



Ohio

Ohio's 2015 Plan to Ensure Equitable Access to Excellent Educators

OHIO DEPARTMENT OF EDUCATION

SEPTEMBER 2015

Table of Contents

Ohio’s 2015 Plan to Ensure Equitable Access to Excellent Educators	1
Ohio’s Current Educational Context.....	1
First Steps of the Journey: Ohio’s 2006 Teacher Equity Plan.....	2
Continuing the Journey: Ohio’s 2015 Plan to Ensure Equitable Access to Excellent Educators....	3
Section 1. Stakeholder Engagement	5
Stakeholder Meeting One	6
Stakeholder Meeting Two	6
Stakeholder Meeting Three.....	7
Departmental Involvement.....	7
Ohio’s Educator Equity Project Staff.....	7
Final Stages of Equity Plan Development.....	8
Section 2. Equity Gap Analysis	9
Definitions and Measures	9
Defining Equity Gap	9
Required Measures.....	9
Additional Measures.....	10
Student Dimensions	11
Data Sources	11
Equity Gaps: Quantitative Data Analysis	12
Data Overview: Equity Gaps in Ohio	12
Equity Gaps: Poverty.....	12
Equity Gaps: Minority	14
State Equity Gap Summary.....	16
Section 3. Root-Cause Analysis	17
Framing the Root-Cause Analysis	17
Root-Cause Analysis Process	18
Findings from Ohio’s Root-Cause Analysis.....	18
Category One: Educator Preparation.....	19
Experience with Students, Schools, Policies and Cultural Competencies.....	19
Program Variation.	19
Category Two: Hiring and Deployment	19
Hiring Timelines.	19

Transfer & Placement.....	19
Salary.....	20
Negative Perceptions.....	20
Assigning Educators.....	20
Postings in Shortage Areas.....	20
Category Three: Teaching and Learning Conditions	20
Professional Learning Opportunities	20
Time and Opportunity.....	20
Quality.....	20
Implementation.....	21
Teacher Leadership	21
Career Pathways.....	21
School Leadership.....	21
School Leader Assignment.....	21
Supportive Leadership.....	21
Leaders Short on Time.....	21
Category Four: Data Use	21
Accessibility of Data.....	21
Data-based Decisions.....	22
Summary	22
Section 4a. Strategies to Eliminate Identified Educator Equity Gaps	23
Strategy One: Strengthen Educator Preparation	24
Educator Preparation Accountability	24
Pre-Kindergarten through Grade 12 Classroom Connections	24
Improved Clinical Experiences	25
Strategy Two: Target Hiring and Deployment Barriers	25
Addressing Teacher Shortage Areas	26
Developing Principal Leadership to Transform Schools.....	26
Strategy Three: Improve Teaching and Learning Conditions.....	27
Updating Professional Development Standards.....	27
Developing Supports for Beginning Principal Mentoring	28
Increasing Career Advancement Opportunities.....	29
Strategy Four: Provide Data to Encourage Strategic Staffing and Educator Development.....	30
Section 4b. Monitoring Equitable Access at the Local Level	32
Current Monitoring Procedures in Ohio.....	32
A New Direction for District Monitoring	33

Ohio’s Educator Workforce Strength Index.....	33
Using the Index for Equitable Access Planning.....	33
Calculating the Educator Workforce Strength Index.....	34
Analyzing the Educator Workforce Strength Index.....	35
Correlations.....	35
Equity Gaps.....	35
Section 5. Evaluating Progress	37
Contextual Considerations for Ohio	37
Retirements.....	37
Local Implementation of Teacher Evaluation System.....	37
Changes to Evaluation System Final Summative Rating Calculations	37
Method and Timeline for Evaluating Progress	37
Progress Measures: Poverty.....	38
Progress Measures: Minority	39
Progress Measures: Educator Workforce Strength Index	39
Section 6. Publicly Reporting Progress	41
Three Methods to Publicly Report Progress	41
ODE Equity Website.....	41
Meetings and Conferences	41
Long-term Stakeholder Engagement.....	41
Conclusion	41
References.....	43
Appendices	47
Appendix A. Sample External Stakeholder Invitation Letter.....	47
Appendix B. Ohio Equity Plan Work Group.....	48
Appendix C. Meeting One Agenda	49
Appendix D. Meeting Two Agenda	50
Appendix E. Meeting Three Agenda	51
Appendix F. Overview of Ohio Schools: Poverty, Minority and Region.....	52
Appendix G. Supporting Materials for Quantitative Data Analysis	54
Appendix H. Ohio’s Timeline for Implementing Strategies	61
Appendix I. Root-Cause/Strategy and Equity Gap Alignment.....	65
Appendix J. Sample Teacher Distribution File (TDF)	68
Appendix K. Sample Educator Workforce Strength Index (District and Building Level)	70

Ohio's 2015 Plan to Ensure Equitable Access to Excellent Educators

Too often, poor and minority students receive less effective teachers than their counterparts (U.S. Department of Education, 2014). Since teachers are the most important school-based factor affecting student achievement (Rivkin, Hanushek, & Kain, 2005) and school leaders are second (Waters, Marzano, & McNulty, 2003), Ohio's education reform efforts must focus on ensuring all students have equitable access to excellent educators.

As part of the *Excellent Educators for All Initiative* led by the U.S. Department of Education, this plan meets Ohio's requirement to develop a State Plan to Ensure Equitable Access to Excellent Educators. The purpose of the state plans is to work toward ensuring that poor and minority children are not taught by unqualified, inexperienced or out-of-field teachers at higher rates than other children. There are six outlined requirements (U.S. Department of Education, 2014) for the state equity plans:

1. Describe and provide documentation of stakeholder consultation regarding the state plan;
2. Identify equity gaps;
3. Conduct a root-cause analysis;
4. Outline steps to eliminate equity gaps;
5. Describe measures that will be used to evaluate progress toward eliminating equity gaps; and
6. Describe how the state will publicly report progress.

The Ohio Department of Education brought together a diverse group of stakeholders to create a context-driven state educator equity plan for ensuring equitable access to excellent educators for poor and minority students. These stakeholders identified Ohio's educator equity gaps and possible strategies to address them.

Ohio's Current Educational Context

The Ohio Department of Education has worked hard for many years to address equitable access for all students to a high-quality education. Ohio is in the midst of fulfilling many education reforms to ensure that every child will graduate from high school prepared to succeed in college, other postsecondary training or a skilled job. Current Ohio reforms include:

- A Third Grade Reading Guarantee to promote early literacy;
- An early detection and intervention system for students at risk of dropping out;
- Multiple new pathways to graduation that accommodate a diverse student population;
- An expanded career-technical education system;
- A College Credit Plus program that provides free college credit to academically eligible middle and high school students; and
- A refined, statewide teacher evaluation system that promotes instructional improvement.

Ohio also has adopted more rigorous K-12 learning standards, launched matching online assessments and established a stronger accountability system in its annual A-F district and school report cards. Finally, Ohio Gov. John Kasich and state lawmakers have created the \$250 million

Straight A Fund to promote teaching and learning innovation in Ohio schools. Straight A is the largest state fund for K-12 education innovation in U.S. history.

Leaders of Ohio's K-12 system recognize that excellent teachers and principals are essential to carrying out the state's reform goals at the classroom level. State Superintendent Richard A. Ross agrees with the findings contained in a Fordham report: "Policy changes and budgetary manipulations alone will not drive student gains...any real gains to Ohio's school and student performance will be primarily the result of work done by district leaders, school principals and teachers (Farkas & Duffett, 2013, p.5)." Superintendent Ross recognizes that excellent teachers and principals are Ohio's "boots on the ground."

Ohio's education leaders have long recognized the need for strong teachers and principals in the state's many high-poverty, high-minority schools. The state's Schools of Promise program recognizes schools that serve 40 percent or more economically disadvantaged students who are achieving academic proficiency. In each of the identified schools, 80 percent of students are scoring proficient or higher in reading and mathematics. Last year, Ohio recognized 98 Schools of Promise. Clearly, excellent teachers and principals make a difference in these schools.

Another Ohio award program, the High Performing Schools of Honor, recognizes schools that have 80 percent of all subgroups of students who are proficient on state achievement tests in reading and mathematics. These subgroups include students of various racial and ethnic groups, those who are economically disadvantaged, students with disabilities and English language learners. Last year, Ohio recognized 48 High Performing Schools of Honor. In addition, the state awarded 27 buildings a third designation – High Progress Schools of Honor – for making the highest five-year gains in student achievement.

Still, state leaders know they must do more to recruit excellent teachers and principals to high-poverty and high-minority schools. For example, the Ohio Department of Education, the Ohio Business Roundtable and The Ohio State University have just selected their first team of 30-40 principals for the Bright Leaders for Ohio Schools program. These proven leaders from business and education will each serve in a high-poverty Ohio public school for 12 months, while simultaneously training in leadership at Ohio State. This report will describe Bright Leaders for Ohio Schools and other strategies to increase the number of excellent educators in Ohio's high-poverty and high-minority schools.

First Steps of the Journey: Ohio's 2006 Teacher Equity Plan

Ohio's effort to give poor and minority students' equitable access to high-quality educators is not new. In 2004, the Joyce Foundation approved a grant through The Education Trust to bring together key state leaders in Ohio, Illinois and Wisconsin to improve the distribution of high-quality teachers to low-income, minority and low-performing students. Ohio Department of Education staff and key stakeholders, including representatives from different branches of government, K-12 and higher education, teacher unions, and business and community leaders, conducted Ohio's Teacher Distribution Project.

Phase I of the project focused on a quantitative statewide analysis of district-level and school-level teacher, school and student characteristics. Ohio's Phase II analysis included case study data of

teachers characteristics in Ohio's Schools of Promise, where a high percentage of low-income and minority students are achieving at high levels.

Phase III called for the development of a state plan outlining strategies to improve the distribution of high quality teachers in Ohio. The strategies included in Ohio's 2006 Teacher Equity Plan were the result of findings from extensive data analyses, the expertise of the project's stakeholder group and national research on teacher quality. The full plan and executive summary can be found on the [Ohio Department of Education's website](#).

As a result of Ohio's 2006 Teacher Equity Plan, Ohio monitored the percentage of courses taught by highly-qualified teachers. In the 2005-2006 school year Ohio had 94.4 percent of courses being taught by highly-qualified teachers¹, and in 2013-2014 Ohio progressed to having 98.7 percent of courses being taught by highly-qualified teachers. With Ohio's 2015 Plan to Ensure Equitable Access to Excellent Educators, Ohio will continue its journey to ensure equitable access to excellent educators.

Continuing the Journey: Ohio's 2015 Plan to Ensure Equitable Access to Excellent Educators

Ohio's 2015 Plan to Ensure Equitable Access to Excellent Educators (hereafter referred to as Ohio's Educator Equity Plan) presents the state's renewed commitment to provide equitable access to excellent educators for poor and minority students. Ohio's Educator Equity Plan is divided into six sections:

- Section one describes how the department engaged both external and internal stakeholders in the development of the plan.
- Section two outlines Ohio's educator equity gaps.
- Section three highlights the possible root causes for educator equity gaps in Ohio.
- Section four explores the steps Ohio will take to eliminate identified educator equity gaps. It describes specific strategies to address identified gaps and includes an implementation timeline. This section also describes how the state will monitor local efforts to provide equitable access to qualified and effective educators, as outlined in the Elementary and Secondary Education Act sections 9304(a)(3)(B) and 1112(c)(1)(L).
- Section five reports the measures the state will use to gauge progress toward eliminating educator equity gaps, as well as the method and timeline for this evaluation.
- Section six describes how Ohio will publicly report its progress on eliminating educator equity gaps.

The data analyses conducted for this report show that Ohio's poor and minority students experience inequitable access to excellent educators. The Excellent Educators for All Initiative propelled Ohio

¹ A highly qualified teacher is one who holds at least a bachelor's degree, a license appropriate to the assignment, and evidence of content knowledge in the core academic subject(s) he or she is teaching.

toward a renewed commitment to eliminating Ohio's identified educator equity gaps. This plan is the next important step toward ensuring that poor and minority children are not taught at higher rates than other children by unqualified, inexperienced or out-of-field teachers.

Section 1. Stakeholder Engagement

Immediately following the release of the “State Plans to Ensure Equitable Access to Excellent Educators, Frequently Asked Questions” publication in November 2014, the Ohio Department of Education formed an external stakeholder group to consult on the development of Ohio’s Educator Equity Plan. Department staff developed a list of Ohio stakeholder organizations representing the broad and comprehensive perspectives of Ohio educators in each of the four school district typologies: urban, suburban, rural and small town. On Jan. 6, 2015, the senior director of the agency’s Center for the Teaching Profession e-mailed invitation letters (see Appendix A for sample) to solicit representatives from identified stakeholder groups (i.e., organizations representing teachers, higher education, school boards, community groups, and school and district leaders). As a result, Ohio’s Equity Plan Work Group included 28 external stakeholders (see Appendix B for the stakeholder list).

Department staff believed it was vital to have stakeholder involvement throughout four critical development stages of Ohio’s Educator Equity Plan. The first stage was an analysis of data to determine if and what educator equity gaps exist in Ohio. The second stage was an analysis of “root causes” to better understand why particular gaps exist. The third stage involved the identification of strategies to address Ohio’s educator equity gaps. Finally, department staff sought feedback on the draft equity plan. Three of these four stages required in-person meetings with the external stakeholders.

The department developed a time frame for in-person, external stakeholder group involvement spanning from January to March. The department set three external meeting dates:

1. Friday, Jan. 23, 2015;
2. Friday, Feb. 20, 2015; and
3. Monday, March 23, 2015.

Department staff intentionally scheduled stakeholder meetings a month apart so they could use feedback from each meeting to inform subsequent meetings. The department cancelled one of the set dates due to inclement weather and added another meeting on Monday, April 13, 2015, to ensure we held three external stakeholder meetings. Each of the three meetings ran for approximately five hours.

Recognizing that external stakeholders would offer critical insights from the local level to create a context-driven state plan, department staff developed meeting agendas that allowed stakeholders to provide input on key decision points for the state plan. In particular, we sought input on the following areas:

1. Defining key terms;
2. Determining appropriate data measures;
3. Reviewing equity gap data;
4. Determining appropriate monitoring tool(s);
5. Analyzing root cause(s) for equity gaps; and
6. Identifying strategies.

In each meeting, stakeholders had sufficient time and opportunity to give feedback through a variety of methods. First, during the meetings, stakeholders could offer direct feedback through whole group

discussions or small group discussions when appropriate. Secondly, stakeholders were provided an opportunity to give written feedback through guided question sheets and surveys. Note: external stakeholders who could not attend a meeting received the appropriate materials and updates so they could provide feedback in future stakeholder meetings.

At the first meeting and each subsequent meeting thereafter, the department communicated the purpose of the Ohio Equity Plan Work Group as follows:

1. Consult the department in creating a state equity plan; and
2. Provide communication and advocacy for Ohio's state equity plan to their respective stakeholder constituencies.

Because the department was seeking to solicit informed and actionable feedback on key decision points for the state equity plan, department staff enlisted the assistance of two external facilitators from *Battelle for Kids*. These facilitators helped plan and facilitate each of the three external stakeholder meetings.

Stakeholder Meeting One

Meeting one was held on Jan. 23, 2015 (for agenda, see Appendix C). Twenty-four of the 28 stakeholders attended. This first external meeting focused on five objectives:

1. Establish a working community;
2. Review the history of Ohio's equity work;
3. Recognize state requirements for the Excellent Educators for All Initiative;
4. Provide input on an approach to assessing and monitoring educator equity gaps at the local level; and
5. Discuss required and optional data measures.

At this initial meeting, external stakeholders learned about the requirements for the State Plan to Ensure Equitable Access to Excellent Educators. Building this understanding was important for soliciting feedback in the development of the state equity plan. An overview of Ohio's 2006 Teacher Equity Plan was shared to highlight how Ohio has been doing this work over the last nine years. For the 2015 equity plan, external stakeholders agreed with the department's suggestion to look beyond using only the measures unqualified, out-of-field and inexperienced and consider the measures of teacher and principal effectiveness ratings, as defined by the state's educator evaluation system.

Stakeholder Meeting Two

The external stakeholder group met again on March 23, 2015 (for agenda, see Appendix D). Twenty-one of our 28 stakeholders attended. The meeting content focused on five objectives:

1. Review stakeholder feedback from the Jan. 23rd meeting;
2. Make recommendations on the definitions of key terms;
3. Give input on what measures to include in the plan;
4. Examine possible local monitoring tools; and
5. Introduce the root-cause analysis process.

The second external stakeholder meeting provided the group an opportunity to examine 2013-2014 state-level equity data through an "equity data walk." In the data walk, stakeholders broke into small

groups where they viewed displays of data which highlighted the three required measures and additional department- and stakeholder-proposed measures from meeting one. In small groups, the stakeholders discussed and reacted to the data at each station.

Each stakeholder completed an online survey at two different times during the meeting. The first survey sought feedback on proposed definitions of key terms. The second survey asked for input on what measures to include in the plan as well as on possible local monitoring tools. If meeting participants felt the need to elaborate on their responses or choices, they had options for doing so within the survey through dialogue boxes.

Stakeholder Meeting Three

The external stakeholder group held its third meeting on April 13, 2015 (for agenda, see Appendix E). Sixteen of our 28 stakeholders attended the session, which centered on two objectives:

1. Conduct root-cause analysis for identified educator equity gaps; and
2. Identify existing and new strategies to reduce and eliminate these gaps.

At the third and final external stakeholder meeting, participants received equity gap statements to inform the root-cause analysis and strategy development. Battelle for Kids facilitators guided the root-cause analysis process. In small groups, stakeholders conducted a root-cause analysis on the educator equity gap statements they received from the department.

Once root causes were identified for each educator equity gap, our stakeholders identified existing and new strategies that both state and local education leaders could implement to address the identified educator equity gaps. Stakeholders were encouraged to consider local strategies, state initiatives or research-based practices that may help to address educator equity gaps in Ohio.

Departmental Involvement

The development of the 2015 Ohio's Educator Equity Plan involved many offices and centers within the Ohio Department of Education. This involvement included participation in the external stakeholder meetings and internal departmental meetings focused on each requirement outlined by the Excellent Educators for All Initiative. The following entities participated:

1. Center for the Teaching Profession;
2. Ohio Department of Higher Education;
3. Office of Exceptional Children;
4. Office of Education Policy and Research;
5. Office of Accountability;
6. Office of School Choice;
7. Office of Data Quality and Governance;
8. Legal Counsel; and
9. Office of the Superintendent.

Ohio's Educator Equity Project Staff

Julia L. Simmerer, Senior Executive Director, Center for the Teaching Profession
Cheryl A. Krohn, Ohio's Educator Equity Project Director, Center for the Teaching Profession

Rebecca S. Schell, Ohio's Educator Equity Project Advisor, Center for the Teaching Profession

Final Stages of Equity Plan Development

The final draft of Ohio's Educator Equity Plan was shared with the external stakeholder group, internal stakeholder group and the Ohio State Consortium for Educator Effectiveness state team. Department staff sent the plan via e-mail to these groups on Monday, May 18, 2015 with a request to review and provide input, for consideration in the development of the final draft.

Department leaders understand that much of the work for the Excellent Educators for All Initiative will continue after the state plan is approved. This work will include long-term involvement from our external stakeholders via annual, in-person meetings with a subset of the larger stakeholder group. The department also plans to post Ohio's Educator Equity Plan on its [equity homepage at education.ohio.gov](http://equity.homepage.education.ohio.gov), once approved by the U.S. Department of Education.

Section 2. Equity Gap Analysis

To meet the goal of ensuring Ohio's poor and minority students have equitable access to qualified, appropriately licensed, experienced and effective educators, the Ohio Department of Education conducted a quantitative analysis of state data sources. Staff in the department's Office of Data Quality and Governance and Office of Policy and Research conducted the data analysis. Department staff, working with our external stakeholder group, gathered data on educator assignments to understand where, and to what extent, inequities exist in the state.

Ohio has focused on improving equitable access to Highly Qualified Teachers for more than a decade. Since 2003, Ohio has collected data on measures of educator quality. Of all Ohio teachers, 98.7 percent hold at least a bachelor's degree, 98.7 percent of teachers of academic core courses meet federal content knowledge qualifications, and 98.1 percent of those courses are taught by appropriately licensed educators.

Ohio's Educator Equity Plan incorporates educator effectiveness data (ratings from the Ohio Teacher and Principal Evaluation Systems) into the analysis of equitable access to excellent educators. An overview of Ohio's five educator measures forms the analytic basis for the state plan: courses taught by *unqualified* teachers; courses taught by *out-of-field* teachers; *inexperienced* teachers among all teachers; *ineffective* teachers; and *ineffective* principals among those evaluated.

Definitions and Measures

Department staff engaged external stakeholders and performed school- and district-level analyses to determine the measures used in Ohio's Educator Equity Plan. Ohio's stakeholders acknowledged that the three federally required measures alone did not adequately define educator quality for the purpose of the Ohio's Educator Equity Plan. For this plan, the measures include the three required by the U.S. Department of Education for this plan, as well as two additional measures that are available from Ohio's evaluation systems: *ineffective* teacher and *ineffective* principal.

Defining Equity Gap

The Ohio Department of Education uses the term "equity gap" to refer to the difference between the rate at which poor and minority students are educated by excellent educators (captured in the measures described below) compared to other students. Ohio has taken the percentage difference between the average of educators found in high-poverty schools and those found in low-poverty schools; and high-minority schools and those found in low-minority schools to calculate the equity gaps for each measure. *Ohio considers an equity gap to be any degree of difference that suggests poor and minority students are receiving less access to excellent educators than other students.*

Required Measures

Ohio defines the three required teacher measures as follows.

1. **An *unqualified* teacher is one teaching a core academic subject course for which he or she is not designated highly qualified with respect to the content knowledge requirements.** Districts, charter and STEM schools report into Ohio's Educational

Management Information System evidence of content knowledge – or lack thereof -- in the core academic subject of each course assignment. Districts and schools report core academic courses as “non-HQT” if the teacher does not hold the highly qualified designation as evidence of content knowledge in the course subject area.

2. **An *out-of-field teacher* is one who is teaching a core academic course that he or she is not licensed to teach.** Ohio districts code their courses in alignment to proper licensure in the Educational Management Information System. A flag in reporting arises when a course is taught by a teacher whose license is not valid for teaching the classroom grade level, the student population or the course subject area.
3. **An *inexperienced teacher* is one who is in his or her first or second year of teaching.** This is a teacher with zero to one year of previous teaching experience. Districts report this element annually.

The first two measures capture the relationship between the qualifications of teachers and the subject matter, grade span and student populations in their classrooms. These measures relate to administrative choices about teacher hiring, assignment and placement, as well as to qualifications of individual teachers. Strategies to address gaps revealed by these two measures should address both sides of this relationship.

In its 2006 equity gap analysis, Ohio defined *inexperienced teachers* as those with zero to three years of prior teaching experience. The Ohio Department of Education revised this definition (for equity planning) going forward for both programmatic and analytic reasons. The revised definition allowed variations across schools and districts to be more visible. This definition of *inexperience* also anticipates coming changes in the age structure of the teacher workforce in Ohio as described in Ohio’s 2013 Supply and Demand Report.

Additional Measures

The Excellent Educators for All Initiative allows states to add measures that help identify equity gaps for assessing whether or not poor or minority students have equitable access to excellent educators. The Ohio Department of Education, with advisement from external stakeholders, determined that adding the following two measures of educator effectiveness helps capture the context in Ohio and aids in identifying educator equity gaps.

1. **An *ineffective teacher* is a teacher who received a final summative rating² of “Ineffective” on the Ohio Teacher Evaluation System (OTES).** Ineffective is the lowest of the four ratings in the evaluation system. School- and district-level aggregate effectiveness ratings are self-reported to the department annually through the electronic reporting system³.

² Final Summative Ratings in the teacher evaluation system consists of a combination of results from various components (Teacher Performance, Student Growth Measures, Alternative Components if applicable) to produce a final summative evaluation rating.

³ The Ohio Teacher and Principal Evaluation Systems (eTPES) is an online, electronic educator evaluation reporting system for statewide use by Ohio districts and schools.

2. **An *ineffective principal* is a principal who received a final summative rating⁴ of “Ineffective” on the Ohio Principal Evaluation System (OPES).** Ineffective is the lowest of the four ratings in the principal evaluation system. School- and district-level aggregate effectiveness ratings are self-reported to the department annually through the electronic reporting system.

Student Dimensions

The five measures discussed above describe potential weak points in Ohio’s educator workforce at schools, districts, or across the state. Turning to the student dimensions of the equity equation, Ohio examined the potential for educator equity gaps between schools with relatively higher or lower enrollment of poor or minority students.

- **In Ohio’s analysis, student *poverty* (poor student) is reported to the Ohio Department of Education at the student level as economic disadvantage⁵.** In our analysis, schools in the highest quartile of poverty enrollment have greater than 75 percentage of their Average Daily Enrollment represented by students reported as economically disadvantaged. In the lowest quartile of schools as defined by poverty enrollment, less than 30 percent of students are economically disadvantaged.
- **Minority students are members of African-American, Multiracial, Hispanic, Native Hawaiian / Pacific Islander, American Indian / Alaskan Native, or Asian ethnic and racial groups.** In schools in the highest quartile of minority enrollment, 43 percent or more of their students are members of these groups. The lowest minority quartile consists of schools with less than six percent of students in these groups.

Data Sources

Ohio’s analysis drew from three data sources at the Ohio Department of Education. Traditional public school districts, community schools, career and technical districts and other public educational entities report primary and secondary educational data to the Ohio Department of Education’s longitudinal data system, the Education Management Information System. This system stores staff, student, district and building data and serves as the source of measures reported to the U.S. Department of Education’s *EDfacts*. The department checks the district- and school-reported course data against its licensure database, called Connected Ohio Records for Educators, to determine whether each course is taught by an appropriately certified teacher. The third source of data underlying our equity analysis is school-level evaluation results from Ohio’s electronic Teacher and Principal Evaluation System. The electronic reporting system supports districts and schools as they implement the teacher and principal evaluation systems, and it stores data on each evaluation.

⁴ Final Summative Ratings in the principal evaluation system consists of a combination of results from various components (Principal Performance, Student Growth Measures) to produce a final summative evaluation rating.

⁵ The Ohio Department of Education’s definition of *economic disadvantage* includes any student who is known to the district to meet any of the following conditions: either the students is eligible to receive free or reduced price lunch themselves or a member of a household is so eligible; students who themselves or whose guardians are known to be recipients of public assistance; and students whose guardians meet the Title I income guidelines.

Data for this analysis is taken from the 2013-2014 school year, the first year of full implementation of the educator evaluation system in the majority of public school districts and community schools. This analysis includes data from 609 of Ohio’s traditional public school districts, 303 of its 381 community schools (also known as charter schools), and two of its four STEM schools.⁶

Equity Gaps: Quantitative Data Analysis

The analysis reported here was focused at the school level, for several reasons. First, while data on students, teachers, principals and courses are available at finer-grained levels, the Ohio Department of Education has legal access to teacher and principal evaluation data aggregated by school, but not to individual-level evaluations (per Ohio Revised Code 3319.111(G)). Second, since 2006 when Ohio released its first equity plan, stakeholders statewide have reported that planning for educator equity can best be supported by data tools that focus on the school as a whole. Finally, a school-level analysis can better reveal the impact across the student population, while a district-level analysis can mask large differences across schools. For an overview of Ohio’s distribution of schools, students, and enrollment by typology see Appendix F.

Data Overview: Equity Gaps in Ohio

Ohio Department of Education staff used two vantage points to examine equity gaps on each of the educator quality measures. First, we described the equity gaps as shown in Table 1 and Table 2 below, naming the percentage point difference between the highest and lowest quartile on poverty and minority enrollment for each of the five measures. Second, we describe the inequity in terms of the relatively higher burden on high-poverty and high-minority schools for each measure. For example, 19.6 percent of all courses are taught in schools with the highest enrollments of students in poverty, but 58.7 percent of the *out-of-field* courses statewide are taught in these schools (see Appendix G for more detail).

Equity Gaps: Poverty

Table 1 shows the equity gaps on the five educator measures, expressed as the number of percentage points between values for the highest and lowest quartiles of poverty in the student population. Table 1 illustrates the percentage difference and multiplier for five, school-level measures, comparing schools in the highest and lowest quartiles on student poverty enrollment.

⁶ This is the number of public school districts, charter schools and STEM schools in operation during the 2013-2014 school year, who reported data into EMIS for at least the three required measures.

Table 1. 2013-2014 Equity Gaps by Poverty Enrollment

<i>Schools by Poverty Enrollment</i>	% Courses with Unqualified Teacher (Nc = 504,398)	% Courses with Out-of-Field Teacher (Nc = 504,398)	% Teachers 0-1 year prior experience (Nt = 108,983)	% Teachers evaluated Ineffective (Nt evaluated = 81,780 ⁷)	% Principals evaluated Ineffective (Np evaluated = 5,213)
All Schools	1.2% (N=6,138)	1.9% (N=9,548)	15.7% (N=17,115)	1.0% (N=794)	0.5% (N=28)
Schools in Highest Quartile (>76%)	3.8% (N=3,758)	5.7% (N=5,608)	21.4% (N=4,847)	2.7% (N=506)	1.3% (N=16)
Schools in Lowest Quartile (<30%)	0.3% (N=522)	0.6% (N=976)	12.6% (N=3,978)	0.2% (N=50)	0.1% (N=1)
Poverty Equity Gap	3.5 % pts	5.1 % pts	8.8 % pts	2.5 % pts	1.2 % pts
Multiplier ⁸	12.7 x	9.5 x	1.7 x	13.5 x	13.0 x

Courses in schools with the highest enrollments of students in poverty are roughly 11 times more likely to be taught by either an *unqualified* teacher or an *out-of-field* teacher, as compared to those with the lowest enrollment.

- Ohio has held steady the rate of courses taught by teachers *who lack* the content knowledge qualifications required by No Child Left Behind, with rates of between 1.8 and 1.0 percent for the last four years. In 2013-2014, that rate was 1.2 percent, but these courses are inequitably distributed. The percentage rate per school ranges from 0.3 percent in schools with the lowest rates of poverty, to 3.8 percent in schools with the highest rates. This is a difference of 3.5 percentage points (Equity Gap One).
- Similarly, the proportion of core academic courses taught by teachers across the state *who lack appropriate certification* (what Ohio is calling *out-of-field courses*) ranged from 1 to 1.9 percent in the last six years. However, schools in the highest quartile on student poverty have a 5.7 percentage rate of such courses, a 5.1 percentage point disadvantage when compared to schools in the lowest quartile of student poverty (Equity Gap Two).
- While there appears to be a relatively small difference between these two quartiles along these measures of educator qualifications, the level of inequity also is visible in the statewide distribution of these courses. While just under 20 percent of all courses in the state are taught in schools with higher enrollment of poor students, 61.2 percent of *unqualified courses* and 58.7 percent of *out-of-field* courses are in these schools. (For more detail, see Appendix G).

Teacher inexperience is nearly two times more prevalent in high poverty schools than in low poverty schools.

⁷ Ohio school districts implement the evaluation systems in accordance with the timing set out in their contract agreements. Not all districts implemented the teacher evaluation system in the 2013-2014 school year; therefore, the denominator for the *ineffective teachers* measure is smaller than that for the *inexperienced teachers* measure.

⁸ The multipliers in Table 1 and 2 were calculated by dividing the schools in highest quartile percentage by the schools in the lowest quartile percentage for each of the five measures.

- Statewide, 15.7 percent of all teachers are *inexperienced*; they are in their first or second year of teaching. *Inexperienced teachers* make up only 12.6 percent of the staff in schools with the lowest rates of poverty among their students. That ratio rises to 21.4 percent in the schools in the highest quartile by poverty. This is an 8.8 percentage point difference (Equity Gap Three).
- There are slightly more inexperienced teachers in the state's high-poverty schools, when comparing them to all teachers. Where 20.8 percent of all teachers statewide teach in these schools, 28.3 percent of the *inexperienced teachers* teach in these schools.

Schools in the highest quartile by student poverty are staffed by 13 times the proportion of *ineffective teachers* and *ineffective principals* than in those in the lowest quartile.

During the 2013-2014 school year, most public school districts and community schools implemented the Ohio Teacher Evaluation System and the Ohio Principal Evaluation System for the first time.⁹ An *Ineffective* rating in this first year of implementation was quite rare; only 1 percent (N = 794) of teachers statewide received this lowest evaluation rating.

- While 0.2 percent of teachers in low-poverty schools were evaluated as *ineffective*, 2.7 percent of teachers in schools with the highest levels of student poverty received an *ineffective* evaluation rating. This is a difference of 2.5 percentage points (Equity Gap Four).
- *Ineffective teachers* are distributed unevenly across schools categorized by the quartile of poverty enrollment. Among the districts implementing the evaluation system for teachers, 22.9 percent of evaluated teachers were in schools with high levels of poverty among students. Those same schools, however, employed 63.7 percent of the *ineffective teachers* in the state (For more details, see Appendix G).
- In 2013-2014, it was rare for principals to receive an *Ineffective* rating on the Ohio Principal Evaluation System rating scale. Nonetheless, the small numbers of ineffective schools leaders are distributed inequitably. While 0.1 percent of principals in low-poverty schools were evaluated as *ineffective*, 1.3 percent of principals in schools with the highest levels of student poverty received an *ineffective* evaluation rating. This is a difference of 1.2 percentage points (Equity Gap Five).

Equity Gaps: Minority

Table 2 shows the equity gaps on the five school-level measures, expressed as the number of percentage points between values for the highest and lowest quartiles of minority membership in the student population. Table 2 illustrates the percentage difference and multiplier for five, school-level measures, comparing schools in the highest and lowest quartile on minority student enrollment.

⁹ Community schools are not required by law to implement the teacher evaluation system among their staff. About two-thirds of community schools implemented OTES in 2013-2014. Their results are included with this analysis.

Table 2. 2013-2014 Equity Gaps by Minority Enrollment

Schools by Minority Enrollment	% Courses with Unqualified Teacher (Nc = 504,398)	% Courses with Out-of-Field Teacher (Nc = 504,398)	% Teachers 0-1 year prior experience (Nt= 108,983)	% Teachers evaluated Ineffective (Nt evaluated = 81,780)	% Principals evaluated Ineffective (Np evaluated = 5,213)
All Schools	1.2% (N=6,138)	1.9% (N=9,548)	15.7% (N=17,115)	1.0% (N=794)	0.5% (N=28)
Schools in Highest Quartile (>43%)	4.3% (N=4,667)	5.9% (N=6,357)	21.7% (N=5,274)	2.5% (N=506)	1.3% (N=17)
Schools in Lowest Quartile (<6%)	0.4% (N=422)	1.0% (N=1,067)	12.8% (N=2,991)	0.5% (N=86)	0.5% (N=6)
Minority Equity Gap	3.9 % pts	4.9 % pts	8.9 % pts	2.0 % pts	0.8 % pts
Multiplier	10.8 x	5.9 x	1.7 x	5.0 x	2.6 x

Courses in schools with the highest enrollments of minority students are ten times more likely to be taught by *unqualified* teachers, and five times more likely to be taught by *out-of-field* teachers.

- In schools in the highest quartile by minority enrollment *unqualified teachers* instruct 4.3 percent of courses. In schools with low minority enrollment, the rate is .4 percent on the *Percent of Unqualified Courses* measure. This is a difference of 3.9 percentage points (Equity Gap Six).
- The equity gap for *out-of-field courses* is 4.9 percentage points (Equity Gap Seven).
- While 21.5 percent of courses statewide are taught in these high minority schools, 76.0 percent of all *unqualified courses* and 66.6 percent of all *out-of-field courses* are located in these schools (For more details, see Appendix G).

Schools with the highest rates of minority enrollments have nearly twice the rate of *inexperienced teachers* on their teaching staffs.

- The rates of *inexperience* among teachers in schools with the highest minority enrollments repeat the pattern with poverty enrollment. In high-minority schools, 21.7 percent of teachers are inexperienced, whereas 12.8 percent of teachers in low-minority schools are inexperienced; a difference of 8.9 percent (Equity Gap Eight).

Students in schools with the highest minority enrollments are five times more likely to encounter *ineffective educators*.

- 2.5 percent of teachers in high-minority schools received *ineffective* evaluation ratings, whereas 0.5 percent of teachers in low-minority schools received this rating, a difference of two percentage points (Equity Gap Nine).

- Schools with low minority enrollments (less than 6 percent of the student population) employ 10.8 percent of the state's 794 *ineffective teachers* (N=86), while 63.7 percent of *ineffective teachers* are in schools with the highest rates of minority enrollment (For more details, see Appendix G).
- In 2013-2014, it was rare for principals to receive an *Ineffective* rating on the Ohio Principal Evaluation System rating scale. Nonetheless, the small numbers of ineffective schools leaders are distributed inequitably. In high-minority schools, 1.3 percent of principals were rated ineffective, whereas 0.5 percent of principals were rated ineffective in low-minority schools; a difference of 0.8 percent (Equity Gap Ten).

Early in the analysis, the department considered how closely the five educator measures correlate with one another. Strong correlations would indicate that they measure the same aspect; conversely, weak or no correlation would indicate that each measure describes a different aspect of the set of educators and their assignments within schools or districts. We found negligible to weak, positive correlations among the five educator measures, with a moderate, positive correlation between the two measures related to courses (unqualified and out-of-field). This means that each educator measure speaks to some distinct aspect of educator quality or effectiveness.

The next step in our analysis was to consider a way to combine the measures for use at both the state and local level. Section four introduces the Educator Workforce Strength Index and addresses the combination of these five measures for state and local use. Data analysis on the index also will be discussed in that section.

State Equity Gap Summary

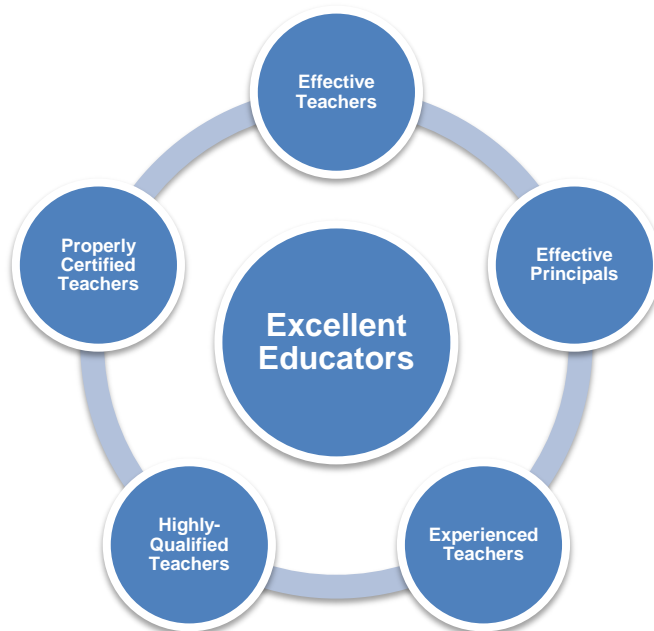
The state equity gap analysis for Ohio shows that poor and minority students experience inequitable access to excellent educators more than other students on every measure analyzed for Ohio. In future work Ohio will conduct a parallel analysis of gaps in access to excellent educators for students with disabilities and English language learners.

To effectively address Ohio's educator equity gaps, education leaders must understand *why* the gaps are occurring in schools with high-poverty and high-minority student enrollment. The next section describes how Ohio's stakeholder groups identified the possible root-causes of these gaps.

Section 3. Root-Cause Analysis

All students deserve to have excellent educators teaching and leading their schools. This equity plan delineates an excellent educator using the five measures illustrated in Figure 1. As identified in section two, the plan outlines Ohio's educator equity gaps based upon these measures. To address these equity gaps, Ohio must first understand why these gaps exist in our high-poverty and high-minority schools.

FIGURE 1. FIVE MEASURES FOR OHIO'S EDUCATOR EQUITY PLAN



Framing the Root-Cause Analysis

Ohio's stakeholders conducted a root-cause analysis process to better understand the “*systems challenges*” Ohio faces in achieving equitable access to excellent educators. The analysis process provided clarity to the possible causes for Ohio's identified equity gaps. This process also provided a foundational rationale for identifying and selecting strategies that have the most potential to advance equitable access to excellent educators for poor and minority students.

Department staff framed the root-cause analysis process on *human capital management*, defined by Sigler and Kashyap (2008) as, “...how an organization tries to acquire, increase and sustain that talent level over time...the entire continuum of activities and policies that affect teachers over their work life at a given school district (p.5)”. Activities and policies found in this management continuum encompass from recruitment, selection, hiring, induction, deployment, evaluation, training and career advancement. The department's belief that focusing on human capital management will help ensure equitable access to excellent educators, framed the root-cause analysis conducted by stakeholders as they addressed the following questions.

Do Ohio's high-poverty and high-minority schools succeed at,

- Attracting excellent educators?

- Assigning excellent educators?
- Developing excellent educators?
- Retaining excellent educators?
- If not, why?

Root-Cause Analysis Process

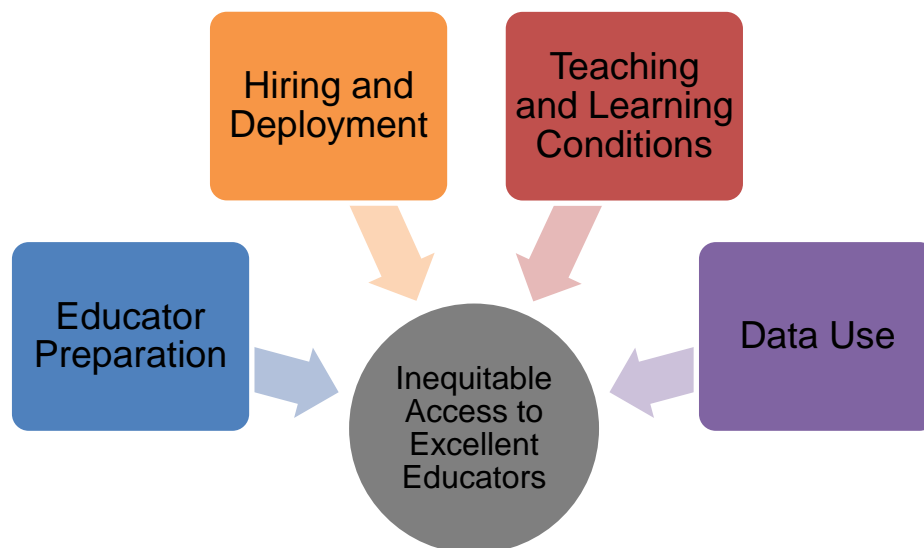
In the third external stakeholder meeting, stakeholders brainstormed possible root causes for Ohio's 2013-2014 educator equity gaps in high-poverty and high-minority schools. Ohio utilized state data to engage stakeholders in the root-cause analysis process. Equity gap statements using the following five measures were presented: teacher ineffectiveness, principal ineffectiveness, out-of-field teachers, inexperienced teachers and unqualified teachers. The equity gap statements (outlined in section two) highlighted for stakeholders the differences in equitable access to excellent educators in high-poverty and high-minority schools.

Stakeholders broke into small groups to conduct a root-cause analysis on the equity gap statements and engaged in discussion about *why* the particular equity gaps exist in Ohio. As stakeholders presented their explanations, they recorded them on post-it notes, which were then categorized onto a fishbone diagram. This process identified four overarching root-cause categories that explain some of Ohio's challenges to equitable access to excellent educators for high-poverty and high-minority schools.

Findings from Ohio's Root-Cause Analysis

Since education is a complex social system, stakeholders could not isolate just one single root cause in every case for a particular equity gap. As they categorized the causes, it became clear that one root-cause category could be linked to several equity gaps. Taking this into consideration, four categories of root causes (see Figure 2) emerged: educator preparation, hiring and deployment, teaching and learning conditions, and data use. A description of each category follows.

FIGURE 2. OHIO'S FOUR ROOT-CAUSE CATEGORIES



Category One: Educator Preparation

Stakeholders believed that the preparation teachers and principals receive for schools with high-poverty, and high-minority enrollments, can influence their effectiveness in these settings. Not all novice educators are prepared similarly. Two particular aspects of educator preparation surfaced from the root-cause analysis.

Experience with Students, Schools, Policies and Cultural Competencies. Pre-service teacher education students may have limited or no experience with poor or minority students. If educator preparation programs do not provide this experience, graduates may come unprepared to teach in those settings, even though many graduates begin their careers in high-poverty and high-minority schools. These graduates also lack awareness and understanding of educational procedures and practices used in Ohio's schools. For instance, many novice teachers do not understand the evaluation system they will engage in, beginning with their first year of teaching. The 2013 Educator Preparation Performance Statewide Report included survey responses from resident educators stating that their program did not prepare them well for understanding Value-Added Growth Measures.¹⁰

Program Variation. Educator preparation program structures can vary from institution to institution. This inconsistency means that novice educators come to schools with varying levels of preparedness and training. One example highlighting this issue comes in the average number of clock hours required for student teaching, which in 2012-2013 ranged from 300 clock hours to 640 in Ohio's various preparation programs for teacher certification.¹¹ Principal preparation programs also can vary based on the institutions' beliefs about the role of the principal. Whether a university views the principal more as an instructional leader or as a chief human resources administrator, its preparation program will be built to support that role.

Category Two: Hiring and Deployment

Ohio stakeholders believe that district hiring and deployment practices should address equitable access to excellent educators. However, they view hiring and deployment of educators in high-minority and high-poverty schools as a significant challenge in Ohio. Six particular aspects of hiring and deployment surfaced from the root-cause analysis.

Hiring Timelines. Too often, high-poverty and high-minority schools have late hiring timelines due to the late timeline for the release of federal funds. This can lead to hiring less effective teachers (Papay & Kraft, 2015). Late hiring was cited as an issue for many Ohio schools as many teachers are paid out of those federal funds in high-poverty and high-minority schools.

Transfer & Placement. Deployment of teachers is also a concern when it comes to inequitable access to effective teachers. Often schools find that their effective and/or experienced teachers transfer to schools with fewer poor and minority students. As a result, less effective and/or inexperienced teachers may be placed into the high-needs positions left vacant. Language in

¹⁰ Respondents gave a 2.61 mean score on a 4-point Likert scale with 1=strongly disagree and 4=strongly agree.

¹¹ Statistics are self-reported in the Title II Report by Ohio's Institutions of Higher Education on an annual basis, located at <https://title2.ed.gov/Public/Report/PrintSection.aspx?Year=2014&StateID=39&Section=130150>.

collective bargaining agreements may allow for these types of movements, creating barriers to placing effective and/or experienced teachers in high-poverty and high-minority schools.

Salary. High-poverty and high-minority schools often offer lower salaries than their low-poverty and low-minority counterparts. For instance, Ohio's large, wealthy suburban districts pay on average \$67,500 as compared to the state average of \$57,000 in 2011 (Ohio Education Research Center, 2013).

Negative Perceptions. Many effective and/or experienced teachers who may be willing to move to high-needs schools often have concerns about the move and the impact it may have on their own career and development. When teachers hold negative perceptions of working in high-poverty and high-minority schools, it can impede them from applying for or taking positions in those schools where their talents are needed. When teachers do move to these high-needs positions, support may be lacking for a successful transition.

Assigning Educators. Parents, school leaders, requirements and scheduling are all factors that have a bearing on the teacher assignment process (Kalogrides, Loeb, & Betiello, 2012). Too often the most effective and/or experienced educators are assigned only to the higher-achieving students, leaving students who need more assistance with less effective or inexperienced educators. The assignment of teachers to students needs a targeted approach to ensure that the right educators are strategically assigned.

Postings in Shortage Areas. Many of the job openings in high-poverty and high-minority schools tend to be in the documented shortage areas in Ohio: English/language arts, foreign languages, mathematics, science, social studies, special education, speech/language pathology and teaching English to speakers of other languages. Due to these shortages, schools often place unqualified and/or out-of-field teachers in high-poverty and high-minority schools if they cannot find qualified applicants to fill those positions.

Category Three: Teaching and Learning Conditions

Stakeholders noted that an effective teacher's decision to stay in a high-poverty and high-minority school is greatly influenced by the quality of the school's teaching and learning conditions. These conditions also can decrease or increase educator equity gaps for properly certified or experienced teachers in these schools. Three particular aspects related to teaching and learning conditions arose: professional learning opportunities, teacher leadership and school leadership.

Professional Learning Opportunities

Time and Opportunity. Improving teaching and learning conditions depends on providing educators with opportunities for growth and development. Educators are often not provided sufficient time and opportunity for necessary professional learning experiences both individually and collaboratively. For example, district and building schedules may create barriers for offering professional learning to educators.

Quality. Some professional learning for educators lacks in quality or relevance, as these programs often use one-size fits all approaches that do not meet the needs of all the

educators. Professional learning is often deficient in alignment to the educator evaluation system (professional growth plans, improvement plans, goal-setting, observation results and final summative rating results) and therefore does not help ineffective educators or effective educators, both whom value learning and growth but have different professional learning needs.

Implementation. Novice teachers have specialized professional learning needs and teacher induction programs should be designed to meet those needs. When districts do not properly implement high-quality induction programs, novice teachers do not gain the potential benefits of professional learning that help them grow in effectiveness. Lack of solid residency programs can negatively influence the decisions of beginning teachers to continue to teach at high-poverty and high-minority schools.

Teacher Leadership

Career Pathways. Teachers need pathways that provide them with opportunities for leadership; these opportunities encourage them to stay in the classroom. Lack of career pathways can decrease the retention of strong teachers (Doyle, 2015). Teachers who do exceptional work in the classroom should be rewarded and it is important to re-conceptualize the roles of – and incentives for – teachers who want to pursue leadership opportunities (Curtis, 2013).

School Leadership

School Leader Assignment. Assigning strong leaders to schools with populations of high-poverty and high-minority students helps to retain effective teachers in those schools. Often, leaders are not assigned to buildings where their strengths are aligned with the needs of the school.

Supportive Leadership. Leaders influence both staff and structures in a school building. If teachers experience a lack of support and/or structures for teaching and learning, there is a greater chance they will leave the school when given the opportunity.

Leaders Short on Time. Too often, school leaders face barriers that keep them from providing instructional support, such as the coaching of teachers. Principals often feel stretched thin with their various roles and responsibilities, especially as those continue to expand.

Category Four: Data Use

Stakeholders revealed that educators may not be using data in large-scale, strategic ways to benefit equitable access. The use of data, however, can help address all equity gaps in Ohio. Two aspects of data use arose.

Accessibility of Data. Schools often have massive amounts of data available for use, but it can be challenging to locate data and determine what data are applicable for various purposes. Data come from multiple sources and it is possible that educators in many districts need assistance in understanding and using it appropriately.

Data-based Decisions. Educators need data to make informed human capital management decisions. Too often, schools are not using the data available to make strategic staffing decisions, which impacts equitable access to excellent educators.

Summary

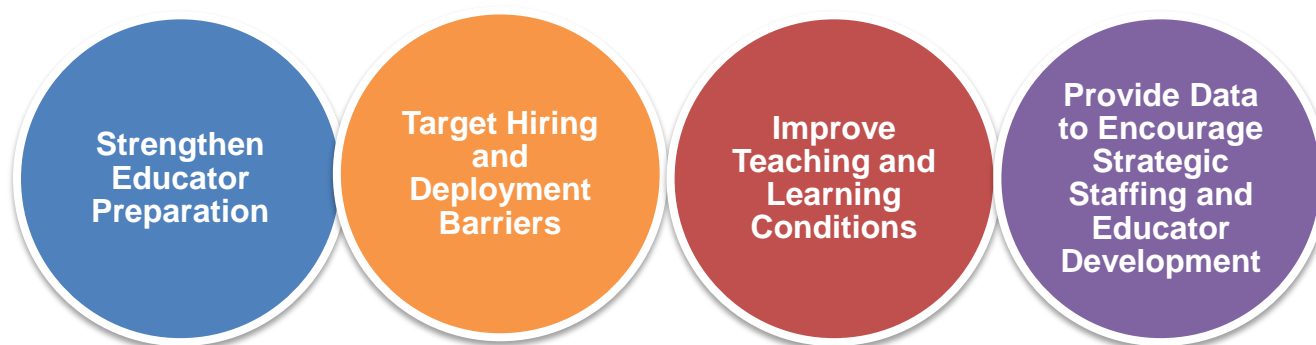
Ohio's root-cause analysis process uncovered four root-cause categories that impact equitable access to excellent educators in our high-poverty and high-minority schools. The root causes outlined in this section are both anecdotal, from our broad group of stakeholders, and data-based when data were available for that particular category. These root-causes were used to help identify strategies to help close Ohio's educator equity gaps. The next section outlines and describes those strategies.

Section 4a. Strategies to Eliminate Identified Educator Equity Gaps

In Ohio's approach to ensuring that poor and minority students have equitable access to excellent educators, Ohio identified four main strategies, illustrated in Figure 3. These improvement strategies are targeted to address the four root-cause categories as described in the previous chapter. These strategies are:

1. Strengthen educator preparation;
2. Target hiring and deployment barriers;
3. Improve teaching and learning conditions; and
4. Provide data to encourage strategic staffing and educator development.

FIGURE 3. FOUR STRATEGIES FOR ELIMINATING IDENTIFIED EDUCATOR EQUITY GAPS



This strategy section of Ohio's Educator Equity Plan is organized around four strategies to eliminate identified educator equity gaps. These four strategies meet one or more of the following criteria:

1. Research-based;
2. Currently in practice or in developmental stages and therefore have impetus and support; and/or
3. Address the root-causes identified by stakeholders.

Ultimately, it may take more than one strategy to alleviate the equity gaps occurring in Ohio's high-poverty and high-minority schools. Our state wanted to tailor the strategies so schools could resolve equity gaps using various options that meet the local context and environment. For this reason, we identified four strategies and a number of sub-strategies that are aligned to the four root cause categories and included them in Ohio's Educator Equity Plan.

This section also spotlights current initiatives that show strong potential for reducing Ohio's educator equity gaps, which we call spotlight strategies. Each of the four strategy areas concludes with a listing of several sub-strategies identified by the department and the stakeholder group that are specific and actionable. Some sub-strategies are ongoing established initiatives while others will take longer-term planning and support for development. Appendix H highlights the time frames for strategy

implementation in Ohio. The department plans to continually revisit these time frames during the course of the next five years.

Strategy One: Strengthen Educator Preparation

Ohio's teachers and leaders enter the beginning stage of career development during their academic preparation. This pre-service entry point provides the foundation that can cultivate knowledge and skills leading to effective teaching and leading (Council of Chief State School Officers, 2012) and positively impact student learning. When educators are well-prepared in this phase of development, they are more likely to be excellent educators in schools. Strengthening educator preparation can help strengthen Ohio's educator workforce.

Educator Preparation Accountability

Ohio has 51 preparation institutions preparing future educators through a wide-ranging array of delivery methods and experiences. This variation in programs could lead to inconsistent results in the success realized by the state's teachers and leaders. Thus, the accountability of these college and university educator preparation programs is an essential part of strengthening them.

Spotlight Strategy: Ohio has worked hard to ensure educator preparation program accountability. Beginning in 2013 the Ohio Department of Higher Education released the first annual educator preparation performance reports for all 51 preparation institutions. The reports include performance data on various metrics for teachers and principal preparation programs. The quality measurements included in these reports are: a) assurances, b) continuous improvement, and c) excellence and innovation. The reports are currently used for program approval through legislation 3333.048 of the Ohio Revised Code and are publicly available. Ohio will continue to develop the educator preparation reports and encourage the use of the reports by various stakeholders.

Pre-Kindergarten through Grade 12 Classroom Connections

Educator preparation programs are responsible for preparing future educators for the realities of the classroom, and those realities include training on topics like data-driven instruction (Council of Chief State School Officers, 2012). Understanding and using data to inform instruction can be influential in reducing achievement gaps when educating disadvantaged students (Greenberg & Walsh, 2012). Yet, some researchers have found that preparation programs do not adequately cover data use or assessment with their candidates (Greenberg & Walsh, 2012).

Spotlight Strategy: The Ohio Department of Higher Education, Department of Education and Battelle for Kids are partnering together to offer the Ohio's Higher Education Value-Added Leaders for Understanding and Using Value-Added Measures professional development opportunity for faculty in Ohio's educator programs. The training will offer in-depth professional development to help institutions infuse value-added understanding into their programs, so that teachers and leaders are better prepared for the realities of the P-12 classroom.

Improved Clinical Experiences

The standard in educator preparation is to focus on academic coursework with some school-based experiences (The National Council for Accreditation of Teacher Education, 2010). Yet; these school-based experiences often are disconnected from the campus portion of the educator program (Zeichner, 2010). Strengthening educator preparation requires a more clinically-based approach that closely connects the academic content and clinical experience to prepare effective teachers (The National Council for Accreditation of Teacher Education, 2010).

Spotlight Strategy: Ohio's educator preparation programs are taking on this challenge in partnership with school districts. Participating colleges, universities, and other interested entities formed the Ohio Clinical Educator Alliance. The alliance is working to implement Blue Ribbon Panel Recommendations to foster innovative clinical preparation (such as designing, pilot testing and researching new initiatives) across Ohio. The alliance partners closely with pre-kindergarten through grade 12 schools, promoting the understanding that a quality clinical program for educators has mutual benefits.

Strategy One: Strengthen Educator Preparation in Institutions of Higher Education

1.1 Disseminate Educator Preparation Reports in Ohio that provide data on passing rates and the number and specialization of educators produced by each institution of higher education; continue expanding performance measures contained in these reports.

1.2 Offer professional development for educator preparation faculty on Value-Added Measures to encourage the embedding of value-added learning in coursework at the educator preparation level.

1.3 Conduct research on the link between educator preparation and student performance data; use data to inform preparation program improvement.

1.4 Support clinical field experience initiatives by universities and pre-kindergarten through grade 12 education.

1.5 Require teacher preparation programs to include cultural competency in their curricula that will help new educators be successful with the students, families and communities they serve.

Strategy Two: Target Hiring and Deployment Barriers

Staffing schools with qualified and effective educators persists as a problem for many schools (Ingersoll & Perda, 2009). Staffing issues occur for various reasons. In some cases, the supply of teachers is lower than the demand. Most recently, the supply of special education, math, foreign language, and science education teachers has been lower than the demand in Ohio. In some cases, the supply of teachers is not the issue, instead it is teachers choosing to teach in particular locations that plays a role in staffing problems (Boyd, Grossman, Ing, Lankford, Loeb, & Wyckoff, 2005; Loeb & Reininger, 2004). Studies have shown that often educators seek to teach in schools similar to, or near, their homes. This factor makes some districts and schools particularly hard to staff, especially if most available teachers are not interested in teaching in those communities.

Addressing Teacher Shortage Areas

While Ohio is typically known as an oversupply state, the 2013 Teacher Supply and Demand study identified specific teacher shortage areas. Ohio is working to increase the supply of teachers in its identified shortage areas. The field of intervention specialists (special educators) has the highest demand in Ohio, and in 2012 only 14.9 percent (N=1066) of our newly licensed teachers were in special education.

Spotlight Strategy: The department, various institutes of higher education and other Ohio entities formed the Ohio Dean's Compact on Exceptional Children to promote shared understanding and implementation of effective practices that contribute to improved results for all of the state's students. The goal of the compact is to increase the level of collaborative inquiry among Ohio's institutions of higher education, thereby improving the capacity of preparation programs to better prepare professional educators to effectively teach and support every child. Through the Dean's Compact, colleges and universities create innovative programs to improve the preparation of professionals who work with children receiving special education services. One particular project offers students in special education a dual enrollment option, in which they can gain the preparation for licensure in both special education and a content area, preparing them for inclusion model classrooms. This project has potential to both increase the supply of special educators in Ohio as well as better prepare them for the pre-kindergarten through grade 12 classrooms.

Developing Principal Leadership to Transform Schools

School leadership is the second most important factor contributing to student learning in schools (Leithwood, Seashore Louis, Anderson, & Walstrom, 2004). The recruitment of the right leader(s) matters for all schools. School districts often report that recruiting principals can be a challenge; especially the urban and rural districts that struggle to improve student achievement, and have high poverty rates (Clifford, 2012; Olson, 2008; & The New Teacher Project, 2006). Often schools that need the strongest leaders, struggle to recruit high-quality principal candidates.

Spotlight Strategy: Ohio has developed a program targeted at developing educational leaders who are prepared to work in hard-to-staff schools. [BRIGHT New Leaders for Ohio Schools](#) is authorized and funded by the Ohio General Assembly and developed through collaboration with the Ohio Department of Education, Ohio Business Roundtable and the Fisher College of Business at The Ohio State University. The BRIGHT fellowship program offers a highly selective process to advance candidates from various walks of life who have the potential to be strong, transformative leaders. Those selected serve a 12-month fellowship in an Ohio school under the mentorship of an accomplished school principal and business leader, while earning a master's degree in business administration. Once fellows complete placement and degree requirements, they are fully certified to serve as principals. The program will target placement of graduates into high-poverty, low-performing schools.

Strategy Two: Target Hiring and Deployment Barriers

2.1 Pilot recruitment programs designed to prepare educators for high-needs fields and hard-to-staff schools.

2.2 Encourage incentives for teachers to teach in high-needs fields.

2.3 Promote partnerships that help districts recruit and hire qualified international teachers in the state's identified shortage areas.

2.4 Utilize a Credential Review Board to review the licensure applications of out-of-state candidates as well as candidates requesting licensure through alternative routes.

2.5 Provide funds to institutions of higher education to create and implement dual-certification routes for special educators.

2.6 Offer a statewide Web-based Recruitment System; provide technical assistance to hard-to-staff schools to help them fully utilize the system.

2.7 Support the continued partnerships between institutions of higher education and school districts to provide professional development for teachers in high-needs schools.

2.8 Publish a supply and demand study (every three to five years).

2.9 Encourage local stakeholders to work collaboratively to review collective bargaining agreements to determine appropriate and effective ways of placing teachers.

Strategy Three: Improve Teaching and Learning Conditions

Attracting and retaining qualified and effective teachers can be challenging for some schools due to high rates of teacher turnover. One particular topic arises as a reason for high turnover: the inadequate teaching and learning conditions found within the schools (Ingersoll & Perda, 2009). Teachers report that most often their reason for leaving a school is inadequate teaching and learning conditions (or working conditions) that inhibit the growth and development of teachers and students. Teacher turnover is highest in high-poverty, high-minority, urban and rural schools (Ingersoll, 2014).

Teaching and learning conditions can influence teachers' career plans (Boyd, Lankford, Loeb, & Wyckoff, 2011; & Ladd, 2011). Teachers want supportive conditions that allow them to be successful (Johnson, Kraft, & Papay, 2012). Improving teaching and learning conditions has the potential to lower the amount of teacher turnover found in schools (Ingersoll & Perda, 2009).

Updating Professional Development Standards

Meaningful professional development is considered one of the most important conditions schools can provide to teachers (Leithwood & Mcadie, 2007). High-quality professional development provided to teachers should be sustained over time, focused on specific content areas or instructional strategies, collective, aligned with school and teacher goals, and offer opportunity to practice and apply new knowledge. Schools need to create professional development systems which advance the effectiveness of staff, benefitting both teachers and students (National Comprehensive Center for Teaching Quality, n.d.). Standards for professional development can help schools design, implement, and evaluate professional development.

Spotlight Strategy: To ensure that schools across Ohio implement strong systems of professional learning, the department developed standards for professional development in 2005-2006. During the past two years, Ohio's Educator Standards Board updated Ohio's standards for professional development. The resulting Ohio Standards for Professional Development, which were adopted by the State Board of Education in April 2015, include seven standards:

- Standard 1: Learning Communities
- Standard 2: Leadership
- Standard 3: Resources
- Standard 4: Data
- Standard 5: Learning Designs
- Standard 6: Implementation
- Standard 7: Outcomes

The revised standards reflect the nation's expanding knowledge – and numerous shifts in thinking – about what constitutes effective professional learning. For example, the new standards reflect the idea that learning communities offer teacher teams professional learning that is sustained and has impact on classroom practices. These updated standards are intended to help various stakeholders in Ohio design, implement and evaluate professional development in schools.

Developing Supports for Beginning Principal Mentoring

School leadership is another critical component of teaching and learning conditions. The principal role can be a challenging one and often principals have high rates of turnover (Burkhauser, Gates, Hamilton, & Ikemoto, 2012), which in turn affects teacher turnover (Beteille, Kalogrides, & Loeb, 2011; Fuller, Baker, & Young, 2007) and student achievement (Beteille et al., 2011). Providing support to newly appointed principals is important for student, teacher and school success.

As new principals gain experience, they become more effective (Beteille et al., 2011; Branch, Hanushek, & Rivkin, 2012; Clark, Martorell, & Rockoff, 2009; Seashore-Louis, Dretzke, & Wahlstrom, 2010). This presents challenges for high-poverty and high-minority schools, because more advantaged schools tend to attract and employ more experienced principals (Loeb, Kalogrides, & Horng, 2010). The National Association of Elementary School Principals has called for principal mentoring to help address leadership turnover (Scott, n.d.).

Spotlight Strategy: Ohio has worked in recent years to build a statewide structure for the Beginning Principal Mentoring Program for newly appointed school principals, assistant principals or persons in charge of school sites. The program offers novice principals coaching by trained mentors who tailor their support to the needs of individual school leaders. Areas often addressed in the program include instructional leadership, communication, team building, family engagement, time management and use of data to improve student achievement. Originally a part of competitive awards for the Race to the Top grant, many of the entities that won the award have built and expanded capacity to continue the program across the state.

Increasing Career Advancement Opportunities

Teaching is known as a “flat profession” (Danielson, 2007), a career with little advancement opportunity unless a teacher decides to leave the classroom. Schools struggle to provide teachers opportunities for leadership while they are still teaching in the classroom. Lack of career advancement can cause teacher turnover (The New Teacher Project, 2012). Schools need to provide conditions in which teachers can exercise leadership and school-level decision making while keeping the capacity to teach students. Giving teachers the ability to extend themselves across and beyond the school, can help teachers realize their potential and also help to improve schools (Danielson, 2007).

Spotlight Strategy: Ohio recognizes the importance of building the capacity for teacher leadership in schools. One example of these efforts is the Teacher Leader Endorsement program. In this initiative, teachers and districts partnering with a university engage in a program model where teachers can take leadership courses while engaging in projects to address specific issues in their building or districts. For example, some teacher-administrator teams developed new teacher mentoring programs in their district as part of the program. As of January 2015, more than 400 teachers have engaged in work for the teacher leader endorsement and those in the program have noted a change in culture in their buildings. Teachers now feel empowered to make a difference in their school and beyond, and the capacity of teachers to become leaders has been strengthened in these districts.

Strategy Three: Improve Teaching and Learning Conditions

- | |
|--|
| 3.1 Require high-quality induction for all new teachers, including those who enter the profession through alternative routes. |
| 3.2 Provide a state-developed list of trained mentors for beginning principals; explore partnerships with educational service centers and principal organizations to provide models of beginning principal mentoring programs for use at local levels. |
| 3.3 Advocate the use of Ohio’s updated Professional Development Standards in designing high-quality professional learning experiences; provide educators with tools to help them use the new standards. |
| 3.4 Provide a teaching and learning conditions survey for districts; explore opportunities to expand the use of a survey. |
| 3.5 Support local educators with field specialists who offer expertise in areas such as student growth measures, assessment literacy, Resident Educator program for beginning teachers and the Ohio Teacher and Principal Evaluation Systems. |
| 3.6 Conduct a co-observation pilot ¹² to understand the potential opportunities for teacher leadership. |
| 3.7 Provide a teacher exit survey for districts and schools. |
| 3.8 Assist districts and schools in utilizing the educator evaluation systems in Ohio for educator professional growth and development. |
| 3.9 Pilot various teacher leadership programs or models. |

¹² The co-observation pilot is currently in development for a small subset of Teacher Incentive Fund districts in Ohio. The model has teacher leaders and principals engaging in a process where they co-observe teachers in the evaluation cycle. Teacher leaders and principals partner together in this model to enhance the feedback and professional learning opportunities given to teachers.

Strategy Four: Provide Data to Encourage Strategic Staffing and Educator Development

To improve education and help students succeed, appropriate data systems should be in place (U.S. Department of Education, 2010), so that educators can use the data for decision making, especially in eliminating equity gaps. Data-driven decision-making happens in a continuous cycle (U.S. Department of Education, 2010). Effective use of gathering, intersecting and organizing a variety of data can help schools target strategies to improve learning for all students (Bernhardt, 2003).

Spotlight Strategy: To help districts in planning for equitable access to excellent educators, the Ohio Department of Education is working to produce an Educator Workforce Strength Index. Through this index, the department will gather data from multiple systems and compile it into a working tool that will allow districts to view various data measures school by school. Each school will receive an index value as an indicator that will help districts pinpoint possible areas to begin action planning. The department will be refining the index, as well as developing resources for utilizing the index over the 2015-2016 year.

Strategy Four: Provide Data to Encourage Strategic Staffing and Educator Development

- | |
|--|
| 4.1 Encourage strategic staffing decisions using student and educator data to cultivate an environment with high-quality instruction and high expectations. |
| 4.2 Provide a data tool to aid districts in monitoring students' equitable access to excellent educators within and across schools. |
| 4.3 Advocate for data systems that report the number of teachers changing schools within districts, changing positions within their districts, moving to other districts or into administration or leaving the profession. |
| 4.4 Expand reports available in the electronic Teacher and Principal Evaluation System to help districts understand patterns and trends in schools. |
| 4.5 Provide report cards about district and school progress, such as student performance, enrollment, graduation rate, education funding and teacher qualifications. |
| 4.6 Consider expanding student subgroups to the Educator Workforce Strength Index utilizing external stakeholder input (ex. English language learners, special education). |
| 4.7 Establish a clearinghouse of best practices at the local and regional levels that focuses on ensuring equitable access to excellent educators. |
| 4.8 Expand research on the impact of current Ohio initiatives through the Ohio Education Research Center. |
| 4.9 Partner with regional centers and organizations to offer trainings on using evaluation data to inform professional learning. |

This section of Ohio's Educator Equity Plan has identified four overarching strategies and outlined multiple supporting sub-strategies that will help Ohio in eliminating educator equity gaps. These strategies encompass all components of the human capital management continuum and will help

improve poor and minority students' access to excellent educators. To see how each strategy aligns to the educator equity gaps in Ohio, see Appendix I.

Section 4b. Monitoring Equitable Access at the Local Level

The state of Ohio as well as its local districts and schools must work together to ensure that excellent educators teach the state's poor and minority students. In accordance with the Elementary and Secondary Education Act¹³, Ohio will continue to monitor local educational agencies in their efforts to reduce educator equity gaps and also look closely at state patterns and trends.

This chapter briefly outlines Ohio's current local monitoring procedures and introduces the newly created monitoring tool called the Educator Workforce Strength Index. The calculation of the index is described, along with the long-term action plan for using it at a local level. Lastly, readers will view the state equity gap data analysis using the index.

Current Monitoring Procedures in Ohio

On an annual basis, districts and community schools are informed of their progress in meeting highly-qualified teacher goals. A letter is sent to districts by the department notifying them of one of the following scenarios:

1. 100 percent of core subject courses are taught by highly-qualified teachers;
2. First year of not having 100 percent of core subject courses being taught by highly-qualified teachers; or
3. Second straight year of not having 100 percent core subject courses being taught by highly-qualified teachers.

Districts and/or community schools informed of scenario three will work on action plans to resolve issues in meeting the 100 percent highly-qualified teacher goals in the state's Comprehensive Continuous Improvement Plan (CCIP).

Districts and/or community schools have the ability to access a Teacher Distribution File (see Appendix I) provided to them by the department to conduct a teacher distribution data analysis for CCIP planning. The department creates a file specific to each district and community school with data for each of its buildings. The data included are:

- The number and percentage of courses taught by highly qualified teachers and the percentage of courses not taught by highly qualified teachers in core subject areas;
- School poverty level;
- Number and percentage of inexperienced teachers teaching minority and economically disadvantaged students by core subject areas;
- Number and percentage of teachers who do not have the highly qualified teacher designation but are teaching minority and economically disadvantaged students by core subject areas; and
- Inexperienced teacher count and percentage by core subject areas.

¹³ Sections 9304(a)(3)(B) and 1112(c)(1)(L),

Through the use of annual letters regarding highly qualified teacher goals and teacher distribution files, the department has supplied districts and community schools with data and information to help them monitor whether their poor and minority students are taught at higher rates than other children by inexperienced, unqualified or out-of-field teachers. These tools and continuous monitoring through the CCIP have helped Ohio move the mark on the goals set in our 2006 Ohio Teacher Equity Plan.¹⁴

A New Direction for District Monitoring

As Ohio engaged with stakeholders on the development of Ohio's Educator Equity Plan, it became apparent that using the three measures of unqualified, inexperienced and out-of-field provided a good foundation in helping address equitable access to excellent educators. This foundation needed to be built upon to provide a more comprehensive and relevant perspective to districts and schools in their planning. The addition of educator effectiveness measures addressed this need. With two additional measures (teacher and principal ineffectiveness) it became clear that it was time for the department to review the tools we offer to districts for monitoring their progress, while streamlining the data in the process. Ohio had to consider a way to capture a combination of these measures to aid in the monitoring of the strength of the educator workforce within educational organizations.

Ohio's Educator Workforce Strength Index

Department staff developed the *Educator Workforce Strength Index* as a way to combine the five measures of excellent educators as identified throughout this plan, while capturing the various qualities of a school's educator workforce. Where earlier efforts at improving equity focused on teachers, the measures included in the index address the effectiveness of both teachers and principals. The measures capture the qualifications and effectiveness of educators, and speak to how well educator placements match teacher qualifications with course subject, grade levels and the needs of particular student populations.

Using the Index for Equitable Access Planning

The Educator Workforce Strength Index is a tool created for state and local use in monitoring equitable access to excellent educators. Index values will be calculated at the state, district, and school levels and can help inform leadership at various levels as they plan and allocate resources for equitable access purposes. State level index values help the department compare the current status of our educator workforce statewide over time and will be used to monitor progress (described further in section 6 of this plan) as a state.

To support equitable access planning at the local level, Ohio will provide districts with the Educator Workforce Strength Index values for each of its schools, along with a composite district-level calculation (see sample format in Appendix J). The index values provide a starting point for making comparisons between schools within districts in a given year. Using the index, district leaders can pinpoint *which schools* could most benefit from educator-level interventions as each building will have a value ranging from 0-100, with 100 being the strongest. For districts with only one school and community schools, they will receive only an index value for that school.

¹⁴ For example, in 2005-2006 school year Ohio had 94.4 percent courses being taught by highly qualified teachers and in 2012-2013 Ohio had 99 percent courses taught by highly qualified teachers.

The Educator Workforce Strength Index provides a snapshot of each of the available data measures used to calculate the index. This will allow districts and community schools to see what particular measures are causing their index to go up or down in each school and help leaders target specific needs in particular schools. Leaders can then tailor strategies for schools according to which measures contribute to a weaker index score.

Over the course of the next year, the Ohio Department of Education will convene an internal working group to create an action plan for integrating the Educator Workforce Strength Index into the Comprehensive Continuous Improvement Plan by the end of the 2015-2016 school year. The department will revise the CCIP and develop resources to help districts use both the index for CCIP planning. Our external stakeholders provided input on the usefulness of the index at the district and school level. Many of these group members will continue to advise the department as we develop and implement the CCIP revisions over the 2015-2016 school year.

Calculating the Educator Workforce Strength Index

The Educator Workforce Strength Index is calculated by adding the percentage point values for each available measure per school or district, dividing by the number of available measures, and subtracting from 100. Index values range from zero to 100, with 100 being a perfect score. Table 3 shows an example of the index calculation for a set of schools within a district.

Table 3. Example Calculations of Educator Workforce Strength Index at the School Level.

School	Courses		Teachers		Calculation		
	% Unqualified	% Out-of-field	% Inexperienced (> 10%)	% Ineffective	Sum	Divide by N of variables	Subtract from 100 INDEX
ABC Elem	4.8	6.7	12.0	13.0	36.5	$36.5 / 4 = 9.1$	90.9
XYZ Elem	1.9	3.5	12.0	25.0	42.3	$42.3 / 4 = 10.6$	89.4
MNOP Elem	0.5	0.9	0.0	5.0	6.4	$6.4 / 4 = 1.6$	98.4

Districts and community schools in Ohio may have fluctuating amounts of available measures that are included in their index value calculation due to varying educator evaluation implementation requirements.

As an ideal, schools would have no courses taught by unqualified or out-of-field teachers, and they would have zero ineffective teachers. However, it is unreasonable and arguably unhealthy as a human capital management goal to hire no new teachers into a district or school. Therefore, for the purposes of calculating an index value for districts and schools, the department removed 10 percent off the top of the *inexperience* calculation. *Teacher inexperience* is entered into the Educator Workforce Strength Index ranging from 0 to 90 percent. For example, a school with 20 percent *inexperienced* teachers would have 10 percentage points entered into its Educator Workforce Strength Index.

Analyzing the Educator Workforce Strength Index

To better understand the implications of using this index at the state and local levels, department staff analyzed the index in two ways:

- 1) Looking for possible correlations of the index (as well as the individual measures) to student achievement; and
- 2) Calculating state equity gaps using the index.

Correlations. Department staff first examined the relationship between the individual educator measures chosen for Ohio's Educator Equity Plan and student achievement. For example, as the percentage of unqualified courses rises, can we predict that student achievement also will rise? With the exception of the percentage of ineffective teachers in a school, the individual educator measures are not strongly related to student performance in schools.¹⁵ To a moderate extent, the more *ineffective teachers* on staff in a school, the lower student achievement in a school is likely to be. This means that we cannot predict levels of student achievement in a school based solely on the value of any of the individual measures. The individual educator measures also have a relatively weak relationship with the proportion of poor and minority students enrolled in the school.¹⁶

Next, department staff examined the relationship between the Educator Workforce Strength Index values and student achievement. Compared to the individual measures, the index values are somewhat more strongly correlated with Ohio's measures of student achievement at the school level ($r = 0.33 - 0.34$). The index values are more strongly correlated with poverty and minority enrollment in schools ($r = -0.35$, and $r = -0.42$), than any one of the single educator measures. In other words, schools with lower index values are also more likely to have lower student achievement overall. This stronger relationship suggests that, more than any single educator measure; the measures captured in an index value may operate together to influence student achievement.

Our findings on these relationships suggest that improving student achievement requires a *comprehensive approach to strengthening the educator workforce in a school*. The index will offer districts a tool to help them in taking a comprehensive approach to strengthening their educator workforce, especially in schools with high enrollment of poor and minority students.

Equity Gaps. Department staff used state data to determine if there were statewide equity gaps using the average index values. Table 4 shows gaps statewide along the poverty and minority dimensions of student enrollment. Each cell in the table below shows the average index value for all schools in that designated group. The overall average index value for all students in all schools is 96.3. All students in high-poverty schools have a 92.3 index value and all students in high-minority schools are at a 92.2 index value.

¹⁵ The achievement measures per school are: the Performance Index, the Percent of Standards Met, and the Performance Index Percentile. The r value for the educator quality measures range between from $r = -0.20$ for Teacher Inexperience and the "Percent of Standards Met" measure on a school's annual report card (for 2013-2014), to -0.27 for Teacher Ineffectiveness with all three achievement measures. At the district level, *Percent of Ineffective Teachers* correlates with the Performance index at $r = 0.44$, a strong relationship.

¹⁶ Percent of Ineffective Teachers is positively correlated with minority enrollment ($r = 0.31$), and correlations with other educator measures are weaker.

Table 4. Average Educator Workforce Strength Index values across schools in Ohio, by quartile of poverty and minority enrollment.

<i>Educator Workforce Strength Index</i>	In High Minority schools	In Medium-High Minority schools	In Medium-Low Minority schools	In Low Minority schools	Poverty Quartiles
In High Poverty schools	91.5	94.8	93.1	97.1	92.3
In Medium-High Poverty schools	93.9	96.6	97.7	98.0	96.8
In Medium-Low Poverty schools	95.4	97.3	97.9	98.1	97.7
In Low Poverty schools	98.2	97.7	98.3	98.0	98.1
Minority Quartiles:	92.2	96.9	97.9	98.0	96.3

Schools in the highest poverty quartile have lower Educator Workforce Strength Index values than those in the lowest poverty quartile. The conclusion is based on these findings: high poverty schools (specifically, the average school in the highest poverty quartile, which has greater than a 75 percent poverty) has an index value nearly six points less than that of low poverty schools (the average school in the lowest poverty quartile, which has less than 25 percent of enrolled students in poverty).

High minority schools also tend to have a lower Educator Workforce Strength Index value than low minority schools. This conclusion is based on a comparison of the average school in the group with the highest minority enrollment (greater than a 43 percent minority rate) with the average school in the group with the lowest minority enrollment (less than 6 percent). There is a gap of 5.8 points between the two, which have index values of 98.0 (low minority) and 92.2 (high minority).

Thus, when we take the educator measures together as a collective indicator of the relative strength or weakness of the educators in a school, the gaps for poor and minority students remain. Schools in the highest quartiles of student poverty and minority status are at a disadvantage when we look at the overall quality of educators in their schools (index value), as compared to schools in the lowest quartiles on these two student dimensions.

Based on the findings outlined in this section, Ohio's education leaders are confident that the Educator Workforce Strength Index will help districts and community schools in their CCIP planning to ensure equitable access to excellent educators for poor and minority students. Districts will be able to begin CCIP planning with the Educator Workforce Strength Index at the end of the 2015-2016 school year. The department will offer technical assistance to districts in this planning.

Section 5. Evaluating Progress

Contextual Considerations for Ohio

Ohio's Educator Equity Plan was developed to improve the equitable access of poor and minority students to excellent educators. As part of this plan, baseline educator equity gaps have been determined and progress on reducing those gaps will be monitored. Department staff acknowledged that three contextual considerations must be taken into account in development of the method and timeline for evaluating progress.

Retirements

In recent years, all five of Ohio's retirement systems changed their plans to include stricter eligibility requirements and lower payments to retirees. Due to changes in these systems, Ohio has had high levels of retirement among teachers and leaders since fiscal year 2011. This trend is anticipated to continue through July 2015.

Local Implementation of Teacher Evaluation System

In 2011, Ohio introduced a new teacher evaluation framework into law. State law allowed districts to adopt the evaluation framework at the expiration of local collective bargaining agreements. Some districts will not begin implementing and reporting teacher evaluation final summative ratings until the 2015-2016 school year.

Changes to Evaluation System Final Summative Rating Calculations

State law (Ohio House Bill 362) brought changes to the Ohio Teacher Evaluation System for the 2014-2015 school year and beyond. This particular change will allow districts a choice between: 1) the current (original) teacher evaluation structure (based on teacher performance rating and student growth rating, each at 50 percent); and 2) the new alternative teacher evaluation framework, which weights teacher performance and student growth equally, but also includes an additional component as 15 percent of the total. The new structure of evaluation led to a change in the calculation of final summative ratings. Our 2013-2014 final summative ratings for educators, which were determined using a matrix system, will serve as the baseline for monitoring the educator effectiveness equity gaps. Beginning in 2014-2015, Ohio will calculate educator final summative ratings using a formula that was made necessary by the change in the evaluation system structure.

While developing the Ohio's Educator Equity Plan, stakeholders discussed changes to the state's educator retirement system and the educator evaluation system. These changes could have an impact on the ability to reduce Ohio's identified equity gaps and were considered in the development of the state's progress measures.

Method and Timeline for Evaluating Progress

As part of this plan, we have identified the state's educator equity baseline gaps and have determined a method and timeline for evaluating progress towards eliminating identified educator equity gaps. The department will use its data systems to monitor the state's progress. The 2013-2014 educator

equity gap data presented in section two will serve as the baseline equity gap measures. The method for evaluation will be the *reduction of the baseline equity gap measures*. Ohio is looking to reduce the baseline equity gap measures by half. The timeline for this reduction is at the conclusion of the 2019-2020 school year, and was set taking into consideration the three contextual reasons explained previously in this section.

Each baseline equity gap measure and progress measure can be found below. Ohio has set progress measures for each educator equity gap identified. This includes the Educator Workforce Strength Index gaps.

Progress Measures: Poverty

Ohio has established progress measures for its identified poverty equity gaps. The chart below outlines each of the five excellent educator terms along with the equity gap statements for that particular measure. We established baselines by calculating the gap between the high-poverty quartile and the low-poverty quartile for each measure. Ohio established our goal year for the end of school year 2019-2020. For each measure, Ohio plans to reduce the gap by half as illustrated below.

Excellent Educator Terms	Equity Gap Statement	Baseline Equity Gap Measure (2013-2014)	Progress Measures for End of SY 2019-2020
Ineffective Teachers	In high-poverty schools, 2.7 percent of teachers received ineffective ratings, whereas 0.2 percent of teachers in low-poverty schools received this rating, a difference of 2.5 percentage points.	2.5 points	1.25 points
Ineffective Principals	In high-poverty schools, 1.3 percent of principals received ineffective ratings, whereas 0.1 percent of principals in low-poverty schools received this rating, a difference of 1.2 percentage points.	1.2 points	.6 points
Unqualified Teachers	In high-poverty schools, teachers without content knowledge qualifications (as required by the No Child Left Behind Act) taught 3.8 percent of courses, whereas in low-poverty schools, unqualified teachers taught 0.3 percent of courses, a difference of 3.5 percentage points.	3.5 points	1.75 points
Out-of-Field Teachers	In high-poverty schools, teachers whose licenses were not appropriate for the courses they instructed, taught 5.7 percent of courses, whereas in low-poverty schools, out-of-field teachers taught 0.6 percent of courses, a difference of 5.1 percentage points.	5.1 points	2.5 points
Inexperienced Teachers	In high-poverty schools, 21.4 percent of teachers were inexperienced, whereas 12.6 percent of teachers in low-poverty schools were inexperienced, a difference of 8.8 percentage points.	8.8 points	4.4 points

Progress Measures: Minority

Ohio has established progress measures for its identified minority equity gaps. The chart below outlines each of the five measures along with the equity gap statements for that particular measure. We established baselines by calculating the gap between the high-minority quartile and the low-minority quartile for each measure. Ohio established our progress measures for the end of school year 2019-2020. For each measure, Ohio plans to reduce the gap by half as illustrated below.

Excellent Educator Terms	Equity Gap Statement	Baseline Equity Gap Measure (2013-2014)	Progress Measures for End of SY 2019-2020
Ineffective Teacher	In high-minority schools 2.5 percent of teachers received ineffective ratings, whereas 0.5 percent of teachers in low-minority schools received this rating, a difference of 2 percent.	2.0 points	1.0 points
Ineffective Principal	In high-minority schools, 1.3 percent of principals received ineffective ratings, whereas 0.5 percent of principals in low-minority schools received this rating, a difference of 0.8 percent.	.8 points	.4 points
Unqualified Teacher	In high-minority schools, teachers without content knowledge qualifications (as required by the No Child Left Behind Act) taught 4.3 percent of courses, whereas in low-minority schools, unqualified teachers taught 0.4 percent of courses, a difference of 3.9 percent.	3.9 points	2 points
Out-of-Field Teachers	In high-minority schools, teachers whose licenses are not appropriate for the courses they instruct taught 5.9 percent of courses, whereas in low-minority schools, out-of-field teachers instruct 1.0 percent of courses, a difference of 4.9 percent.	4.9 points	2.5 points
Inexperienced Teacher	In high-minority schools, 21.7 percent of teachers were inexperienced, whereas 12.8 percent of teachers in low-minority schools were inexperienced, a difference of 8.9 percent.	8.9 points	4.4 points

Progress Measures: Educator Workforce Strength Index

Ohio has established progress measures for its identified Educator Workforce Strength Index gaps. We established baselines by calculating the gaps between the high-poverty quartile and the low-poverty quartile and high-minority and low-minority quartile for each measure. Ohio established our goal for the end of school year 2019-2020. For each measure, Ohio plans to reduce the gap by half as illustrated below.

Excellent Educator Terms	Equity Gap Statement	Baseline Equity Gap Measure	Progress Measures for End of
--------------------------	----------------------	-----------------------------	------------------------------

		(2013-2014)	SY 2019-2020
Educator Workforce Strength Index (Poverty)	The Average Workforce Index in Ohio's high-poverty schools is 92.3; in Ohio's low-poverty schools it is 98.1, a difference of 5.8 percentage points.	5.8 points	2.9 points
Educator Workforce Strength Index (Minority)	The Average Workforce Index in Ohio's high-minority schools is 92.2; in Ohio's low-minority schools it is 98, a difference of 5.8 percentage points.	5.8 points	2.9 points

Ohio will track each of the progress measures at the state level on an annual basis and publicly report this information as outlined in the next section.

Section 6. Publicly Reporting Progress

Ohio understands the importance of monitoring statewide progress toward eliminating identified equity gaps and reporting it to the public. The department will first build public awareness of our baseline equity gaps and our state plan to address these gaps. Secondly, we will update the public on the annual progress toward meeting our five-year progress measures. The department will use the following three methods to publicly report progress.

Three Methods to Publicly Report Progress

ODE Equity Website

Once approved, Ohio will post the Ohio Educator Equity Plan on the [department's website at education.ohio.gov](http://education.ohio.gov). The website currently hosts Ohio's 2006 Teacher Equity Plan and 2008 Progress Monitoring Report. On this website, we also will post our state-level progress measures and will update the progress on those measures on a yearly basis (we anticipate summer or fall of each year).

Meetings and Conferences

The department has reported on the equity plan development at various professional meetings and conferences such as the Educator Standards Board, and the Ohio Association of Administrators of State and Federal Education Programs Title I/Federal Programs Fall and Spring Conferences. Ohio will continue to build public awareness of both the plan and the progress measures through professional meetings and conferences.

Long-term Stakeholder Engagement

The external stakeholder group will be notified once Ohio's Educator Equity Plan is approved by the U.S. Department of Education. They also will receive an electronic copy of the full plan with an executive summary to distribute to their representative constituents. A smaller subset of the external group will convene at least once in the 2015-2016 school year to address long-term strategy development, such as the addition of special education and English language learners as part of the student subgroups. Members of the smaller subset could engage in monitoring activities as we gather enough data to gauge progress and problem-solve if issues arise.

The department's Center for the Teaching Profession will seek additional opportunities for publicly reporting progress on the goals established in the 2015 plan by working closely with the department's senior leadership and its communications office. The department also will seek input from the smaller external stakeholder group about other possible methods for informing the public of this critical work to ensure that all students have equitable access to excellent educators.

Conclusion

As part of the *Excellent Educators for All Initiative* led by the U.S. Department of Education, this plan meets Ohio's requirement to develop a State Plan to Ensure Equitable Access to Excellent Educators. The purpose of the Ohio's plan is to work toward ensuring that poor and minority students are not taught by unqualified, inexperienced or out-of-field teachers at higher rates than other

students. This plan fulfills all of the following six outlined requirements (U.S. Department of Education, 2014) for the state equity plans:

1. Describe and provide documentation of stakeholder consultation regarding the state plan;
2. Identify equity gaps;
3. Conduct a root-cause analysis;
4. Outline steps to eliminate equity gaps;
5. Describe measures that will be used to evaluate progress toward eliminating equity gaps; and
6. Describe how the state will publicly report progress.

References

- Bernhardt, V. (2003). Using data to improve student achievement. *Educational Leadership*, 60(5), 26-30.
- Berry, B., Smylie, M. & Fuller, E.J. (2008). *Understanding teacher working conditions: A review and look to the future*. Hillsborough, NC: Center for Teaching Quality
- Beteille, T., Kalogrides, D., & Loeb, S. (2011). Stepping stones: Principal career paths and school outcomes. *Social Science Research*, 41(4), 904-919. Retrieved from <https://cepa.stanford.edu/sites/default/files/Prncpal%20Turnover%20Published%20Version.pdf>
- Boyd, D., Grossman, P., Ing, M., Lankford, H., Loeb, S., & Wyckoff, J. (2011). The influence of school administrators on teacher retention decisions. *American Educational Research Journal*, 48, 303–333.
- Boyd, D., Lankford, H., Loeb, S., & Wyckoff, J. (2005). Explaining the short careers of high-achieving teachers in schools with low-performing students,” *American Economic Review Proceedings*, 95(2), 166-171.
- Branch, G.F., Hanushek, E.A., & Rivkin, S.G. (2013). *School leaders matter: Measuring the impact of effective principals*. Retrieved from <http://hanushek.stanford.edu/sites/default/files/publications/Branch%2BHanushek%2BRivkin%202013%20EdNext%2013%281%29.pdf>
- Burkhauser, S., Gates, S.M., Hamilton, L.S., Ikemoto, G.S. (2012). *First-year principals in urban school districts: How actions and working conditions relate to outcomes*. Santa Monica, CA: RAND Corporation.
- Clark, D., Martorell, P., & Rockoff, J. (2009). School principals and school performance. Working Paper 38. *National Center for Analysis of longitudinal data in Education research*.
- Clifford, M. (2012). *Hiring quality school leaders: Challenges and emerging practices*. Washington, DC: American Institutes for Research. Retrieved from http://www.learningpt.org/pdfs/HiringQualitySchoolLeaders_IssueBrief052009.pdf
- Council of Chief State School Officers. (2012). *Our responsibility, our promise: Transforming educator preparation and entry into the profession*. Retrieved from http://ccsso.org/Documents/2012/Our%20Responsibility%20Our%20Promise_2012.pdf
- Curtis, R. (2013). *Finding a new way: Leveraging teacher leadership to meet unprecedented demands*. Washington, DC: The Aspen Institute.
- Danielson, C. (2007). The many faces of leadership. *Educational leadership*, 65(1), 14-19. Retrieved from <http://www.ascd.org/publications/educational-leadership/sept07/vol65/num01/The-Many-Faces-of-Leadership.aspx>

- Doyle, D. (2015). *Leadership and lattices: New pathways across the teaching profession*. Washington, DC: The Center on Great Teachers and Leaders. Retrieved from http://www.gtlcenter.org/sites/default/files/1580%20GTL%20Ask%20the%20Team_Leadership%20Lattices%20d2%20lvr.pdf
- Farkas, S., & Duffett, A. (2013). *Half empty or half full: Superintendents' views on Ohio's education reforms*. Columbus, OH: The Thomas Fordham Institute. Retrieved from http://edex.s3-us-west-2.amazonaws.com/publication/pdfs/FINAL_FORINS-Superintendents-Views-Report-HR-FINAL_7.pdf
- Fuller, E., Baker, B., & Young, M. (2007). The relationship between principal characteristics, school-level teacher quality and turnover, and student achievement. *Working Paper Series (Federal Reserve Bank of Atlanta)*.
- Greenberg, J., & Walsh, K. (2012). *What teacher preparation programs teach about K-12 assessment: A review*. Retrieved from National Council on Teacher Quality website: http://www.nctq.org/dmsView/What_Teacher_Prep_Programs_Teach_K-12_Assessment_NCTQ_Report
- Heck, R., & Hallinger, P. (2009). Assessing the contribution of distributed leadership to school improvement and growth in math achievement. *American Educational Research Journal*, 46(3), 626-658.
- Ingersoll, R.M. (2004). *Why do high-poverty schools have difficulty staffing their classrooms with qualified teachers?* Report for Renewing Our Schools, Securing Our Futures.
- Ingersoll, R.M., & Perda, D. (2009). *The mathematics and science teacher shortage: Fact and myth* (Report No. RR-62). University of Pennsylvania: Consortium for Policy Research in Education.
- Johnson, S., Kraft, M.A., & Papay, J.P. (2012). How context matters in high needs schools: The effect of teachers' working conditions on their professional satisfaction and students' achievement. *Teachers College Record*, 114(10), 1-39.
- Kalogrides, D., Loeb, S., & Beteille, T. (2013). Systemic sorting: Teacher characteristics and class assignments. *Sociology of Education*, 86(2), 103-123.
- Ladd, H. (2011). Teachers' perceptions of their working conditions: How predictive of planned and actual teacher movement? *Educational Evaluation and Policy Analysis*, 33, 235-261.
- Leithwood, K., Seashore Louis, K., Anderson, S., & Wahlstrom, K. (2004). *How leadership influences student learning*. Report for The Wallace Foundation.
- Leithwood, K. & Mcadie, P. (2007). Teacher working conditions that matter. *Education Canada*, 47(2), 42-45.
- Loeb, S., Kalogrides, D. & Horng, E. L. (2010). Principal preferences and the uneven distribution of principals across schools. *Educational Evaluation and Policy Analysis*, 32(2), 205-229.

- Loeb, S. & Reininger, M. (2004). *Public policy and teacher labor markets: What we know and why it matters*. East Lansing: The Education Policy Center at Michigan State University.
- Noguera, P.A. (1996). Confronting the urban in urban school reform. *Urban Review*, 28(1), 1-19.
- Ohio Education Research Center. (2013). *2013 Teacher supply and demand in ohio*. Columbus: Ohio Education Research Center.
- Olson, L. (2008, April 15). Lack of school leadership seen as a global problem. *Education Week*. Retrieved from <http://www.edweek.org>
- Papay, J.P., & Kraft, M.A. (2015). Delayed teacher hiring and student achievement: Missed opportunities in the labor market or temporary disruptions? Working paper.
- Rivkin, S.G., Hanushek, E.A., & Kain, J.F. (2005). Teachers, schools, and academic achievement. *Econometrica*, 73(2), 417-458.
- Scott, L.M. (n.d.). Enhancing principals' skills through sustainable mentoring programs [Webinar archive]. Retrieved from <https://www.youtube.com/embed/MIvx6-d3PXw>
- Seashore Louis, K., Dretzke, B., & Wahlstrom, K. (2010). How does leadership affect student achievement? Results from a national US survey. *School effectiveness and school improvement*, 21(3), 315-336.
- Sigler, D., & Kashyap, M.U. (2008). Human capital management: A new approach for districts. *Voices in Urban Education*, 20, 5-12.
- Spillane, J.P., & Lee, L.C. (2013). Novice school principals' sense of ultimate responsibility: Problems of practice in transitioning to the principal's office. *Educational Administration Quarterly*, 50(3), 431-465. doi: 10.1177/0013161X13505290
- The National Council for Accreditation of Teacher Education. (2010). *Transforming teacher education through clinical practice: A national strategy to prepare effective teachers*. Retrieved from <http://www.ncate.org/LinkClick.aspx?fileticket=zzeiB1OoqPk%3d&tabid=715>
- The New Teacher Project. (2006). *Improved principal hiring: The new teacher project's findings and recommendations for urban schools*. New York: The New Teacher Project.
- The New Teacher Project. (2012). *The irreplaceables: Understanding the real retention crisis in america's urban schools*. New York: The New Teacher Project.
- The Wallace Foundation. (2007). *Getting principal mentoring right: Lessons from the field*. Retrieved from <http://www.wallacefoundation.org/knowledge-center/school-leadership/principal-training/Documents/Getting-Principal-Mentoring-Right.pdf>
- U.S. Department of Education, Office of Planning, Evaluation and Policy Development. (2010). *Use of education data at the local level: From accountability to instructional improvement*. Retrieved from <http://www2.ed.gov/rschstat/eval/tech/use-of-education-data/use-of-education-data.pdf>

U.S. Department of Education, Institute of Education Sciences. (2014). *Do disadvantaged students get less effective teaching?* (NCEE 2014-4010). Retrieved from <http://ies.ed.gov/ncee/pubs/20144010/pdf/20144010.pdf>

U.S Department of Education. (2015). *State plans to ensure equitable access to excellent educators: Frequently asked questions*. Retrieved from <http://www2.ed.gov/programs/titleiparta/equitable/eafaq2015.pdf>

U.S. Department of Education. (2015). *Ohio 2014 title II report*. Retrieved from <https://title2.ed.gov/Public/Report/PrintReport.aspx?Year=2014&StateID=39>

Waters, T., Marzano, R.J., & McNulty, B. *Balanced leadership: What 30 years of research tells us about the effect of leadership on student achievement*. Aurora, CO: Mid-Continent Research for Education and Learning. Retrieved from <http://files.eric.ed.gov/fulltext/ED481972.pdf>

Zeichner, K. (2010). Rethinking the connections between campus courses and field experiences in college-and-university-based teacher education. *Journal of Teacher Education*, 61(1-2), 89-99.

Appendices

Appendix A. Sample External Stakeholder Invitation Letter

January 6, 2015

Name, Title
Organization
Address Line 1
Address Line 2

Dear Name:

The Ohio Department of Education invites you or a representative of your organization to get involved with the Excellent Educators for All Initiative announced by the U.S. Department of Education in July. This initiative is targeted to help states and school districts support great educators for the students who need them the most. One key piece of this initiative is the comprehensive educator equity plan due to the U.S. Department of Education in June 2015. The plan will describe the steps that the state is taking to ensure students from minority and poverty backgrounds are not taught at higher rates than other children by unqualified, inexperienced or out-of-field teachers. This has been required since 2002 with the reauthorization of the Elementary and Secondary Education Act.

It is vital to have stakeholder involvement throughout the four stages of development of Ohio's Equity Plan. The first stage is an analysis of data to determine if/what equity gaps exist in Ohio. The second stage is an analysis of "root causes" to better understand why/how particular gaps exist. The third stage involves the development of strategies to address the identified equity gaps. Lastly, feedback will be elicited on a draft written equity plan.

Ohio stakeholder groups will be critical to the crafting of a strong state plan with locally driven solutions. Please nominate a representative for the Ohio Equity Plan Work Group, which is tentatively scheduled to meet on:

- Friday, January 30, 2015 from 9 a.m. to 3:30 p.m.
- Friday, February 20, 2015 from 9 a.m. to 3:30 p.m.
- Monday, March 23, 2015 from 9 a.m. to 3:30 p.m.

All meetings will be held at Quest Business Center located at 8405 Pulsar Place, Columbus, Ohio 43240. The department will reimburse mileage costs.

Please send the name, organization and email address of your nominee to serve on the Ohio Equity Plan Work Group by Monday, January 12, 2015 to cheryl.krohn@education.ohio.gov.

Sincerely,



Julia Simmerer
Senior Executive Director
Ohio Department of Education

Appendix B. Ohio Equity Plan Work Group

Ohio Equity Plan Work Group	
Wendy Adams [Ohio Department of Higher Education]	Ellen Adornetto [Ohio Education Association]
Patty Nyquist [Ohio Education Association]	Jesse Truett [Ohio Alliance for Public Charter Schools]
Mike Rarick [Ohio Association of School Personnel Administrators]	Ken Baker [Ohio Association of Secondary School Administrators]
Deb Tully [Ohio Federation of Teachers]	Terri Hook [Ohio Federation of Teachers]
Dr. Beverly Good [Central Ohio English Language Learners' Education Collaborative/Otterbein]	Dr. Brenda Custodio [Ohio TESOL/Ohio State University]
Aretha Paydock [Ohio Association of Elementary School Administrators]	Yenetta Harper [Cincinnati Public Schools]
Jackie Arendt [Ohio Parent Teacher Association]	Tracey Johnson [Columbus Education Association]
Dr. John Stanford [Columbus City Schools]	Cynthia Lemmerman [Lorain City Schools]
Rhonda Johnson [City of Columbus]	Sharon McDermott [Ohio Appalachian Collaborative]
Dr. Thomas Tucker [Lorain City Schools]	Debbie Aimes [Rolling Hills School District]
Dave Axner [BASA]	Luther Johnson, Jr. [Cleveland Metropolitan School District]
Damon Asbury [Ohio School Board Association]	Terri McIntee [OCECD]
Lisa Heins [Circleville City School District]	Dr. Nancy Nestor-Baker [United Way of Central Ohio]
Craig Burford [OESCA]	Lynn Smith [Toledo Federation of Teachers]

Appendix C. Meeting One Agenda

Ohio's Equity Stakeholder Meeting One

Date: Friday, January 30, 2015

Time: 9:00 a.m. to 3:45 p.m.

Location: Quest Business Center (Capitol Room)

9:00 a.m.	Introductions, Objectives
	History of Equity Work
	Excellent Educators for All Initiative Overview
	A Glimpse at US DoE Educator Equity Profile for Ohio
11:30 a.m. – 1 p.m.	Lunch (on own)
	Definitions of Required Terms
	Understanding Data Sources and Measures
	Review Approaches for Educator Equity Gap Analysis
3:45 p.m.	Closing

Appendix D. Meeting Two Agenda

Ohio's Equity Stakeholder Meeting Two

Date: Monday, March 23, 2015

Time: 9:00 a.m. to 3:30 p.m.

Location: Quest Business Center (Worthington Room)

9:00 a.m.	Introductions, Objectives, Excellent Educators for All Initiative Overview
	Update from Federal Convening, and Reviewing Stakeholder Meeting One
	Equity Gap Data Review & Feedback
12:00-1:30 p.m.	Lunch (on own)
	Progress Monitoring Review & Feedback
	Overview of Root-Cause Analysis Process
3:30 p.m.	Closing

Appendix E. Meeting Three Agenda

Ohio's Equity Stakeholder Meeting Three

Date: Monday, April 13, 2015

Time: 9:00 a.m. to 3:30 p.m.

Location: Quest Business Center

9:00 a.m.	Introductions, Objectives, Excellent Educators for All Initiative Overview
	Feedback from March <ul style="list-style-type: none">• Definitions• Measures to Include
	Root-Cause Analysis Process
	Root-Cause Analysis and Strategy Development <ul style="list-style-type: none">• Teacher Effectiveness
11:30-1:00 p.m.	Lunch (on own)
1:00 p.m.	Root-Cause Analysis and Strategy Development <ul style="list-style-type: none">• Principal Effectiveness• Unqualified Educators• Inexperienced Educators• Out-of-Field Educators
3:30 p.m.	Closing

Appendix F. Overview of Ohio Schools: Poverty, Minority and Region

With respect to student racial and socioeconomic status, enrollment in Ohio's 614 traditional public school districts and 385 charter and STEM schools is diverse. Table F-1 shows the distribution of public schools across a matrix intersecting the poverty and minority quartiles, with schools placed into quartiles based on their enrollment characteristics.

TABLE F-1. COUNT OF SCHOOLS, STATEWIDE, BY POVERTY AND MINORITY QUARTILE OF SCHOOL ENROLLMENT.¹⁷

Total Schools	In High Minority schools	In Medium-High Minority schools	In Medium-Low Minority schools	In Low Minority schools	Poverty Quartiles
In High Poverty schools	640	130	21	37	828
In Medium-High Poverty schools	150	239	201	274	864
In Medium-Low Poverty schools	33	225	282	341	881
In Low Poverty schools	15	253	343	208	819
Minority Quartiles:	838	847	847	860	3,392

Table F-2 shows the distribution of student population in Ohio's public schools,¹⁸ split into the same standard matrix of poverty and minority quartiles. The numbers here represent all students enrolled in these schools, not only the students who have poverty or minority status. In illustration, there are 250,688 students enrolled in the 640 schools in the upper left corner of the matrix. While these 640 schools fall into the highest quartile for both poverty and minority percentage of enrollment, certainly some of those students are not economically disadvantaged, and some of those students are white.

TABLE F-2. STUDENT ENROLLMENT, STATEWIDE, BY POVERTY AND MINORITY QUARTILE.

Total Enrollment	In High Minority schools	In Medium-High Minority schools	In Medium-Low Minority schools	In Low Minority schools	Poverty Quartiles
In High Poverty schools	241,746	66,370	5,790	12,125	326,032
In Medium-High Poverty schools	78,922	137,029	89,060	105,569	410,580
In Medium-Low Poverty schools	19,471	137,310	135,995	143,704	436,480
In Low Poverty schools	7,884	177,744	219,567	90,556	495,750
Minority Quartiles:	348,023	518,453	450,412	351,954	1,668,842

¹⁷ The statewide quartiles for poverty enrollment and minority enrollment encompass a larger universe of schools than is included in the equity gap analysis. For example, public preschools and vocational schools are part of the standard determination of quartiles; however, neither of these school types is applicable for the equity gap analysis due to reporting conventions.

¹⁸ Enrollment here refers to Average Daily Membership for school year 2013-2014.

High poverty and minority enrollments do tend to co-occur in Ohio, as in many states, and these demographic dimensions intersect with the rural-to-urban spectrum of districts. In urban districts and charter schools, higher poverty rates tend to coincide with higher minority rates. In rural districts, we find many schools with medium-to-high rates of student poverty, but relatively low minority enrollment. Schools in suburban districts, on the other hand, may have medium-to-high rates of minority enrollment, but most have medium-to-low levels of economic disadvantage. Ohio's District Typology includes a rural-to-urban categorization. Community schools are treated as a separate type, but the majority are located in urban district boundaries. Ohio's "Urban 8" districts include Akron, Canton, Cincinnati, Columbus, Cleveland, Dayton, Toledo, and Youngstown. Table F-3 shows the distribution of schools by type, again crossed by the poverty and minority quartiles.

TABLE F-3. COUNT OF SCHOOLS, STATEWIDE, BY POVERTY AND MINORITY QUARTILE AND DISTRICT TYPE.

<i>Total Schools</i>	High Minority	Medium-High Minority	Medium-Low Minority	Low Minority
High Poverty				
Rural	0	1	4	33
Small Town	4	20	13	3
Suburban	7	1	1	0
Urban (other)	112	54	1	0
Urban 8	323	29	0	0
Community School	194	25	2	1
Medium-High Poverty				
Rural	0	6	59	220
Small Town	10	94	121	51
Suburban	43	37	7	1
Urban (other)	32	76	7	0
Urban 8	40	9	0	0
Community School	25	17	7	2
Medium-Low Poverty				
Rural	0	5	61	230
Small Town	0	41	143	103
Suburban	23	126	69	8
Urban (other)	1	40	7	0
Urban 8	5	5	0	0
Community School	4	8	2	0
Low Poverty				
Rural	0	2	12	76
Small Town	0	8	66	95
Suburban	11	229	258	37
Urban (other)	1	5	6	0
Urban 8	1	5	0	0
Community School	2	4	1	0

Appendix G. Supporting Materials for Quantitative Data Analysis

RATES BY POVERTY AND MINORITY QUARTILES

For further detail on each educator quality measure, taking into account relative enrollment of *both* economically disadvantaged and students of color, the following tables depict the rate on each measure, **for the set of schools in each poverty/minority cell of the matrix.**

TABLE G-1. PERCENT UNQUALIFIED CORE COURSES, STATEWIDE, BY POVERTY AND MINORITY QUARTILE.

<i>Unqualified</i>	In High Minority schools	In Medium-High Minority schools	In Medium-Low Minority schools	In Low Minority schools	Poverty Quartiles
In High Poverty schools	4.7	0.7	1.3	1.9	3.8
In Medium-High Poverty schools	3.9	0.5	0.3	0.4	1.1
In Medium-Low Poverty schools	2.4	0.3	0.2	0.3	0.4
In Low Poverty schools	0.9	0.6	0.2	0.3	0.3
Minority Quartiles:	4.3	0.5	0.2	0.4	1.2

TABLE G-2. PERCENT OUT-OF-FIELD CORE COURSES, STATEWIDE, BY POVERTY AND MINORITY QUARTILE.

<i>Out-of-Field</i>	In High Minority schools	In Medium-High Minority schools	In Medium-Low Minority schools	In Low Minority schools	Poverty Quartiles
In High Poverty schools	6.7	2.1	1.3	3.5	5.7
In Medium-High Poverty schools	4.7	0.8	0.7	1.0	1.6
In Medium-Low Poverty schools	1.1	0.6	0.7	0.9	0.8
In Low Poverty schools	2.7	0.7	0.5	0.7	0.6
Minority Quartiles:	5.9	0.9	0.6	1.0	1.9

TABLE G-3. PERCENT INEXPERIENCED TEACHERS, STATEWIDE, BY POVERTY AND MINORITY QUARTILE.

<i>Inexperienced Teachers</i>	In High Minority schools	In Medium-High Minority schools	In Medium-Low Minority schools	In Low Minority schools	Poverty Quartiles
In High Poverty schools	23.0	17.1	23.6	8.5	21.4
In Medium-High Poverty schools	19.7	17.1	14.6	13.2	16.0
In Medium-Low Poverty schools	16.1	15.8	14.1	12.9	14.3
In Low Poverty schools	13.5	12.6	12.5	12.9	12.6
Minority Quartiles:	21.7	15.1	13.6	12.8	15.7

TABLE G-4. PERCENT INEFFECTIVE TEACHERS, STATEWIDE, BY POVERTY AND MINORITY QUARTILE.

<i>Teachers Rated Ineffective</i>	In High Minority schools	In Medium-High Minority schools	In Medium-Low Minority schools	In Low Minority schools	Poverty Quartiles
In High Poverty schools	3.1	1.6	0.4	0.7	2.7
In Medium-High Poverty schools	1.2	0.6	0.4	0.3	0.6
In Medium-Low Poverty schools	1.1	0.5	0.3	0.7	0.5
In Low Poverty schools	0.5	0.2	0.2	0.4	0.2
Minority Quartiles:	2.5	0.6	0.3	0.5	1.0

TABLE G-5. PERCENT INEFFECTIVE PRINCIPALS, STATEWIDE, BY POVERTY AND MINORITY QUARTILE.

<i>Principals Rated Ineffective</i>	In High Minority schools	In Medium-High Minority schools	In Medium-Low Minority schools	In Low Minority schools	Poverty Quartiles
In High Poverty schools	1.6	0.0	0.0	0.0	1.3
In Medium-High Poverty schools	0.4	0.5	0.0	0.8	0.5
In Medium-Low Poverty schools	0.0	0.3	0.2	0.6	0.4
In Low Poverty schools	0.0	0.0	0.2	0.0	0.1
Minority Quartiles:	1.3	0.2	0.2	0.5	0.5

DISTRIBUTIONS OF COURSES, TEACHERS, AND SCHOOL LEADERS

When comparing core courses across the state, the *out-of-field* and *unqualified* courses are over-represented in schools with higher enrollments of students in poverty *and* those with higher enrollments of minority students. The first set of three tables shows the numbers of courses and then *unqualified* and *out-of-field* courses, by poverty and minority quartiles.

TABLE G-6. TOTAL CORE COURSES, STATEWIDE, BY POVERTY AND MINORITY QUARTILE.

<i>Total Courses</i>	In High Minority schools	In Medium-High Minority schools	In Medium-Low Minority schools	In Low Minority schools	Poverty Quartiles
In High Poverty schools	75,513	17,553	2,028	3,895	98,989
In Medium-High Poverty schools	24,565	35,730	25,988	31,134	117,417
In Medium-Low Poverty schools	6,367	40,401	43,698	45,061	135,527
In Low Poverty schools	2,012	53,693	67,478	29,282	152,465
Minority Quartiles:	108,457	147,377	139,192	109,372	504,398

TABLE G-7. UNQUALIFIED CORE COURSES, STATEWIDE, BY POVERTY AND MINORITY QUARTILE.

<i>Unqualified</i>	In High Minority schools	In Medium-High Minority schools	In Medium-Low Minority schools	In Low Minority schools	Poverty Quartiles
In High Poverty schools	3,531	128	26	73	3,758
In Medium-High Poverty schools	963	182	86	119	1,350
In Medium-Low Poverty schools	154	119	90	145	508
In Low Poverty schools	19	311	107	85	522
Minority Quartiles:	4,667	740	309	422	6,138

TABLE G-8. OUT-OF-FIELD CORE COURSES, STATEWIDE, BY POVERTY AND MINORITY QUARTILE.

<i>Out-of-Field</i>	In High Minority schools	In Medium-High Minority schools	In Medium-Low Minority schools	In Low Minority schools	Poverty Quartiles
In High Poverty schools	5,078	369	26	135	5,608
In Medium-High Poverty schools	1,156	297	169	308	1,930
In Medium-Low Poverty schools	68	237	324	405	1,034
In Low Poverty schools	55	363	339	219	976
Minority Quartiles:	6,357	1,266	858	1,067	9,548

Schools with high levels of poverty and minority among the student population are more likely to encounter an *inexperienced teacher* in their classroom. The following set of tables shows the numbers of teachers in each quartile statewide, and then the number of *inexperienced teachers* by quartile.

TABLE G-9. TOTAL TEACHERS, STATEWIDE, BY POVERTY AND MINORITY QUARTILE.

<i>Total Teachers</i>	In High Minority schools	In Medium-High Minority schools	In Medium-Low Minority schools	In Low Minority schools	Poverty Quartiles
In High Poverty schools	17,230	4,171	445	836	22,682
In Medium-High Poverty schools	5,279	8,145	5,939	7,189	26,552
In Medium-Low Poverty schools	1,289	8,768	8,792	9,384	28,233
In Low Poverty schools	498	11,368	13,781	5,869	31,516
Minority Quartiles:	24,296	32,452	28,957	23,278	108,983

TABLE G-10. INEXPERIENCED TEACHERS, STATEWIDE, BY POVERTY AND MINORITY QUARTILE.

<i>Inexperienced Teachers</i>	In High Minority schools	In Medium-High Minority schools	In Medium-Low Minority schools	In Low Minority schools	Poverty Quartiles
In High Poverty schools	3,958	713	105	71	4,847
In Medium-High Poverty schools	1,041	1,390	869	950	4,250
In Medium-Low Poverty schools	208	1,384	1,238	1,210	4,040
In Low Poverty schools	67	1,428	1,723	760	3,978
Minority Quartiles:	5,274	4,915	3,935	2,991	17,115

When comparing the effectiveness of teachers and principals across the quartiles, we also find that *ineffectiveness* is inequitably distributed. The following set of tables shows the numbers of teachers and principals evaluated statewide, by poverty and minority quartiles, followed by the distribution of *ineffective teachers* and *ineffective principals* across schools in these quartiles.

TABLE G-11. TOTAL TEACHERS EVALUATED, STATEWIDE, BY POVERTY AND MINORITY QUARTILE.

<i>Evaluated Teachers</i>	In High Minority schools	In Medium-High Minority schools	In Medium-Low Minority schools	In Low Minority schools	Poverty Quartiles
In High Poverty schools	14,113	3,531	245	833	18,722
In Medium-High Poverty schools	4,521	6,676	4,456	5,459	21,112
In Medium-Low Poverty schools	942	6,457	6,008	6,447	19,854
In Low Poverty schools	364	7,194	9,946	4,588	22,092
Minority Quartiles:	19,940	23,858	20,655	17,327	81,780

TABLE G-12. TEACHERS RATED AS INEFFECTIVE, STATEWIDE, BY POVERTY AND MINORITY QUARTILE.

<i>Teachers Rated as Ineffective</i>	In High Minority schools	In Medium-High Minority schools	In Medium-Low Minority schools	In Low Minority schools	Poverty Quartiles
In High Poverty schools	441	58	1	6	506
In Medium-High Poverty schools	53	40	17	19	129
In Medium-Low Poverty schools	10	35	21	43	109
In Low Poverty schools	2	11	19	18	50
Minority Quartiles:	506	144	58	86	794

TABLE G-13. TOTAL PRINCIPALS EVALUATED, STATEWIDE, BY POVERTY AND MINORITY QUARTILE.

<i>Principals Evaluated</i>	In High Minority schools	In Medium-High Minority schools	In Medium-Low Minority schools	In Low Minority schools	Poverty Quartiles
In High Poverty schools	975	184	25	42	1,226
In Medium-High Poverty schools	254	366	301	370	1,291
In Medium-Low Poverty schools	60	385	413	475	1,333
In Low Poverty schools	20	478	574	291	1,363
Minority Quartiles:	1,309	1,413	1,313	1,178	5,213

TABLE G-14. PRINCIPALS RATED AS INEFFECTIVE, STATEWIDE, BY POVERTY AND MINORITY QUARTILE.

<i>Principals Rated as Ineffective</i>	In High Minority schools	In Medium-High Minority schools	In Medium-Low Minority schools	In Low Minority schools	Poverty Quartiles
In High Poverty schools	16	0	0	0	16
In Medium-High Poverty schools	1	2	0	3	6
In Medium-Low Poverty schools	0	1	1	3	5
In Low Poverty schools	0	0	1	0	1
Minority Quartiles:	17	3	2	6	28

PREVALENCE OF WORKFORCE WEAKNESSES ACROSS SCHOOLS

The following set of tables describes the number of Ohio schools that have a low versus high or very high value on a given measure of educator quality. Schools are divided into two groups—(1) those that fall within the highest poverty and/or highest minority quartile of schools statewide and (2) the remainder of schools in the state. For each of the two groups of schools, we present a distribution of the members that are at various levels of severity for the measure. The distributions allow for comparisons such as the following: Among schools that are high poverty and/or high minority enrollment, 17.3% (or 178 schools) have at least one out of every 10 core courses taught by a teacher without proper licensure; the same is true of only 1.5% (36) of all other schools statewide.

TABLE G-15. SCHOOLS, STATEWIDE, BY PERCENT UNQUALIFIED CORE COURSES.

<i>Unqualified</i>	High Poverty or High Minority Schools	Pct	All Other Schools	Pct
With fewer than 2% of courses	776	75.6	2,272	96.0
With 2.0 - 4.9% of courses	78	7.6	52	2.2
With 5.0 - 9.9% of courses	65	6.3	24	1.0
With 10% or more of courses	107	10.4	18	0.8
All schools	1,026	100.0	2,366	100.0

TABLE G-16. SCHOOLS, STATEWIDE, BY PERCENT OUT-OF-FIELD CORE COURSES.

<i>Out-of-Field</i>	High Poverty or High Minority Schools	Pct	All Other Schools	Pct
With fewer than 2% of courses	613	59.7	2,091	88.4
With 2.0 - 4.9% of courses	135	13.2	160	6.8
With 5.0 - 9.9% of courses	100	9.7	79	3.3
With 10% or more of courses	178	17.3	36	1.5
All schools	1,026	100.0	2,366	100.0

TABLE G-17. SCHOOLS, STATEWIDE, BY PERCENT INEXPERIENCED TEACHERS.

<i>Inexperienced Teachers</i>	High Poverty or High Minority Schools	Pct	All Other Schools	Pct
With fewer than 10% of teachers	376	36.6	1,138	48.1
With 10-.0 - 14.9% of teachers	138	13.5	427	18.0
With 15.0 - 24.9% of teachers	186	18.1	440	18.6
With 25.0 - 39.9% of teachers	116	11.3	226	9.6
With 40% or more of teachers	210	20.5	135	5.7
All schools	1,026	100.0	2,366	100.0

TABLE G-18. SCHOOLS, STATEWIDE, BY PERCENT TEACHERS RATED INEFFECTIVE.

Teachers Rated as Ineffective	High Poverty or High Minority Schools	Pct	All Other Schools	Pct
With fewer than 2% of teachers	630	72.0	1,661	92.2
With 2.0 - 4.9% of teachers	96	11.0	91	5.1
With 5.0 - 9.9% of teachers	86	9.8	40	2.2
With 10% or more of teachers	63	7.2	9	0.5
All schools	875	100.0	1,801	100.0

Appendix H. Ohio's Timeline for Implementing Strategies

Strategy One: Strengthen Educator Preparation	Implementation Time Frame	SEA Staff
1.1 Disseminate Educator Preparation Reports in Ohio that provide data on passing rates and the number and specialization of educators produced by each institution of higher education; continue expanding performance measures contained in these reports.	Began 2012; Ongoing	Dept. of Higher Education, Center for Teaching Profession
1.2 Offer professional development for educator preparation faculty on Value-Added Measures to encourage the embedding of value-added learning in coursework at the educator preparation level.	2015-2016	Dept. of Higher Education, Ed Policy, Center for Teaching Profession
1.3 Conduct research on the link between educator preparation and student performance data; use data to inform preparation program improvement.	Begin 2015-2016	Dept. of Higher Education, Office of Accountability, Center for Teaching Profession
1.4 Support clinical field experience initiatives by universities and pre-kindergarten through grade 12 education.	Began 2012; Ongoing	Dept. of Higher Education
1.5 Require teacher preparation programs to include cultural competency in their curricula that will help new educators be successful with the students, families and communities they serve.	Began 2005; Ongoing	Dept. of Higher Education

Strategy Two: Target Hiring and Deployment Barriers	Implementation Time Frame	SEA Staff
2.1 Pilot recruitment programs designed to prepare educators for high-needs fields and hard-to-staff schools.	Begin 2015	Dept. of Higher Education
2.2 Encourage incentives for teachers to teach in high-needs fields.	Began 2010; Ongoing	Dept. of Higher Education, Center for Teaching Profession
2.3 Promote partnerships that help districts recruit and hire qualified international teachers in the state's identified shortage	Began 2007; Ongoing	Curriculum

areas.		
2.4 Utilize a Credential Review Board to review the licensure applications of out-of-state candidates as well as candidates requesting licensure through alternative routes.	Began 2005; Ongoing	Center for Teaching Profession
2.5 Provide funds to institutions of higher education to create and implement dual-certification routes for special educators.	Begin 2015	Dept. of Higher Education, Office of Exceptional Children, Center for Teaching Profession
2.6 Offer a statewide Web-based Recruitment System; provide technical assistance to hard-to-staff schools to help them fully utilize the system.	Began 2008; Ongoing	Center for Teaching Profession
2.7 Support the continued partnerships between institutions of higher education and school districts to provide professional development for teachers in high-needs schools.	Began 2009; Ongoing	Dept. of Higher Education, Curriculum
2.8 Publish a supply and demand study (every three to five years).	Began 2004; Ongoing periodic report	Center for Teaching Profession, Office of Educational Policy & Research
2.9 Encourage local stakeholders to work collaboratively to review collective bargaining agreements to determine appropriate and effective ways of placing teachers.	Begin 2015-2016	Center for Teaching Profession

Strategy Three: Improve Teaching and Learning Conditions	Implementation Time Frame	SEA Staff
3.1 Require high-quality induction for all new teachers, including those who enter the profession through alternative routes.	Began 2011; Ongoing	Center for Teaching Profession
3.2 Provide a state-developed list of trained mentors for beginning principals; explore partnerships with educational service centers and principal organizations to provide models of beginning principal mentoring programs for use at local levels.	Begin 2015-2016	Center for Teaching Profession
3.3 Advocate the use of Ohio's updated Professional Development Standards in designing high-quality professional learning experiences; provide educators with tools to help them use the new standards.	Begin 2015-2016	Center for Teaching Profession

3.4 Provide a teaching and learning conditions survey for districts; explore opportunities to expand the use of a survey.	Began 2012; Ongoing	Center for Teaching Profession
3.5 Support local educators with field specialists who offer expertise in areas such as student growth measures, assessment literacy, Resident Educator program for beginning teachers and the Ohio Teacher and Principal Evaluation Systems.	2015-2016	Center for Teaching Profession
3.6 Conduct a co-observation pilot ¹⁹ to understand the potential opportunities for teacher leadership.	Begin 2015	Center for Teaching Profession
3.7 Provide a teacher exit survey for districts and schools.	Begin 2015-2016	Center for Teaching Profession
3.8 Assist districts and schools in utilizing the educator evaluation systems in Ohio for educator professional growth and development.	Began 2014; Ongoing	Center for Teaching Profession
3.9 Pilot various teacher leadership programs or models.	Began 2011; Ongoing	Center for Teaching Profession

Strategy Four: Provide Data to Encourage Strategic Staffing and Educator Development	Implementation Time Frame	SEA Staff
4.1 Encourage strategic staffing decisions using student and educator data to cultivate an environment with high-quality instruction and high expectations.	Begin 2016	Center for Teaching Profession
4.2 Provide a data tool to aid districts in monitoring students' equitable access to excellent educators within and across schools.	Begin 2015-2016	Center for Teaching Profession, Data,
4.3 Advocate for data systems that report the number of teachers changing schools within districts, changing positions within their districts, moving to other districts or into administration or leaving the profession.	Begin 2015-2016	Center for Teaching Profession
4.4 Expand reports available in the electronic Teacher and Principal Evaluation System to help districts understand patterns and trends in schools.	Begin 2015	Center for Teaching Profession
4.5 Provide report cards about district and school progress, such as student performance, enrollment, graduation rate, education funding and teacher qualifications.	Began 1999; Ongoing	Office of Accountability
4.6 Consider expanding student subgroups to the Educator Workforce Strength Index utilizing external stakeholder input (ex. English language learners, special education).	Begin 2015-2016	Center for Teaching Profession

¹⁹ The co-observation pilot is currently in development for a small subset of Teacher Incentive Fund districts in Ohio. The model has teacher leaders and principals engaging in a process where they co-observe teachers in the evaluation cycle. Teacher leaders and principals partner together in this model to enhance the feedback and professional learning opportunities given to teachers.

4.7 Establish a clearinghouse of best practices at the local and regional levels that focuses on ensuring equitable access to excellent educators.	Begin 2015-2016	Center for Teaching Profession
4.8 Expand research on the impact of current Ohio initiatives through the Ohio Education Research Center.	Begin 2015-2016	Ed Policy
4.9 Partner with regional centers and organizations to offer trainings on using evaluation data to inform professional learning.	Began 2014; Ongoing	Center for Teaching Profession

Appendix I. Root-Cause/Strategy and Equity Gap Alignment

The table below aligns each of Ohio's four root-cause categories and four strategies to the related equity gap(s) in Ohio's Educator Equity Plan. When an x is indicated in the chart below, the strategy listed is an option for schools to utilize when addressing that particular educator equity gap.

Root Cause: Educator Preparation Strategy One: Strengthen Educator Preparation	Related Equity Gap				
	Unqualified	Out-of-Field	Inexperienced	Ineffective Teachers	Ineffective Principals
1.1 Disseminate Educator Preparation Reports in Ohio that provide data on passing rates and the number and specialization of educators produced by each institution of higher education; continue expanding performance measures contained in these reports.			x	x	x
1.2 Offer professional development for educator preparation faculty on Value-Added Measures to encourage the embedding of value-added learning in coursework at the educator preparation level.			x	x	x
1.3 Conduct research on the link between educator preparation and student performance data; use data to inform preparation program improvement.			x	x	x
1.4 Support clinical field experience initiatives by universities and pre-kindergarten through grade 12 education.			x	x	x
1.5 Require teacher preparation programs to include cultural competency in their curricula that will help new educators be successful with the students, families and communities they serve.			x	x	x

Root Cause: Hiring and Deployment Barriers Strategy Two: Target Hiring and Deployment Barriers	Related Equity Gap				
	Unqualified	Out-of-Field	Inexperienced	Ineffective Teachers	Ineffective Principals
2.1 Pilot recruitment programs designed to prepare educators for high-needs fields and hard-to-staff schools.	x	x	x	x	x
2.2 Encourage incentives for teachers to teach in high-needs fields.	x	x	x	x	x
2.3 Promote partnerships that help districts recruit and hire qualified international teachers in the state's identified shortage areas.	x	x	x	x	x
2.4 Utilize a Credential Review Board to review the licensure	x	x	x	x	x

applications of out-of-state candidates as well as candidates requesting licensure through alternative routes.					
2.5 Provide funds to institutions of higher education to create and implement dual-certification routes for special educators.	x	x	x	x	
2.6 Offer a statewide Web-based Recruitment System; provide technical assistance to hard-to-staff schools to help them fully utilize the system.	x	x	x		
2.7 Support the continued partnerships between institutions of higher education and school districts to provide professional development for teachers in high-needs schools.	x	x	x	x	
2.8 Publish a supply and demand study (every three to five years).	x	x	x		
2.9 Encourage local stakeholders to work collaboratively to review collective bargaining agreements to determine appropriate and effective ways of placing teachers.	x	x	x	x	

Root Cause: Teaching and Learning Conditions Strategy Three: Improve Teaching and Learning Conditions	Related Equity Gap				
	Unqualified	Out-of-Field	Inexperienced	Ineffective Teachers	Ineffective Principals
3.1 Require high-quality induction for all new teachers, including those who enter the profession through alternative routes.			x	x	
3.2 Provide a state-developed list of trained mentors for beginning principals; explore partnerships with educational service centers and principal organizations to provide models of beginning principal mentoring programs for use at local levels.					x
3.3 Advocate the use of Ohio's updated Professional Development Standards in designing high-quality professional learning experiences; provide educators with tools to help them use the new standards.	x	x	x	x	x
3.4 Provide a teaching and learning conditions survey for districts; explore opportunities to expand the use of a survey.	x	x	x	x	x
3.5 Support local educators with field specialists who offer expertise in areas such as student growth measures, assessment literacy, Resident Educator program for beginning teachers and the Ohio Teacher and Principal Evaluation Systems.			x	x	x
3.6 Conduct a co-observation pilot to understand the potential opportunities for teacher leadership.			x	x	
3.7 Provide a teacher exit survey for districts and schools.	x	x	x	x	
3.8 Assist districts and schools in utilizing the educator evaluation systems in Ohio for educator professional growth and development.				x	x
3.9 Pilot various teacher leadership programs or models.			x	x	

Root Cause: Teaching and Learning Conditions Strategy Three: Improve Teaching and Learning Conditions	Related Equity Gap				
	Unqualified	Out-of-Field	Inexperienced	Ineffective Teachers	Ineffective Principals
4.1 Encourage strategic staffing decisions using student and educator data to cultivate an environment with high-quality instruction and high expectations.	x	x	x	x	x
4.2 Provide a data tool to aid districts in monitoring students' equitable access to excellent educators within and across schools.	x	x	x	x	x
4.3 Advocate for data systems that report the number of teachers changing schools within districts, changing positions within their districts, moving to other districts or into administration or leaving the profession.	x	x	x	x	
4.4 Expand reports available in the electronic Teacher and Principal Evaluation System to help districts understand patterns and trends in schools.				x	x
4.5 Provide report cards about district and school progress, such as student performance, enrollment, graduation rate, education funding and teacher qualifications.	x	x	x	x	
4.6 Consider expanding student subgroups to the Educator Workforce Strength Index utilizing external stakeholder input (ex. English language learners, special education).	x	x	x	x	x
4.7 Establish a clearinghouse of best practices at the local and regional levels that focuses on ensuring equitable access to excellent educators.	x	x	x	x	x
4.8 Expand research on the impact of current Ohio initiatives through the Ohio Education Research Center.	x	x	x	x	x
4.9 Partner with regional centers and organizations to offer trainings on using evaluation data to inform professional learning.			x	x	x

Appendix J. Sample Teacher Distribution File (TDF)

(IRN001) Equity High School

1.) Identify where more than 10% of the core courses are being taught by not highly qualified teachers by core subject area and by school.

Core Subject Area	HQT Course Count	Core Course Count	HQT Percent	Not HQT Percent
Arts	6	19	31.6%	68.4%
Civics and Government	10	10	100.0%	0.0%
Economics	10	10	100.0%	0.0%
English	9	16	56.3%	43.8%
Foreign Language	9	21	42.9%	57.1%
History	16	18	88.9%	11.1%
Language Arts	43	47	91.5%	8.5%
Mathematics	44	50	88.0%	12.0%
Science	37	42	88.1%	11.9%

2.) Identify the percentage of highly qualified and not highly qualified teachers in high-poverty and low-poverty schools.

School Poverty Level
Not Applicable

3.) Identify the percentage of minority and economically disadvantaged students who are taught by inexperienced teachers.

Core Subject Area	Number of Minority and Economically Disadvantaged Students Being Taught by an Inexperienced Teacher	Number of Minority and Economically Disadvantaged Students	Percent of Minority and Economically Disadvantaged Students Being Taught by an Inexperienced Teacher	Number of All Students Being Taught by an Inexperienced Teacher	Number of All Students	Percent of All Students Being Taught by an Inexperienced Teacher
Arts	0	171	0.0%	0	337	0.0%
Civics and Government	0	89	0.0%	0	231	0.0%
Economics	0	94	0.0%	0	239	0.0%
English	21	126	16.7%	52	313	16.6%
Foreign Language	58	175	33.1%	111	410	27.1%
History	0	209	0.0%	0	369	0.0%
Language Arts	0	362	0.0%	0	764	0.0%
Mathematics	117	360	32.5%	303	732	41.4%
Science	76	354	21.5%	130	711	18.3%

4.) Identify the percentage of minority and economically disadvantaged students who are taught by not highly qualified teachers.

Core Subject Area	Number of Minority and Economically Disadvantaged Students Being Taught By a Not Highly Qualified Teacher	Number of Minority and Economically Disadvantaged Students	Percent of Minority and Economically Disadvantaged Students Being Taught By a Not Highly Qualified Teacher	Number of All Students Being Taught By a Not Highly Qualified Teacher	Number of All Students	Percent of All Students Being Taught By a Not Highly Qualified Teacher
Arts	123	171	71.9%	239	337	70.9%
Civics and Government	0	89	0.0%	0	231	0.0%
Economics	0	94	0.0%	0	239	0.0%
English	45	126	35.7%	129	313	41.2%
Foreign Language	110	175	62.9%	246	410	60.0%
History	4	209	1.9%	7	369	1.9%
Language Arts	29	362	8.0%	58	764	7.6%
Mathematics	35	360	9.7%	65	732	8.9%
Science	21	354	5.9%	59	711	8.3%

5.) Identify the percentage of inexperienced teachers (less than 3 years) in high-poverty and low-poverty schools by core subject area.

School Poverty Level
Not Applicable

Core Subject Area	Inexperienced Teacher Count	Total Teacher Count	Percent of Inexperienced Teachers
Arts	0	5	0.00%
Civics and Government	0	5	0.00%
Economics	0	5	0.00%
English	1	8	12.50%
Foreign Language	1	4	25.00%
History	0	6	0.00%
Language Arts	0	8	0.00%
Mathematics	3	11	27.27%
Science	1	12	8.33%

Appendix K. Sample Educator Workforce Strength Index (District and Building Level)

**Educator Workforce Strength Index: District Sample
2013-2014 Data**

[illegible]