 by Advance Education, Inc. AdvanceD[™] grants to the Institution, which is the subject of the External Review Team Report, and its designees and stakeholders a non-exclusive, perpetual, irrevocable, royalty-free license and release to reproduce, reprint, and distribute this report in accordance with and as protected by the Copyright Laws of the United States of America and all foreign countries. All other rights not expressly conveyed are reserved by AdvancED[™].

Table of Contents

Introduction	4
Results	9
Teaching and Learning Impact	9
Standard 3 - Teaching and Assessing for Learning	10
Standard 5 - Using Results for Continuous Improvement	11
Student Performance Diagnostic	11
Effective Learning Environments Observation Tool (eleot™)	13
eleot™ Data Summary	16
Findings	19
Leadership Capacity	21
Standard 1 - Purpose and Direction	22
Standard 2 - Governance and Leadership	22
Stakeholder Feedback Diagnostic	22
Findings	23
Resource Utilization	24
Standard 4 - Resources and Support Systems	24
Findings	25
Conclusion	27
Accreditation Recommendation	29
Addenda	30
Team Roster	30
Next Steps	31
About AdvancED	32
References	33

Introduction

The External Review is an integral component of AdvancED Performance Accreditation and provides the institution with a comprehensive evaluation guided by the results of diagnostic instruments, in-depth review of data and documentation, and the professional judgment of a team of qualified and highly trained evaluators. A series of diagnostic instruments examines the impact of teaching and learning on student performance, the capacity of leadership to effect continuous improvement, and the degree to which the institution optimizes its use of available resources to facilitate and support student success. The results of this evaluation are represented in the Index of Education Quality (IEQ™) and through critical observations, namely, Powerful Practices, Opportunities for Improvement, and Improvement Priorities.

Accreditation is a voluntary method of quality assurance developed more than 100 years ago by American universities and secondary schools and designed primarily to distinguish schools adhering to a set of educational standards. Today the accreditation process is used at all levels of education and is recognized for its ability to effectively drive student performance and continuous improvement in education.

Institutions seeking to gain or retain accreditation must meet AdvancED Standards specific to their institution type, demonstrate acceptable levels of student performance and the continuous improvement of student performance, and provide evidence of stakeholder engagement and satisfaction. The power of AdvancED Performance Accreditation lies in the connections and linkages between and among the conditions, processes, and practices within a system that impact student performance and organizational effectiveness.

Standards help to delineate what matters. They provide a common language through which an education community can engage in conversations about educational improvement, system effectiveness, and achievement. They serve as a foundation for planning and implementing improvement strategies and activities and for measuring success. AdvancED Standards were developed by a committee comprised of talented educators and leaders from the fields of practice, research, and policy who applied professional wisdom, deep knowledge of effective practice, and the best available research to craft a set of robust standards that define institutional quality and guide continuous improvement. Prior to implementation, an internationally recognized panel of experts in testing and measurement, teacher quality, and education research reviewed the standards and provided feedback, guidance and endorsement.

The AdvancED External Review Team uses AdvancED Standards, associated indicators and criteria related to student performance and stakeholder engagement to guide its evaluation. The Team examines adherence to standards as well as how the institution functions as a whole and embodies the practices and characteristics expected of an accredited institution. The Standards, indicators and related criteria are evaluated using indicator-specific performance levels. The Team rates each indicator and criterion on a scale of 1 to 4. The final scores assigned to the indicators and criteria represent the average of the External Review Team members' individual ratings.

The External Review is the hallmark of AdvancED Performance Accreditation. It energizes and equips the institution's leadership and stakeholders to achieve higher levels of performance and address those areas that

may be hindering efforts to reach desired performance levels. External Review is a rigorous process that includes the in-depth examination of evidence and relevant data, interviews with all stakeholder groups, and extensive observations of learning, instruction, and operations.

Use of Diagnostic Tools

A key to examining the institution is the design and use of diagnostic tools that reveal the effectiveness with which an institution creates conditions and implements processes and practices that impact student performance and success. In preparation for the External Review the institution conducted a Self Assessment that applied the standards and criteria for accreditation. The institution provided evidence to support its conclusions vis a vis organizational effectiveness in ensuring acceptable and improving levels of student performance.

- an indicator-based tool that connects the specific elements of the criteria to evidence gathered by the team:
- a student performance analytic that examines the quality of assessment instruments used by the
 institution, the integrity of the administration of the assessment to students, the quality of the learning
 results including the impact of instruction on student learning at all levels of performance, and the
 equity of learning that examines the results of student learning across all demographics;
- a stakeholder engagement instrument that examines the fidelity of administration and results of perception surveys seeking the perspective of students, parents, and teachers;
- a state-of-the-art, learner-centric observation instrument, the Effective Learning Environments
 Observation Tool (eleot™) that quantifies students' engagement, attitudes and dispositions organized
 in 7 environments: Equitable Learning, High Expectations, Supportive Learning, Active Learning,
 Progress Monitoring and Feedback, Well-Managed Learning, and Digital Learning. All evaluators
 must be trained, reach acceptable levels of inter-rater reliability, and certified to use this research based and validated instrument.

The External Review Team's findings and critical observations are shared in this report through the IEQ™ results as well as through the identification of Powerful Practices, Opportunities for Improvement, and Improvement Priorities.

Index of Education Quality

In the past, accreditation reviews resulted in an accreditation recommendation on status. Labels such as advised, warned, probation, or all clear were used to describe the status of a school relative to the AdvancED Standards and other evaluative criteria. Beginning in the 2013-14 school year, AdvancED introduced a new framework to describe the results of an accreditation review. Consistent with the modern focus of accreditation on continuous improvement with an emphasis on student success, AdvancED introduced an innovative and state-of-the-art framework for diagnosing and revealing institutional performance called the Index of Education Quality (IEQTM). The IEQTM comprises three domains of performance: 1) the impact of teaching and learning on student performance; 2) the capacity of leadership to guide the institution toward the achievement of its

vision and strategic priorities; and 3) use of resources to support and optimize learning. Therefore, your institution will no longer receive an accreditation status. Instead, your institution will be accredited with an IEQ™ score. In the case where an institution is failing to meet established criteria, the accreditation will be under review thereby requiring frequent monitoring and demonstrated improvement.

The three domains of performance are derived from the AdvancED Standards and associated indicators, the analysis of student performance, and the engagement and feedback of stakeholders. Within each domain institutions can connect to the individual performance levels that are applied in support of the AdvancED Standards and evaluative criteria. Within the performance levels are detailed descriptors that serve as a valuable source of guidance for continuous improvement. Upon review of the findings in this report and building on their Powerful Practices, institutional leaders should work with their staff to review and understand the evidence and rationale for each Opportunity for Improvement and Improvement Priority as well as the corresponding pathway to improvement described in the performance levels of the selected indicator(s).

The IEQ[™] provides a new framework that recognizes and supports the journey of continuous improvement. An institution's IEQ[™] is the starting point for continuous improvement. Subsequent actions for improvement and evidence that these have had a positive impact will raise the institution's IEQ[™] score.

Benchmark Data

Throughout this report, AdvancED provides benchmark data for each indicator and for each component of the evaluative criteria. These benchmark data represent the overall averages across the entire AdvancED Network for your institution type. Thus, the AdvancED Network average provides an extraordinary opportunity for institutions to understand their context on a global scale rather than simply compared to a state, region, or country.

It is important to understand that the AdvancED Network averages are provided primarily to serve as a tool for continuous improvement and not as a measure of quality in and of itself. Benchmark data, when wisely employed, have a unique capacity to help institutions identify and leverage their strengths and areas of improvement to significantly impact student learning.

Powerful Practices

A key to continuous improvement is the institution's ability to learn from and build upon its most effective and impactful practices. Such practices serve as critical leverage points necessary to guide, support and ensure continuous improvement. A hallmark of the accreditation process is its commitment to identifying with evidence, the conditions, processes and practices that are having the most significant impact on student performance and institutional effectiveness. Throughout this report, the External Review Team has captured and defined Powerful Practices. These noteworthy practices are essential to the institution's effort to continue its journey of improvement.

Opportunities for Improvement

Every institution can and must improve no matter what levels of performance it has achieved in its past. During the process of the review, the External Review Team identified areas of improvement where the institution is meeting the expectations for accreditation but in the professional judgment of the Team these are Opportunities for Improvement that should be considered by the institution. Using the criteria described in the corresponding rubric(s) to the Opportunity for Improvement, the institution can identify what elements of practice must be addressed to guide the improvement.

Improvement Priorities

The expectations for accreditation are clearly defined in a series of the rubric-based AdvancED Standards, indicators and evaluative criteria focused on the impact of teaching and learning on student performance, the capacity of the institution to be guided by effective leadership, and the allocation and use of resources to support student learning. As such, the External Review Team reviewed, analyzed and deliberated over significant bodies of evidence provided by the institution and gathered by the Team during the process. In the professional judgment of the Team as well as the results of the diagnostic process, the Team defined, with rationale, Improvement Priorities. The priorities must be addressed in a timely manner by the institution to retain and improve their accreditation performance as represented by the IEQTM. Improvement Priorities serve as the basis for the follow-up and monitoring process that will begin upon conclusion of the External Review. The institution must complete and submit an Accreditation Progress Report within two years of the External Review. The report must include actions taken by the institution to address the Improvement Priorities along with the corresponding evidence and results. The IEQTM will be recalculated by AdvancED upon review of the evidence and results associated with the Improvement Priorities.

The Review

The External Review for the Mississippi School for the Deaf (MSD) was conducted February 7 - 9, 2017 with a team of four including the Lead Evaluator. The Team was comprised of two members who were fluent in American Sign Language (ASL) and two members who had never worked in a deaf environment. One member was an instructor in the education of the deaf from an out of state university, and the remainder of the Team was from Mississippi. Due to the nature of the MSD, the team was assisted during the review by interpreters from the school as well as two out of state interpreters contracted for the Review. The Lead Evaluator contacted all team members by email approximately five weeks prior to the review to establish a date and time for the first webinar meeting to prepare for the 3 day school review. The webinar to communicate logistics and team assignments as well as the purpose and responsibilities of the External Review Team was held on January 20, 2017. A replacement team member was assigned after the initial meeting and was brought up to speed quickly.

The Team gathered a 5:00 p.m. on the opening day to a dinner hosted by key school leadership followed by a presentation about the school and its accomplishments presented and signed by students. The presentation gave the rich history of the school as well as its many accomplishments as told by students in their signed language interpreted by two staff interpreters. Following the presentation attended by all resident students, local parents, and community members who are affiliated with the programs of the school, the Team received

a tour of the extensive facilities with detailed explanations of spaces signed by two students. The team conducted the first work session to discuss initial ratings, the overall self-assessment, and the eleot™ assignments and schedule for the following day. The team work room and residence was on campus at the Lifeshare House which is used to accommodate campus guests and families who need overnight lodging for school purposes.

Day 2 started with a presentation by school and district leadership followed by interviews. The team quickly transitioned to conducting eleot™ observations. The second day concluded with interviews with 3 stakeholder groups. The team moved to the Lifeshare house for dinner and the evening work session of discussions around rating the Standard indicators and proposed actions.

The third day began with follow-up interviews, discussions, and viewing of the oracy and signacy labs where students were being instructed in small group to assist in learning spoken English and American Sign Language respectively. The team reviewed the prescribed actions for accuracy and structure. The entire team met with the superintendent for a pre-exit report and met with the entire leadership team and faculty for the exit presentation.

The External Review Team would like to sincerely thank the Mississippi School for the Deaf leadership and staff for the detailed preparations and the thoroughness with which the staff was involved in the continuous improvement process in preparing for the Review. The school leadership and staff diligently prepared reports, artifacts, and scheduled presentations in order to show the team the depth in which student services are provided to all students on a daily basis. An overwhelming number of community members were present for the opening program and participated in stakeholder interviews.

Stakeholders were interviewed by members of the External Review Team to gain their perspectives on topics relevant to the institution's effectiveness and student performance. The feedback gained through the stakeholder interviews was considered with other evidences and data to support the findings of the External Review. The following chart depicts the numbers of persons interviewed representative of various stakeholder groups.

Stakeholder Interviewed	Number
Superintendents	1
Administrators	3
Instructional Staff	8
Support Staff	6
Students	10
Parents/Community/Business Leaders	8
Total	36

Results

Teaching and Learning Impact

The impact of teaching and learning on student achievement is the primary expectation of every institution. The relationship between teacher and learner must be productive and effective for student success. The impact of teaching and learning includes an analysis of student performance results, instructional quality, learner and family engagement, support services for student learning, curriculum quality and efficacy, and college and career readiness data. These are all key indicators of an institution's impact on teaching and learning.

A high-quality and effective educational system has services, practices, and curriculum that ensure teacher effectiveness. Research has shown that an effective teacher is a key factor for learners to achieve their highest potential and be prepared for a successful future. The positive influence an effective educator has on learning is a combination of "student motivation, parental involvement" and the "quality of leadership" (Ding & Sherman, 2006). Research also suggests that quality educators must have a variety of quantifiable and intangible characteristics that include strong communication skills, knowledge of content, and knowledge of how to teach the content. The institution's curriculum and instructional program should develop learners' skills that lead them to think about the world in complex ways (Conley, 2007) and prepare them to have knowledge that extends beyond the academic areas. In order to achieve these goals, teachers must have pedagogical skills as well as content knowledge (Baumert, J., Kunter, M., Blum, W., Brunner, M., Voxx, T., Jordan, A., Klusmann, U., Krauss, S., Nuebrand, M., & Tsai, Y., 2010). The acquisition and refinement of teachers' pedagogical skills occur most effectively through collaboration and professional development. These are a "necessary approach to improving teacher quality" (Colbert, J., Brown, R., Choi, S., & Thomas, S., 2008). According to Marks, Louis, and Printy (2002), staff members who engage in "active organizational learning also have higher achieving students in contrast to those that do not." Likewise, a study conducted by Horng, Klasik, and Loeb (2010), concluded that leadership in effective institutions "supports teachers by creating collaborative work environments." Institutional leaders have a responsibility to provide experiences, resources, and time for educators to engage in meaningful professional learning that promotes student learning and educator quality.

AdvancED has found that a successful institution implements a curriculum based on clear and measurable expectations for student learning. The curriculum provides opportunities for all students to acquire requisite knowledge, skills, and attitudes. Teachers use proven instructional practices that actively engage students in the learning process. Teachers provide opportunities for students to apply their knowledge and skills to real world situations. Teachers give students feedback to improve their performance.

Institutions with strong improvement processes move beyond anxiety about the current reality and focus on priorities and initiatives for the future. Using results, i.e., data and other information, to guide continuous improvement is key to an institution's success. A study conducted by Datnow, Park, and Wohlstetter (2007) from the Center on Educational Governance at the University of Southern California indicated that data can shed light on existing areas of strength and weakness and also guide improvement strategies in a systematic and strategic manner (Dembosky, J., Pane, J., Barney, H., & Christina, R., 2005). The study also identified six

key strategies that performance-driven systems use: (1) building a foundation for data-driven decision making, (2) establishing a culture of data use and continuous improvement, (3) investing in an information management system, (4) selecting the right data, (5) building institutional capacity for data-driven decision making, and (6) analyzing and acting on data to improve performance. Other research studies, though largely without comparison groups, suggested that data-driven decision-making has the potential to increase student performance (Alwin, 2002; Doyle, 2003; Lafee, 2002; McIntire, 2002).

Through ongoing evaluation of educational institutions, AdvancED has found that a successful institution uses a comprehensive assessment system based on clearly defined performance measures. The system is used to assess student performance on expectations for student learning, evaluate the effectiveness of curriculum and instruction, and determine strategies to improve student performance. The institution implements a collaborative and ongoing process for improvement that aligns the functions of the school with the expectations for student learning. Improvement efforts are sustained, and the institution demonstrates progress in improving student performance and institution effectiveness.

Standard 3 - Teaching and Assessing for Learning

The school's curriculum, instructional design, and assessment practices guide and ensure teacher effectiveness and student learning.

Indicator	Description	Review Team Score	AdvancED Network Average
3.1	The school's curriculum provides equitable and challenging learning experiences that ensure all students have sufficient opportunities to develop learning, thinking, and life skills that lead to success at the next level.	4.00	2.82
3.2	Curriculum, instruction, and assessment are monitored and adjusted systematically in response to data from multiple assessments of student learning and an examination of professional practice.	4.00	2.45
3.3	Teachers engage students in their learning through instructional strategies that ensure achievement of learning expectations.	4.00	2.63
3.4	School leaders monitor and support the improvement of instructional practices of teachers to ensure student success.	4.00	2.69
3.5	Teachers participate in collaborative learning communities to improve instruction and student learning.	3.75	2.52
3.6	Teachers implement the school's instructional process in support of student learning.	4.00	2.56
3.7	Mentoring, coaching, and induction programs support instructional improvement consistent with the school's values and beliefs about teaching and learning.	4.00	2.56
3.8	The school engages families in meaningful ways in their children's education and keeps them informed of their children's learning progress.	3.75	3.07

Indicator	Description	Review Team Score	AdvancED Network Average
3.9	The school has a formal structure whereby each student is well known by at least one adult advocate in the school who supports that student's educational experience.	4.00	3.01
3.10	Grading and reporting are based on clearly defined criteria that represent the attainment of content knowledge and skills and are consistent across grade levels and courses.	4.00	2.71
3.11	All staff members participate in a continuous program of professional learning.	4.00	2.48
3.12	The school provides and coordinates learning support services to meet the unique learning needs of students.	4.00	2.63

Standard 5 - Using Results for Continuous Improvement

The school implements a comprehensive assessment system that generates a range of data about student learning and school effectiveness and uses the results to guide continuous improvement.

Indicator	Description	Review Team Score	AdvancED Network Average
5.1	The school establishes and maintains a clearly defined and comprehensive student assessment system.	4.00	2.64
5.2	Professional and support staff continuously collect, analyze, and apply learning from a range of data sources, including comparison and trend data about student learning, instruction, program evaluation, and organizational conditions.	4.00	2.33
5.3	Professional and support staff are trained in the evaluation, interpretation, and use of data.	4.00	2.03
5.4	The school engages in a continuous process to determine verifiable improvement in student learning, including readiness for and success at the next level.	4.00	2.45
5.5	Leadership monitors and communicates comprehensive information about student learning, conditions that support student learning, and the achievement of school improvement goals to stakeholders.	3.75	2.68

Student Performance Diagnostic

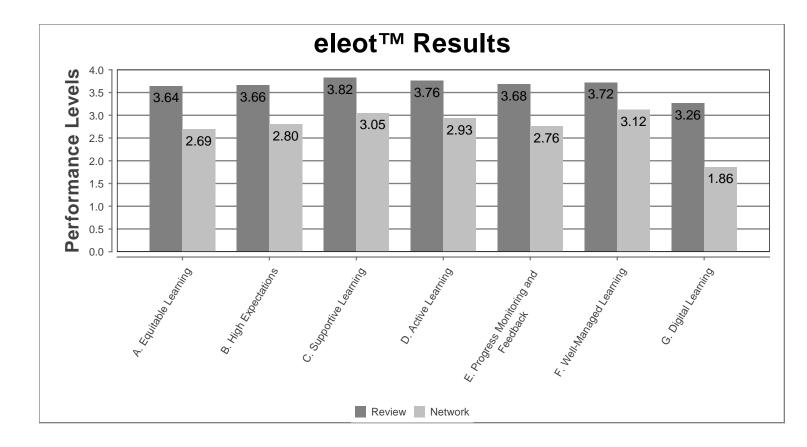
The quality of assessments used to measure student learning, assurance that assessments are administered with procedural fidelity and appropriate accommodations, assessment results that reflect the quality of learning, and closing gaps in achievement among subpopulations of students are all important indicators for evaluating overall student performance.

Evaluative Criteria	Review Team Score	AdvancED Network Average
Assessment Quality	4.00	3.11
Test Administration	4.00	3.46
Equity of Learning	4.00	2.75
Quality of Learning	4.00	2.93

Effective Learning Environments Observation Tool (eleot™)

Every learner should have access to an effective learning environment in which she/he has multiple opportunities to be successful. The Effective Learning Environments Observation Tool (eleot™) measures the extent to which learners are in an environment that is equitable, supportive, and well-managed. An environment where high expectations are the norm and active learning takes place. It measures whether learners' progress is monitored and feedback is provided and the extent to which technology is leveraged for learning.

Observations of classrooms or other learning venues are conducted for a minimum of 20 minutes per observation. Every member of the External Review Team is required to be trained and pass a certification exam that establishes inter-rater reliability. Team members conduct multiple observations during the review process and provide ratings on 30 items based on a four-point scale (4=very evident; 3=evident; 2=somewhat evident; and 1=not observed). The following provides the aggregate average score across multiple observations for each of the seven learning environments included in eleot™ as well as benchmark results across the AdvancED Network.



The External Review Team conducted 24 eleot™ observations during the review with very strong results in each of the areas. The highest rating of the Effective Learning Environments was the Supportive Learning Environment with a rating of 3.82 as compared to the AdvancED Network Average (AEN) of 3.05. The rating for this environment was no surprise considering the nature of the Mississippi School for the Deaf and the fact that every student is managed by an individual educational plan. There were two environments with strong

scores of 3.76 and 3.72, which were Active Learning Environment and Well-Managed Learning Environment respectively. In comparison those two environments scored 2.93 and 3.12 in the AEN. Three environments clustered with 3.68, 3.66, and 3.64 as compared to the AEN averages of 2.76, 2.80, and 2.69 for Progress Monitoring and Feedback, High Expectations, and Equitable Learning Environments respectively. The lowest rated environment was Digital Learning Environment with 3.26 compared to 1.86 for the AEN. All areas observed using the eleot™ were higher than the AEN.

The 24 eleot[™] observations conducted during the review revealed a very high index of engagement in every environment. Small classes and small group interaction created an instructional environment that was very positive and actively interactive with instructors and peers. Due to the nature of the instructional process, two of the team members that did not speak American Sign Language had to observe in classrooms with an interpreter. That process worked surprisingly well and yielded in information needed to complete eleot[™] observations.

Although the Digital Learning Environment was the lowest overall, it was significantly higher than the AEN. Digital Learning was present in every classroom and was being used in the majority of learning environments, even during about a two-hour period when the network was down due to state-wide connectivity issues. Each student is assigned a device and all had them present and in use in the majority of classrooms. Math students were using graphing calculators in upper mathematics classes while many language students were interacting within computer applications.

Equitable, Supportive, and Active Learning Environments were demonstrated in most classrooms by the interaction of students in peer teaching and enriching opportunities to clarify topics and interject ideas and opinions. All learning environments were viewed as supportive by teachers, staff, and peers. One teacher described her classroom as one with a "Success for all" mentality in that students did not want to leave one student behind. Progress monitoring in the classrooms was constant from the teacher and from other students. All classrooms were well managed and supportive of learning.

The Mississippi School for the Deaf has shown itself to be a family environment with supports meeting or exceeding each child's needs. The school provides supports for placement, assessment, inclusion, services, and rights for both students and their families. Since students are strategically placed in an environment conducive to their individualized needs, they have several opportunities to engage in academic and social discussions with teachers and other students. In turn, students are given constructive as well as positive feedback about their learning engagements. Teachers ensure that students comprehend their lesson content by expecting students to respond to teacher feedback to improve their understanding. This cyclical approach to learning allows for teachers to get initial data from students to inform their planning for instruction. Teachers collaborate with others during their professional learning communities to ensure implementation of quality instruction. Teachers gain feedback from students to determine their level of understanding by obtaining data both informally and informally. This process is continuous and allows for optimal student success for all learners.

The External Review Team observed a very engaged instructional process in the majority of classrooms

observed during the review. The atmosphere in classrooms and in non-instructional environments was very engaging and welcoming of anyone who entered the environment. The overall atmosphere of family was present with all faculty, leadership, and staff attending to every need of students.

eleot™ Data Summary

A. Equitable Learning		able Learning %				
Item	Average	Description	Very Evident	Evident	Somewhat Evident	Not Observed
1.	3.71	Has differentiated learning opportunities and activities that meet her/his needs	75.00%	20.83%	4.17%	0.00%
2.	3.83	Has equal access to classroom discussions, activities, resources, technology, and support	83.33%	16.67%	0.00%	0.00%
3.	3.67	Knows that rules and consequences are fair, clear, and consistently applied	79.17%	8.33%	12.50%	0.00%
4.	3.33	Has ongoing opportunities to learn about their own and other's backgrounds/cultures/differences	75.00%	4.17%	0.00%	20.83%

Overall rating on a 4 point scale: 3.64

B. High Exp	3. High Expectations		High Expectations %					
Item	Average	Description	Very Evident	Evident	Somewhat Evident	Not Observed		
1.	3.79	Knows and strives to meet the high expectations established by the teacher	79.17%	20.83%	0.00%	0.00%		
2.	3.71	Is tasked with activities and learning that are challenging but attainable	70.83%	29.17%	0.00%	0.00%		
3.	3.42	Is provided exemplars of high quality work	62.50%	20.83%	12.50%	4.17%		
4.	3.67	Is engaged in rigorous coursework, discussions, and/or tasks	70.83%	25.00%	4.17%	0.00%		
5.	3.71	Is asked and responds to questions that require higher order thinking (e.g., applying, evaluating, synthesizing)	75.00%	20.83%	4.17%	0.00%		
Overall rati	ng on a 4 po	pint scale: 3.66		'				

C. Supporti	C. Supportive Learning		%				
Item	Average	Description	Very Evident	Evident	Somewhat Evident	Not Observed	
1.	3.79	Demonstrates or expresses that learning experiences are positive	87.50%	4.17%	8.33%	0.00%	
2.	3.83	Demonstrates positive attitude about the classroom and learning	87.50%	8.33%	4.17%	0.00%	
3.	3.79	Takes risks in learning (without fear of negative feedback)	83.33%	12.50%	4.17%	0.00%	
4.	3.88	Is provided support and assistance to understand content and accomplish tasks	91.67%	4.17%	4.17%	0.00%	
5.	3.83	Is provided additional/alternative instruction and feedback at the appropriate level of challenge for her/his needs	83.33%	16.67%	0.00%	0.00%	

Overall rating on a 4 point scale: 3.82

. Active Learning		tive Learning %				
Item	Average	Description	Very Evident	Evident	Somewhat Evident	Not Observed
1.	3.83	Has several opportunities to engage in discussions with teacher and other students	87.50%	8.33%	4.17%	0.00%
2.	3.67	Makes connections from content to real- life experiences	75.00%	20.83%	0.00%	4.17%
3.	3.79	Is actively engaged in the learning activities	83.33%	12.50%	4.17%	0.00%

E. Progress	E. Progress Monitoring and Feedback		%			
Item	Average	Description	Very Evident	Evident	Somewhat Evident	Not Observed
1.	3.71	Is asked and/or quizzed about individual progress/learning	75.00%	20.83%	4.17%	0.00%
2.	3.71	Responds to teacher feedback to improve understanding	75.00%	20.83%	4.17%	0.00%
3.	3.67	Demonstrates or verbalizes understanding of the lesson/content	79.17%	12.50%	4.17%	4.17%
4.	3.50	Understands how her/his work is assessed	70.83%	16.67%	4.17%	8.33%
5.	3.79	Has opportunities to revise/improve work based on feedback	87.50%	8.33%	0.00%	4.17%

Overall rating on a 4 point scale: 3.68

Well-Managed Learning		earning %				
Item	Average	Description	Very Evident	Evident	Somewhat Evident	Not Observed
1.	3.88	Speaks and interacts respectfully with teacher(s) and peers	87.50%	12.50%	0.00%	0.00%
2.	3.88	Follows classroom rules and works well with others	87.50%	12.50%	0.00%	0.00%
3.	3.46	Transitions smoothly and efficiently to activities	70.83%	12.50%	8.33%	8.33%
4.	3.62	Collaborates with other students during student-centered activities	83.33%	4.17%	4.17%	8.33%
5.	3.79	Knows classroom routines, behavioral expectations and consequences	83.33%	12.50%	4.17%	0.00%

Overall rating on a 4 point scale: 3.72

G. Digital Learning		%				
Item	Average	Description	Very Evident	Evident	Somewhat Evident	Not Observed
1.	3.50	Uses digital tools/technology to gather, evaluate, and/or use information for learning	70.83%	16.67%	4.17%	8.33%
2.	3.21	Uses digital tools/technology to conduct research, solve problems, and/or create original works for learning	58.33%	20.83%	4.17%	16.67%
3.	3.08	Uses digital tools/technology to communicate and work collaboratively for learning	58.33%	12.50%	8.33%	20.83%

Overall rating on a 4 point scale: 3.26

Findings

Opportunity For Improvement

Develop and implement a communication plan to all district superintendents about the attributes, services, and successes of the Mississippi School for the Deaf. (Indicator 5.5)

Primary Indicator

Indicator 5.5

Evidence and Rationale

The involvement of most school districts with MSD is centered with a special services department. Outreach and information to the superintendents and/or district leadership lends to a fresh perspective of the purpose, mission, and services provided to all districts, schools, students, and families. Providing opportunities for student success in the best and least restrictive environment should be the goal of each school superintendent. Having local superintendents visit campus and the MACHL would benefit the entire state.

Powerful Practice

The Mississippi School for the Deaf is a community of learners who are nurtured and taught in a comprehensive family environment, where everyone is focused on supporting the whole child for academic, social, and emotional success.

(Indicator 3.1, Indicator 5.4, SP3. Quality of Learning)

Primary Indicator

Indicator 3.1

Evidence and Rationale

Through observations and interviews with all stakeholder groups, students and staff have an attachment to each other in ways similar to a small family setting. Each student on campus knows the others. It is a safe, communication-rich society for students and staff to interact, grow, and learn. The support staff bond with students to allow them to assist in meeting all of the social and emotional needs of students as needs arise. The goal of MSD leadership, faculty, and staff is to provide for early language acquisition and the development of two languages: American Sign Language (ASL) and English. As a comprehensive center providing education, resources, and services for deaf and hard of hearing children, their families and educational partners, MSD's mission is to empower students with a positive deaf identity so that they will possess confidence, discipline, leadership, and productivity in becoming contributing citizens in their communities.

Leadership Capacity

The capacity of leadership to ensure an institution's progress towards its stated objectives is an essential element of organizational effectiveness. An institution's leadership capacity includes the fidelity and commitment to its institutional purpose and direction, the effectiveness of governance and leadership to enable the institution to realize its stated objectives, the ability to engage and involve stakeholders in meaningful and productive ways, and the capacity to enact strategies to improve results of student learning.

Purpose and direction are critical to successful institutions. A study conducted in 2010 by the London-based Chartered Institute of Personnel and Development (CIPD) reported that "in addition to improving performance, the research indicates that having a sense of shared purpose also improves employee engagement" and that "lack of understanding around purpose can lead to demotivation and emotional detachment, which in turn lead to a disengaged and dissatisfied workforce."

AdvancED has found through its evaluation of best practices in more than 32,000 institutions around the world that a successful institution commits to a shared purpose and direction and establishes expectations for student learning that are aligned with the institutions' vision and supported by internal and external stakeholders. These expectations serve as the focus for assessing student performance and overall institution effectiveness.

Governance and leadership are key factors in raising institutional quality. Leaders, both local administrators and governing boards/authorities, are responsible for ensuring all learners achieve while also managing many other facets of an institution. Institutions that function effectively do so without tension between the governing board/authority, administrators, and educators and have established relationships of mutual respect and a shared vision (Feuerstein & Opfer, 1998). In a meta-analysis of educational institution leadership research, Leithwood and Sun (2012) found that leaders (school and governing boards/authority) can significantly "influence school conditions through their achievement of a shared vision and agreed-on goals for the organization, their high expectations and support of organizational members, and their practices that strengthen school culture and foster collaboration within the organization." With the increasing demands of accountability placed on institutional leaders, leaders who empower others need considerable autonomy and involve their communities to attain continuous improvement goals. Leaders who engage in such practices experience a greater level of success (Fink & Brayman, 2006). Similarly, governing boards/authorities that focus on policy-making are more likely to allow institutional leaders the autonomy to make decisions that impact teachers and students and are less responsive to politicization than boards/authorities that respond to vocal citizens (Greene, 1992).

AdvancED's experience, gained through evaluation of best practices, has indicated that a successful institution has leaders who are advocates for the institution's vision and improvement efforts. The leaders provide direction and allocate resources to implement curricular and co-curricular programs that enable students to achieve expectations for their learning. Leaders encourage collaboration and shared responsibility for school improvement among stakeholders. The institution's policies, procedures, and organizational conditions ensure equity of learning opportunities and support for innovation.

Standard 1 - Purpose and Direction

The school maintains and communicates a purpose and direction that commit to high expectations for learning as well as shared values and beliefs about teaching and learning.

Indicator	Description	Review Team Score	AdvancED Network Average
1.1	The school engages in a systematic, inclusive, and comprehensive process to review, revise, and communicate a school purpose for student success.	4.00	2.73
1.2	The school's leadership and staff commit to a culture that is based on shared values and beliefs about teaching and learning and supports challenging, equitable educational programs and learning experiences for all students that include achievement of learning, thinking, and life skills.	4.00	3.00
1.3	The school's leadership implements a continuous improvement process that provides clear direction for improving conditions that support student learning.	4.00	2.52

Standard 2 - Governance and Leadership

The school operates under governance and leadership that promote and support student performance and school effectiveness.

Indicator	Description	Review Team Score	AdvancED Network Average
2.1	The governing body establishes policies and supports practices that ensure effective administration of the school.	4.00	2.95
2.2	The governing body operates responsibly and functions effectively.	4.00	2.90
2.3	The governing body ensures that the school leadership has the autonomy to meet goals for achievement and instruction and to manage day-to-day operations effectively.	3.50	3.15
2.4	Leadership and staff foster a culture consistent with the school's purpose and direction.	4.00	3.11
2.5	Leadership engages stakeholders effectively in support of the school's purpose and direction.	3.75	2.79
2.6	Leadership and staff supervision and evaluation processes result in improved professional practice and student success.	4.00	2.71

Stakeholder Feedback Diagnostic

Stakeholder Feedback is the third of three primary areas of evaluation in AdvancED's Performance Accreditation model. The AdvancED surveys (student, parent, and teacher) are directly correlated to the AdvancED Standards and indicators. They provide not only direct information about stakeholder satisfaction but also become a source of data for triangulation by the External Review Team as it evaluates indicators.

Institutions are asked to collect and analyze stakeholder feedback data, then submit the data and the analyses to the External Review Team for review. The External Review Team evaluates the quality of the administration of the surveys by institution, survey results, and the degree to which the institution analyzed and acted on the results.

Evaluative Criteria	Review Team Score	AdvancED Network Average
Questionnaire Administration	4.00	3.43
Stakeholder Feedback Results and Analysis	3.50	3.08

Findings

Powerful Practice

Mississippi School for the Deaf has visionary, mission-oriented leadership representing diversity in a bilingual/bicultural environment that has transformed the culture and reputation of a historical institution, while strengthening the experience and outcomes for students and families from the deaf community. (Indicator 2.4, Indicator 2.6)

Primary Indicator

Indicator 2.4

Evidence and Rationale

The Mississippi School for the Deaf has a rich and checkered history dating to its beginning in 1854. Today, the facilities, programs, diversity in leadership and staff make it unique, even among other state schools for the deaf. The visionary leadership from Superintendent to building level principals has created and maintained a growing institution focused on a specific, but broad mission of providing the best learning environment for the deaf and hard of hearing.

Deaf and hard of hearing students flourish when educated in a language-rich environment designed specifically to meet their communication, language, and educational needs. Mississippi School for the Deaf is providing that environment.

Resource Utilization

The use and distribution of resources must be aligned and supportive of the needs of an institution and the students served. Institutions must ensure that resources are aligned with the stated mission and are distributed equitably so that the needs of students are adequately and effectively addressed. The utilization of resources includes an examination of the allocation and use of resources, the equity of resource distribution to need, the ability of the institution to ensure appropriate levels of funding and sustainability of resources, as well as evidence of long-range capital and resource planning effectiveness.

Institutions, regardless of their size, need access to sufficient resources and systems of support to be able to engage in sustained and meaningful efforts that result in a continuous improvement cycle. Indeed, a study conducted by the Southwest Educational Development Laboratory (Pan, D., Rudo, Z., Schneider, C., & Smith-Hansen, L., 2003) "demonstrated a strong relationship between resources and student success... both the level of resources and their explicit allocation seem to affect educational outcomes."

AdvancED has found through its own evaluation of best practices in the more than 32,000 institutions in the AdvancED Network that a successful institution has sufficient human, material, and fiscal resources to implement a curriculum that enables students to achieve expectations for student learning, meets special needs, and complies with applicable regulations. The institution employs and allocates staff members who are well qualified for their assignments. The institution provides a safe learning environment for students and staff. The institution provides ongoing learning opportunities for all staff members to improve their effectiveness and ensures compliance with applicable governmental regulations.

Standard 4 - Resources and Support Systems

The school has resources and provides services that support its purpose and direction to ensure success for all students.

Indicator	Description	Review Team Score	AdvancED Network Average
4.1	Qualified professional and support staff are sufficient in number to fulfill their roles and responsibilities necessary to support the school's purpose, direction, and the educational program.	3.75	2.95
4.2	Instructional time, material resources, and fiscal resources are sufficient to support the purpose and direction of the school.	3.25	2.98
4.3	The school maintains facilities, services, and equipment to provide a safe, clean, and healthy environment for all students and staff.	4.00	3.14
4.4	Students and school personnel use a range of media and information resources to support the school's educational programs.	4.00	2.84
4.5	The technology infrastructure supports the school's teaching, learning, and operational needs.	3.75	2.63

Indicator	Description	Review Team Score	AdvancED Network Average
4.6	The school provides support services to meet the physical, social, and emotional needs of the student population being served.	4.00	2.86
4.7	The school provides services that support the counseling, assessment, referral, educational, and career planning needs of all students.	4.00	2.75

Findings

Improvement Priority

Continue to implement and enhance both marketing and recruitment plans to seek out students, as well as uniquely, highly qualified faculty and staff.

(Indicator 4.1)

Primary Indicator

Indicator 4.1

Evidence and Rationale

With capacity and a story of success, MSD should develop a plan to take their story to different regions of the state in a marketing effort to let everyone know of the services, excellence, history, and future of MSD. Similarly, the need to grow student population would require additional, very hard to find, educators who are uniquely qualified to serve with the MSD staff.

Opportunity For Improvement

Explore the creation of a community led foundation to not only support and create interest in the efforts of the Mississippi School for the Deaf, but also consider avenues to generate revenue and additional resources to enhance programs and activities.

(Indicator 4.2)

Primary Indicator

Indicator 4.2

Evidence and Rationale

Most school districts in Mississippi are supported by some form of a local foundation established to support programs and generate revenue to assist schools in unique and innovative ways. The establishment of a similar foundation for MSD would certainly provide an avenue to reach all parts of the state with information about the mission, success, and needs of the school.

Powerful Practice

The Mississippi School for the Deaf is a school of innovation in meeting the needs of students and families

across the state of Mississippi. (Indicator 4.4, Indicator 4.5, Indicator 4.6)

Primary Indicator

Indicator 4.4

Evidence and Rationale

The Mississippi School for the Deaf (MSD) and the Mississippi Assistance Center on Hearing Loss (MACHL) offer services and opportunities for students and families of deaf and hard of hearing at no cost. Additionally the early detection and intervention for deaf and hard of hearing is the focus of Ski*Hi Early Intervention program. The institution is a tremendously rich in terms of technology. All students have personal devices used in classrooms and personal use. Each classroom is equipped to make communication in multiple modalities available. The school and the MACHL assist in providing students with acquiring, maintaining, and servicing all necessary hearing devices as needed. The school offers American Sign Language community courses to help families and community members with language development. The MSD maintains a full athletic program for students to compete in an eleven state region and has competed well with recent championships in several sports.

Conclusion

The External Review for the Mississippi School for the Deaf (MSD) was an enlightening and an awesome experience for each of the team members. Two of the team members were experienced in interactions in a deaf environment and were able to interact without the use of interpreters. There existed a sense of urgency for success of students and the transitioning of students to the next level of independent living, workforce, or continued education. The leadership, faculty, and staff voiced and demonstrated the family centered environment that exists on the MSD campus. Nearly half of the students are residential students ranging from age 6 - 21 while the remainder of students ranging from 2 years old through 21 either ride a bus provided by local school districts or are transported daily by parents. One student has a driver's license and commutes on his own from home each day. The nature of a partially residential school lends itself to the care taken with addressing all needs for the students.

Throughout Mississippi School for the deaf, teachers excelled at integrating technology into the instructional process to enhance both the delivery of content and student assessment. In multiple classrooms, students engaged in classroom discussions with visual aids on the smart boards, edited text as a whole group on the projectors, and took assessments that provided real time results. They created a digital learning environment where students worked collaboratively and where teachers were better able to meet the unique communication needs of their students using technology.

Students at Mississippi School for the Deaf are also continuously monitored and given feedback throughout their classes. In every classroom observed, teachers utilized whole group instruction to teach a concept to the class, and then moved seamlessly into small group or individual work environments where students were given instant feedback on their progress. The students were free to ask questions and the teachers monitored every student to ensure their progress through the lesson.

Professional development is designed and implemented through all staff positions to promote the degree in which faculty and staff can address all needs including social and emotional needs. The dorm parents and staff are uniquely trained to protect all students while promoting interaction and support from peers.

The entire focus of the Mississippi School for the Deaf is on student success. A major challenge is to find and maintain faculty and staff who are qualified and dedicated to teaching and working is a Deaf educational community. Although recruiting occurs, the pool of applicants is very small, and it is hard for a Mississippi school to compete in the areas of amenities and salaries for staff. Another challenge is to grow the student population without overwhelming the current capacity of instructional and residential staff. Although a large number of communities are represented from around the state, many more districts have little working knowledge of the offerings or the excellence of MSD.

The External Review Team developed an Improvement Priority which focused on the recruiting and retention of highly qualified faculty and staff as well as a marketing plan to be used to better inform communities throughout Mississippi of the offerings, services, and excellence of the Mississippi School for the Deaf. The school is currently led by visionary, mission-oriented leadership at all levels to allow them to continue to

improve in meeting needs of students. That leadership is well-equipped to implement the Improvement Priority and consider other Opportunities for Improvement in order to grow. The Team encourages the leadership, faculty, and staff to continue serving with excellence and continue to strive for excellence in all aspects of the school's mission.

Improvement Priorities

The institution should use the findings from this review to guide the continuous improvement process. The institution must address the Improvement Priorities listed below:

- Continue to implement and enhance both marketing and recruitment plans to seek out students, as well as uniquely, highly qualified faculty and staff.

Accreditation Recommendation

Index of Education Quality

The Index of Education Quality (IEQ™) provides a holistic measure of overall performance based on a comprehensive set of indicators and evaluative criteria. A formative tool for improvement, it identifies areas of success as well as areas in need of focus.

The IEQ[™] comprises three domains: 1) the impact of teaching and learning on student performance; 2) the leadership capacity to govern; and 3) the use of resources and data to support and optimize learning.

The overall and domain scores can range from 100-400. The domain scores are derived from: the AdvancED Standards and indicators ratings; results of the Analysis of Student Performance; and data from Stakeholder Feedback Surveys (students, parents, and staff).

	External Review IEQ Score	AdvancED Network Average
Overall Score	391.67	278.94
Teaching and Learning Impact	396.43	268.48
Leadership Capacity	388.64	293.71
Resource Utilization	382.14	286.27

The IEQ[™] results include information about how the institution is performing compared to expected criteria as well as to other institutions in the AdvancED Network. The institution should use the information in this report, including the corresponding performance rubrics, to identify specific areas of improvement.

Consequently, the External Review Team recommends to the AdvancED Accreditation Commission that the institution earn the distinction of accreditation for a five-year term. AdvancED will review the results of the External Review to make a final determination including the appropriate next steps for the institution in response to these findings.

Addenda

Team Roster

Member	Brief Biography
Dr. Keith Shaffer	Dr. Keith Shaffer is currently the director of the operations office for AdvancED in Mississippi. Delta State University in Cleveland, MS is where Keith received his bachelors, masters, educational specialist, and doctorate in educational leadership degrees. He is a retired educator with 30 years of service from the mathematics classroom to building level administrator and ending his career as a superintendent for 11 years. Serving as a volunteer for AdvancED for more than 10 years, Keith was well-suited to take over as director in Mississippi. He continues to serve at various levels of education throughout the state and region.
Dr. Mary Anne Gentry	Dr. Mary Anne Gentry is an Associate Professor in the Department of Deaf Studies/Deaf Education at Lamar University for the past 16 years. She is currently the Director of the Masters Degree program in Deaf Studies/Deaf Education. She was a Teacher of the Deaf for 23 years in the Calcasieu Parish School system in Lake Charles, Louisiana. She also served as a Visiting Lecturer/Adjunct at McNeese State University teaching Sign Language courses, and a part-time Parent/Incant Educator for the Louisiana School for the Deaf. She holds a B.A. (1977), in Speech, Language, and Hearing Specialist from Northeast Louisiana University, Monroe, Louisiana, an M.S. (1984) in Deaf Education/Habilitation Lamar University, Beaumont, Texas, and an Ed.D. (1998), in Deaf Studies/Deaf Education from Lamar University, Beaumont, Texas.
Dr. Kathleen Grigsby	Kathleen Grigsby was born of two deaf parents and is a native of Louisiana. She has lived in many parts of the country as well as Australia. Her father was a theatre actor and her mother is originally from Australia. She attended many schools, however, she graduated from the East Baton Rouge Parish School Board in Louisiana. In 1994, she attended The University of Mississippi and graduated with a Bachelor of Education in Elementary Education. A year later, she received her Masters of Education at The University of Mississippi. In 2004, she attended Mississippi College and obtained her Education Specialist degree in Administration. In January 2008, she became a part of the first cohort at Mississippi College's Doctoral program. In 2011, she was the first person to graduate from Mississippi College with a Doctorate in Administration. She is currently the principal at Davis Magnet World IB Elementary School.
Mr. Jake Winter	After beginning his career teaching in Jackson Public Schools, Jake Winter began working at New Summit School as a teacher and grant writer in 2009. In 2011, New Summit School's partner company, the Mississippi Community Education Center, was awarded a statewide grant initiative, Families First for Mississippi. Mr. Winter served a the Operations Manager for Families First for the next 3 years. In 2014, Mr. Winter was named Lower School Administrator and remained in that capacity until the spring of 2016, when he was named Principal of New Summit School.

Next Steps

- 1. Review and discuss the findings from this report with stakeholders.
- 2. Ensure that plans are in place to embed and sustain the strengths noted in the Powerful Practices section to maximize their impact on the institution.
- 3. Consider the Opportunities for Improvement identified throughout the report that are provided by the team in the spirit of continuous improvement and the institution's commitment to improving its capacity to improve student learning.
- 4. Develop action plans to address the Improvement Priorities identified by the team. Include methods for monitoring progress toward addressing the Improvement Priorities.
- 5. Use the report to guide and strengthen the institution's efforts to improve student performance and system effectiveness.
- 6. Following the External Review, submit the Accreditation Progress Report detailing progress made toward addressing the Improvement Priorities. Institutions are required to respond to all Improvement Priorities. The report will be reviewed at the appropriate state, national, and/or international levels to monitor and ensure that the system has implemented the necessary actions to address the Improvement Priorities. The accreditation status will be reviewed and acted upon based on the responses to the Improvement Priorities and the resulting improvement.
- 7. Continue to meet the AdvancED Standards, submit required reports, engage in continuous improvement, and document results.

About AdvancED

AdvancED is the world leader in providing improvement and accreditation services to education providers of all types in their pursuit of excellence in serving students. AdvancED serves as a trusted partner to more than 32,000 public and private schools and school systems – enrolling more than 20 million students - across the United States and 70 countries.

In 2006, the North Central Association Commission on Accreditation and School Improvement (NCA CASI), the Southern Association of Colleges and Schools Council on Accreditation and School Improvement (SACS CASI), both founded in 1895, and the National Study of School Evaluation (NSSE) came together to form AdvanceD: one strong, unified organization dedicated to education quality. In 2011, the Northwest Accreditation Commission (NWAC) that was founded in 1917 became part of AdvanceD.

Today, NCA CASI, NWAC and SACS CASI serve as accreditation divisions of AdvancED. The Accreditation Divisions of AdvancED share research-based quality standards that cross school system, state, regional, national, and international boundaries. Accompanying these standards is a unified and consistent process designed to engage educational institutions in continuous improvement.

References

- Alwin, L. (2002). The will and the way of data use. School Administrator, 59(11), 11.
- Baumert, J., Kunter, M., Blum, W., Brunner, M., Voxx, T., Jordan, A., Klusmann, U., Krauss, S., Nuebrand, M., & Tsai, Y. (2010). Teachers' mathematical knowledge, cognitive activation in the classroom, and student progress. American Educational Research Journal, 47(1), 133-180.
- Chartered Institute of Personnel and Development. (2012). Shared purpose: the golden thread? London: CIPD.
- Colbert, J., Brown, R., Choi, S., & Thomas, S. (2008). An investigation of the impacts of teacher-driven professional development. Teacher Education Quarterly, 35(2), 134-154.
- Conley, D.T. (2007). Redefining college readiness (Vol. 3). Eugene, OR: Educational Policy Improvement Center.
- Datnow, A., Park, V., & Wohlstetter, P. (2007). Achieving with data: How high-performing school systems use data to improve instruction for elementary students. Los Angeles, CA: Center on Educational Governance, USC.
- Dembosky, J., Pane, J., Barney, H., & Christina, R. (2005). Data driven decision making in Southwestern Pennsylvania school districts. Working paper. Santa Monica, CA: RAND.
- Ding, C. & Sherman, H. (2006). Teaching effectiveness and student achievement: Examining the relationship. Educational Research Quarterly, 29 (4), 40-51.
- Doyle, D. P. (2003). Data-driven decision making: Is it the mantra of the month or does it have staying power? T.H.E. Journal, 30(10), 19-21.
- Feuerstein, A., & Opfer, V. D. (1998). School board chairmen and school superintendents: An analysis of perceptions concerning special interest groups and educational governance. Journal of School Leadership, 8, 373-398.
- Fink, D., & Brayman, C. (2006). School leadership succession and the challenges of change. Educational Administration Quarterly, 42 (62), 61-89.
- Greene, K. (1992). Models of school-board policy-making. Educational Administration Quarterly, 28 (2), 220-236.
- Horng, E., Klasik, D., & Loeb, S. (2010). Principal time-use and school effectiveness. American Journal of Education 116, (4) 492-523.
- Lafee, S. (2002). Data-driven districts. School Administrator, 59(11), 6-7, 9-10, 12, 14-15.
- Leithwood, K., & Sun, J. (2012). The Nature and effects of transformational school leadership: A metaanalytic review of unpublished research. Educational Administration Quarterly, 48 (387). 388-423.
- Marks, H., Louis, K.S., & Printy, S. (2002). The capacity for organizational learning: Implications for pedagogy and student achievement. In K. Leithwood (Ed.), Organizational learning and school improvement (p. 239-266). Greenwich, CT: JAI Press.
- McIntire, T. (2002). The administrator's guide to data-driven decision making. Technology and Learning, 22(11), 18-33.
- Pan, D., Rudo, Z., Schneider, C., & Smith-Hansen, L. (2003). Examination of resource allocation in education: connecting spending to student performance. Austin, TX: SEDL.