Introducing Early Warning Indicators

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Introduction

Denver Public Schools (DPS) has a data rich culture. Yet with so much data, DPS is facing the challenge of how to focus the conversation to key metrics that affect change and drive significant improvements in student achievement. Based on research from Johns Hopkins (Mac Iver, Balfanz & Byrnes, 2009), DPS developed the "ABC Stoplight" for students in grades 6 through 9. However, this system does not provide frequent enough feedback during the school year, and it does not have risk scores for students beyond 9th grade and below 6th grade. The DPS Early Warning Indicators (EWI) is an upgraded version of the ABC Stoplight as it is a tracking system that provides data more often to educators for students in kindergarten through grade 12. The EWI summarizes multiple and frequently changing key performance indicators into one indicator, which is the probability that a student will be proficient the following year. The EWI informs educators as to whether a student is on-track to reach each DPS "gateway" (DPS's version of Montgomery County Public School's 7 Keys to College Readiness), and if not, how far the student is from reaching the Gateways. Based on key observable academic and behavioral student information collected in Grade T, logistic regression was used to predict the odds that a student will reach his/her target in Grade T+1 (e.g., based on student performance in 1st grade, the EWI predicts how likely it is that the student will be reading at grade level in 2nd grade). This tool will also serve as an input for the Response to Intervention (RtI) team to screen for students who need intervention and promote a shared sense of accountability across all grade levels. The project will be developed, launched, and communicated throughout DPS to various audiences over the next 6-18 months.

About Denver Public Schools

DPS is a large urban school district in central Denver with 162 schools, 81,870 students, and a teaching staff of over 4,500. Enrollment is growing annually at a rate of about 1,000 new students per year. The Charter and Innovation school portfolios are also growing at a significant pace. DPS has a free or reduced lunch population of 73%, and 34% of the student population are English Language Learners, with Spanish being the prominent language.

DPS has set goals, outlined in the Denver Plan, to increase Reading and Math (as measured by the Colorado Standardized Assessment Program or CSAP) proficiency by 3.5% per year, decrease the achievement gap by 3.5% per year, and reach graduation rates of 73% by 2014. Unfortunately, DPS has struggled to meet these goals but is experiencing steady increases in many key areas. DPS has increased the number of high school graduates by almost 500 graduates over the past two years. Additionally, median growth percentiles have been trending upward from the 40s in 2005 to the 50s in 2011 in all state assessment content areas.

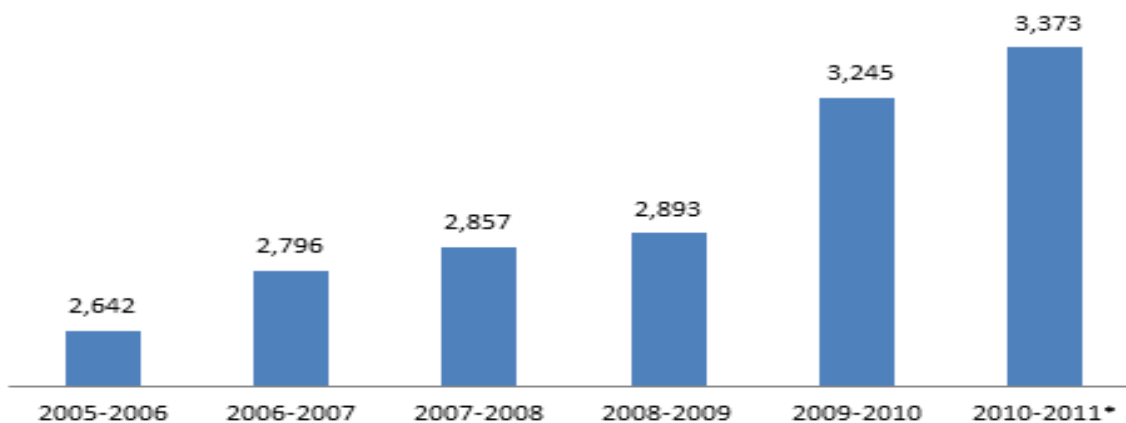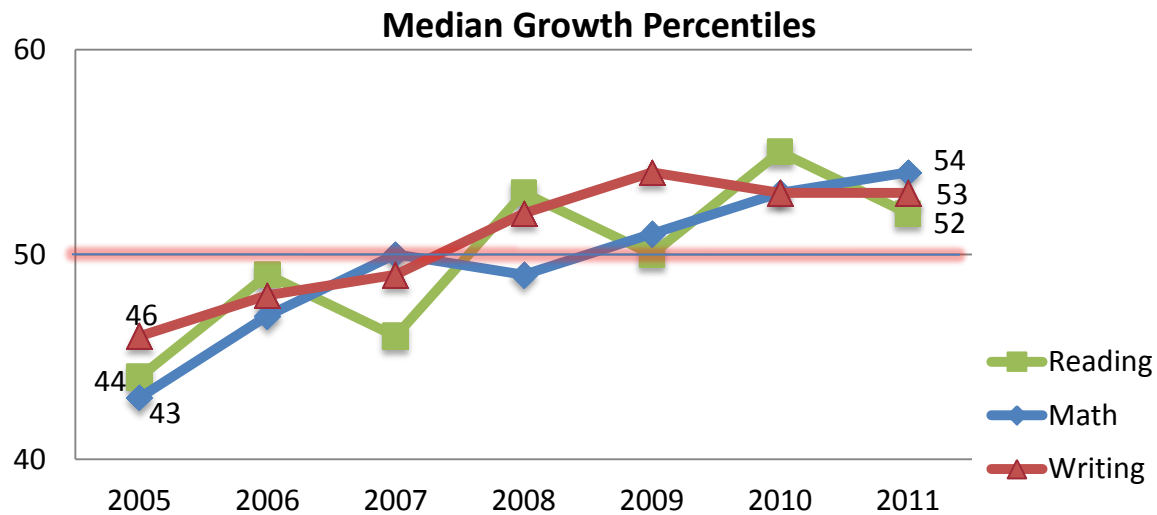**Figure 1: Total DPS Graduate per Year 2006-11**

Figure 2: CSAP Growth District vs. State: CSAP Reading, Math & Writing

DPS also has four key priorities to help align work within the district to support the attainment of the Denver Plan Goals:

1) English Language Learners

2) Turnaround Schools

3) Common Core State Standards and Online Assessments

4) Teacher Effectiveness

DPS has a data rich culture, as well as numerous equally important, and sometimes competing, goals and priorities. However, with so much data and so many high priorities, goals, and major initiatives, DPS is facing the challenge of how to focus the conversation to the right goals and key metrics to affect change and drive significant improvements in student achievement. The DPS Gateways will serve to focus goal-setting and alignment of priorities and initiatives within the district, and the Early Warning Indicator system (EWI) will serve to evaluate DPS's progress toward achieving its goals.

The Early Warning Indicator Project

The Early Warning Indicator project emerged from a request from the Assistant Superintendent overseeing postsecondary readiness to update the ABC Stoplight tool. The EWI is an updated version of the "ABC Stoplight" tracking system for grades 6 through 9, developed in DPS based on research from Johns Hopkins (Mac Iver, Balfanz & Byrnes, 2009). The ABC Stoplight tool provides information to educators about students' attendance (A), behavior (B), and course grades (C). The tool produces a list of incoming students whose performance falls below thresholds for one or more of the following parameters based on data from the last school year that includes:

- Math grades: U for standards based schools; D or lower for letter grade schools

- Language Arts grade: U for standards based schools; D or lower for letter grade schools

- Student Attendance: Below 94%

- Suspensions: 1 or more

Students are awarded one point for each indicator. The ABC Stoplight tool is only in place for students in grades 6 through 9. The limitations of the ABC Stoplight system are that it does not provide frequent enough feedback during the school year, and it does not have risk scores for students beyond 9th grade and below 6th grade. The need for more frequent feedback for students in kindergarten through grade 12 naturally led to the development of the EWI – the EWI is meant to expand both the grade range and list of indicators in the original tool.

Not only does the EWI update and improve the original tool, it also provides a method to measure progress toward college entry. Rather than assigning an arbitrary weight to each indicator in the early warning system, weights are determined based on three years of historical data, the outcome of which is the probability that the student will achieve the DPS Gateways.

The Gateways are DPS's version of Montgomery County Public School's 7 Keys to College Readiness[1] and are displayed below in Figure 3. The Gateways are based on a student's probability of entering college immediately after high school without remediation.

Figure 3: DPS Gateways
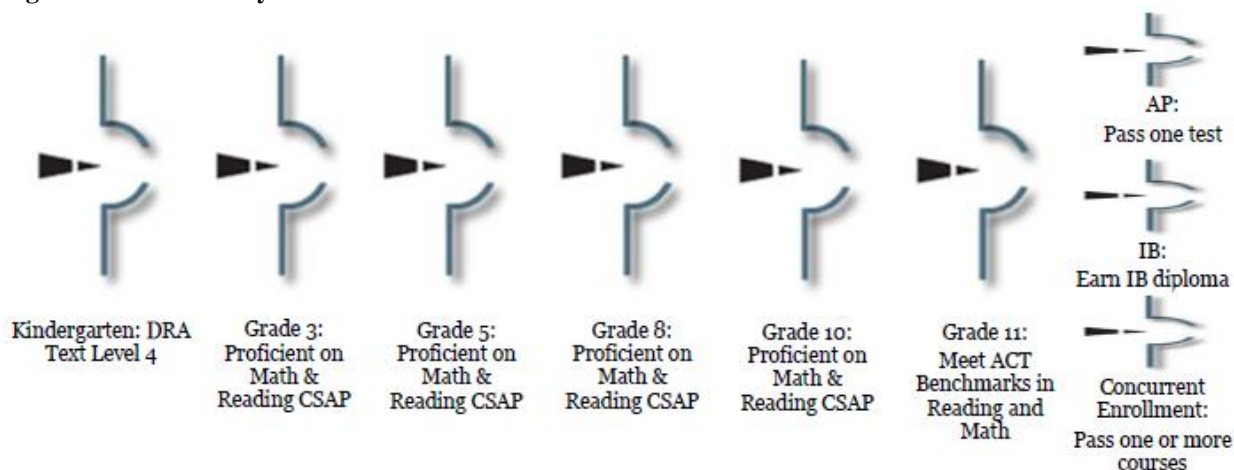
The EWI informs educators about a student's on-track status to reach each DPS Gateway (grade-level targets) and if not, how far the student is from reaching the Gateways. This project has potentially very far-reaching impacts as the project team is working to communicate the Gateways district- and community-wide, and use the Gateways as the basis for district goal setting. Should the Gateways be adopted, the EWI will then be the tracking system for whether the district is making progress toward its goals.

The Early Warning Indicators system is designed to provide educators with regular key performance data, which help identify and monitor whether students are on-track to be successful throughout their K-12 career. The EWI summarizes multiple and frequently changing key performance indicators into one indicator. That indicator represents the probability that a student will be proficient in key content areas the following year.

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[1] http://www.montgomeryschoolsmd.org/info/keys/

Additionally, the EWI will serve as the primary input for the Response to Intervention (RtI) team to screen for students who need intervention by acting as a universal indicator that will flag students who may need attention and support, and potentially intervention. Additional data will be considered by the RtI team to develop an intervention plan for students. While the EWI does not provide frequent nor fine-tuned enough data to act as a full progress monitoring tool, change in student outcomes (attendance, behavior, course grades, assessments) can be observed at multiple points throughout the school year, allowing RtI teams and educators to assess general student progress. By adopting the EWI for use by RtI teams, as well as throughout the district for all educators, a shared sense of accountability across all grade levels will be promoted.

Project Goals

This project can be divided into three parts: (1) Refocusing district goals to directly connect to college readiness (Gateways); (2) Developing and rolling out a tool to inform and monitor progress toward those goals; and (3) Evaluating the impact of interventions enacted with students who were not on track to meet the district goals. It is a large undertaking and will impact many programs and initiatives at DPS. These are the primary objectives of the work:

- District-wide adoption of the DPS Gateways

- Development of an Early Warning Indicator system to predict and affect student outcomes from kindergarten through grade 12

- Successful communication (through collaboration across multiple DPS teams) of the DPS Gateways within the district and community

- Development of a user-friendly tracking system (EWI tool) aligned to the DPS Gateways

- Use/adoption of EWI tool by educators, parents, and students

- Successful integration of EWI tool in the RtI model

- Alignment to DPS initiatives and progress toward DPS Denver Plan goals

Our Team

DPS is fortunate to have a team of fellows with a diverse range of skills, expertise, and areas of responsibility. This makes collaboration on a significant project like this more effective. Chung Pham is the Strategic Data Fellow working with the Post-Secondary Readiness team. Chung has been the primary researcher and developer on the EWI system. He held initial meetings with content experts to map out the indicators and developed the EWI prototype. Chung worked closely with the DPS IT organization to ensure the model was replicable inside of the DPS data structure. Finally, he will support the team developing the communication and education plan.

Tracy Keenan is the Strategic Data Fellow working with the English Language Acquisition Department, and member of DPS's Research Team. Tracy's role has been to advise the development of the key indicators included in the EWI, and meet with key partners and content experts throughout the district to ensure the correct indicators have been included, as well as determine whether these indicators can be used by the RtI team. In addition, Tracy will develop the mock-up for the visual interface and advise the IT team in developing the final visual interface. She will also help develop the interim report for Reporting Services while the visual interface is designed. Tracy will also help plan and implement the communication and education plan for the EWI.

Megan Marquez is Director of the Academic Product Management team and is the DPS Agency Fellow. Megan's role has been to advise Tracy and Chung in aligning the project with

other significant DPS initiatives. In addition, Megan's team will help develop the interface in

which the EWI is displayed for District leadership, Principals, Teachers, Parents, and Students

through DPS' portal tools. Megan will also help plan and implement the communication and

education plan.

In addition to the SDP fellows, multiple teams throughout DPS are involved in the EWI

project, from the development of the tool to the communication of the Gateways and the uses of

the EWI tool, to the adoption of the tool for use in practice. The Office of Postsecondary

Readiness has acted as the sponsor of the project, while the Business Intelligence and Research

teams have been involved in the conceptualization and development of the tool. Curriculum and

content experts have advised these teams along the way, ensuring the appropriate indicators have

been incorporated. District leadership and communications experts, will inform the roll out of the

project. The Principal and Teacher Portal teams will be called upon to develop the interface for

the tool and will work with the Research team to understand the uses and impacts of the EWI.

Project Vision and Communication

Vision

DPS' vision for data use in general is that educators will have a focused set of student

achievement goals (DPS Gateways) with easily accessible and actionable tools to analyze data,

apply interventions, and monitor effectiveness. If the DPS Gateways and EWI are successful,

together the district leadership, teachers, parents, and students will understand what is expected

in terms of student performance, what can be done, and will understand their role in improving

achievement results. For the first time, the EWI will provide DPS insight into the efficacy of

district, school, and classroom interventions. This should help students get the targeted help they

need at the point in time they need it and ensure that the interventions they get are of the highest

quality.

Given the various tools used in the past by DPS to identify at-risk students, it was

imperative that DPS improve the validity and applicability of its indicators to ensure they are

founded on data and indicators from DPS students. The EWI analysis helped DPS identify true

indicators of success for its students and made developing the predictive component much more

reliable. The hope is that students will be identified as "at-risk" as early as possible to ensure

they are supported and monitored. The result is that DPS can provide educators with more

frequent feedback, dynamic predictors, and insight into the impact of interventions. Principals

will be able to designate resources, set school schedules properly and flexibly, and ensure

students in need receive targeted support and interventions. Teachers can use the data as a

progress monitoring mechanism and can measure the impact of interventions. For parents, the

availability of this tool will mean new and early insight to understand if their children are

progressing towards specific targets (Gateways) and are on-track to college success.

Project Support and Stakeholder Engagement

Senior leadership identified the need: expand the existing ABC stoplight tool beyond 6-

9th grades to cover earlier grades, emphasize key metrics and ensure students are identified prior

to entering high school. Once the need was identified, SDP fellows began researching the

solution, consulted experts to confirm the initial indicators, and presented the concept to senior

leadership. Leadership was receptive to the approach and work continued. Not much further into

the development, it was clear that the impact of the tool could be great and that DPS needed to

carefully execute the project and be clear on where it aligns with the district vision, goals, and

other initiatives. The team began backwards mapping to ensure alignment with other key

initiatives such as the DPS Gateways, Response to Intervention, Common Core State Standards, Principal, Teacher and Parent Portals and Data Literacy. When the team and leadership began to discuss high level communication strategies, the decision was made that the Gateways and EWI tool could not be just one more project, initiative or goal in the district – but rather, if it was to be implemented it needed to replace a number of existing initiatives. DPS determined it needed to complete a proof of concept, identify a strategic plan, and obtain support from the Board of Education either as a vehicle to meet the goals or as a replacement to existing board goals.

Relevance to DPS Priorities

Early Warning Indicators are directly aligned to enhance and support progress within each of the District's top four priorities:
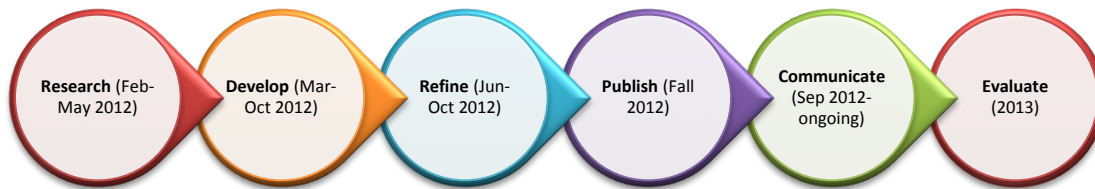
1) English Language Learners

2) Turnaround Schools

3) Common Core State Standards and Online Assessments

4) Teacher Effectiveness

The EWI will contain additional indicators to measure language acquisition progress for English Language Learners. This is the first time an ELL indicator has been included in the at-risk reports. For Turnaround Schools, this tool will help school leaders schedule courses and faculty more strategically, target students in need with applicable interventions, and track the progress of the entire school population over the year. The district is focused on implementing the Common Core State Standards (CCSS). The EWI indicators are aligned to specific CCSS for math and reading and will allow for progress monitoring down to the standard level. Finally, DPS is focused on strengthening teacher effectiveness. Part of teacher effectiveness is the ability to analyze data to improve instruction and implement effective student interventions. The EWI

will help teachers focus on the right data and determine if their strategies and interventions are improving students' probability of success.

Project Implementation

Figure 4: Project Timeline

Research (Feb-May 2012) → Develop (Mar-Oct 2012) → Refine (Jun-Oct 2012) → Publish (Fall 2012) → Communicate (Sep 2012-ongoing) → Evaluate (2013)

Research

As of late 2011, DPS had multiple progress monitoring tools such as the ABC Stoplight and High School Student Segmentation (based on student age and number of credits earned that apply toward graduation) that were developed or in development. Feedback from district leadership and school administrators revealed that these tools not only omitted grades from Kindergarten to 5, they also sometimes conflicted with each other due to the differences in data sources of each tool. This was confusing to end users.

In February 2012, representatives from the Office of Post-Secondary Readiness, Department of Technology Services, and SDP fellows met to discuss the need to provide a K-12 progress monitoring tool for district leadership and school administrators, and at the same time integrate all current data points used by existing tools into one comprehensive tool that is user-friendly to educators. As discussed at that meeting, the current plan is to have, by fall 2012, a tool that tracks how far each student is from the "DPS Gateways to College" at multiple points in

time during a school year. The tool will be refined when DPS has determined which indicators

are the most beneficial as more data becomes available.

Furthermore, the project team recognized the need to start a culture of documenting

interventions in DPS in accordance with the EWI. This will help determine which interventions

work with which type of at-risk students, and in the future will provide actionable information to

educators whenever an at-risk student is identified. SDP fellows are consulting on the project to

develop a tool for tracking and evaluating interventions.

SDP fellows took the lead on collecting data, developing a defined set of indicators for

each grade level, and running econometric models to determine the weight assigned to each

indicator. In March 2012, when initial data had been collected and models run, the project team

determined the timeline and methods of communication to each audience (district leadership,

school administrators, teachers, and parents).

Develop

Based on the Johns Hopkins research finding that key underlying factors affecting student

outcomes can be grouped into Attendance, Behavior, and Course Grades, SDP fellows consulted

DPS content owners to identify key indicators for each grade. After the list of indicators was

clearly defined, SDP fellows collected data over the last three school years on each indicator and

then performed logistic regressions with the identified indicators in year T being the independent

variables and the outcome variables being the DPS Gateway applied for Year T+1. For example,

the set of indicators in first grade (attendance, report card Reading, report card Math, first grade

DRA) will predict the second grade outcome (scoring at grade level on the second grade DRA).

Coefficient matrices were obtained to perform out-of-sample predictions for existing students.

Note that different data points become available at different times during the year (e.g.,

report cards are updated three times a year, attendance updated daily, and DRA scores only twice

per year). As a result, to obtain a continuous indicator for the student throughout the year, the

formulae of EWI uses the predicted values instead of the observed values until the observed

values become available. For instance, because the first grade report card is unavailable until late

October, EWI uses the predicted first grade report card scores based on Kindergarten indicators.

These predicted values are obtained through regressions with independent variables being

Kindergarten indicators and dependent variables being one of the first grade indicators.

Coefficient matrices, obtained from the regressions described above, were then

transferred to DPS's Department of Technology Services (DoTS). DoTS is currently in the

process of transforming DPS data into formats that fit the EWI system, performing out-of-sample

predictions for current students throughout the district, and building user-friendly interfaces for

teachers (in consultation with SDP fellows), principals, and parents that provide individual level

student data as well as summary data at the grade and school levels.

Refine

Since the initial meeting was held, the EWI has been supported by senior leadership. The

Assistant Superintendent of Secondary Education served as the champion for this work, after the

initial concept was developed, and vision and impact was socialized to subject matter experts and

the rest of the senior leadership team. Key stakeholders have expressed that this tool (and the

Gateways) has the potential to bring great value for students and the DPS community. Feedback

from DPS leadership and involved stakeholders continues to be incorporated into the project

plan.

Content experts were brought in early during the development phase to help determine the list of appropriate indicators for each grade level, refine the methodology, and provide feedback. The Response to Intervention team, a separate team working on identifying at-risk students and designing intervention for them, subsequently met with the EWI team to align the works and have decided to include EWI as a universal screener for at-risk students. The EWI team is currently developing a methodology and work plan to pilot the tool in fall, 2012. Feedback from consumers will be used to refine both the tool itself as well as the visual interface.

Publish

Although still in development, the idea of the EWI was introduced early on to key leaders within DPS. Feedback was carefully collected after each meeting, most of which were comments on how to improve communication and participation around the development, vision and implementation strategies related to the roll-out of EWI. The tool will be piloted in fall 2012, with full roll out of the tool slated for the 2013-14 school year. EWI will be presented in dashboard form for principals so they understand what bands their student body falls within, what population has interventions in progress, how students' progress is changing over time, and a view into the effectiveness of interventions used. Teachers, through their Teacher Portal will have access to student EWI status along with other key pieces of student data, and the EWI indicators will be integrated into the future RtI solution. Eventually, parents and students will also have a dashboard view of their progress towards the DPS Gateways and visibility into a version of the EWI to understand student status and progress over time. The publishing within the portals will begin inside the Principal Portal, then Teacher Portal, and finally in the Parent and Student Portal. This will coincide with the overall communication strategy so that principals

and teachers are comfortable with the EWI data and the associated processes prior to releasing to parents and students.

Communicate

The Office of Postsecondary Readiness is leading the communication efforts for the EWI and the Accountability, Research, and Evaluation department is the sponsor for the DPS Gateways. Early on during the development phase of the project a cross-functional group convened to determine the communications strategy for the EWI and quickly realized it could not be done as a standalone effort without a clear connection to the broader district strategy. It was determined that the Gateway concept must first be adopted by senior leadership and then approved by the Board of Education before broader communication efforts could begin. As we stand today, this is the critical next step before any other communications actions will begin. Once the strategy is adopted by the Board, the tactical implementation and ongoing communications planning will begin.

In parallel, the EWI will be vetted with principals and other constituents to ensure the tool will meets the needs for monitoring at-risk students and assigning interventions. It is also the intention that this tool will be rolled out to principals and teachers along with the district's RtI system to combine efforts. Much more needs to be done in the communications work stream, but the team will work to secure cross-departmental cooperation and ownership for the effort to ensure its success, will be mindful of messaging to various audiences, and will ensure the alignment between the Gateways, EWI, and other district goals.

Evaluate

Evaluation of the program will take a few different forms. Once the program is in place, DPS can immediately begin to evaluate and measure efficacy of district and school-based intervention methods and programs by comparing student performance before and after the interventions were administered. The district will also look at the added value of the EWI itself by comparing the predicted outcomes of students to actuals after the EWI and interventions were applied. This will help us make further refinements to the tool and determine its value on moving the achievement needle.

Next Steps

Despite a few challenges and a bit of backtracking, the project has been moving forward at a steady pace, and has benefitted from the additional input from stakeholders. The tool has been developed by the research team and is in development by the technology department for piloting in fall 2012. We plan to engage with the tool customers prior to full roll out to ensure it works in the field and meets the needs of its users. In building the tool and visual model, we have focused on making it actionable rather than just giving educators another flag to identify students in need of support. We have challenged ourselves and those with whom we are partnering to not just to use data to identify a problem, but to help guide educators in how to turn those data into supports and interventions that help students. Furthermore, the EWI team is working to ensure that the messaging is clear about what the EWI is replacing and how it is adding value by supporting district goals and related priorities/initiatives. We need to work with DPS leadership, school support staff, and other key DPS staff to ensure that users are trained on how to integrate the EWI tool into their role in district schools and throughout the community.

We are about mid-way through refocusing district goals to directly connect to college readiness (Gateways) and are developing and rolling out the tool to inform and monitor progress toward those goals. We are working to set a system up so that data can be collected to help ensure we can evaluate the impact of interventions enacted with students who were not on track to meet the district goals. We must continue to work toward providing intervention recommendations to educators based on student and intervention program data. A system that provides intermediate targets for students on their road to college, monitor progress toward those targets, and then be able to identify what is helping students get to those targets has the potential to truly impact student achievement and outcomes.

Outcomes

Project Goals

The scope of the EWI project has evolved to include far reaching and ever expanding goals and has the potential for much greater impact than originally expected. The EWI, originally intended to expand the ABC Stoplight tool, has now not only replaced that tool, but has also been adopted as a universal screening tool by the RtI team, and will be the monitoring tool for the DPS Gateways (which may be adopted as district goals) and, thereby, allow DPS to measure progress toward college entry. As a result of the evolving nature of this project, the goal now of the EWI is to introduce and roll out the Gateways as potential new board goals with the Board of Education, implement the EWI district-wide (after piloting and refining – and successfully communicating about the tool and Gateways throughout the district), use EWI as the new RtI universal screener and on-track to graduate tool, and eventually evaluate district interventions. It is essential that we continue to align our work with other key initiatives throughout the district.

The RtI team had been working to develop a screening tool as well as a tracking tool to identify and monitor students in need of intervention. Realizing that we were both working on similar tools, and the EWI being much further along, the RtI team decided to adopt the EWI as a universal screener to identify students. The EWI, once intervention data begins to be collected, can also serve to monitor student progress after intervention, as well as evaluate implemented interventions.

The project timeline changed significantly when the scope of the project changed and, therefore, the implementation timeline is currently being developed. Additionally, because the scope expanded so greatly, not all district leaders were brought on board from the start of the project. We are currently in the process of meeting with key leaders in the district to ensure adoption of the tool, as well as moving toward adopting the Gateways as district goals. We are also developing the visual model for the EWI tool to be piloted in the fall and are working with the RtI team to ensure both projects' goals and work streams are aligned and coordinated.

Lessons Learned

Key Guiding Questions

The Early Warning Indicator project has been a thrilling yet challenging experience. While we may not have asked all the questions we should have from the start, upon realizing the potential scope of the project, we recalibrated and brought in the necessary partners and thought through what we needed to do to make the project successful. The questions we asked ourselves (or should have asked) throughout the course of this project have included:

- What is the scope of this project?
- Who does the project impact (e.g., partners, users)?
- Who is the owner?

- What resources are required?

- Who are the key stakeholders?

- How does this project impact other programs and initiatives within the district?

- What is the capacity of the users?

- What is the capacity of the district and stakeholders for change?

- What is the timeline of this project / what is the project plan?

- How will the tool be rolled out?

- How will the tool be used?

Successes

Despite the numerous challenges faced throughout this project, there has been a great deal of excitement regarding the EWI tool. The proper steps were taken during the development of the tool to ensure its relevance, fit with other key initiatives, and sustainability. For example, fellows met with key content experts to determine which indicators were not only the most relevant to include, but which standards would be kept upon roll out of the Common Core State Standards so that the tool would not have to be remodeled once those standards were fully adopted. Furthermore, SDP fellows continue to collaborate extensively with the IT team to develop the underlying logic and visuals for the EWI so that district leaders see the vision and direction of the project. The tool will hopefully be piloted in conjunction with the RtI pilot in fall 2012.

The success of EWI project implementation is dependent on many factors. First, SDP fellows can easily access the right data to perform historical analysis to develop DPS-specific models. During the development of EWI framework, SDP fellows also made use of several SDP resources such as forwarded presentations from Fort Worth Independent School District, and

information and presentations about the Montgomery County Seven Keys and the Consortium on Chicago School Research's on-track to graduate indicators. Second, the technical tools at DPS are ready to accept new data and visualization. Third, the project was supported by multiple departments and stakeholders so that work continued without bottlenecks. Finally, district leadership acknowledged that the impact of the project has the potential to be great and requires a thoughtful and coordinated strategy to maximize effectiveness.

Barriers

Like most initiatives, the EWI also ran into many barriers. First, DPS has too many existing projects for data analysis and too many goals and priorities. This required the project team to determine how the EWI system would complement or replace existing processes and goals. Second, the project sponsor did not work with peer leaders to develop a district-wide collaborative push for the work. Third, the DPS Gateways have not yet been rolled out or adopted by the BOE or communicated to all district and school leadership. And last, the project has no assigned project manager and no clear owner.

A major challenge encountered throughout this project has been the lack of recognition from the start of the potential broad impact of the EWI – which was largely a result of a disjointed vision and limited communication by district leadership. In reflecting upon the path of this project, we would advise others to ensure that there is unified buy-in and a common vision among district leadership early on, and that project leaders communicate how the project aligns to the vision for the district as a whole. One of the great strengths of this project has been the use of district data to develop the targets and weights for each indicator within the tool. By ensuring that the data elements used are specific to the DPS and the district's historic trends rather than to state or national indicators and targets, the project has gained more traction and relevance.

Had we the opportunity to start the project over again, we would do a number of things differently:

1. Focus on communication regarding the DPS Gateways prior to communicating about the EWI. The Gateways, while a part of the dialogue among leadership, have not been fully adopted. To realize the full potential of this project, the Gateways must be communicated throughout the district and become part of the culture within DPS, for example, by replacing the current board goals. The EWI then would be communicated as the tool to monitor progress toward achieving these goals, which is a much clearer and cleaner communication strategy.

2. For the Gateways to permeate the district, the Board of Education and DPS leadership must have an interest in and be ready to support this type of change. There was not enough dialogue prior to project development to ensure that the project vision was shared by leadership. As a result we are backtracking now to gain that buy-in, input, and support.

Lessons Learned

As leaders of the EWI project, SDP fellows have learned many lessons and skills that could inform other initiatives. Key lessons we have taken from this project include:

- Multiple stakeholders must be consulted (at the beginning of the project) to ensure the accuracy and validity of proposed metrics as well as to gather support.

- The scope of these types of efforts has the potential to be much larger than initially envisioned. Make sure to consult key stakeholders early, and develop a

work plan and timeline that takes the scope into account. Slowing down to engage leadership in determining the implementation strategy was key.

- It is very important to consider what other tools are currently in use (e.g., RtI, Continuous Improvement Guides, Board Goals, etc.) and what the impacts of the new project, tool, and corresponding processes will be on them.

- The project team needs to understand the scale and the potential impact of the project on Board and District goals, and plan accordingly.

Conclusion

Through the challenges and successes, the EWI project has been an exciting and interesting endeavor. The greatest lesson we learned has been that good ideas well executed can only go so far – the time must be taken to ensure there are stakeholders and consumers of the tool. While some key stakeholders were engaged from the start, more comprehensive engagement is necessary to execute something with such far reaching implementation implications. It has been through true district-wide collaboration, careful planning, and thoughtful research that this project has taken root in DPS – and will, in time, influence how educators view and consume data and student outcomes to directly impact student achievement.