

Initiating School Improvement: An Analysis of Improvement Priorities Issued by the Kentucky Department of Education

Matthew B. Courtney
Kentucky Department of Education, USA

ABSTRACT

In the United States, state education agencies (SEAs) are required to regularly identify low-performing schools. Initiating the school improvement process is one of the most important, yet most challenging steps. The Kentucky Department of Education (KDE) has been nationally recognized for the way it initiates the school improvement process. This study seeks to distill findings from 476 suggested first steps issued by the KDE to create action statements that a school leader could use when initiating school improvement on their own. School improvement audit reports were accessed from the KDE. Four hundred seventy-six school improvement priorities (IPs) were coded using a two-tier conceptual coding protocol to distil IPs into essential improvement priorities (EIPs) that reflect the steps required to initiate school improvement. The coding protocol yielded 38 EIPs divided among eight themes. The most frequently assigned EIP relates to the deployment of a consistent improvement process, with the second most frequently assigned EIP being related to the establishment of a school-wide instructional process. Leaders of schools with declining performance may use the EIPs identified by this study to inform their improvement efforts as they seek to enhance teaching and learning conditions in their school.

Keywords: comprehensive support and improvement, improvement leadership, Kentucky, principal support, school improvement

INTRODUCTION

In 2012, the Kentucky Department of Education (KDE) began implementing a school improvement audit procedure called the Diagnostic Review (DR) as a mechanism to initiate turnaround processes in low-performing schools. These audits provide a thorough overview of the current state of the school and result in the creation of immediate action steps called improvement priorities (IPs). Over the years, commonalities between IPs have begun to arise. This paper seeks to synthesize the advice of 476 IPs into a series of clear action steps that, once generalized to a broader setting, may be used to help initiate school improvement efforts.

LITERATURE REVIEW

School Improvement Models

When a leader is seeking to implement an improvement process in their school, there are several models that can guide their work. School improvement models are usually rooted in improvement science, a method of driving continuous improvement that focuses on intensely studying problems of practice and facilitating incremental and sustainable change in a disciplined, evidence-based way (Park, 2013). Improvement science has been a powerful tool deployed in industry settings for many years and can improve teaching and learning conditions and motivate staff (Lewis, 2015; Peterson, 2016). School leaders have found success in implementing variations of improvement science, such as plan-do-study-act cycles (Tinchor-Wagner et al., 2017; Sears et al., 2019) and action research (Downes et al., 2016; Ward & Miller, 2019; Aldridge, 2021), into their improvement planning processes. Similarly, concepts of improvement science have successfully been integrated into professional learning communities (PLCs) or teacher collaboration and networking meetings (Hannan et al., 2015; Woodland, 2016).

School leaders have benefited from the work of various organizations, such as the Carnegie Foundation for the Advancement of Teaching, the Council of Chief State School Officers, the Center for School Turnaround at WestEd, the Bill and Melinda Gates Foundation, and the US Department of Education's What Works Clearinghouse, who have posed their own unique spins on the school improvement framework. These models, ranging anywhere from three to ten recommendations or principles, are meant to guide leaders as they work to improve teaching and learning conditions. They generally point to the transitioning role of the principal as both a motivational and instructional leader (Calkins et al., 2007; Herman et al., 2008; Kutash et al., 2010; The Center on School Turnaround, 2017; Council of Chief State School Officers, 2017), the need for professional learning for

teachers (Calkins et al., 2007; The Center on School Turnaround, 2017; Council of Chief State School Officers, 2017), the value of high-quality instructional practices (Herman et al., 2008; The Center on School Turnaround, 2017; Council of Chief State School Officers, 2017), the importance of developing a systemic culture of improvement that is rooted in collaboration (Calkins et al., 2007; Herman et al., 2008; Kutash et al., 2010; Baroody, 2011; The Center on School Turnaround, 2017; Council of Chief State School Officers, 2017), and the need for differentiated reforms that meet the needs of each school (Calkins et al., 2007; Baroody, 2011; Council of Chief State School Officers, 2017).

Consistent among the models is a focus on the importance of correctly initiating the school improvement process. School improvement efforts work best when their initiation is swift, creates a sense of urgency, and facilitates early, visible progress (Calkins et al., 2007; Herman et al., 2008; Kutash et al., 2010; Baroody, 2011; The Center on School Turnaround, 2017; Council of Chief State School Officers, 2017). While the literature agrees that proper initiation is a vital step, it does not agree on what the first step should be. Some models recommend that a swift change in leadership is the most appropriate first step, suggesting that new leadership may create a sense of urgency and signal a broad commitment to school turnaround by the system (Herman et al., 2008). Calkins et al. (2007) suggests that systems look beyond the school leadership team and facilitate a dramatic redesign of the whole school as it signals to the community that the school is seeking to implement a grand turnaround as opposed to mere improvement. Baroody's (2011) model proposes beginning with a needs assessment process to determine the priorities for each individual school. Other models cited in this paper define priorities and domains without providing a specific initial step (Kutash, 2010; The Center on School Turnaround, 2017; Council of Chief State School Officers, 2017). The unique challenges of each individual turnaround school make it difficult for the literature to abstractly posit what the first step should be.

Challenges to Initiating School Improvement

School improvement is often described as a journey in which the challenges faced by the school are aligned with their current point along the path (Jackson, 2000; Hallinger & Heck, 2011). As with any journey, the most important part is to start; however, the initiation of the school improvement process is fraught with challenges.

Foremost among them are the emotional burdens often carried by leaders and staff serving in schools identified as low performing. The relationship between emotions and organizational change is well documented (Harms & Credé, 2010; Fløvik, Knardahl, & Christensen, 2019; Peng, Li, & Wang, 2020). The changes necessary to improve learning and the challenging

feedback that proceeds to them often elicit negative emotions in both leaders and educators as they seek to adapt to a new way of doing business (Karami-Akkary, Mahfouz, & Mansour, 2019). This is especially true if the feedback is perceived to be unfair or irrelevant (Quintelier, De Maeyer, & Vanhoof, 2020). For example, educators in rural schools may feel as although their school is low performing by the nature of its rurality and experience frustration based on the belief that the conditions that led to low performance coincide with the known challenges of rural education (Rosenburg, Christianson, & Hague Angus, 2015). The sense of vulnerability created by the change process can be challenging for leaders, but it can be overcome and even leveraged for good through clear communication, collaboration with teachers, and boundary setting (Zayim Kurtay, 2020).

In addition to any emotional burden they may bear, school leaders also struggle to initiate school improvement due to the immense size of the task. The sheer volume of necessary changes, including curriculum policy, newly defined leadership roles, necessary professional learning, resource reallocation, and opportunities for learners, can paralyze leaders who struggle to focus on a single priority when everything seems to be of equal priority (Tsakeni, Munje, & Jita, 2021). Turnaround leadership is fundamentally different than maintenance leadership, and not all school leaders have been sufficiently prepared for the task (AIR, 2010). Improvement leaders must have a wide range of capacities, including organizational, instructional, cultural, and change leadership (Dolph, 2017), and leaders may struggle to develop new skills while in the throgs of school improvement (Calkins et al., 2007; Steiner & Hassel, 2011). Leaders may also struggle to build meaningful relationships with support staff assigned to them by the state education agency (SEA), as they worry that their role is one of surveillance and discipline over support (Swaffield, 2015).

Finally, the improvement planning process can itself be a barrier to initiation. School improvement efforts must be tightly coordinated and coherent. Leaders who make decisions strategically and consider how all the pieces fit together have greater success at improving schools (Robinson et al., 2017). A plan that addresses low-hanging fruit and leads to “quick wins” is considered to be ideal, as it creates momentum and increases motivation (Herman et al., 2008), but leaders are often unable to identify high-quality quick wins during the planning process (Meyers & Hitt, 2018). Similarly, education leaders often struggle to correctly identify the root cause of persistent problems of practice impacting their schools (Meyers & VanGronigen, 2021). An improvement plan developed in collaboration with stakeholders is also perceived to be of higher quality (Thompson, 2018), while improvement planning performed in isolation is likely to lead to an unsuccessful initiation, as changes perceived to have been made unilaterally may undermine the launch of the new initiative (Redding & Searby, 2020).

School leaders need support in implementing the school improvement process. System- and state-level leaders must ensure that school leaders have adequate time to perform improvement tasks and training to successfully complete those tasks. Support services that prevent overburdening the staff are key to successful initiation (Bose & Brauckmann-Sajkiewicz, 2021).

Identification and Initiation of School Improvement in Kentucky

In the United States, school improvement is a federal policy prescribed by the most current version of the Elementary and Secondary Education Act of 1965 (ESEA). The time period included in this study covers two reauthorizations of the ESEA. This study begins its data collection in the 2012-13 school year, during which the administration of President Barack Obama offered SEAs a series of waivers to the No Child Left Behind Act of 2001 (NCLB). As a condition of receiving the waiver, SEAs were required to identify not less than five percent of their lowest performing schools as Priority Schools (U.S. Department of Education, 2013).

Beginning in the 2017-18 school year, the requirements for school improvement were codified in Section 1111 of the Every Student Succeeds Act of 2015 (ESSA). Pursuant to this statute, each SEA must identify a list of low-performing schools for comprehensive support and improvement (CSI) at least every three years. The list of CSI schools must include “(I) not less than the lowest-performing 5 percent of all schools receiving funds under [Title I, Part A] in the state; (II) all public high schools in the State failing to graduate one third or more of their students; and public schools in the State described [as additional targeted support and improvement schools that do not exit the status]”. ESSA also allows SEAs to create local measures that may go beyond the statutory minimum. The KDE chose to expand the definition of a CSI school to include all public high schools in the state failing to graduate 20 percent or more of their students (Every Student Succeeds Act, 2015)

While the qualifications and procedures for identification may have shifted over time, the formal process for initiating school improvement in Kentucky has remained unchanged since 2012. Kentucky’s school improvement processes begin with the identification of low-performing schools as prescribed by the federal statutes referenced above. Once identified, the KDE embarks in an intensive effort to support and guide the school to higher achievement. This process begins with the completion of a school improvement audit called a Diagnostic Review (DR). Since the 2012-13 school year, the KDE has partnered with Cognia, formerly known as AdvancED, to perform these reviews. Each review is performed by a team of specialists that includes school- and district-level administrators, school improvement specialists, and classroom-level educators who have no prior connection to the school or system being reviewed. Team membership is

divided between KDE selected members from within the state and Cognia selected members who could be from within or outside the state. Over the course of four days, the review team heard a presentation from school leadership, performed classroom observations, and conducted interviews with staff, students, and parents affiliated with the institution. The team also reviews pieces of evidence selected and submitted for review by the leadership team in the school (703 KAR 5:280).

To assess the health of the school's systems with validity, audit teams evaluate each school according to performance standards established by Cognia. The standards, called *AdvancEd Performance Standards for Schools* at the time of this writing, outline various leadership, instructional, and system level metrics that schools should have in place as a precursor to success (Cognia, 2020). These standards are regularly reviewed and updated and have been updated three times over the time period covered by this study. In the 2012-13 and 2013-14 school years, the standards covered five domains: Purpose and Direction, Governance and Leadership, Teaching and Assessing for Learning, Resources and Support Systems, and Using Results for Continuous Improvement. From 2014-15 through 2016-17 school years, the standards covered three domains: teaching and learning impact, leadership capacity, and resource utilization. Finally, in the 2017-18 through 2019-20 school years, the standards covered three domains: leadership capacity, learning capacity, and resource capacity (Kentucky Department of Education, 2021).

Review teams compile their findings into a report that includes three sections. In the first section, the team reflects on each standard and identifies pieces of evidence that point to either the strengths or weaknesses illustrated by the standard. In the second section, the team reports on its findings by summarizing the results of systemic classroom observations and interviews with stakeholders. They also create improvement priorities (IPs), which are short action statements designed to prompt the school improvement process. In the final section, the teams capture all relevant evidence that was not included in the original submission by the school, such as detailed classroom observation or stakeholder input data (Kentucky Department of Education, 2021).

Once the audit reports are complete, the KDE presents the report to school and system leadership and reviews each finding and IP before turning the report over to a team of Education Recovery (ER) staff (previously called Highly Skilled Educators (HSEs)) who provide ongoing support to a school as they work to exit the federal improvement classification. The work of the ER staff begins with a thorough review and deconstruction of each IP and the development of action plans to help the school initiate their improvement process (703 KAR 5:280).

Kentucky has been recognized as a leader in initiating the rapid turnaround of low-performing schools. This success is heavily rooted in the performance of the DR and the development of thoughtful IPs. In May 2016, the KDE underwent an independent review of its school improvement process conducted by the Mass Insight Education & Research Institution. This review cited the use of IPs to help schools identify the root causes of low performance and jumpstart school improvement as a key factor in the success of KDE's support model (Mass Insight Education & Research Institution, 2017). While the IPs developed during Kentucky's school improvement audits cannot begin to overcome the myriad of challenges to school improvement on their own, they provide school leaders with an accessible entry point. It is in this spirit that this study seeks to generalize the common elements from the full corpus of IPs issued by the KDE to provide a resource for leaders seeking to initiate school improvement on their own.

RESEARCH METHOD

Data Sources

All school improvement audit reports from the 2012-13 school year through the 2019-20 school year were accessed from the KDE (Kentucky Department of Education, 2021). There were no DR reports issued in the 2020-21 or 2021-22 school years due to federal flexibility waivers granted by the USED in response to the COVID-19 pandemic. Improvement priorities were mined from those reports and archived for analysis.

Qualitative coding protocols

While the IPs cited in audit reports are aligned to designated school improvement standards and could be grouped by their preexisting standard categories, the standards have been updated three times through the timespan covered by this study. An IP written in 2012 may have been aligned to a standard related to leadership, while a similar IP written in a later year may have been aligned to a standard related to resource allocation. Due to these changes, conceptual coding was deployed to cluster the IPs into the broad themes reported below. This process allows for a more accurate generalization of the data. Conceptual coding is a qualitative coding method in which the researcher assigns macrolevel descriptors to symbolically represent the meaning of data. This coding method is appropriate for the analysis of IPs because they are written for a specific school and under a specific set of circumstances. This allows the researcher to examine the IP beyond the local context and permits greater generalizability (Saldaña, 2016). Once the IPs were sorted into new broad categories, the protocol was repeated within each category to allow the researcher to capture the nuances and specific initial-step recommendations made by the diagnostic review teams.

The synthesized IPs produced by this second layer of coding are referred to as essential improvement priorities (EIPs).

In instances where a lengthy or multisentence IP could be coded under multiple headings, the researcher selected the code that most closely aligned with the first portion of the IP under the assumption that language earlier in the statement has priority over language later in the statement. Table 1 below shows the text of three illustrative IPs coded under the heading “Curriculum and Instruction: Develop and implement a schoolwide instructional process with fidelity”. The principle action in each of the three illustrative IPs is to develop and implement an instructional process. The first IP listed is offered to the school directly and without explanation. The second IP listed clearly instructs the school to develop and implement an instructional process but elaborates by including the directive for the process to include the use of formative assessments, the ongoing modification of instructional practices, and the use of data to monitor and refine the curriculum. The third IP focuses on the refinement of the existing instructional process and offers guidance for improvement. While there are other categories that discuss the use of assessment or the personalization of learning, the two latter IPs have been categorized under this heading with the understanding that the later instructions are in reference to the initial directive, in this case, to implement an instructional process.

Table 1: Illustrative Improvement Priorities

Create and implement systems that ensure all teachers use an instructional process that informs students of learning expectations and standards of performance.
Develop a school instructional process that is consistently implemented in all classes to clearly inform students of learning expectations and standards of performance. Ensure that students are provided exemplars to guide and inform their work. Ensure that multiple measures, including formative assessments, are provided to inform ongoing modifications of instruction and provide data for possible curriculum revision. Further ensure that students are provided specific and immediate feedback about their learning.
Further refine strategies to more consistently implement the school’s instructional framework. Ensure that the instructional process/framework is effective in increasing student engagement and achievement of learning expectations and that it fosters the use of a variety of instructional strategies including the use of exemplars of high quality work.

RESULTS

The data set included 476 IPs issued through 134 school improvement audit reports. Table 2 shows the number of school improvement audits issued per academic year and the average number of improvement priorities issued per report. The average number of IPs decreases sharply in the first three academic years of the program, with the average number of IPs settling around three IPs per review for the following five academic years. This likely reflects a period of stabilization of the policies and procedures for performing school improvement audits. The initial coding protocol identified eight broad categories of IPs, with a ninth category representing a single IP that is nongeneralizable due to its response to a specific incident that occurred within the school.

Table 3 lists the IP categories along with the total count and percent of the total for each category. IPs from the *Curriculum and Instruction* category are the most frequent, making up 42.11 percent of the total list of IPs. This is followed by *strategic planning and resource allocation* at 16.00 percent and *policy and governance* at 11.16 percent. Table 4 shows the count of IPs by category and academic year. When viewed in a historical context, the *Curriculum and Instruction* category continues to be the most frequently utilized category across the timespan. It is notable that IPs from the *Curriculum and Instruction* and *Assessment and Data Use* categories have been issued every year since the program's inception.

Finally, Table 5 shows the list of EIPs divided by category. While the broad category *Curriculum and Instruction* has the highest number of total IPs, when viewed as a whole, the EIP *Develop, implement, and monitor a continuous improvement process* is the most frequently assigned EIP at 12.00 percent, followed by *Develop and implement a schoolwide instructional process with fidelity* at 11.58 percent. Four EIPs have been issued every year since the start of the program. They are:

- *Develop and implement a schoolwide instructional process with fidelity;*
- *Monitor the deployment and impact of curriculum and instructional strategies;*
- *Develop a process for the selection and implementation of high-yield instructional strategies; and*
- *Develop a systematic process to collect, analyze, and use data to inform instructional decisions.*

As previously mentioned, one EIP is context specific and unable to be generalized beyond the report in which it was included. There are 14 EIPs that have been issued less than five times. These EIPs are often linked to more frequently issued EIPs within their category but capture a specific local nuance that may be of benefit to practitioners in other settings.

Table 2: Count of Reviews and Improvement Priorities by Academic Year

	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	Total
N. Reviews	12	13	6	10	6	8	49	30	134
N. IP	99	78	25	31	17	24	125	77	476
Avg. N. IPs per Review	8.25	6.00	4.17	3.10	2.83	3.00	2.78	2.57	3.66

Table 3: Count of Improvement Priorities by Category

Category	N	Pct.
Curriculum and Instruction	200	42.11%
Strategic Planning and Resource Allocation	76	16.00%
Policy and Governance	53	11.16%
Assessment and Data Use	49	10.32%
Induction, Mentoring, and Ongoing Professional Learning	49	10.32%
Stakeholder Engagement and Communication	24	5.05%
Social and Emotional Learning and Student Safety	13	2.74%
Professional Learning Communities	10	2.11%
Context Specific ^a	1	0.21%

^aThis improvement priority is only relevant to a single school under a specific context.

Table 4: Count of Improvement Priorities by Category and Academic Year

Category	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	Total
Curriculum and Instruction ^a	25	27	12	17	10	14	60	34	199
Strategic Planning and Resource Allocation	8	13	3	1	0	3	28	20	76
Policy and Governance	19	11	2	1	0	4	11	5	53
Assessment and Data Use ^a	5	8	4	5	3	3	14	8	50
Induction, Mentoring, and Ongoing Professional Learning	21	10	3	6	2	0	5	2	49
Stakeholder Engagement and Communication	11	4	0	0	1	0	4	4	24
Social and Emotional Learning and Student Safety	6	3	1	1	0	0	0	2	13
Professional Learning Communities	4	2	0	0	0	0	2	2	10
Context Specific ^b	0	0	0	0	0	0	1	0	1

^aAn IP has been issued under this category every year.

^bThis improvement priority is only relevant to a single school under a specific context.

Table 5: Count of Essential Improvement Priorities by Category

Essential Improvement Priorities	Count	Pct. within	
		Group	Total
Curriculum and Instruction			
Develop and implement a schoolwide instructional process with fidelity. ^a	55	27.50%	11.58%
Monitor the deployment and impact of curriculum and instructional strategies. ^a	47	23.50%	9.89%
Adopt and implement a rigorous curriculum with fidelity.	36	18.00%	7.58%
Develop a process for the selection and implementation of high-yield instructional strategies. ^a	32	16.00%	6.74%
Develop a process to ensure the meaningful differentiation and personalization of instruction.	20	10.00%	4.21%
Develop a process to vertically and horizontally align curriculum and instruction with academic standards.	9	4.50%	1.89%
Develop a process to integrate digital resources into teaching and learning.	1	0.50%	0.21%
Strategic Planning and Resource Allocation			
Develop, implement, and monitor a continuous improvement process.	57	75.00%	12.00%
Establish and communicate a clear mission and vision.	6	7.89%	1.26%
Ensure technology infrastructure meets the needs of the school.	4	5.26%	0.84%
Strategically align related programs and initiatives.	4	5.26%	0.84%
Ensure the effective use of human, material, and fiscal resources.	3	3.95%	0.63%
Implement root-cause-analysis and needs assessment procedures.	2	2.63%	0.42%
Policy and Governance			
Develop, monitor, and continually improve supervision and evaluation protocols.	14	26.42%	2.95%

Develop, monitor, and continually improve grading and reporting policies.	10	18.87%	2.11%
Establish a process to build capacity in the leadership team.	8	15.09%	1.68%
Develop and enforce schoolwide expectations for student behavior.	5	9.43%	1.05%
Nurture a healthy school culture aligned to shared values.	5	9.43%	1.05%
Establish a system of shared leadership.	4	7.55%	0.84%
Establish clear operational processes and procedures.	3	5.66%	0.63%
Establish protocols for developing a master schedule.	2	3.77%	0.42%
Establish protocols to recruit and retain staff.	2	3.77%	0.42%
Induction, Mentoring, and Ongoing Professional Learning			
Implement a rigorous professional learning program aligned to the school's goals.	27	55.10%	5.68%
Implement a systemic induction, mentoring, and coaching program.	21	42.86%	4.42%
Develop a process to ensure the effectiveness of professional learning opportunities.	1	2.04%	0.21%
Assessment and Data Use			
Develop a systematic process to collect, analyze, and use data to inform instructional decisions. ^a	25	51.02%	5.26%
Develop a system to use assessment data to inform instructional decisions.	16	32.65%	3.37%
Develop a process to ensure curriculum and instruction are adjusted in response to data.	4	8.16%	0.84%
Establish a comprehensive student assessment system.	4	8.16%	0.84%
Stakeholder Engagement and Communication			
Expand opportunities for stakeholders to meaningfully engage in decision making.	12	50.00%	2.53%
Establish a comprehensive system of multichannel, two-way communication.	6	25.00%	1.26%
Communicate student learning in an accessible way.	6	25.00%	1.26%

Social and Emotional Learning and Student Safety

Ensure that each student is well known by at least one staff member.	8	61.54%	1.68%
Develop a system to identify and respond to the social and emotional needs of students.	3	23.08%	0.63%
Implement a process to ensure counseling, assessment, and referral needs are met.	2	15.38%	0.42%
Professional Learning Communities			
Establish protocols for effective professional learning communities.	8	80.00%	1.68%
Promote collaboration between professional learning communities.	2	20.00%	0.42%
Context Specific			
Context Specific ^b	1	100.00%	0.21%

^a A variant of this Essential Improvement Priority has been issued every year.

^b This improvement priority is only relevant to a single school under a specific context.

DISCUSSION AND CONCLUSIONS

The synthesis of IPs presented in this report provides a point of reflection on the processes deployed by the KDE, a potential tool to guide leaders as they review needs assessment outcomes and design professional learning, and an entry point for leaders seeking to initiate school improvement without support provided by an SEA or an external organization.

Reflections on Kentucky's Process

This analysis provides an important point of reflection on the processes used by the KDE as they seek to support low-performing schools. The findings presented in this report suggest that the KDE's internal processes have settled over time and become more stable and predictable. This is likely due to the increase in experience and training of the KDE staff as they have sought to implement their own continuous improvement processes within the agency. As demonstrated in Table 2 above, the number of IPs issued each year has steadily decreased from an average of 8.25 IPs per report to an average of 2.57 IPs per report. This phenomenon, when placed alongside a follow-up interview with KDE leadership, indicates that KDE's audit team members have responded to the previously discussed research that suggests that a narrow and focused improvement process is preferable to a process with many areas of focus. While the overall number of IPs has decreased, the data presented in Table 4 suggest that this narrowing in focus does not translate to a narrowing in scope. While the majority of IPs issued in the most recent school year remain in the areas of Curriculum and Instruction and Strategic Planning and Resource Allocation, KDE-led audit teams continue to provide specific and local IPs across the range of categories.

Common Themes

As one reviews the list of EIPs, it is apparent that the audit teams in Kentucky believe that systems and processes are key for successful school improvement efforts. Leadership teams should take steps to ensure intentionality in their decision making, planning, and implementation. For school improvement efforts to become sustainable, leaders must make an effort to transform school improvement from an abstract federal policy to a concrete way of doing business. Similarly, efforts to improve school-level systems must be strategically monitored. This is clear in EIPs that discuss the importance of data analysis for informing instructional decisions as well as those related to the selection and implementation of new curriculum and teaching strategies. The full body of EIPs suggests that data analysis be used at the forefront, when selecting new strategies, and on the back end through regular, periodic monitoring of program implementation.

A unified approach also appears to be key to the successful implementation of school improvement efforts. The two most frequently issued

EIPs speak to this point directly by suggesting that institutions adopt school-wide frameworks for both instruction and continuous improvement systems. These school-wide frameworks ensure that everyone within the system is working toward a consistent goal in the same manner. This alignment within the system is vital for the success of school improvement efforts, which are often fragile in their infancy and take many years to become sustainable and bare, regular fruit.

The list of EIPs also demonstrates a clear emphasis on staff support. The EIP list includes statements related to formal supervision and evaluation, induction and mentoring of new teachers, and ongoing professional learning for all staff. Together, these EIPs make up more than ten percent of the total EIP list. Leaders seeking to drive school improvement would be well served by establishing a thoughtful and relevant program of professional learning. When viewed within the context of other EIPs, this program of professional learning should be an embedded part of the school’s continuous improvement process and should support teachers in implementing the school-wide instructional framework by ensuring that curriculum and high-yield instructional strategies are implemented with fidelity.

Ultimately, effective school-level leadership is a key theme that runs through all the EIPs listed in this report. School improvement leaders must take care to cast a clear mission and vision, establish replicable and sustainable systems for planning, implementing, and monitoring improvement efforts, and support their staff as they implement the work. They must also lead from a place of self-awareness and humility by focusing on transparency, data-driven decision making, and distributed leadership efforts. None of the EIPs generated by this synthesis can be implemented without the full support and guidance of the leadership team.

Table 6: Common Themes from the Analysis

Concise systems and processes are key to successful school improvement.
Improvement efforts must be thoughtfully and intentionally monitored.
Data analysis should be at the forefront of decision making.
School-wide instructional and continuous improvement frameworks must be developed and deployed.
Initiatives must be aligned and coherent.
Staff must receive ongoing support from leadership.
A professional learning program should be embedded into the school’s improvement framework.
Effective leadership is key – leaders must cast a clear mission and vision, establish sustainable systems of improvement, and communicate and support staff through the process.

Implications for School and System Leaders

Local school- and system-level leaders may benefit from this analysis and the creation of EIPs. As was previously discussed, little formal support exists for school and system leaders seeking to address persistent decline over time. These leaders must often source and fund their own support mechanisms or wait until the decline is sufficient to identify them for state or federally funded support. School and system leaders may be able to use the list of EIPs as a framework when crafting their own locally supported improvement plans.

One common improvement mechanism that may be enhanced by the use of EIPs is the needs assessment and prioritization process. As leaders seek to understand the current needs in their institutions and make plans to address those needs, the list of EIPs created by this report may provide a useful point for self-reflection. Leaders can use the EIP list as a sort of rubric to self-assess their current systems and identify lacking areas. As EIPs are structured as action statements, local leaders can readily apply EIPs to their work and build other improvement systems around the action statement.

The EIP list may also serve as a valuable training tool for system-level leaders seeking to build capacity for school improvement in building-level leaders. While the IPs issued by the KDE are designed to be instructive to schools, they also reflect areas of deficit within the school. Should a school receive an IP related to differentiated learning, for example, it stands to reason that systems for effective differentiated learning are lacking within the current school structure. System-level leaders may benefit from using EIPs to inform the selection of professional learning opportunities for school-level leaders. If an EIP resonates with a leadership team, then professional learning could be designed to help all leaders within a system better understand the nuances of a particular EIP.

Additionally, the EIP list may provide a vital starting point for leaders who recognize that school improvement processes should be implemented but do not know where to begin. Leaders can reflect upon the frequency of EIP identification and select the highest ranking EIP to initiate the school improvement process. While this method may be less intentional than a thorough needs assessment or external review, it would be preferable to a leader taking no improvement action when action is clearly necessary. Similarly, leaders may benefit by using the list of EIPs to help them better understand the core functions of improvement steps proposed through future audit reports. While this list reflects only audit reports developed by the KDE, many SEAs and independent organizations offer similar audit processes. Leaders may be able to use the EIP list to examine a lengthy improvement suggestion by comparing the elements of a lengthy statement to the essential action steps provided in this report.

Limitations of Application

This study has limitations that should be considered by leaders before applying it to their work. The EIPs identified in this study should not be seen as an all-inclusive list of practices or solutions. The action statements provided here should serve as a tool to inform improvement decisions rather than as an instruction manual. While EIPs may assist in the interpretation or implementation planning of findings from a rigorous school audit, school leaders should not seek to replace rigorous audit findings with an EIP or forgo a rigorous audit in favor of an EIP-based needs assessment process. Additionally, the EIPs only reflect findings from audits conducted in Kentucky public schools. While their alignment with the literature suggests that they can be generalized to a wider audience, leaders should consider their own local contexts when deploying the EIP list in decision-making processes.

Conclusion

Since 2012, the KDE has performed 137 school improvement audits resulting in 476 IPs. This study distilled the IPs into 38 EIPs that can be used by system- and school-level leaders seeking to inform school improvement work. While the study is not without limitations, the list of EIPs may serve as an important training tool, an enhancement to existing needs assessment protocols, and a starting point for school leaders seeking to initiate school improvement without support from the SEA or an independent organization.

REFERENCES

- 703 KAR 5:280. *School improvement procedures*. Commonwealth of Kentucky.
- Aldridge, J.M., Rijken, P.E., & Fraser, B.J. (2021). Improving Learning Environments through Whole-School Collaborative Action Research. *Learning Environments Research, 24*(2). 183-205. DOI: <http://dx.doi.org/10.1007/s10984-020-09318-x>
- American Institutes for Research (2010). *School Restructuring: What works when. A Guide for Education Leaders. Ed. 3*. American Institutes for Research.
- Baroody, K. (2011). *Turning Around the Nation's Lowest-Performing Schools: Five steps districts can take to improve their chances of success*. The Center for American Progress, Washington, D.C.
- Bose, S., & Brauckmann-Sajkiewicz, S. (2021). (In)effective Leadership? Exploring the Interplay of Challenges, Goals and Measures in the Context of School Improvement. *Journal of Educational Administration, 59*(4). 454-471. DOI: <http://dx.doi.org/10.1108/JEA-07-2020-0162>
- Calkins, A., Guenther, W., Belfiore, G., & Lash, D. (2007). *The Turnaround Challenge: Why America's best opportunity to dramatically improve student achievement lies in our worst-performing schools*. Mass Insight Education & Research Institute, Boston, M.A.
- Cognia. 2020. *AdvancED Performance Standards for Schools*. Advance Education, Inc.

- Council of Chief State School Officers. (2017). *CCSSO Principles of Effective School Improvement Systems*. Council of Chief State School Officers, Washington, DC.
- Dolph, D. (2017). Challenges and Opportunities for School Improvement: Recommendations for Urban School Principals. *Education and Urban Society*, 49(4). 363-387. DOI: <http://dx.doi.org/10.1177/0013124516659110>
- Downes, J.M., Bishop, P.A., Swallow, M., Oloson, M., & Hennessey, S. (2016). Collaborative Action Research for Middle Grades Improvement. *Educational Action Research*, 24(2). 194-215. DOI: <http://dx.doi.org/10.1080/09650792.2015.1058169>
- Every Student Succeeds Act, 20 U.S.C. § 6301. (2015). <https://www.congress.gov/bill/114th-congress/senate-bill/1177>
- Fløvik, L., Knardahl, S., & Christensen, J.O. (2019). The Effect of Organizational Changes on the Psychosocial Work Environment: Changes in Psychological and Social Working Conditions Following Organizational Changes. *Frontiers in Psychology*. DOI: <https://doi.org/10.3389/fpsyg.2018.02845>
- Hallinger, P & Heck, R.H., (2011). Exploring the Journey of School Improvement: Classifying and Analyzing Patterns of Change in School Improvement Processes and Learning Outcomes. *School Effectiveness and School Improvement*, 22(1). 1-27. website: <http://www.informaworld.com/openurl?genre=article&id=doi:10.1080/09243453.2010.536322>
- Hannan, M., Russell, J. L., Takahashi, S., & Park, S. (2015). Using Improvement Science to Better Support Beginning Teachers: The Case of the Building a Teacher Effectiveness Network. *Journal of Teacher Education*, 66(5). 494-508. DOI: <http://dx.doi.org/10.1177/0022487115602126>
- Harms, P.D., & Credé, M. (2010). Emotional Intelligence and Transformational and Transactional Leadership: A Meta-Analysis. *Journal of Leadership & Organizational Studies*. DOI: <https://doi.org/10.1177/1548051809350894>
- Herman, R., Dawson, P., Dee, T., Greene, J., Maynard, R., Redding, S., & Darwin, M. (2008). *Turning Around Chronically Low-Performing Schools: A practice guide* (NCEE #2008-4020). Washington, DC: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education. website: <http://ies.ed.gov/ncee/publications/practiceguides>.
- Jackson, D. (2000). The School Improvement Journey: Perspectives on Leadership. *School Leadership & Management*, 20(1). 61-78. DOI: <https://doi.org/10.1080/13632430068888>
- Karami-Akkary, R., Mahfouz, J., & Mansour, S. (2019). Sustaining School-Based Improvement: Considering Emotional Responses to Change. *Journal of Educational Administration*, 57(1). 50-67. DOI: <http://dx.doi.org/10.1108/JEA-01-2018-0022>
- Kentucky Department of Education. 2021. *Diagnostic Reviews*. <https://education.ky.gov/school/prischedrecov/Pages/Leadership-Assessments.aspx>
- KRS 160.346. *Definitions -- Targeted and comprehensive support and improvement -- Revised plans -- Turnaround audit -- Review and report -- Intervention process -- Reimbursement of district -- Report required -- Exit criteria -- Schools requiring rigorous support and action -- District with significant number of targeted schools*

-- Evidence of violation -- Restoration of school's right to establish council.
Commonwealth of Kentucky.

- Kutash, J., Nico, E., Gorin, E., Rahmatullah, S., & Tallant, K. (2010). *The School Turnaround Field Guide*. FSG Social Impact Advisors.
- Lewis, C. (2015). What is Improvement Science? Do We Need It in Education? *Educational Researcher*, 44(1), 54-61. DOI: <http://dx.doi.org/10.3102/0013189X15570388>
- Mass Insight Education & Research Institution. (2017). *Mass Insight State Development Network School Turnaround Diagnostic: Kentucky*. Mass Insight Education & Research Institution, Boston, M.A.
- Meyers, C.V., & Hitt, D.H. (2018). Planning for School Turnaround in the United States: An Analysis of the Quality of Principal-Developed Quick Wins. *School Effectiveness and School Improvement*, 29(3), 362-382. DOI: <http://dx.doi.org/10.1080/09243453.2018.1428202>
- Meyers, C.V., & VanGronigen, B.A. (2021). Planning for What? An Analysis of Root Cause Quality and Content in School Improvement Plans. *Journal of Educational Administration*, 59(4), 437-453. DOI: <http://dx.doi.org/10.1108/JEA-07-2020-0156>
- Peng, J., Li, M., Wang, Z., & Yuying, L. (2020). Transformational Leadership and Employees' Relations to Organizational Change: Evidence from a Meta-Analysis. *The Journal of Applied Behavioral Science*. DOI: <https://doi.org/10.1177/0021886320920366>
- Peterson, A. (2016). Getting "What Works" Working: Building blocks for the integration of experimental and improvement science. *International Journal of Research & Method in Education*, 39(3), 299-313. DOI: <http://dx.doi.org/10.1080/1743727X.2016.1170114>
- Quintelier, A., DeMayer, S. & Vanhoof, J. (2020). Determinants of Teacher's Feedback Acceptance during a School Inspection Visit. *School Effectiveness and School Improvement*, 31(4), 529-547. DOI: <http://dx.doi.org/10.1080/09243453.2020.1750432>
- Redding, C., & Searby, L. (2020). The Map is Not the Territory: Considering the Role of School Improvement Plans in Turnaround Schools. *Journal of Cases in Educational Leadership*, 23(3), 63-75. DOI: <http://dx.doi.org/10.1177/1555458920938854>
- Robinson, V., Bendikson, L., McNaughton, S., Wilson, A., & Zhu, T. (2017). Joining the Dots: The Challenge of Creating Coherent School Improvement. *Teachers College Record*, 119(9). website: <http://www.tcrecord.org/Content.asp?ContentId=21946>
- Rosenberg, L., Christianson, M.D., & Hague Angus, M. (2015). Improving Efforts in Rural Schools: Experience of Nine Schools Receiving School Improvement Grants. *Peabody Journal of Education*, 90(2), 194-210. DOI: <http://dx.doi.org/10.1080/0161956X.2015.1022109>
- Saldaña, J. 2016. *The Coding Manual for Qualitative Researchers*. Sage Publications, London.
- Sears, R., Hopf, F., Torres-Ayala, A., Williams, C., & Skryzpek, L. (2019). Using Plan-Do-Study-Act Cycles and Interdisciplinary Conversations to Transform

- Introductory Mathematics Courses. *PRIMUS*, 29(8). 881-902. DOI: <http://dx.doi.org/10.1080/10511970.2018.1532938>
- Steiner, L., & Hassel, E.A. (Public Impact). (2011). *Using Competencies to Improve School Turnaround Principal Success*. Charlottesville: University of Virginia's Darden/Curry Partnership for Leaders in Education. website: www.dardencurry.org.
- Swaffield, S. (2015). Support and Challenge for School Leaders: Headteachers' Perceptions of School Improvement Partners. *Educational Management Administration & Leadership*, 43(1). 61-76. DOI: <http://dx.doi.org/10.1177/1741143213494884>
- The Center on School Turnaround. (2017). *Four domains for rapid school improvement: A systems framework*. The Center for School Turnaround at WestEd. San Francisco, CA.
- Thompson, C.S. (2018). 'School Administrators' and Stakeholders' Attitudes toward, and Perspectives on, School Improvement Planning. *Educational Planning*, 25(4). 7-26.
- Tinchor-Wagner, A., Wachen, J., Cannata, M., & Cohen-Vogel, L. (2017). Continuous Improvement in the Public School Context: Understanding how educators respond to plan-do-study-act cycles. *Journal of Educational Change*, 18(4). 465-494. DOI: <http://dx.doi.org/10.1007/s10833-017-9301-4>
- Tsakeni, M., Munje, P., & Jilta, L. (2021). Issues and Challenges Influencing School Improvement Opportunities for Science and Mathematics. *Cypriot Journal of Educational Sciences*, 16(3). 1300-1318. DOI: <https://doi.org/10.1884/cjes.v16i3.5853>
- U.S. Department of Education. (December 12, 2013). *Waivers Granted Under No Child Left Behind*. Flexibilities and Waivers. Accessed on February 1, 2022. <https://www2.ed.gov/nclb/freedom/local/flexibility/waiverletters/index.html>
- Ward, G., & Miller, M. (2019). Action Research: A Tool for Transformation. *Montessori Life: A Publication of the American Montessori Society*, 31(3). 38-43. DOI: <https://amshq.org/Educators/Membership/Montessori-Life>
- Woodland, R. H. (2016). Evaluating PK-12 Professional Learning Communities: An Improvement Science Perspective. *American Journal of Evaluation*, 37(4). 505-521. DOI: <http://dx.doi.org/10.1177/1098214016634203>
- Zayim Kurtay, M. (2020). Teacher Emotions in Organizational Change Process = Örgütsel Degisim Sürecinde Öğretmen Duygulari. *Educational Administration: Theory and Practice*, 26(3). 681-718. DOI: 10.14527/kuey.2020.015

Matthew B. Courtney, Ed.D. is the Policy Advisor to the Office of Continuous Improvement and Support at the Kentucky Department of Education. Email: courtney.matthewb@gmail.com

Manuscript submitted: February 24, 2022

Manuscript revised: June 3, 2022

Accepted for publication: November 1, 2022
