

2012 Annual Evaluation Report

Kentucky School Improvement Grant

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Submitted by

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* We dedicate this report to Joanne Farley for her dedication and never failing resolve in the face of illness.

Executive Summary

On April 21, 2010 the U.S. Department of Education awarded School Improvement Grant (SIG) funds to the Commonwealth of Kentucky to help turn around its persistently lowest-achieving schools. Ten schools were identified as Tier I or II, and 97 in Tier III in the 2010-2011 academic year (Cohort 1). Twelve schools were placed in Tier I and II for the 2011-2012 academic year. There were no schools identified for Tier III for the 2011-2012 academic year (Cohort 2). Tier I and II schools were grouped in three regions—Eastern, Western, Central/Jefferson.

The main supports provided to the Tier I and II schools were a team of experts called Education Recovery Teams (ERTs). The ERTs were made up of an Education Recovery Leader (ERL), an Educational Recovery Specialist (ERS) for Reading, and an ERS for Math at each school to support the administration and teachers in the implementation of their School Improvement plans and to provide mentoring and embedded professional development (PD). Each ERT was supported by the Educational Recovery Director (ERD) in their region. **The summative evaluative question was to examine the impact of the SIG on instructional and leadership climates in the schools and the impact of SIG on student outcomes.** Data on instructional and leadership climates were obtained through: 1) semi-structured interviews with principals and ERT members, and 2) teacher survey data. The below paragraphs highlight the common themes across all regions and cohorts. However, it is important to note that each region has its own unique socio-cultural context that presents unique challenges. Additionally, within a particular region the participating schools have certain challenges that are unique to them because of various reasons e.g. location of the school within the region, the communities they serve, rural versus urban etc. The report includes a more detailed analysis of the findings as well as ‘voices’ of the SIG schools.

The following were the main themes from the interviews with ERLs, ERSs and Principals and teacher survey data:

- **Data driven processes:** All the SIG schools had processes in place at varying levels of implementation that collect data to aid decision making at various levels of instruction—walkthroughs to help address implementation issues, formative assessments to ensure that students understand the concepts in place, learning communities to discuss how teachers can improve instruction based on student data, and tiered intervention system based on student data to help struggling learners. There was a great deal of variation in the extent to which these processes are used both by the teachers and leadership. For example, in some schools data from the walkthroughs was processed by the leadership team and feedback was given to teachers on a regular basis. While in other schools, data from the walkthroughs were collected but feedback to the teachers was not provided in a consistent manner. However, the commonality across all schools was that the ERT members were crucial in facilitating these data driven processes and helped school personnel use the data in a meaningful way. Teachers rated items that asked about data driven instruction highly (overall mean ratings greater than 3.5 on a five point scale).
- **Professional development tailored to emerging and individual needs:** The ERT members in all regions reported that they provided embedded PD that was differentiated to meet individual needs. Both the principals and the ERT members reported that teachers were very receptive to the PD provided and the teachers were willing and open to change/adopt new practices. It is interesting to note that a majority of the teachers rated the items related to ER efforts slightly lower (Overall Mean 3.70) than the items related to school leadership (Overall Mean 4.0), their instructional (Overall Mean 4.34) and management practices (Overall Mean 4.27).

- **Student engagement and involvement in learning:** The ER staff and the principals provided several anecdotes of how student engagement had improved in the schools. The principals also reported that students were now more involved in the learning process e.g. they were more aware of what classes they need to pass to go to college or to graduate, they knew their scores on the formative assessment and what it meant, they knew remediation was available if they were struggling, and they were aware of the high expectations the teachers and the principal had of them.
- **External barriers:** The principals identified several external barriers that continued to influence their school's performance—lack of urgency for reform and low expectations at the community level, feeder middle schools with a disproportionate number of struggling students, and low parental involvement. Additionally, most principals expressed concern about how they would be able to sustain the changes after the life of the grant, e.g. paying an interventionist to provide individual assistance to students, having ER staff who train inexperienced and new teachers.

To examine the impact of the SIG on student outcomes, the annual assessment data was analyzed. During the grant period, Kentucky adopted a new assessment and accountability system, 'Unbridled Learning: College/Career- Ready for All'. As a part of the new accountability system, a new statewide assessment was administered. The data should be cautiously interpreted across years. Comparing a school's scores in 2012 to state level data would be more applicable than comparing their 2012 performance with the data from 2011. Similar to the state, there was a significant drop in the number of students scoring proficient and above in 2012 for both Cohort 1 and 2 schools. Cohort 1 schools had a slightly higher average percent students scoring proficient and above in reading than Cohort 2 schools. However, Cohort 2 schools had a much higher average percent scoring proficient than Cohort 1 in Math. This is partly due to the fact that the Cohort 2 Western School had 50.0% of its students scoring proficient and above in Math which increased the overall average of Cohort 2 schools in Math.

In order to further understand the college and career readiness of the SIG school students, the graduation rate and college and career readiness rates were examined. The baseline graduation rate had been steadily increasing for four of the eight Cohort 1 schools and five of the eleven Cohort 2 schools. In 2011 East Carter High School and Greenup High School were the only SIG schools with a higher graduation rate than the state. Leslie County high school had the greatest decline in graduation rate over the past few years from 73.8% in 2010 to 66.5% in 2011. Of the 19 high schools, 7 schools had a college career readiness rate less than 15.0% (less than half that of the state college and career readiness rate of 38%) in 2011. None of the high schools had a college career readiness rate (Range 2%- 36%) higher than the state total rate.

Finally, an online survey was administered to Tier III principals. The Tier III principal survey focused on identifying the types of information and services received by the schools and how these resources impacted best practices in their schools. The overall mean rating for the impact of SIG on the implementation of the School Improvement Plan was similar for 2011 and 2012. While in 2011 25% of the principals reported that they had not yet implemented curriculum changes in math, only 4% of principals reported that curriculum changes in math were not yet implemented. Similarly in 2011 approximately 22% of the principals reported having not implemented curriculum changes in reading; only 4% of the principals reported having not implemented curriculum changes in reading in 2012. The principals rated the overall receptivity of key stakeholders slightly higher this year than the previous year. At the same time a higher percentage of respondents identified resistance to change as a barrier to ensuring that all students are college and career ready in

2012 (19.7%) than the previous year (11.4%). Half of the respondents identified teacher inexperience and a disproportionate number of struggling learners as barriers to ensuring that all students are ready for college and careers.

The SIG schools have discrete processes in place that help school personnel track student learning of specific concepts in core content areas and to be able to respond to their learning gaps quickly. As the grant enters its third year, it is imperative to take these processes to the 'next level' so that they form a cohesive system which allows the school to respond to student learning gaps fairly quickly.

Recommendations

The following recommendations build on the common themes that emerged from the interview and survey results:

- **Periodic reflection of data processes:** The SIG schools have implemented several best practices and processes so that the school overall climate and culture not only allows students to be on par but also excel beyond their peers in high performing schools. For these processes to be truly inherent to the school culture they have to form a cohesive flexible system. This will require a periodic reflection on the data processes in a school -- how well a process is implemented, if it is still applicable, if it needs to be modified to collect information on a more emerging need, is the data collected from a process shared in a real time manner so that it informs the next decision step, should the sharing process be changed, do the processes make efficient use of time, is it sustainable, are there duplication of information collection, etc. The periodic reflection will ensure that the data processes are only a means to achieving a goal and not the goal itself.
- **Professional development feedback:** The teachers provided anecdotal feedback on how the professional development was useful and helped them grow as instructors. However, the survey item 'I am becoming a more effective teacher due to the assistance in instruction from my ERS.' was rated the lowest (Overall Mean 3.21 on a five point scale) relative to other education recovery efforts. In order to further improve the services and support provided to schools, perhaps the grant should consider collecting more periodic formative feedback specifically on the professional development and assistance provided by the ER staff to teachers. The feedback data will help not only the ER staff but also the grant leadership on how further services can be provided to teachers.
- **Action plan for sustainability:** The SIG is a pivotal resource of professional development to teachers and provides support systems that address student learning needs. Therefore, it is natural that principals are concerned about the grant ending. If they are not already underway, conversations need to begin with key stakeholder groups to identify current self-sustaining features and prioritize SIG services based on school needs and capacity. This will provide information to the grant leadership on how to connect SIG schools with other initiatives and supports. An excellent example is the collaborative partnership of the State Personnel Development Grant to help the priority schools address the achievement gap for students with disabilities. These conversations will also provide a platform for schools share successful 'sustainability' strategies with each other.

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Introduction

On April 21, 2010 The U.S. Department of Education awarded School Improvement Grant (SIG) funds to the Commonwealth of Kentucky to help turn around its persistently lowest-achieving schools. According to HB 176, these are the lowest 5 percent of Title I schools (based on averaging the percentage of students receiving proficient or higher in reading and mathematics on the state assessments) that fail to meet Adequate Yearly Progress (AYP) for three consecutive years; non-Title I schools grades 7-12 with a 35 percent or higher poverty rate failing to meet AYP for three consecutive years; and high schools with a 60 percent or lower graduation rate for three or more years. Beginning with the state assessment results for the school year 2011-12, these are schools in the lowest 5 percent of all schools that fail to meet the achievement targets of the state accountability system for at least three consecutive years.

Ten schools were identified as Tier I or II, and 97 in Tier III in the 2010-2011 academic year (Cohort 1). Twelve schools were placed in the Tier I and II for the 2011-2012 academic year. There were no schools identified for Tier III for the 2011-2012 academic year (Cohort 2). Tier I and II schools were grouped in three regions—Eastern, Western, Central/Jefferson. Cohort 1 schools include: Lawrence County High and Leslie County High in the East; Caverna High and Metcalfe County High in the West; and Fern Creek High, Valley High, Western High, the Academy at Shawnee, Western Middle, and Frost Middle in the Central region. Cohort 2 schools include: East Carter High, Newport Independent, Sheldon Clark High and Greenup High in the East; Christian County High school in the West; and Knight Middle, Seneca High, Southern High, Fairdale High, Waggener High, Doss High and Iroquois High schools in the Central region.

The main supports provided to the Tier I and II schools were a team of experts called Education Recovery Teams (ERTs). The ERTs were made up of an Education Recovery Leader (ERL), an Educational Recovery Specialist (ERS) for reading, and an ERS for Math at each school to support the administration and teachers in the implementation of their School Improvement plans and to provide mentoring and embedded professional development (PD). Each ERT was supported by the Educational Recovery Director (ERD) in their region. A Center for Learning Excellence (CLE) was also created in each of the three regions to provide further administrative and professional development resources from Institutes of Higher Education and regional educational cooperatives.

Of the 97 Tier III schools, 36 schools were in the Eastern region, 25 in the Central (20 schools were Jefferson County Public schools, 5 were non- Jefferson County Public schools), and 36 in the Western region. During the 2011-2012 school year, principals from the Tier III schools received information on best practices from the SIG.

In December of 2010 a contract was awarded to the Evaluation Unit of the Human Development Institute (HDI) at the University of Kentucky to evaluate the SIG on behalf of KDE. **The main evaluative question was to examine the impact of the SIG on instructional and leadership climates in the schools and document how the changes in instructional practices and leadership have impacted student outcomes.** The evaluative question was examined from four distinct perspectives for each region:

1. School instructional and leadership climates from the Educational Recovery Staff Perspective
2. School instructional and leadership climates from the Principal Perspective
3. School instructional and leadership climates from the Teacher Perspective
4. Academic and Non- academic student outcomes

Evaluation Methodology

In order to examine the impact of the SIG on instructional practice and school leadership, the evaluators employed a mixed method design. The evaluators collected data from three key groups for the 3 regions:

1. School instructional and leadership climate from the Educational Recovery Staff Perspective
The evaluators conducted semi- structured phone interviews with 40 ER staff. The interviews were conducted in Spring-Summer 2012. Of the 40 ER staff, twenty-seven were ERs and 13 were ERLs. The purpose of the interviews was to gather the staff's perspective not only on the instructional and leadership climates within the school but also their perspective on the impact of the SIG. Additionally, interviews provided the opportunity to obtain "mini-stories" from respondents in which themes often ran consistently through responses to even different questions. In this sense, they were more holistic than surveys. Background interviews were conducted with the ERDs to help frame the interview questions with the ERT members and principals. These interviews were coded and entered into a qualitative data entry spreadsheet in Microsoft Excel and then analyzed to discover the major themes emergent from the perceptions of participants.
2. School instructional and leadership climates from the Principal Perspective
Semi-structured interviews were conducted with 19 principals. The interviews were conducted in Spring-Summer 2012. The purpose of the interviews was to gather the principals' perspective not only on the instructional and leadership climates within the school but also their perspective on the impact of the SIG.
3. School instructional and leadership climate from the Teacher Perspective
An electronic survey was administered to teachers in all the SIG schools and to Tier III principals. The survey items were created based on the results of interviews with the ER staff and the Center on Innovation and Improvement's Indicators of Effective Practice.

Quantitative data was gleaned from the state-wide assessment for 2011-2012 and non-academic KDE public data sources (graduation and college and career readiness data). Assessment data for reading and math was compared across 2009, 2010, 2011 and 2012 to identify the trends in Tier I and II Cohort 1 schools. Assessment data for reading and math was compared across 2010, 2011 and 2012 to identify the trends in Tier I and II Cohort 2 schools.

The evaluation findings are organized by findings from the ERT interviews, principal interviews and results from teacher surveys for each region. The final section of the report includes the trend analysis of the academic and non-academic student outcomes.

Eastern: Instruction and Leadership Education Recovery Staff Perspectives

"The culture is different. The conversations are different. It's a data driven atmosphere."

"I've seen a big improvement in the PLC's, just in the last few weeks. I see improvement in the red zones. I see students who are actually beginning to care about their data. When I walk through the halls I see a lot more intentional instruction." - ER staff in the Eastern region

Interviews were conducted with all of the ten ERSs within the Eastern region. In general, respondents in Cohorts 1 and 2 provided similar perspectives. Thus, their responses were reported together to limit redundancy; however, divergent themes have been explicitly explained by cohort where applicable. In addition, genders of pronouns were randomized to protect respondents' anonymity.

ERSs in the East defined their role as collaboration with teachers to improve student learning in their schools. They provided embedded PD differentiated to meet individual teachers' unique needs (including training in the effective use of data), facilitated professional learning communities (PLCs) designed to create individualized assistance to help students, and conducted classroom observations to monitor best practices and identify additional areas in which to provide PD. They believed that teachers had been generally receptive to these activities. As a result, teachers had become more open to new instructional practices, had raised their expectations and increased the rigor in their classrooms, and had become more collaborative in their work. ERSs also reported improved student behavior and academic growth. At the same time, they still observed signs of negativity within the school and local community as well as a lack of urgency of reform.

Role of the ERS

ERSs' understanding of their role was encapsulated in the language used in one interview, *"Mainly my role is to work with the teachers."* They tended to see everything they did through this lens. Whether leading or collaborating within a PLC, providing embedded PD to an individual teacher in a particular classroom, teaching how to use data analysis to meet individual student needs, or conducting and following up on classroom observations, they focused on providing teachers with the tools they needed to improve their schools. As another ERS put it, *"We address their needs."*

In accordance with this, ERSs emphasized that their job was service-oriented and collaborative, regularly using words like "assist", "help", and "facilitate" when describing their role. Only occasionally was supervisory language used to describe their responsibilities. One respondent mentioned being instrumental in "monitoring" lesson plans; another spoke of *"determining interventions and actions that have to be taken."* ER staff much more frequently referred to their tasks as activities they and teachers explored "together."

SIG Activities

At the forefront of the work ERSs performed at their schools was PD. One ERS said, *"One of my main roles is to provide professional development for teachers...research for specific instructional approaches, behavior management, classroom*

management as it relates to their subject area, unit planning with them, lesson planning with them." ER staff provided training across a gamut of audiences from small groups of 5-10 "on early release days" to department level PLCs and one on one assistance. This allowed them to provide PD that was embedded in the reality of the struggles teachers faced and individualized to meet their unique needs.

As would be expected of such highly differentiated training, ERS staff addressed a plethora of educational topics. Frequently addressed issues included clear learning targets, differentiation in instruction, formative assessment, new group instructional strategies, quality core standards, the use of technology, and classroom management. Sometimes outside experts were brought in to provide additional training in "*standards based grading*" or instructional best practices in particular content areas. Again, ER staff members were able to focus the training on whatever the teachers needed.

The most frequently cited topic for PD was training in data analysis. One ERS stated, "*I've provided a lot of professional development on data analysis...provided a professional development on using a performance calculator to see exactly where students are, to do item analysis on assessments that they've given, discussed strengths and weaknesses, what things we need to celebrate and improve on. I've done some professional development on formative assessments, using data boards where they identify students who need interventions and putting interventions in place for those students and tracking results.*" Another said, "*A lot of PD time is spent discussing data, using data to make decisions and drive instruction and culture and beliefs.*" ERSs agreed that the teachers they served had lacked the capacity to use data effectively before they received training. As one put it, "*They are doing the MAPS assessment. They had this last year but it appeared as though teachers were testing and not doing anything with them. They were used to pulling off reports and not using them. So we've been pulling off the data, learning how to read the reports and access them.*" Specialists agreed that this was a critical element because if teachers lacked information concerning student knowledge deficits they would be unable to provide effective remediation and re-teaching.

Another activity in which ER teams participated was PLCs. PLCs were a key place in which PD was delivered and in which teachers and ER staff collaborated to create individualized assistance to help students. All ERSs reported that PLCs were being used in their schools to varying levels of success. One called the groups at her school "*very, very good*" because they effectively looked at formative assessments and collaborated on methods of re-teaching. However, the ERS at another school believed that the PLCs in her school were not currently sustainable without the assistance of the ER team, despite the fact that they were in the second year of their grant. Learning Communities at this school had improved and were now teacher led, but ER staff still felt the need to continue to provide additional leadership skills to teachers before the groups could become sustainable. In all Cohort 1 schools ER staff either led PLCs directly or at least helped to develop their agendas. Most ERSs in these schools agreed that teacher participation was positive though some teachers objected to meeting during planning periods. Generally, they also believed PLCs had improved over the course of the year.

The ER staff also reported doing frequent classroom observations. ER staff reported that this was the main mechanism used to ensure that best practices were being successfully employed. One ERS said, "*We are constantly observing and talking with the teachers and looking for ways to improve.*" All of the schools had a formal walkthrough process; most had walkthroughs by ER staff, administrators, and district personnel. However, three said that school administrators were not doing observations regularly enough, and one of those was unsure of the principal's current capacity to provide feedback. Several schools utilized Observation 360, an electronic walkthrough application that allowed staff and administrators to provide immediate feedback to teachers. One Cohort 1 school had improved teacher capacity in

instruction to such an extent that they been able to had replace walkthroughs by ER staff with formal peer classroom observations.

ERSs saw walkthroughs as a way to focus their PD efforts to individual teacher needs. As one put it, *"During walkthroughs, we are trying to target individual teachers and differentiate that way to see what the individual needs are and what we need to look for with each of the teachers to see if they're growing, to identify individual strengths and weaknesses."* In general, they reported that teachers responded favorably to the walkthroughs by the ER staff because they were used consistently and seen as useful. One ERS said, *"(the walkthroughs) have become part of the work and I think more and more they (the teachers) are understanding the importance of it...Now the teachers are getting specific feedback and because of that I think the teachers are much more receptive to it."* ERSs also believed that teachers responded favorably because their walkthroughs were *"not evaluative."*

Teacher Attitudes

ERSs believed that most teachers' attitudes had been generally supportive across the board. One stated, *"Everybody's been very receptive and been on board. I haven't had any problems."* Several thought teachers had supported the ER work because they found the resources they brought to them useful. As one put it, *"They were very receptive because it was something that would help them."* Another said, *"I think the staff has been ok with the PD that we've offered...after one of the meetings I heard a comment 'this is one of the best PD we've ever had.'" Others suggested that success had given credibility to their PD. One suggested, "Last year the school had the highest scores in the region so teachers have tasted success and don't want to go back."* Even in schools where more resistance from teachers was reported, specialists believed attitudes had improved over time.

Impact of the SIG

ERSs in Cohort 2 schools agreed that their schools lacked rigor and were marked by low expectations before their participation in the SIG. Some also reported serious problems with classroom management and student behavior. One stated, *"students were sleeping, eating...in most classes they were doing what they wanted to do."* Several believed that teachers simply didn't understand what they were supposed to be teaching. One ERS said, *"No one was going in the same direction. The curriculum maps were pretty much not on target with the common core and college and career readiness core. We started there. We started with everyone teaching what they're supposed to be teaching."* Teachers also seemed isolated from one another *"working as more of an individual as opposed to a professional learning community."*

This contrasted sharply with Cohort 1 schools. An ERS described the teachers there as *"responsible for their own success. They are taking responsibility for their failures and for their successes in the classroom. They're able to redirect their own instruction. They don't need me to sit there and observe and give critique, they critique their own (selves) through their student success and their own success...They are monitoring their own instruction with formative assessment...They are also figuring out ways to make the students more accountable...They (students) have their own student notebook, data notebook....students set their own goals with that."* However, even the Cohort 1 schools were challenged by high teacher turnover which threatened every year to undue the progress of the last.

ERSs in both cohorts pointed to a number of improvements in in the culture of their schools within both teachers and students. They reported that teachers were more open to new instructional practices. One ERS for Math said, *"I have a few teachers who are using more manipulatives...They're starting to see the value of not just paper/pencil work."* Another said, *"There are more teachers using best practices."* ER staff also believed that teachers' attitudes were

changing. As one ERS pointed out, *"The teachers want to do what's best for kids...I can see that culture beginning to shift and we're more and more about what's important is our students."* One ERS suggested this was because teachers were *"feeling more pressure now for quality."* Another hypothesized that it was because of the help they were being provided, *"I think since I came they were so excited to have somebody come in to give them guidance and clarity."*

All this had led to higher expectations on the part of teachers and greater rigor in the classroom. Teachers were improving in their use of data, and it was impacting their teaching. One ERS said, *"(Teachers) seem to understand their data (now), there is no emotion in that, it is what it is, don't fight it....this is what it is so where do we go from here?"* Another suggested, *"teachers are really studying (student data)...where are my kids, if they went back why did they go back...they are seeing the value and embracing it."* A third asserted, *"We have been looking at data and what that data tells us....we are aware that data needs to drive us."* As a result, several respondents reported seeing *"more intentional instruction."* There was *"more of the school involved in looking at the individual child as opposed to looking at the senior class or the sophomore class. There's a person at the school who targets kids having academic or other issues, volunteers come in to mentor students."*

In addition, teachers were beginning to reach out to each other for help. One ERS related an example, *"One of my teachers that has been my toughest nut to crack said, 'Mrs. X, I've been working on my unit plans and I've been thinking about how to address this standard and I went and asked my colleague and he said oh, I've been having the same issue, here why don't you read this book. This book helped me.'"*

Changes in the teachers' attitudes and practices had led to corresponding changes within their students. Several ERSs reported greater student engagement. One said, *"When we first started to do the walkthroughs one of the things on there is the percent of students that are involved....that is increasing with each walkthrough that I do."* Student behavior had also improved because *"(teachers) are establishing rules and they are not backing down."* One ERS saw a great deal of academic growth in students saying, *"I'm seeing the students' capacity; it's like snowballing. The teachers are able to move at a faster pace through the content because students are picking it up, and they have adapted."* A number of ER staff related that improvement on school-wide formative assessments like MAP demonstrated real student progress. Several Specialists attributed the academic improvement and higher engagement to students beginning to know their own data. However, one ERS pointed out that some students were slower to adapt to the new culture than others; *"Some students are doing well with (the change), some are not handling it so well, used to the low expectations."*

Continuing Challenges

Of course, challenges remained in each school. Negativity within the school and community culture still existed. A lack of district leadership capacity made the work of reform more difficult. Some Recovery Specialists reported that they still heard "apathy" from teachers. A number said a lack of "urgency" persisted. Not all students had bought into the changes and therefore, in at least one school, discipline continued to be *"a huge issue."* One ERS complained that communication was *"a weakness right now."* Another complained that teachers continued *"making excuses for the students."* Additionally, attendance was an issue for both teachers and students in some schools. Even in a Cohort 1 school marked by significant improvement, ER staff were concerned that things could stall. In the words of one ERS, *"The biggest challenge is taking them to the next level. The first year there were 'easy wins'...now how do we really move students...how do we get them to their highest potential, move beyond 'good?'"*

"One of greatest successes is our data driven decision making. We have built processes and a culture where we are constantly looking at data. The tendency is to look at State assessment data and just work from there...but...we have built in benchmark assessments, quality core that we constantly look at, we've worked on summative assessment, all on a schedule that nobody seems too crunched about. Students keep a student data notebook, that's a huge change....students know what their data is, they can talk to you about it."—ERL Eastern region

Interviews were also held with five of the five ERLs within the Eastern region. ERLs believed their role to be to develop the leadership capacity within the school principal. They spoke positively of the principal and believed he had developed a good relationship with their faculties. They agreed that their principals were active instructional leaders involved in delivering PD to their teachers, setting high expectations, and monitoring best practices through the systematic use of walkthroughs. At the same time, they believed that the SIG had helped them become better at dealing with data, more effective administrators, and better leaders. However, some principals also continued to struggle with planning and communication as well as with conflict with the Central Office of their districts.

Role of the ERL and the ER Team

ERLs universally described their role with the words "coaching" or "mentoring." They regarded their main task to be developing leadership capacity within the school's administrative team, particularly for the building principal, so that they could improve their schools. One ERL called it, "constant coaching, assessing, reassessing, reflecting on what we could have done better." Another mentioned the importance of ensuring consistent and accurate communication between the Kentucky Department of Education, district, and the school.

As to the role of the ER team, ERLs offered a similar vision to the Recovery Specialists—the ERT existed as "very much a support system" to teachers and administrators. They too referred to the tasks of improving school culture, training in the use of data, impacting instructional practices in the classroom, and leading PLCs. However, Recovery Leaders also emphasized the need to supervise the progress of the 30-60-90 day SIG plan.

Relationships with the Principal

All ERLs spoke positively of their current principal. One said, "He has a good knowledge of what needs to be done." Another said that her principal "changes the schedule or whatever it takes to meet the individual needs of the child." A third related that his principal had "great vision." None of the Recovery Leaders reported any areas of concern in their ability to work productively with the principals. Instead, one reported that, "It is clear that the administration and ER team are a unified team," and a second called her principal "very receptive" to the ER team's arrival. In addition, for the most part ERLs felt that principals had developed positive relationships with their faculty. Teachers at one school "seem(ed) to think that he's done a good job;" at another they wanted "the principal to be successful." Only one ERL suggested that the principal's relationship with teachers needed to be further "fostered and developed" because of their resistance to change.

Principal's Role in Instruction

ERLs reported that principals were for the most part active instructional leaders. Most had been involved in delivering PD alongside the ER teams on various aspects of instruction to their staffs. They had also been instrumental in setting high expectations and monitoring the implementation of best practices. Many had also taken the lead in communicating to their staffs concerning the new statewide assessment. All were a part of the PLCs in their schools. One ERL said her principal was *"intentional about the professional learning communities."* He monitored the PLC's and looked *"at their data and what they are doing with the data."* Another principal had *"developed a purpose"* for PLCs that *"lacked focus."* However, a third ERL complained that her principal was *"not involved in PLC's at a school wide level,"* and a fourth pointed out that, *"Things have started but the PLC's haven't begun with consistency, the monitoring piece of the PLC meetings has not been established with good practice."*

In addition, principals were very involved in walkthroughs for the purpose of monitoring instructional change. One was praised for being *"visible in a lot of classrooms."* A second used *"systematic processes to review teachers and make walkthroughs more consistent and evaluations more specific, (with) specific feedback and focused PD."* Most used a walkthrough document developed in conjunction with the ER team. Teachers were visited in a regular rotation and feedback was delivered to teachers afterward. Walkthroughs were also used *"to look at strength and weaknesses (of the school) and the plan for addressing those and how it is connected to the 30-60-90 day plan."*

Two areas of concern were widespread among ERLs when it came to the principals' instructional leadership. First, some principals lacked capacity to assist teachers with formative assessment. As one ERL put it, *"The formative assessment piece has been done a lot by ER staff."* Another's principal was getting *"coached on what it is and what it is not."* As a result, formative assessment remained a weakness in those schools. Teachers *"still didn't understand (that) to formatively assess you have to change what you're doing."* At the same time, in one school the principal was *"instrumental in the meetings on formative assessment and model(ed) lessons in the classroom himself."* Second, several principals struggled to focus on instructional leadership. Discipline issues and other tasks crowded their day which prevented them from spending the time they should on instruction. One ERL feared this had not *"gotten any better since the start of school."*

SIG Impact on Principals

ERLs identified a variety of improvements that had occurred among administrators as a result of their participation in the SIG. One suggested that, *"With the help of the ER team the Administrative team has made a lot of strides."* First, principals had become better in working with data. Recovery Leaders were pleased that decisions were being *"made by way of data."* One called data driven decision making their *"greatest success."* Second, principals were becoming better administrators. Planning meetings were improving. One principal was becoming *"much more organized, much more proactive."* Third, principals were becoming more skilled at leading their staffs. In one school teachers now understood *"how they were evaluated."* At another school conversations were being *"held to help teachers improve their teaching."* An additional principal was taking on *"a bigger role in the school improvement planning."* Finally, principals had developed higher expectations and were *"getting in the classrooms much more"* to monitor their expectations.

Continuing Challenges

Of course, challenges remained. The most frequently reported weakness was in communication and planning. Some principals struggled with details; others failed to communicate *"in a timely manner."* Several ERLs reported that their school was working on a communications plan. In addition, a number of ERLs reported struggles between the principal and the Central Office of the district. Some principals felt they lacked support from the district concerning *"personnel*

issues.” Other districts and principals had trouble communicating clearly. One ERL reported a “*feeling of us against them.*”

Eastern: Instruction and Leadership Principal Perspectives

*"I think the students are taking more responsibility for their learning now. We started doing data reports with the students...every couple of weeks so now they know where they are, what they need to do to be successful. The overall atmosphere in the building I would say that is a success. Also, there is a more positive feeling from the community towards the school."—
Principal in Eastern SIG school*

Interviews were held with five of six principals within the Eastern region. Principals agreed that their role was to work collaboratively with the ER teams to reform their schools, and they were extremely positive about the SIG process and their ER teams. They also thought their teachers had become receptive to the ER teams' contributions. As a result, teachers had learned to work more collaboratively, the culture had improved, and teachers were using differentiated instruction and formative assessment more effectively. Principals also believed that students were now taking more responsibility for their own learning. However, at the same time, they feared that future staff cuts would make it difficult to continue to provide interventions that individual students needed. They also saw a need to align administrative practices and curriculum across the district so that students did not start high school so far behind, and believed their greatest need remained to continue to elevate the instructional skill of their teachers.

Role of the Principal

Principals generally agreed that their role was to work collaboratively with the ER teams to reform their schools. They regularly used the words "we" and "us" in describing their work. They worked together to analyze teacher needs and "come up with different kinds of PD that we think will fit them." They regularly monitored teachers' progress and ensured best practices were being used in instruction. One principal said, "They have helped guide me in processes and looking at data." In addition, several principals believed their role in setting the daily schedule was essential to successful school reform. They had developed a schedule with an RTI intervention period in order to provide interventions "based on individual student data." One principal even taught one of the intervention classes. They also modeled appropriate attitudes for faculty by "making administrative decisions based on what's best for kids."

Relationship of ERT with School Leadership

Principals were extremely positive concerning both the SIG process and their ER teams. One called ER members "a higher notch of people, willing and ready to go the extra mile." Another feared losing "any ER staff." A third agreed saying, "I can't imagine it without the ER staff; they are phenomenal." The SIG was valuable, one principal asserted, because the grant process forced a school "to make changes." Another principal said, "I tell people all the time the SIG was the best thing that ever happened to me and my career and the school district. It has made me an instructional leader."

Principals also believed that most of their faculty had lost their resistance to the ER team and the SIG. This had occurred, they argued, as teachers realized "we are there to support them." One stated that his teachers had gone through "the whole spectrum of grief" concerning the changes at the school but were now "partners" with the ER team. Another said she thought "over half my staff have been very receptive the ER staff."

Impact of the SIG

Principals realized that the culture of their schools was negative before their participation with the SIG. One called it *“awful, toxic, and confrontational.”* People were *“demoralized by being a lowest performing school.”* Principals spoke of a lack of urgency among faculty. Academic rigor and expectations of students were low. At one school *“a lot of the teachers felt like (reaching AYP) was one of those lofty goals we just couldn't hit because we have a high percentage of students that are free and reduced lunch.”* In reading and math, progress was hampered by a lack of basic skills among students. Another principal said, *“School morale and discipline was an issue and building those student/teacher relationships.”* Even a Cohort 1 school that had greatly improved its school culture had significant challenges because 28 personnel had been replaced since the previous year.

Principals reported a number of improvements associated with the SIG. Teachers were collaborating in PLCs. The culture was improving as student discipline improved. One principal said a sense of urgency had begun to take hold. *“Before, (teachers) did the best we could until 3:30 or 4:30 and accepted excuses. Now, there is a no excuses policy, teachers are starting to own the data, take responsibility for student failure as well as success.”* Another principal said accountability had increased because, *“We've tied teachers names to performance on assessments, this has changed teacher perspectives because their name is on the line.”* This principal also saw improvement in the use of differentiated instruction and formative assessment. A third principal believed *“more buy in”* was occurring as teachers saw *“results.”* He said, *“We're (no longer) just doing what the state wants, but we're doing what's best for kids.”*

One of the biggest changes principals saw was in students. As one put it, *“students are taking more responsibility for their learning now.”* This was occurring as teachers shared data reports with students to help them see where they needed to improve. Students were taking assessments more seriously in part as schools emphasized the importance of College and Career readiness with them.

Continuing Challenges

Principals remained aware that challenges persisted. Several feared that staff cuts for the coming year would make it difficult to continue to provide interventions that individual students needed. As one principal put it, *“The board is meeting next week, and I am hoping that we don't lose any staff. That's the biggest key. We've implemented the math and reading intervention classes, and those would be the first ones to go if we lose staff.”* Others emphasized the need to align *“administrative practices”* and *“curriculum”* across the district so that students did not start high school so far behind. However, several principals argued that the greatest need was to continue to build the instructional capacity of teachers in their buildings. To accomplish this they needed the ER teams—*“someone helping the teachers who are not evaluating them.”*

Eastern: Instruction and Leadership Teacher Perspectives

Eastern Cohort 1 schools

"I believe that the ERS work and the KY SIG involvement has been a valuable component in improving student achievement at our school. The close monitoring and constant feedback has proved to elevate teacher awareness and implementation of effective teaching strategies. The focus has been on making decisions that ultimately provide the best possible outcomes for students. This focus has opened the door to changes that might otherwise have not occurred. For example, removing barriers like scheduling to provide math and reading intervention. I believe that being identified as a PLA school was a positive turn-of-events and, in the long term, will help the school be viewed as an outstanding center for learning."-Eastern Cohort 1 teacher

A follow-up survey was given to Cohort 1 tier II teachers in the Eastern region. Forty-One teachers responded to the online survey. The survey asked teachers to rate statements related to four major aspects-- the leadership environment in their schools, their instructional practices, current classroom management, and educational recovery efforts. Teachers were asked to express their agreement with statements on a five-point scale with 5 representing 'Strongly Agree' and 1 representing 'Strongly Disagree'. The overall means for all four major variables were high, with mean ratings above 3.5 on a 5 point scale. The 'instructional practices' variable had a higher overall mean (4.35) and the 'ER efforts' variable had a relatively lower overall mean (3.89) relative to other variables.

School Leadership: Cohort 1 Teacher Follow-Up Survey Eastern Region

Respondents in Cohort 1 were asked to rate statements related to their school's leadership. Results indicate they agreed that their principal participates actively with the school's instructional teams (Mean 4.17). In addition, they fairly positively agreed that the principal models and continuously communicates high expectations for significantly improved student achievement (Mean 3.88). Teachers rated the statement 'Our principal spends a significant portion of their time working directly with teachers to improve instruction' the lowest, with an average of "Somewhat Agree" (Mean 3.24). Table 1 provides the ratings for all the statements concerning school leadership.

Table 1: School Leadership: Cohort 1 Teacher Follow-Up Survey Eastern Region

Please rate your level of agreement:	N	Mean	Std. Dev.
The Principal participates actively with our school's Instructional Teams.	41	4.17	0.998
Our Principal models and continuously communicates high expectations for significantly improved student achievement.	42	3.88	1.187
Our Principal closely monitors curriculum and classroom instruction.	41	3.71	1.23
Our school personnel are open to change and to interventions for school improvement.	40	3.56	1.285
Our school leadership actively collaborates with faculty in reviewing progress and making recommendations for change.	41	3.29	1.285
Our Principal spends a significant portion of time working directly with teachers to improve instruction.	40	3.24	1.338
Overall Average		3.64	

*1= Strongly Disagree, 5= Strongly Agree

Instructional Practices: Cohort 1 Teacher Survey Eastern Region

Respondents were asked to rate statements about their classroom instructional practices. Teacher responses were positive in all statements related to classroom instructional practices. The statements receiving the highest level of agreement were 'My instructional team develops standards-aligned units of instruction for math and literacy at each grade level' (Mean 4.5) and 'I frequently assess my students using a variety of evaluation methods' (Mean 4.45). In addition to these positive ratings teachers agreed that individualized instruction is based on formative assessments to provide learning support for some and enhance learning opportunities for others (Mean 4.39), using student performance data to plan instruction (Mean 4.21), and that the school's leadership regularly monitors school-level performance data to plan instruction (Mean 4.18). Table 2 provides the rating statements provided for the area of classroom instructional practices.

Table 2: Instructional Practices: Cohort 1 Teacher Survey Eastern Region

Please rate your level of agreement:	N	Mean	Std. Dev.
My Instructional Team develops standards-aligned units of instruction for math and literacy at each grade level.	28	4.5	0.839
I frequently assess my students using a variety of evaluation methods.	38	4.45	0.767
I individualize instruction based on the results of formative assessments to provide learning support for some students and to enhance learning opportunities for others.	38	4.39	0.887
My Instructional Team uses student performance data to plan instruction.	33	4.21	0.857
My school's leadership regularly monitors school-level student performance data.	38	4.18	0.955
Overall Average		4.35	

*1= Strongly Disagree, 5= Strongly Agree

Classroom Management: Cohort 1 Teacher Survey Eastern Region

Respondents from Cohort 1 were asked to rate statements about their classroom management practices. Ratings were fairly high for all statements; with most teachers agreeing that they clearly inform students of lesson objectives and expected learning outcomes (Mean 4.58) and that they engage all students in classroom discussions and activities (Mean 4.50). Other areas that were high were 'Teaching practices reflect that different learners learn differently' (Mean 4.38) and that 'I balance instruction in my classroom between lecturing and small group activities' (Mean 4.32). Teachers rated lowest their maintaining records of student performance on formative assessment (Mean 3.82) and maintaining records of student mastery on learning objectives (Mean 3.79) though the results here were still fairly positive. Table 3 provides the ratings for statements concerning classroom instructional practices.

Table 3: Classroom Management: Cohort 1 Teacher Survey Eastern Region

Please rate your level of agreement:	N	Mean	Std. Dev.
I clearly inform students of lesson objectives and expected learning outcomes.	38	4.58	0.793
I engage all students in classroom discussions and activities (e.g., encourage silent students to participate).	38	4.50	0.83
My teaching practice reflects that different learners learn differently.	39	4.38	0.847
I balance instruction in my classroom between lecturing and having students work in small group activities.	38	4.32	0.962
I differentiate assignments (individualize instruction) in response to student performance on formative assessment.	39	3.82	0.997
I maintain a record of each student's mastery of specific learning objectives.	39	3.79	1.128
Overall Average		4.23	

*1= Strongly Disagree, 5= Strongly Agree

Educational Recovery Efforts: Teacher Survey Eastern Region

Respondents were asked to rate statements about educational recovery efforts. Teachers overall agreed that math and literacy teachers in their schools were open to having the ERS work with them to improve instructional practice (Mean 4.46) and that the PLCs in which they were engaged provided them with opportunities to learn from their peers (Mean 4.03). Other areas receiving a fairly high rating were ‘Since working with my ERS, I have a better understanding of how to use formative assessment data in planning classroom instruction’ (Mean 3.94). Rated slightly lower were the statements ‘My ERS supports me in a constructive and non-judgmental manner’ (Mean 3.71) and ‘There are specific areas in my instructional practice which my ERS can help me improve’ (Mean 3.71). The area receiving the lowest rating was the statement ‘I am becoming a more effective teacher due to the assistance in instruction from my ERS’ (Mean 3.42). Table 4 provides the ratings for the statements for educational recovery efforts.

Table 4: Educational Recovery Efforts: Cohort 1 Teacher Survey Eastern Region

Please rate your level of agreement:	N	Mean	Std. Dev.
Math and literacy teachers in this school are open to having the ERS work with them to improve instructional practice.	28	4.46	0.744
The Professional Learning Community in which I'm engaged provides me opportunities to learn from my peers.	34	4.03	1.359
Since working with my ERS, I have a better understanding of how to use formative assessment data in planning classroom instruction.	32	3.94	0.982
My ERS and I have established a positive collaboration in working on classroom practices.	32	3.78	1.211
My ERS supports me in a constructive and non-judgmental manner.	34	3.71	1.426
There are specific areas in my instructional practice which my ERS can help me improve.	34	3.71	1.115
I am becoming a more effective teacher due to the assistance in instruction from my ERS.	33	3.42	1.119
Overall Average		3.86	

*1= Strongly Disagree, 5= Strongly Agree

Eastern Cohort 2 schools

Forty-One teachers from Cohort 2 schools in the Eastern region responded to a survey which asked respondents to rate statements related to the leadership environment in their schools, their instructional practices, and educational recovery efforts. Teachers were asked to express their agreement with statements on a five-point scale with 5 representing 'Strongly Agree' and 1 representing 'Strongly Disagree'. Similar to Eastern Cohort 1 ratings, the overall means for all four major variables were high, with mean ratings above 3.5 on a 5 point scale. The 'instructional practices' variable had a higher overall mean (4.23) and the 'ER efforts' variable had a relatively lower overall mean (3.69) relative to other variables.

School Leadership: Cohort 2 Teacher Survey Eastern Region

Respondents were asked to rate statements related to their school's leadership. Results indicate they believed strongly that their principal models and continuously communicates high expectations for significantly improved student achievement (Mean 4.4). In addition, they rated relatively highly that their principal participates actively with the schools instructional team (Mean 4.05). Teachers assessed the leadership's collaboration with faculty in reviewing and making recommendations for change the lowest (Mean 3.7). Table 5 provides the ratings for all the statements concerning school leadership.

Table 5: School Leadership: Cohort 2 Teacher Survey Eastern Region

Please rate your level of agreement:	N	Mean	Std. Dev.
Our Principal models and continuously communicates high expectations for significantly improved student achievement.	40	4.4	1.057
The Principal participates actively with our school's Instructional Teams.	39	4.05	1.337
Our Principal closely monitors curriculum and classroom instruction.	41	3.92	1.349
Our school personnel are open to change and to interventions for school improvement.	40	3.76	1.241
Our Principal spends a significant portion of time working directly with teachers to improve instruction.	40	3.73	1.301
Our school leadership actively collaborates with faculty in reviewing progress and making recommendations for change.	41	3.7	1.381
Overall Average		3.93	

*1= Strongly Disagree, 5= Strongly Agree

Instructional Practices: Cohort 2 Teacher Survey Eastern Region

Respondents were asked to rate statements about their classroom instructional practices. Teacher responses were positive in all statements related to classroom instructional practices. The statements receiving the highest level of agreement were 'I individualize instruction based on the results of formative assessments to provide learning support for some students and to enhance learning opportunities for others.' (Mean 4.44) and 'I frequently assess my students using a variety of evaluation methods' (Mean 4.63). In addition to these positive ratings teachers agreed that their instructional team develops standards-aligned units of instruction for math and literacy (Mean 4.13), using student performance data to plan instruction (Mean 4.11), and that the school's leadership regularly monitors school-level performance data to plan instruction (Mean 4.05). Table 6 (on the following page) provides the rating statements provided for the area of classroom instructional practices.

Table 6: Instructional Practices: Cohort 2 Teacher Survey Eastern Region

Please rate your level of agreement:	N	Mean	Std. Dev.
I frequently assess my students using a variety of evaluation methods.	38	4.63	0.489
I individualize instruction based on the results of formative assessments to provide learning support for some students and to enhance learning opportunities for others.	39	4.44	0.641
My Instructional Team develops standards-aligned units of instruction for math and literacy at each grade level.	31	4.13	1.118
My Instructional Team uses student performance data to plan instruction.	38	4.11	0.981
My school's leadership regularly monitors school-level student performance data.	37	4.05	0.981
Overall Average		4.23	

*1= Strongly Disagree, 5= Strongly Agree

Classroom Management: Cohort 2 Teacher Survey Eastern Region

Respondents from Cohort 2 were asked to rate statements about their classroom management practices. Ratings were fairly high for all statements; with most teachers agreeing that they clearly inform students of lesson objectives and expected learning outcomes (Mean 4.58) and that they engage all students in classroom discussions and activities (Mean 4.51). Other areas that were high were 'Teaching practices reflect that different learners learn differently' (Mean 4.32) and that 'I balance instruction in my classroom between lecturing and small group activities' (Mean 4.23). Teachers rated lowest their maintaining records of student performance on formative assessment (Mean 3.92) and maintaining records of student mastery on learning objectives (Mean 3.52) though the results here were still fairly positive. Table 7 provides the ratings for statements concerning classroom instructional practices.

Table 7: Classroom Management: Cohort 2 Teacher Survey Eastern Region

Please rate your level of agreement:	N	Mean	Std. Dev.
I clearly inform students of lesson objectives and expected learning outcomes.	38	4.58	0.793
I engage all students in classroom discussions and activities (e.g., encourage silent students to participate).	37	4.51	0.804
My teaching practice reflects that different learners learn differently.	37	4.32	0.852
I balance instruction in my classroom between lecturing and having students work in small group activities.	35	4.23	0.808
I differentiate assignments (individualize instruction) in response to student performance on formative assessment.	36	3.92	0.937
I maintain a record of each student's mastery of specific learning objectives.	35	3.57	1.065
Overall Average		4.19	

*1= Strongly Disagree, 5= Strongly Agree

Educational Recovery Efforts: Cohort 2 Teacher Survey Eastern Region

Finally, respondents from Cohort 2 in the Eastern region were asked to rate statements related to ERS practices. Teachers rated educational recovery efforts fairly positively, though ratings for education recovery efforts were lower than instructional practices and school leadership. They, in general, agreed that the PLCs provide opportunities to learn from other peers (Mean 4.06) and that math and literacy teachers in the school were open to having the ERS work with them to improve instructional practices (Mean 4.05) However, teachers rated lower their becoming more effective teachers due to the assistance in instruction from their ERS (Mean 3.14) and that since working with the ERS they have a better understanding of how to use formative assessment data in planning classroom instruction (Mean 3.23). Table 8 (on the following page) provides the ratings for all the statements concerning educational recovery efforts.

Table 8: Educational Recovery Efforts: Cohort 2 Teacher Survey Eastern Region

Please rate your level of agreement:	N	Mean	Std. Dev.
The Professional Learning Community in which I'm engaged provides me opportunities to learn from my peers.	33	4.06	1.197
Math and literacy teachers in this school are open to having the ERS work with them to improve instructional practice.	19	4.05	0.97
My ERS supports me in a constructive and non-judgmental manner.	24	4.00	0.978
There are specific areas in my instructional practice which my ERS can help me improve.	24	3.75	1.113
My ERS and I have established a positive collaboration in working on classroom practices.	23	3.57	1.199
Since working with my ERS, I have a better understanding of how to use formative assessment data in planning classroom instruction.	22	3.23	0.973
I am becoming a more effective teacher due to the assistance in instruction from my ERS.	22	3.14	1.283
Overall Average		3.69	

*1= Strongly Disagree, 5= Strongly Agree

Western: Instruction and Leadership Education Recovery Staff Perspectives

"The attendance has gone up in the school. Kids are willing to spend time after school to improve (ACT prep, etc.)."

"The biggest success is their school culture has really made some big changes. (In the past) They had some very disruptive atmosphere, a lot of discipline problems. (Now) kids are very respectful."—ER staff Western region

Interviews were also held with five of the five ERSs within the Western region. Again, respondents in Cohorts 1 and 2 generally provided similar perspectives, and their responses were reported together. Divergent themes have been explicitly explained by cohort where applicable. Genders of pronouns were once again randomized to protect respondents' anonymity.

ERSs in the West agreed with their colleagues that their work with teachers was collaborative and focused on improving student outcomes. They utilized embedded PD to improve instructional practices within the classroom. Much of this PD was delivered within PLCs which were improving in all schools. In addition, they too utilized walkthroughs to identify gaps in teacher training. In general, they believed most teachers were supportive of their activities, and that as a result the instructional climate within classrooms had been elevated. They also observed that student engagement, attendance, and behavior had all improved. However, local cultural expectations remained relatively low, and some teachers still maintained low expectations for student progress.

Role of the ERS

Western ERS views of their role were both similar and dissimilar from those in the East in part because three out of five of them were in their second year of the grant. Like their colleagues in the East they viewed their work with teachers collaboratively. One described his role, *"I am to work to help improve student achievement by working with teachers, parents, students in any way that we decide to do that. Help any way that I can at the school."* Again the goal was improved student outcomes which were pursued through an emphasis on data, the provision of PD, walkthroughs, and PLCs. At the same time, some ERSs in Cohort 1 schools reported greater frustration in the second year of the grant. ERSs knew that they needed to step back from providing direct leadership in "agendas" or "planning" in order to make school reform efforts sustainable. However, figuring out how much responsibility teachers were ready to handle was "frustrating" and "difficult." Another ERS in a Cohort 1 school expressed frustration that the progress in her school had been interrupted by large amounts of faculty turn-over which had forced them *"to start over from scratch."* Trust that had been built the prior year once again had to be re-established which slowed progress.

SIG Activities

As in the East, the first practice brought to schools by the ER teams *"focused on one on one embedded PD."* Training was provided based on what ERSs saw happening in classrooms and what they heard from teachers *"following PLCs."* Some ERSs emphasized that modeling was the primary way in which PD was provided. One said, *"When PD is done in PLCs or in a whole group the PD is presented as a 'model' lesson to model for teachers what is expected from them...A lot of our teachers have explained to us that they enjoy these lessons because they know exactly what we (the ER team) expect."*

Topics for PD mentioned in interviews included instructional strategies, formative assessment, developing smart goals, lesson planning, and the new core standards.

A second activity used in all schools was PLCs. ERSs reported that a great deal of their PD was delivered in these venues. PLCs in each school looked at student data, and were broken down by subject area. Leadership was provided by internal staff, many of whom had *“administrative certification.”* Unlike PLCs in the East which tended to meet at least weekly, PLCs in the West came together a couple of times a month. One ERS was particularly enthused by the progress PLCs had made in his school saying, *“This year, they actually look like PLC’s.”*

All ER teams also used classroom observations in their work. ERSs emphasized the value of walkthroughs for identifying gaps in teacher training. This allowed the teams to identify areas for additional PD. In two schools a walkthrough document aligned with the principal’s goals for instruction were used. In the third, the school used Observation 360. ERSs reported that teachers wanted the feedback and were receptive to the walkthroughs.

Teacher Attitudes

In fact, just as in the East ERSs believed that most teachers’ attitudes had been generally supportive across the board. One ERS believed this was due in part to the *“positive attitude”* of the new principal. He and his administrative team had worked hard to improve the culture of the school and everything had become more positive as a result including *“the teachers’ willingness to improve.”*

Impact of the SIG

As in the East, ERSs in the West reported that their schools had been marked by low expectations and a lack of rigor prior to the SIG. Some teachers had pedagogical skill deficits that needed to be overcome. One ERS said some of his teachers did not know how *“to begin their class, what the expectations are during a class, and then how to end a class”* before their participation in the SIG. Teachers also suffered from not knowing what to do with the student data they had. They were not using it to help students at an individual level. One ERS stated that her school was marked by a *“very disruptive atmosphere, a lot of discipline problems.”* In addition the schools suffered from attendance problems and high turnover among teachers and administrators.

ERSs believed that the SIG had brought broad, positive changes to their schools. One said, *“I think that the instructional climate is very positive. I think that’s changed quite a bit.”* Another stated, *“We have made great strides both academically as well as culture and climate, so we have a lot to celebrate and be proud of.”* Teachers were using new instructional strategies they had been taught with greater creativity. One ERS asserted, *“They realize that lecture format is not going to get it.”* In addition, teachers were doing a better job planning their instruction. As one ERS put it, *“now they’re planning the vocabulary, the higher level questioning, thinking ahead...a lot more planning.”*

In Cohort 1 schools, teachers trained in the prior year were successfully mentoring new teachers and training them in instructional techniques. These schools also reported increased success with formative assessment. In one of these schools, the ERS asserted that, *“Formative assessment is definitely guiding our instruction, especially in the math department.”* Another stated, *“Some teachers are doing a better job because they now understand how that daily feedback will help them to modify their instruction for the next day. They don’t just cover things and go on. It is still not at the fully implemented level but more teachers are using it than there were.”*

ERSs in all three schools also spoke of improved attitudes among faculty. Some believed improved leadership on the part of school principals had a strong positive effect on teachers’ willingness to improve. One ERS also mentioned that important systemic change was occurring as reform at the high school began to trickle down across the district. Better

alignment with core standards “from the elementary up to the high school” had begun “eliminating the gap between transitioning from one grade to the next grade.” In addition, another ERS praised her school’s improved use of data, “Before the ER team came, they had tons of data but they never ever did anything with it. Now, their having conferences with students one on one, they’re setting goals with the students, they’re trying to motivate them to make gains from benchmark.”

Changes within the instructional environment had led to improvements within students as well. ERSs said that students were more “engaged” and that their attendance had improved. At one school that has struggled with discipline problems in the past, an ERS referred to students as “very respectful.” Students displayed a number of behaviors that suggested they were more interested in learning. One ERS reported that students were now “willing to spend time after school to improve.” Another said that students in a math intervention class were “coming to the office to find out how they did on their tests/assessments.” They were “taking more ownership of their progress.” A third shared with some excitement the results of creating incentives for reading in his school. By “giving away Kindles for AR points and contests for reading” the school library had seen lending increase to 4,500 volumes between August and December, four times the amount during the same period in the previous year. In addition, understanding what it meant to be college and career ready had led to an increased interest in further education for some students. One ER said, “A lot of what we’re seeing is that kids that weren’t even college bound or even thinking about going to college are at least considering it because they know now how to that. Some of them didn’t realize how smart they were.”

Continuing Challenges

Despite the improvement, ERSs made it clear that challenges remained in part because the schools had so far to go from the beginning. As a result areas of great improvement over the course of a year or two still represented a threat to continued reform. Local cultural expectations had not been turned completely around. Instead ERSs admitted that schools were still “dealing with the battle of the high poverty school, my parents were drop outs so...(I will be too)” Some teachers continued to exhibit “a low expectation mentality.” Also, student attendance and engagement remained issues.

ERL Interviews in the Western Region

“The teachers are taking a lot more responsibility for their classrooms for the discipline in the room, resources, materials, and diversifying how they use it in their room....Our teacher attendance rate has absolutely skyrocketed.”

“The kids are making progress and seem motivated,(they) see a lot of hope, see that people really care about them and want them to succeed and they are stepping up to the plate.”

Three of the three ERLs in the Western region were also interviewed. These ERLs were less inclined than those in the East to call themselves mentors of principals, instead referring to themselves as a support to the leadership. ERLs in the West spoke very favorably of their principals as instructional leaders. They noted their roles in providing PD, PLCs, and walkthroughs. In addition, they believed that the SIG had made principals better leaders and had improved their skills at communication. At the same time, they recognized that principals continued to struggle with monitoring instructional practices and remaining focused on instruction.

Role of the ERL and the ER Team

In the West, ERLs most used the words “supporting” and “*working with*” to describe their role. One ERL mentioned “*building capacity*” in leadership. Another used the word “mentor” but was uncomfortable with the word because his principal was “*very experienced and (had) a lot of expertise and knowledge.*” ERLs tended to see their role as assisting the principal and leadership team in their task of ensuring that the school functioned “*in the best interest of students*” and making sure the needs identified in the 30-60-90 day plan and audits were addressed.

ERLs differed on the role of the ER team. One said they “*assist the school, to offer suggestions, ideas, resources, avenues, information, guidance.*” Another referred to it as an administrative role of “*coordinating things.*” One of the Cohort 1 ERLs emphasized the importance of the ER team stepping back from its leadership role in the first year in order to “*develop a little more capacity*” within the school leadership team.

Relationships with the Principal

As in the East, all ERLs spoke positively of their current principal. One was said to bring “*a lot of strong instructional base.*” Another “*brought a lot of vitality to the building.*” The third was “*an outstanding instructional leader.*” All thought the principal had also developed positive relationships with their staffs.

Principal’s Role in Instruction

Principals in the West were active instructional leaders. Two, in particular, were praised for their instructional skill. One ERL said her principal “*empower(ed) teachers to do their jobs.*” He was “*very, very helpful*” at going into a teacher’s classroom and modeling instruction effectively. He knew “*how to get all kids engaged in learning.*” Another opined that his principal took on “*a major role in PLCs*” and “*Instructional activities in the school.*” All three principals participated in providing PD to teachers both one-on-one and in group settings. They were also active in setting the agendas for PLCs. One used PLCs to “*bring literacy into (other) content areas.*” Another led a book study. The third had created agendas that related to his initiatives. He was “*in the meetings, making sure the agenda (was) followed.*”

In addition, principals were involved in walkthroughs designed to identify instructional challenges. The entire leadership team including the principal and the ER personnel visited teachers according to a regular rotation using a walkthrough instrument to record their observations. Afterward, the leadership team met together to discuss their observations concerning, as one ERL phrased it, “*strengths, weaknesses...teachers who (might) need help.*” In addition, principals performed separate evaluative walkthroughs as well. All told, one ERL reported that her principal spent 60-70 percent of his time in classrooms.

SIG Impact on Principals

In the West, ERLs were able to identify a few important positive impacts of the SIG on two of their principals. One had begun to take on “*more of a leadership role.*” She had also started to do a better job “*in recognizing, celebrating teachers and students that (were) doing the right thing day in and day out.*” The principal’s relationship with district-level personnel had also improved. The second principal had, with the assistance of the ERL, improved his “*communication*” with staff. He had also become better at delegating.

The third principal’s ERL did not identify any improvements the SIG had brought to the principal, instead focusing on the positive impact the principal had on reform efforts in her school. This principal had led rapid cultural change, creating a school “*with lots of safety*” with “*order in the building*” and “*very few discipline issues.*” She had created a “*much higher morale among the teachers and students and community.*”

Continuing Challenges

ERLs were able to point to challenges that remained for all three schools. One principal excelled at instruction but needed to continue to work with the ERL on *“the monitoring piece”* to insure that her expectations in the classroom were adopted. A second still struggled with being *“pulled in a lot of different directions.”* He had trouble maintaining *“focus.”* In the third school, the ERL said that they still had some *“teachers who (were) not solid and secure with the (changing) standards.”*

Western: Instruction and Leadership Principal Perspectives

"The Freshman attendance in January was 98%. For the month of January, out of 5 Middle and High Schools, we had the lowest number suspended. We only had 7 suspensions...fewer suspensions than all the Middle and High School students. What is the school doing to change the suspension rate?- "It's the relationships...kids voted me most inspirational faculty member. We're a little more patient... celebrating kids."—Principal Western region

Interviews were held with three of the three principals within the Western region. These principals envisioned their role to focus on reforming their schools by improving school culture and classroom instruction. They tended to be positive concerning the SIG process and the ER team. In addition, they felt teachers were receptive to the ER team. They believed that the SIG had led to improvements within the school culture and instruction. At the same time, they continued to maintain concern for student and parent apathy. One principal felt greater increases in teachers' instructional skill remained her school's most pressing need.

Role of the Principal

Principals in the West were focused on reforming their schools by improving school culture and classroom instruction. One principal in particular expressed resentment of anything that took his focus away from improving instruction. All, to varying levels of success, initiated change and followed up with teachers to enforce the change. They raised expectations by demanding that teachers plan for instruction more effectively. They tried to provide teachers with the training they needed to implement their initiatives. One principal also emphasized modeling appropriate relationships with students to transform his school's culture.

Relationship of ERT with School Leadership

Principals were generally positive about the SIG process and the ER team. None expressed any dissatisfaction with the help they were receiving. In particular, two principals valued the financial resources the SIG provided that enabled them to hire reading and math interventionists to work with the lowest performing students in their schools. Both expressed sincere trepidation that their districts would not be able to continue to support those positions after the grant went away. Another principal said that when the ER teams first arrived there was a period of "feeling out" one another to make sure that everyone wanted to move "in the same direction." He had come to appreciate "another set of unbiased eyes" in the building to help him identify needed changes.

In addition, principals felt the receptivity of staff toward the ER teams was high. One thought this was in part because the leadership had "presented" them to the faculty "in a positive light." They were offered to teachers "as a resource" that had "the same vision of improving student learning." However, principals also believed strongly that teacher morale had dropped substantially over the course of the year because of the work load and the increased rate of change. One Cohort 1 principal felt that the uncertainty concerning the new assessments and standards had slowed the momentum of improvement from the year before.

Impact of the SIG

Principals reported a number of improvements associated with the SIG. All three reported improvements in their school culture. One principal said, *"We have made some big strides in our culture, the kids have accepted the gauntlet we've thrown down to them."* He believed that his younger students in particular had bought into the changing expectations at the school. Another believed that *"academics...(was) at the forefront."* She cited as evidence students being recognized at basketball games for *"academic achievements"* and higher expectations like *"required"* homework and assignment *"expected on time."* She asserted that, *"Athletics is not the coolest thing anymore, having the highest test scores is."* Students were *"coming in on Saturday for AP study sessions,"* and AP classes were *"full for the next year."* The third principal pointed to increases in teacher and student attendance. In January the freshman attendance rate at the school was 98%. In additions, suspensions had fallen below the levels at neighboring schools.

Principals also believed instruction had improved tremendously. One said her teachers were *"knocking it out of the park."* Instruction had *"improved greatly,"* and teachers were becoming *"more reflective"* and *"solid instructionally."* A second argued that his teachers were *"doing some incredible teaching based on standards and teaching bell to bell."* Winter formative assessments in all schools showed an increase in student learning.

Continuing Challenges

Principals identified a number of challenges that remained at their schools. Two were concerned about continuing student and parent *"apathy."* In several cases students and their parents were still not *"receptive to the more rigorous instruction."* Students also still faced the impact of *"poverty"* on their learning, and teachers still did not know how to teach students from poverty. One principal was very concerned about support from the district office and, in particular, the level of funding they were willing to provide. Another principal believed the biggest issue was *"teachers mastering pedagogy."* She stated that the *"money and intelligence"* already existed in sufficient quantities and that teachers could make the transition if the school kept the *"culture growing, functional, and healthy"* so that teachers would remain receptive.

Western: Instruction and Leadership Teacher Perspectives

Western Cohort 1 Schools

"Our ERS team has gone beyond the call of duty. They have selflessly supported classroom instruction and worked tirelessly to improve the school culture and climate. They are approachable and positive in their interactions with teachers. Our school is a better place because of their presence."--Western Cohort 1 teacher

A follow-up survey was given to Cohort 1 teachers in the Western region. Twenty responded to this follow-up survey which asked teachers to rate statements related to the leadership environment in their schools, their instructional practices, current classroom management, and educational recovery efforts. Teachers were asked to express their agreement with statements on a five-point scale with 5 representing 'Strongly Agree' and 1 representing 'Strongly Disagree'. The overall means for all four major variables were high, with mean ratings above 3.5 on a 5 point scale. The 'instructional practices' variable had a higher overall mean (4.69) and the 'ER efforts' variable had a relatively lower overall mean (3.88) relative to other variables.

School Leadership: Cohort 1 Teacher Survey Western Region

Respondents in Cohort 1 were asked to rate statements related to their school's leadership in a follow-up survey. Teachers rated highly all statements concerning their school leadership. They agreed that their principal participates actively with the school's instructional teams (Mean 4.7). In addition, they rated positively that the principal models and continuously communicates high expectations for significantly improved student achievement (Mean 4.6). Teachers also rated the statements 'Our principal spends a significant portion of their time working directly with teachers to improve instruction' (Mean 4.45), 'Our school leadership actively collaborates with faculty in reviewing progress and making recommendations for change' (Mean 4.45), and 'Our principal closely monitors curriculum and classroom instruction' (4.45) with an average of "Strongly Agree." The statement 'Our school personnel are open to change and to interventions for school improvement' was rated lowest but still high (Mean 4.3) Table 9 provides the ratings for all the statements concerning school leadership.

Table 9: School Leadership: Cohort 1 Teacher Survey Western Region

Please rate your level of agreement:	N	Mean	Std. Dev.
The Principal participates actively with our school's Instructional Teams.	20	4.7	0.979
Our Principal models and continuously communicates high expectations for significantly improved student achievement.	20	4.6	0.94
Our Principal closely monitors curriculum and classroom instruction.	20	4.45	1.1
Our Principal spends a significant portion of time working directly with teachers to improve instruction.	20	4.45	0.826
Our school leadership actively collaborates with faculty in reviewing progress and making recommendations for change.	20	4.45	0.999
Our school personnel are open to change and to interventions for school improvement.	20	4.3	1.031
Overall Average		4.49	

*1= Strongly Disagree, 5= Strongly Agree

Instructional Practices: Cohort 1 Teacher Survey Western Region

Next, respondents were asked to rate statements about their classroom instructional practices. Teacher responses were positive in all statements related to classroom instructional practices. The statements receiving the highest level of agreement were 'My school's leadership regularly monitors school-level student performance data' (Mean 4.84) and 'The instructional team develops standards-aligned units of instruction for math and literacy at each grade level' (Mean 4.82) and 'I frequently assess my students using a variety of evaluation methods' (Mean 4.71). In addition to these positive ratings teachers agreed with the statements 'I am using student performance data to plan instruction' (Mean 4.61) and 'I individualized instruction based on formative assessments to provide learning support for some and enhance learning opportunities for others' (Mean 4.47). Table 10 provides the ratings for statements concerning classroom instructional practices.

Table 10: Instructional Practices: Cohort 1 Teacher Survey Western Region

Please rate your level of agreement:	N	Mean	Std. Dev.
My school's leadership regularly monitors school-level student performance data.	19	4.84	0.501
My Instructional Team develops standards-aligned units of instruction for math and literacy at each grade level.	17	4.82	0.393
I frequently assess my students using a variety of evaluation methods.	17	4.71	0.47
My Instructional Team uses student performance data to plan instruction.	18	4.61	0.778
I individualize instruction based on the results of formative assessments to provide learning support for some students and to enhance learning opportunities for others.	17	4.47	0.8
Overall Average		4.69	

*1= Strongly Disagree, 5= Strongly Agree

Classroom Management: Cohort 1 Teacher Survey Western Region

Ratings were fairly high for most statements regarding classroom management, with most teachers agreeing that they clearly inform students of lesson objectives and expected learning outcomes (Mean 4.53) and that they engage all students in classroom discussions and activities (Mean 4.53). Other areas that were high were the balance between instruction/lecturing and having students work in small group activities (Mean 4.38) and teaching practices reflecting that different learners learn differently (Mean 4.24). Teachers rated lowest their maintaining records of student mastery on learning objectives (Mean 3.71) though the results were still fairly positive. Table 11 provides the ratings for statements concerning classroom management practices

Table 11: Classroom Management: Cohort 1 Teacher Survey Western Region

Please rate your level of agreement:	N	Mean	Std. Dev.
I clearly inform students of lesson objectives and expected learning outcomes.	17	4.53	0.514
I engage all students in classroom discussions and activities (e.g., encourage silent students to participate).	17	4.53	0.514
I balance instruction in my classroom between lecturing and having students work in small group activities.	16	4.38	0.5
My teaching practice reflects that different learners learn differently.	17	4.24	0.752
I differentiate assignments (individualize instruction) in response to student performance on formative assessment.	17	4.12	0.928
I maintain a record of each student's mastery of specific learning objectives.	17	3.71	1.404
Overall Average		4.25	

*1= Strongly Disagree, 5= Strongly Agree

Educational Recovery Efforts: Cohort 1 Teacher Survey Western Region

Finally, respondents were asked to rate statements about educational recovery efforts. Teachers overall agreed that the PLCs in which they were engaged provided them with opportunities to learn from their peers (Mean 4.5) and that math and literacy teachers in their school were open to having the ERS work with them to improve instructional practice (Mean 4.19). Another area that received a fairly high rating was that since working with the ERS, they had better understanding of how to use formative assessment data in planning classroom instruction (Mean 3.83). Rated slightly lower was the statement 'There are specific areas of my instructional practice that the ERS can help me improve' (Mean 3.76). The areas receiving the lowest rating were the statements 'I am becoming a more effective teacher due to the assistance in instruction from my ERS' (Mean 3.65) and 'My ERS supports me in a constructive and non-judgmental manner' (Mean 3.5). Table 12 provides the ratings for the statements for educational recovery efforts.

Table 12: Educational Recovery Efforts: Cohort 1 Teacher Survey Western Region

Please rate your level of agreement:	N	Mean	Std. Dev.
The Professional Learning Community in which I'm engaged provides me opportunities to learn from my peers.	18	4.5	0.707
Math and literacy teachers in this school are open to having the ERS work with them to improve instructional practice.	16	4.19	1.109
Since working with my ERS, I have a better understanding of how to use formative assessment data in planning classroom instruction.	18	3.83	1.339
My ERS and I have established a positive collaboration in working on classroom practices.	17	3.76	1.393
There are specific areas in my instructional practice which my ERS can help me improve.	17	3.76	1.602
I am becoming a more effective teacher due to the assistance in instruction from my ERS.	17	3.65	1.539
My ERS supports me in a constructive and non-judgmental manner.	18	3.5	1.543
Overall Average		3.88	

*1= Strongly Disagree, 5= Strongly Agree

Western Cohort 2 school

Fifteen teachers from Cohort 2 schools in the Western region responded to a survey which asked respondents to rate statements related to the leadership environment in their schools, their instructional practices, and educational recovery efforts. Teachers were asked to express their agreement with statements on a five-point scale with 5 representing “Strongly Agree” and 1 representing “Strongly Disagree”. With the exception of the ‘ER effort’ variable, all other three major variables had overall mean ratings above 3.5 on a 5 point scale. The ‘classroom management’ variable had a higher overall mean (3.9) relative to other variables and the ‘ER efforts’ had a relatively lower overall mean (3.28).

School Leadership: Cohort 2 Teacher Survey Western Region

Respondents were first asked to rate statements related to their school’s leadership. Results indicated they agreed that their principal models and continuously communicates high expectations for significantly improved student achievement (Mean 4.13). In addition, they agreed (though less positively) that the principal participates actively with the schools instructional team (Mean 3.86) and that the school personnel are open to change and to interventions for school improvement (Mean 3.86). Teachers assessed the principal spending a significant portion of their time working directly with teachers to improve their instruction the lowest (Mean 3). Table 13 provides the ratings for all the statements concerning school leadership.

Table 13: School Leadership: Cohort 2 Teacher Survey Western Region

Please rate your level of agreement:	N	Mean	Std. Dev.
Our Principal models and continuously communicates high expectations for significantly improved student achievement.	15	4.13	0.915
The Principal participates actively with our school’s Instructional Teams.	15	3.86	0.864
Our school personnel are open to change and to interventions for school improvement.	15	3.86	1.246
Our Principal closely monitors curriculum and classroom instruction.	15	3.8	0.861
Our school leadership actively collaborates with faculty in reviewing progress and making recommendations for change.	15	3.13	1.125
Our Principal spends a significant portion of time working directly with teachers to improve instruction.	15	3.00	0.756
Overall Average		3.63	

*1= Strongly Disagree, 5= Strongly Agree

Instructional Practices: Cohort 2 Teacher Survey Western Region

Next, respondents were asked to rate statements related to instructional practices in their classrooms. Teachers gave the highest rating to balancing their instruction between lecturing and having students work in small groups (Mean 4.36). They agreed, on average, to clearly informing students of learning objectives and expected learning objectives (Mean 4.21), engaging students in classroom discussions and activities (Mean 4.21), and frequently assessing students using a variety of assessment methods (Mean 4.21) Teachers rated maintaining records of student’s mastery of specific learning objectives (Mean 3.08) and my instructional team develops standards-aligned units of instruction for math and literacy at each grade level (Mean 3) the lowest. Table 14 (on the following page) provides the ratings for all the statements concerning instructional practices.

Table 14: Instructional Practices: Cohort 2 Teacher Survey Western Region

Please rate your level of agreement:	N	Mean	Std. Dev.
I frequently assess my students using a variety of evaluation methods.	14	4.21	0.802
My school's leadership regularly monitors school-level student performance data.	15	4.07	0.884
I individualize instruction based on the results of formative assessments to provide learning support for some students and to enhance learning opportunities for others.	14	4.00	0.679
My Instructional Team uses student performance data to plan instruction.	14	3.29	1.069
My Instructional Team develops standards-aligned units of instruction for math and literacy at each grade level.	11	3.00	1.264
Overall Average		3.71	

*1= Strongly Disagree, 5= Strongly Agree

Classroom Management: Cohort 2 Teacher Survey Western Region

Ratings were fairly high for most statements regarding classroom management, with most teachers agreeing that they clearly inform students of lesson objectives and expected learning outcomes (Mean 4.21) and that they engage all students in classroom discussions and activities (Mean 4.21). Other areas that were high were the balance between instruction/lecturing and having students work in small group activities (Mean 4.36) and their teaching practices reflecting that different learners learn differently (Mean 4.24). Teachers rated lowest the item regarding maintenance of a record of student mastery of specific learning objectives (Mean 3.04). Table 15 provides the ratings for statements concerning classroom management practices

Table 15: Classroom Management Practices: Cohort 2 Teacher Survey Western Region

Please rate your level of agreement:	N	Mean	Std. Dev.
I balance instruction in my classroom between lecturing and having students work in small group activities.	14	4.36	0.497
I clearly inform students of lesson objectives and expected learning outcomes.	14	4.21	0.802
I engage all students in classroom discussions and activities (e.g., encourage silent students to participate).	14	4.21	0.579
My teaching practice reflects that different learners learn differently.	13	4.08	0.862
I differentiate assignments (individualize instruction) in response to student performance on formative assessment.	14	3.43	0.852
I maintain a record of each student's mastery of specific learning objectives.	12	3.08	0.9
Overall Average		3.90	

*1= Strongly Disagree, 5= Strongly Agree

Educational Recovery Efforts: Cohort 2 Teacher Survey Western Region

Respondents in Cohort 2 in the Western region were asked to rate statements related to ERS functions. Teachers rated educational recovery efforts lower than instructional practices and school leadership. They, on average, agreed that math and literacy teachers in the school were open to having the ERS work with them to improve instructional practices (Mean 3.73) and that there are certain areas of instructional practice which the ERS can help them improve (Mean 3.54). Teachers also agreed with the statement that the ERS and teachers have established a positive collaboration in working on classroom practices (Mean 3.46). However, teachers disagreed with the statement 'I am becoming a more effective teacher due to the assistance in instruction from my ERS' (Mean 2.54). Table 16 (on the following page) provides the ratings for all the statements concerning educational recovery efforts.

Table 16: Educational Recovery Efforts: Cohort 2 Teacher Survey Western Region

Please rate your level of agreement:	N	Mean	Std. Dev.
Math and literacy teachers in this school are open to having the ERS work with them to improve instructional practice.	11	3.73	0.905
There are specific areas in my instructional practice that my ERS can help me improve.	13	3.54	1.05
My ERS and I have established a positive collaboration in working on classroom practices.	13	3.46	0.967
My ERS supports me in a constructive and non-judgmental manner.	13	3.31	1.032
The Professional Learning Community in which I'm engaged provides me opportunities to learn from my peers.	11	3.18	1.168
Since working with my ERS, I have a better understanding of how to use formative assessment data in planning classroom instruction.	12	3.17	1.03
I am becoming a more effective teacher due to the assistance in instruction from my ERS.	13	2.54	1.266
Overall Average		3.28	

*1= Strongly Disagree, 5= Strongly Agree

Central/Jefferson: Instruction and Leadership Education Recovery Staff Perspectives

"We had a teacher that was here last year, so this was his 2nd year here. He struggled tremendously, some with classroom management but I think it was his instruction he struggled the most with. This year he came in with a "clean slate". He has turned into one of our strongest teachers in the sense of when kids don't get it he's not frustrated with the student but he actually comes to our PLC times and says, "ok, I was teaching this, this is what I did and they didn't get it." He takes the feedback he gets (from the PLC) and is more open to help and suggestions. This has helped the students feel it's ok to not understand something. All teachers also understand there is flexibility in the curriculum map."—ERS in the Central region

Twelve of twenty-one ERSs in the Central region were interviewed. Once again, respondents in Cohorts 1 and 2 generally provided similar perspectives, and their responses were reported together. Divergent themes have been explicitly explained by cohort where applicable. Genders of pronouns were once again randomized to protect respondents' anonymity.

In the Central region ERSs tended to describe their role based on the tasks they were performing. They were PD providers; they were data support personnel. Depending on their relationship with the principal they sometimes functioned as part of the school's leadership team. However, some principals did not include them in decision-making. In addition, they supported multi-tiered systems of intervention and served as a resource in PLCs. In several cases they were not a part of the formal walkthrough process in their schools but instead used informal observations of the teachers in their departments. They also assisted teachers with formative assessment. ERSs agreed that teachers supported their presence and were receptive to their PD. As such, they believed that teachers' instructional practices had improved as a result of the SIG. They also suggested that school climates had become more positive, that formative assessment was yielding more timely interventions, and that teachers were working more collaboratively. They also observed that students were more engaged in learning. At the same time, overall student behavior remained relatively poor.

Role of the ERS

ERSs in the Central region tended to describe their role based on the tasks they were performing. First and foremost, they were PD providers. They provided training in the use of formative assessment, teaching based on standards, developing fully-functioning PLCs, instructional strategies, tier 1 interventions, rigorous instruction, lesson planning, learning targets, test taking skills, and differentiated instruction. Frequently this PD was delivered formally within PLCs; several ERSs also mentioned modeling lessons for teachers. Providing PD was particularly important in the Central region because most schools had a very high percentage of young, inexperienced teachers. Secondly, the ERSs provided teachers and administrators with data. They helped teachers a great deal with *"identifying students for interventions."*

They also helped analyze formative assessment data. In some cases they were tasked with gathering data for administrators to use in planning for school improvement.

Other roles varied by school based on the vision of the school principal and the nature of the ER team's professional relationship with her. In some schools they had leadership roles and functioned as a part of the instructional leadership team. There ERSs assisted with implementing PLCs, building systems of intervention, and monitoring instruction and lesson plans. In others settings, they were *"not an active part of decision-making...not a part of the monitoring system."*

SIG Activities

In addition to PD, the SIG supported a number of practices in the participating schools. Most of the schools were using a multi-tiered system of interventions for students that failed to master a particular standard. Some schools provided this support in an additional interventions class each day. Others re-grouped students or did pull outs. Saturday schools were also employed. Many ERSs reported that they assisted teachers in identifying students for interventions and helped *"design intervention systems."* In addition, frequently SIG funds were used to hire math or reading interventionists to provide these services.

A second strategy used in all schools was PLCs. In some schools they met weekly, in others *"twice a month."* The quality and function of these groups also varied by school and even within schools. Some had *"very structured agendas,"* and teachers collaborated and looked *"at data and individual students."* Others were more like *"a glorified planning period."* In some schools, ERSs led the PLCs or were involved in setting the norms and procedures. In other cases, they were simply used as a resource, and the groups were led by teachers. In general, ERSs believed that teachers found the PLCs to be beneficial.

Based on the description of the ERSs, walkthroughs seem to have been employed less uniformly in the Central region than in the East and West. ERSs in the East and West all indicated that walkthroughs were formalized and regular. The ER team was a part of the walkthrough process, and feedback was provided to teachers based on the observations. ERSs in the Central region described walkthroughs in some of their schools this way but not in all. In several schools, the ER team was not a part of the school's walkthrough process. Instead, principals and assistant principals served this function. Indeed, in one of these schools the ERS was unaware of when administrative walkthroughs occurred or whether feedback from the walkthroughs was made available to teachers. In other cases, ERSs were involved in walkthroughs with administrators. However, they reported that feedback was rarely made available directly to the teachers observed. Instead the data was analyzed to discover common gaps within the instructional climate of the school for the purpose of planning PD. This aggregated data was sometimes made available beyond a school's administrative team within the contexts of faculty meetings. At the same time, in every school ERSs reported regularly and purposefully observed the instruction of teachers within their departments. These observations were used to provide feedback to teachers concerning their instructional practices so that they could improve.

One final common activity mentioned by ERSs within the Central region was formative assessment. The Jefferson County School District mandated standardized formative assessments to monitor student mastery of 18 common core standards. When students performed poorly on these assessments, interventions were supposed to be provided to help the student master the standard. ERSs provided PD to help teachers learn to use this system more effectively. In addition, ERSs regularly attempted to train teachers to use more informal, daily formative assessments as a regular part of their normal classes. As a result, in several schools ERSs stated that teachers seemed to be, as one put it, *"starting to understand that as they go around the classroom and assess, monitor and see that there are some kids who are not understanding a concept" they should "then (get) the class back together and possibly (do) a reteaching of the concept."*

Teacher Attitudes

Universally, ERSs interviewed in the Central region believed that the vast majority of the teachers they served supported the presence of the ER team and were receptive to the PD they had been provided. One respondent said, *"Teachers are very willing to accept assistance."* A second announced, *"75-80% are committed and behind the changes."* A third opined, *"I feel like the teachers are very willing to try new things."* One ERS admitted that it had taken teachers *"a while to get comfortable and used to the idea of the Educational Recovery team being at the school."* However, as trust grew they became more and more open to help. ERSs agreed that teachers wanted their students to succeed and were willing to make the changes necessary for their success.

Impact of the SIG

ERSs believed that the SIG had brought positive changes to their schools. Instructional practices had improved as teachers used more engaging activities and fewer lectures. Indeed, as one phrased it, teachers were now *"very willing to try different strategies."* As a result the climate in classrooms had improved. One ERS stated that, *"The climate in the classrooms is really positive in that the students enjoy math to the best of their ability."* Another said, *"Students are more settled. The students feel that the school is a place for education and don't have the attitude of I have to work."* The use of formative assessment had also improved enabling more timely interventions. An ERS believed that, *"Formative assessment (had) become a common practice in many of the math classes and using that data to decide what they (would) be doing next in the classroom."* ERSs also pointed to the increase of collaboration within PLCs as a very important result of the SIG work.

In addition, a number of positive results were being noted within students. One ERS pointed out that, *"Teachers (were) not just teaching but showing students how much they care(d)."* As a result some students responded with a higher level of engagement. One school saw dramatic change when they began attaching competitions to formative assessments. The ERS reported that, *"Kids were wanting to get their name on posters, wanting to get their reward, wanting to get recognized...because a lot of these kids don't get recognized in a positive way. Telling them that we believe(d) in them and that we care(d) about them was a big deal."*

Continuing Challenges

However, despite the improvement in some students, ERSs made it clear that overall behavior in these schools remained poor. As one ERS put it, *"we're still working on discipline."* In addition, turnover was a difficult problem as teachers gained the experience necessary to obtain other opportunities that were easier or closer to where teachers lived. As a result, schools were filled with young, inexperienced teachers, inflating the need for additional PD. ERSs also identified a lack of parental involvement as a serious problem for the schools.

ERL Interviews within the Central Region

"Both schools have had improvement in their culture. They are not accepting that they are going to be at the bottom of the list. The teachers and students are living up to the higher expectations."

*"She(the principal) has high expectations of the students and can break down barriers."—
ERLs in the Central region*

Interviews were also held with five of the seven ERLs in the Central region. These ERLs split their time between two separate schools and tended to view their role as a mentor to the principals. However, in some schools ERLs did not believe the principal was receptive to their advice. Their descriptions of principals as instructional leaders were mixed. The SIG assisted principals with improving systems, making better use of data for decision-making, and growing in instructional leadership. At the same time, ERLs noted that schools in their region continued to struggle with classroom management and inexperienced faculty.

Role of the ERL

In the Central region, ERLs split their time between two different schools. In each their roles reflected the relationship they had developed with the school principal. Most frequently, ERLs described their role as mentoring. In these cases, the ERL role included *"a lot of planning and advising with the principal."* ERLs also spoke of *"establishing agendas for meetings, protocols for keeping minutes, getting systems in place for maintaining minutes for meetings, communicating with faculty."* However, in some schools ERLs felt that the principal was not open to their advice because of conflict concerning what their roles should be. In these cases, ERLs provided the principal with whatever level of service she would allow and tended to focus their efforts on teachers.

Nevertheless, ERLs viewed most of the principals with whom they worked positively. One was, *"very passionate about preparing students for college or a career."* Others' conversations were *"focused on improving student scores, improving instruction."* In addition, they believed that most had the respect of their staffs.

Principal's Role in Instruction

ERLs' description of principals' instructional roles was mixed. Only one was described as *"frequently in and out of classrooms."* ERLs also only mentioned two who were involved in delivering PD on instruction. However, two others who recognized their weakness instructionally had *"made the effort to get quality people in those (instructional oversight) positions and then to rely on their expertise."* Also, principals did tend to support and had developed and monitored norms for PLCs. In addition, several required the submission of lesson plans or learning targets from teachers and provided them with feedback. Walkthroughs or *"learning walks"* varied by principal. Some conducted them sporadically (One ERL called them *"hit or miss"*), while others scheduled them regularly. However, few provided teachers with direct feedback after the walkthroughs in order to improve their instruction.

SIG Impact on Principals

ERSs identified some important impacts on principals through the SIG. One said, *"I'd say the biggest improvement (was) putting systems in place because it's something that we've worked with them on."* He pointed to the development of

non-negotiables for academics and behavior. Another believed the principal had learned to look *“at the data regularly and (make) decisions based on the data every day.”* One ERL said she had seen *“tremendous growth”* in both of her principals as instructional leaders.

Perhaps the most powerful change was related by one ERL this way: *“This year the best things that I heard...that came out of my principal’s mouth was after the test scores came out. We met with him as an ER team. He goes ‘I believe’, and that was awesome that he said he believed that they could turn the school around instructionally. But the second great thing was that he said that....(the ER team members) were genuine, that people that they had worked with in the past from the state...were really cold, not really personable. He thought that many of them had taken that position to further their position.”* The ERL went on to relate the principal saying *“If you didn’t know that (you) were from KDE you’d think you were (from X school), that you were genuine, that you were there to help the teachers to help the kids.”*

Continuing Challenges

ERLs described two major continuing weaknesses in the schools in the Central region. First, school culture remained a challenge. One ERS said there were *“a lot of classroom management problems.”* A second closely related problem was *“a very young faculty.”* Most teachers were inexperienced in all the schools. Teachers didn’t know a variety of instructional strategies. They didn’t know how to adapt a lesson plan in mid-stream that wasn’t working. Thus, ERLs believed these schools continued to need *“professional growth in teaching.”*

Central/Jefferson: Instruction and Leadership Principal Perspectives

"I was in the cafeteria about a week ago and there were 3 boys arguing with one student so it was three on one and they were really loud and I walk over there and I said 'guys calm down, what are you doing, what's going on here?' and they responded 'Ms. X tell so and so he can't graduate if he doesn't pass Algebra 2. He thinks that he can pass, graduate without passing Algebra 2. He knows he has to have Algebra 2 to graduate and we're telling him that he needs to do his work in class and you know that you're supposed to be going to HIP if you're supposed to go to HIP. It's not an invitation, it's an expectation.' That just made me feel so good that students are actually listening and they really get it. Kids believe in the mission and vision."—Principal, Central SIG school

Finally, interviews were held with eleven of the thirteen principals in the Central region. These principals emphasized their management and leadership roles. Some had very positive opinions of their ER teams, but others seemed to be engaged in some level of conflict with them. At the same time, they believed that their teachers had positive relationships with the ER teams. They thought the SIG had contributed to positive changes in school climate, improved student attitudes and engagement in learning, better attitudes and instruction by teachers, an improved ability to use data, and resources for reform. In addition, they believed the biggest challenges facing their schools were the skill gap students brought with them, the low expectation community culture, and the inexperience of teachers in their buildings. They thought that additional money and time were necessary in order to overcome these challenges.

Role of the Principal

Principals in the Central region emphasized their management and leadership roles. They supported the reform of their schools through the organization of the school and their assignment of resources to the right priorities. One said, *"I get to be the guy in charge. I get to set the priorities and make sure resources match that priority."* Others spoke of their role monitoring the implementation of changes in instruction. Several mentioned setting high expectations as a vital part of their leadership role. Another said, *"I get students excited about education."*

Relationship of ERT with School Leadership

School leaders and ER teams had a mixed relationship. One principal described her ER staff as "phenomenal." Another said they worked *"really well and they have truly bought into the vision of the school."* A third said, *"The ER teams have been part of every facet."* However, a few principals revealed conflict with the ER team. One said, *"In the beginning, I was not clear exactly (what the roles were) between the ERL, ERS and my job. Had that been established in a better way it would have reduced some friction. Any principal is leery of other people in the building who have power and it might be seen as challenging the principal's authority. There needs to be only one person in charge and the decision maker. There was some disagreement at the start and the transition could have been handled better."* Another principal pointed out that, *"The thing about a PLA school is you're getting help from everywhere....there just needs to be a delineation of responsibilities or that communication piece because there are district resource people that come, we've got some of our ERS resources here, then we have resources in the building, interventionists. I think it's just more of coordinating all of those efforts so that they're consistent. We've had issues with people not really talking to each other, and so I think*

resource team." Another said, *"The SIG has allowed me to get more resources for the school. More professional development for teachers, ability to travel to national conferences, the SIG has allowed me to have more technology...every classroom has a Smartboard, teachers have laptops, document cameras. We have CART laptops, some e-readers, and very modern computer labs...We were able to get the math interventionist, data managers."* A third reported, *"It allowed us to be able to have an elaborate, tiered intervention system that included after school tutoring and assistants, and Saturday school."*

Continuing Challenges

Principals identified a number of challenges that remained at their schools. The first was the skills gap that students brought to the school when they arrived. As one principal put it, *"We have to work with them to gain multiple years of reading and math knowledge gain."* Secondly, the community culture remained an impediment. Another principal pointed out that, *"Very few of our students come from homes where anyone has gone to college or where college has (been) an option or even a realistic option. For some of them, they may be only ones who have finished high school. They come to us with low expectation(s)."* Third, the schools relied on young, relatively inexperienced teachers. One principal pointed out how that challenge made the cultural issues even more challenging. *"We still have some teachers who don't have the skills to improve the rapport with the at risk population. Because of this it interferes with teaching and learning. It is important as we move forward for teachers to get PD on cultural competence, people skills. They need to understand how culture impacts teaching and learning."*

Principals believed they needed two resources to overcome these challenges: money and time. Over and over, principals expressed a fear that their SIG money would not continue or could not be replaced from other sources at the end of the third year. One principal went so far as to say, *"You can't give a school \$400,000 a year for 3 years and then take it from them....and ask the school to sustain at the level ...how do we fund for the additional six positions?"* Another said they needed *"the financial part of it...finances that allow us to provide a tier intervention, provide PD, programs that support the tiered intervention."* However, other principals believed time was more important. As one put it, *"The faculty has to gain experience...Time is the answer....we need time to implement these changes."*

initially there was resistance to the ERS staff as someone just coming from the outside telling them what to do because they hadn't been a part of what's been going on yet."

At the same time, principals believed that their teachers were generally receptive to the ER team. One claimed *"teachers embraced them immediately."* Others said it took a time of adjustment and trust building, but that the ER staff had been successful in moving past the initial resistance.

Impact of the SIG

Principals recognized several impacts from the SIG. First, they had seen positive changes in the school climate. Reduced suspensions were reported by several principals. As one put it, *"Our suspensions are down; the time on task is increased."* Another agreed, *"We were one of the schools with the highest suspension rate, now we're one of the schools with the lowest suspension rate."* One principal argued that better behavior had contributed to the receptivity of teachers to the changes. He pointed out that teachers had *"started seeing the results as students were coming to school and not getting in fights."* Even students noticed the change. One was overheard by a principal responding to a classmate's complaints about the new behavioral structures with these words, *"but we are good school now."*

The second impact principals noticed was a change in students' attitudes and engagement in learning. Multiple principals noted that students were much focused on learning. One said there had been, *"A cultural change of students taking responsibility for their learning. You hear students talking about what standards they have met or haven't met, what they can do to meet these standards. They have a real clear understanding of what it is they're expected to know and if they know whether they've met that expectation. If they haven't met that expectation they know exactly what they need to do."* Another said one of the biggest differences he had seen was, *"Number one that students weren't sleeping in class because before they would just let them have their heads down and just sleep and not really care anything about them getting up and learning. All students are engaged."* A third noted, *"Increased interest in students interested in advanced placement, students willing to stay after school, students who come after school or come on the weekends."* A fourth agreed, *"Students seem to take more ownership in their learning."*

The third major impact was on teachers' attitudes and instruction. Principals believed teachers were now motivated to work harder. One pointed out, *"We now have teachers who are willing to work after school and come in on weekends to help the kids...huge cultural shift."* They also were more likely to take responsibility for their students' success and failure with *"less blaming parents and attendance."* In conjunction with improved attitudes, instruction had improved. A principal voiced that teachers were trying, *"More creative ways to instruct...most of them started by lecturing and now they have realized that this does not work. The teachers are now giving information and asking students to work in groups."* A second concurred, *"Now they are using a variety of strategies."* Additionally, principals spoke of teachers *"teaching bell to bell"*, using more *"technology for instruction"*, and increasing *"rigor."* Finally, one principal was encouraged by *"collaboration between special and regular teachers."*

The fourth impact of the SIG identified by principals was a better ability to use data. One principal said, *"The recovery team gives us additional human resources to assist teachers in assessments and looking at data to see what their next steps are going to be."* Another admitted that data was not very important to the school until ERS staff helped teachers *"connect a name to the data and really (talk) about moving kids forward and really challenging students. Those things wouldn't have happened here without the extra SIG help."*

Finally, principals emphasized the importance of the increased resources that came with the SIG. The SIG brought the schools money that could be used for reform efforts. One principal said, *"Through the SIG money we now have a*

Central/Jefferson: Instruction and Leadership Teacher Perspectives

Central (Jefferson) Cohort 1 Schools

"I have gained knowledge on how to better relate to students that are apathetic in the classroom. The suggestions that my ERS gave me helped me reclaim the grades on three specific "sleeper" students. My ERS taught me to engage those students." -Jefferson County Cohort 1 teacher

A follow-up survey was given to Cohort 1 teachers in the Central region. Forty-six teachers responded to this follow-up survey, which asked teachers to rate statements related to the leadership environment in their schools, their instructional practices, current classroom management, and educational recovery efforts. Teachers were asked to express their agreement with statements on a five-point scale with 5 representing 'Strongly Agree' and 1 representing 'Strongly Disagree'. The overall means for all four major variables were high, with mean ratings above 3.5 on a 5 point scale. The 'instructional practices' variable had a higher overall mean (4.46), and the 'leadership' variable had a relatively lower overall mean (3.81) relative to other variables.

School Leadership: Cohort 1 Teacher Survey Central (Jefferson) Region

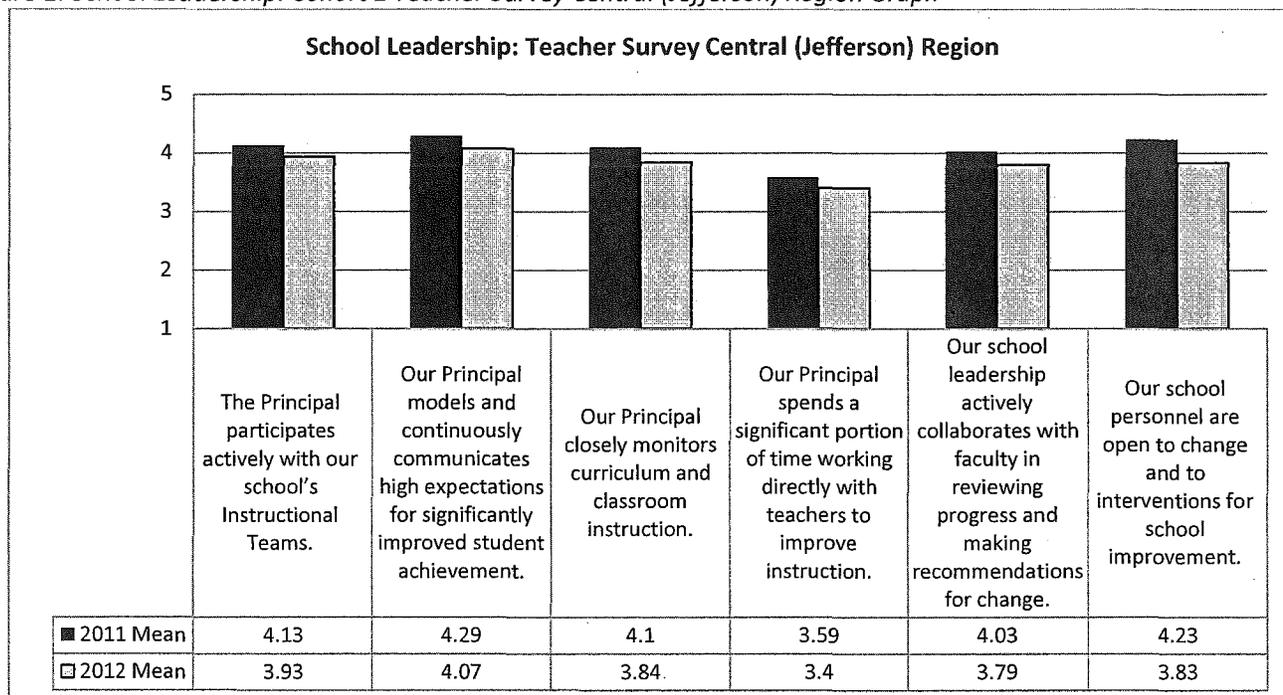
Respondents in Cohort 1 were asked to rate statements related to their school's leadership. Table 17 and Figure 1 show the ratings in comparison to 2011, when teachers in Cohort 1 in the Central region took the survey for the first time. In the follow-up survey, they agreed that their principal models and continuously communicates high expectations for significantly improved student achievement (Mean 4.07), a 0.22 drop than the previous year. Teachers, in the follow-up survey, rated the statements 'The principal participates actively with our school's instructional team' (Mean 3.93), 'Our principal closely monitors curriculum and classroom instruction' (Mean 3.84), and 'Our school personnel are open to change and to interventions for school improvement' (Mean 3.83) with an average of "Agree" though each question saw a drop in rating from the previous year. The statement 'Our principal spends a significant portion of time working directly with teachers to improve instruction' (Mean 3.4) was rated lowest in 2011 and in 2012.

Table 17: School Leadership: Cohort 1 Teacher Survey Central (Jefferson) Region

Please rate your level of agreement:	2011			2012		
	N	Mean	Std. Dev.	N	Mean	Std. Dev.
Our Principal models and continuously communicates high expectations for significantly improved student achievement.	31	4.29	1.071	46	4.07	1.272
The Principal participates actively with our school's Instructional Teams.	31	4.13	1.147	46	3.93	1.272
Our Principal closely monitors curriculum and classroom instruction.	31	4.1	1.076	45	3.84	1.313
Our school personnel are open to change and to interventions for school improvement.	30	4.23	1.073	46	3.83	1.305
Our school leadership actively collaborates with faculty in reviewing progress and making recommendations for change.	30	4.03	1.326	47	3.79	1.344
Our Principal spends a significant portion of time working directly with teachers to improve instruction.	29	3.59	1.181	45	3.4	1.437
Overall Average		4.06			3.81	

*1= Strongly Disagree, 5= Strongly Agree

Figure 1: School Leadership: Cohort 1 Teacher Survey Central (Jefferson) Region Graph



Instructional Practices: Cohort 1 Teacher Survey Central (Jefferson) Region

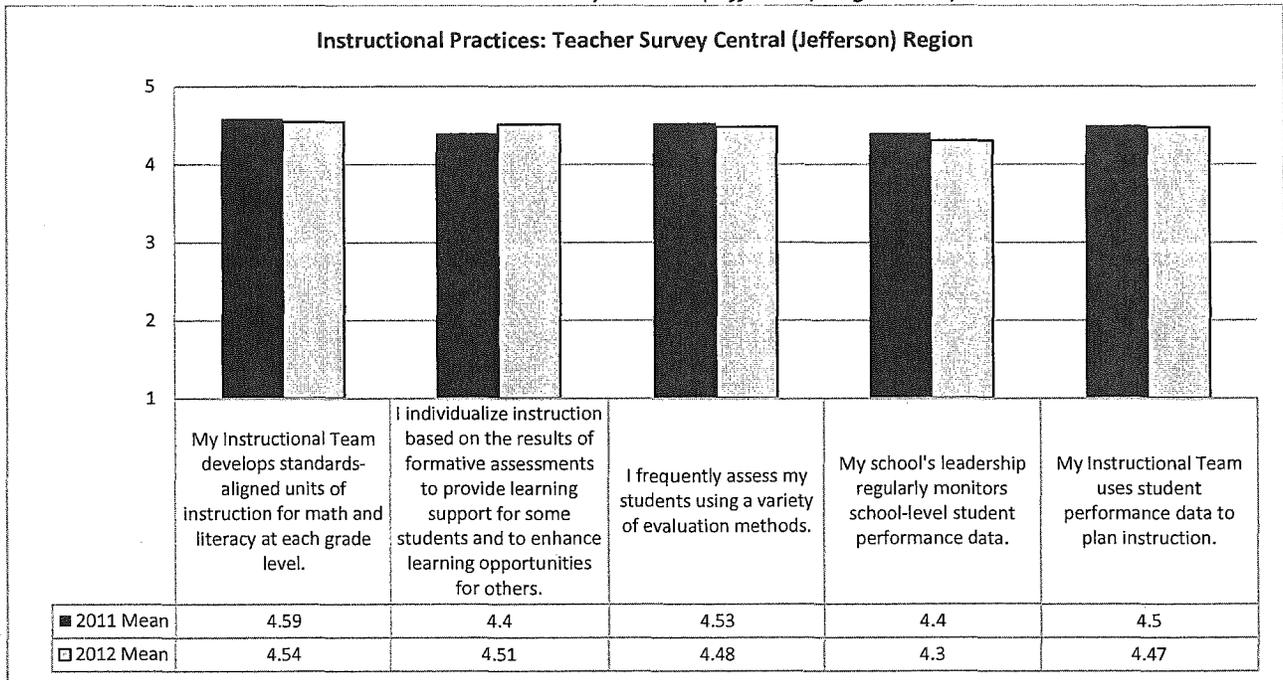
Next, respondents were asked to rate statements related to instructional practices. Table 18 and Figure 2 show the ratings in comparison to 2011. In the follow-up survey, teachers strongly agreed that their instructional team develops standards-aligned units of instruction for math and literacy at each grade level (Mean 4.54), a slight drop from 2011. Another statement receiving an average of strongly agree was 'I individualize instruction based on the results of formative assessments to provide learning support for some students and to enhance learning opportunities for others' (Mean 4.51). This statement saw a slight increase from 2011. Teachers rated the statements 'I frequently assess my students using a variety of evaluation methods' (Mean 4.48) and 'My instructional team uses student performance data to plan instruction' (Mean 4.47) with an average rating of "Agree", though both statements saw a slight drop from 2011 to 2012. The statement 'My school's leadership regularly monitors school-level student performance data' (Mean 4.3) was rated the lowest, though still fairly high.

Table 18: Instructional Practices: Cohort 1 Teacher Survey Central (Jefferson) Region

Please rate your level of agreement	2011			2012		
	N	Mean	Std. Dev.	N	Mean	Std. Dev.
My Instructional Team develops standards-aligned units of instruction for math and literacy at each grade level.	27	4.59	0.694	37	4.54	0.9
I individualize instruction based on the results of formative assessments to provide learning support for some students and to enhance learning opportunities for others.	30	4.4	0.77	47	4.51	0.688
I frequently assess my students using a variety of evaluation methods.	30	4.53	0.571	46	4.48	0.752
My Instructional Team uses student performance data to plan instruction.	30	4.5	0.568	43	4.47	0.767
My school's leadership regularly monitors school-level student performance data.	30	4.4	1.003	46	4.3	1.152
Overall Average		4.48			4.46	

*1= Strongly Disagree, 5= Strongly Agree

Figure 2: Instructional Practices: Cohort 1 Teacher Survey Central (Jefferson) Region Graph



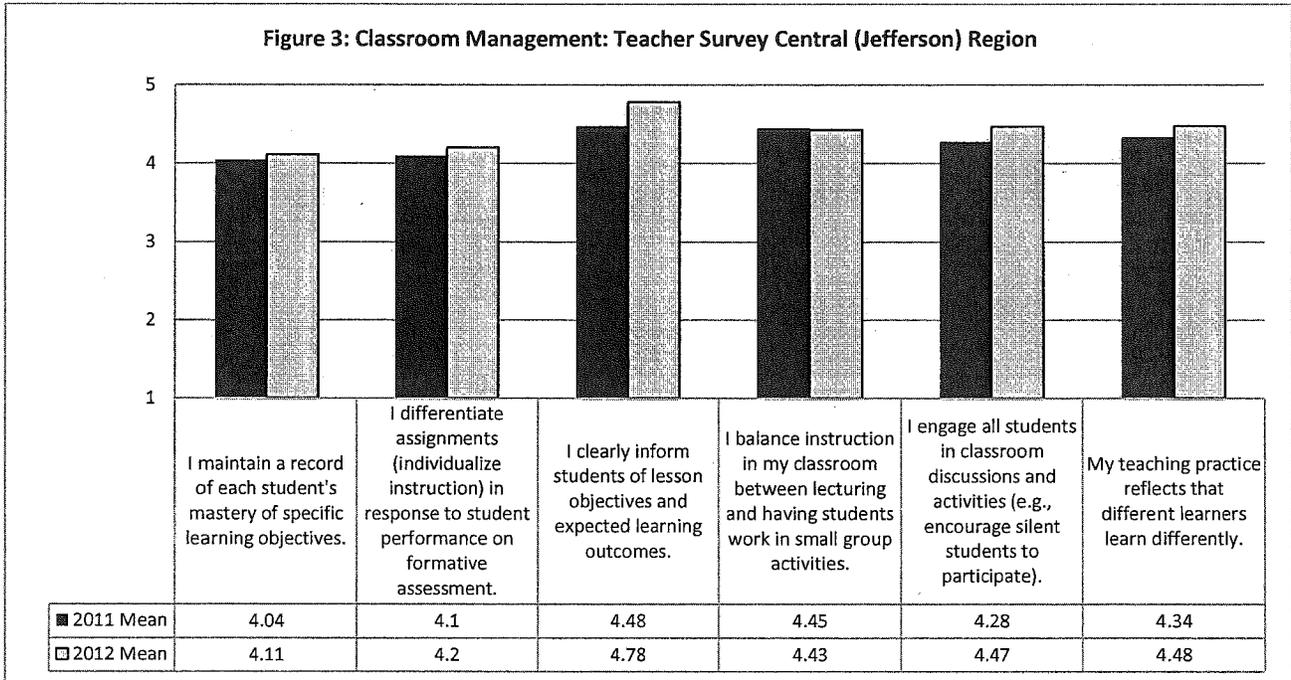
Classroom Management: Cohort 1 Teacher Survey Central (Jefferson) Region

Third, teachers in Cohort 1 were asked to rate statements related to classroom management. Table 19 and Figure 3 show the ratings in comparison to 2011. In the follow-up survey, they strongly agreed that they clearly inform students of lesson objectives and expected learning outcomes (Mean 4.78), a 0.30 increase from 2011. This statement received the highest rating in both 2011 and 2012. Other statements receiving a fairly high rating were 'My teaching practice reflects that different learners learn differently' (Mean 4.48) and 'I engage all students in classroom discussions and activities (e.g., encourage silent students to participate)' (Mean 4.47). Both statements showed an increase from 2011 to 2012. The statement 'I maintain a record of each student's mastery of specific learning objectives' (Mean 4.11) was rated lowest and changed very little with a .07 gain from 2011 to 2012.

Table 19: Classroom Management: Cohort 1 Teacher Survey Central (Jefferson) Region

Please rate your level of agreement:	2011			2012		
	N	Mean	Std. Dev.	N	Mean	Std. Dev.
I clearly inform students of lesson objectives and expected learning outcomes.	29	4.48	0.738	46	4.78	0.417
My teaching practice reflects that different learners learn differently.	29	4.34	0.614	46	4.48	0.658
I engage all students in classroom discussions and activities (e.g., encourage silent students to participate).	29	4.28	0.797	45	4.47	0.661
I balance instruction in my classroom between lecturing and having students work in small group activities.	29	4.45	0.572	44	4.43	0.873
I differentiate assignments (individualize instruction) in response to student performance on formative assessment.	29	4.1	0.86	46	4.2	1.046
I maintain a record of each student's mastery of specific learning objectives.	28	4.04	0.999	45	4.11	1.027
Overall Average		4.28			4.42	

Figure 3: Classroom Management: Teacher Survey Jefferson (Central) Region Graph



“Our ERS has done multiple PDs in lunch-n-learns and gold days that focus on CHETL, formative assessments, learning targets, and using data to prepare instruction. Our Math ERS is frequently involved in our PLC, making pop ins during classroom instruction and has been a large support system for us. Her experience and support have been a valuable resource this year!!!!” –Jefferson County Cohort 1 teacher

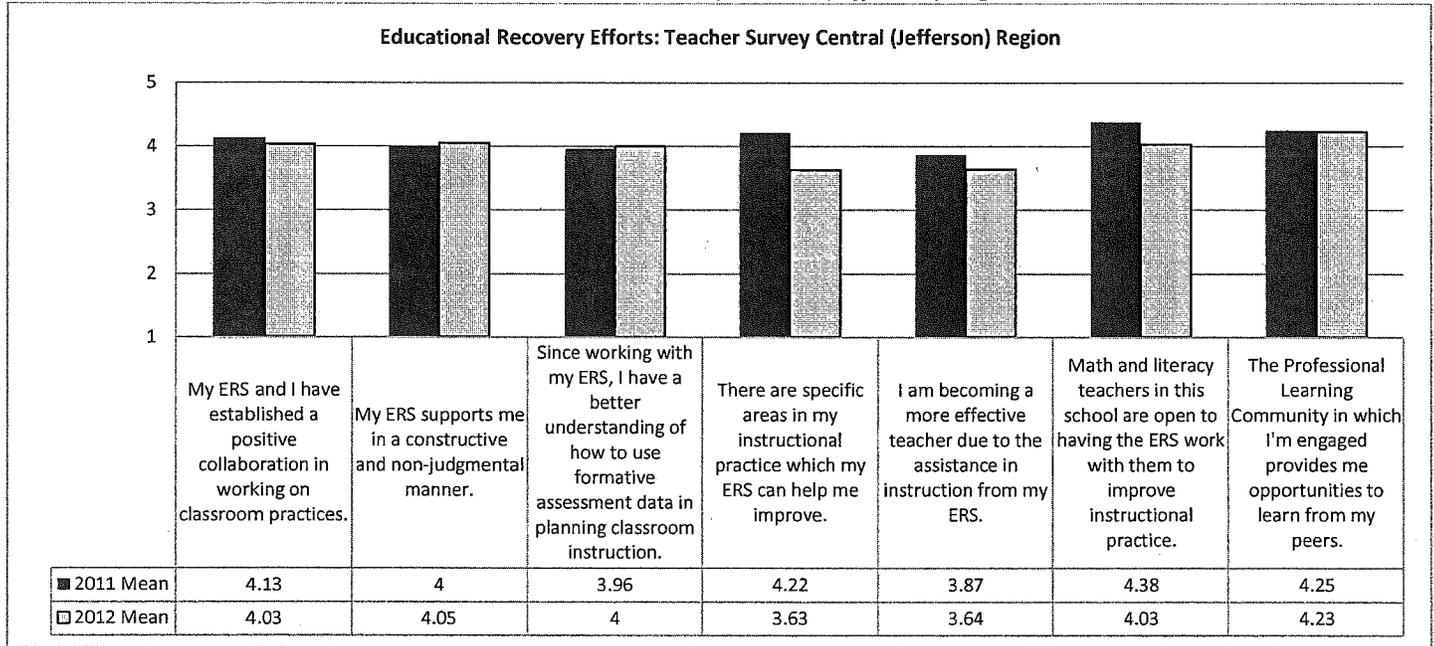
Finally, respondents in Cohort 1 were asked to rate statements related to education recovery efforts. Table 20 and Figure 4 show the ratings in comparison to 2011. Teachers overall agreed that the PLC in which they were engaged provided them with opportunities to learn from their peers (Mean 4.23) with only a slight drop from 2011 to 2012. They also agreed that their ERS supports them in a constructive and non-judgmental manner (Mean 4.05), a slight increase from 2011 to 2012. The statements ‘Math and literacy teachers in their school are open to having the ERS work with them to improve instructional practice’ (Mean 4.03) and ‘My ERS and I have established a positive collaboration in working on classroom practices’ (Mean 4.03) were rated as “Agree” though both saw a drop of .35 and .10 respectively from 2011 to 2012. Teachers rated lower the statement ‘I am becoming a more effective teacher due to the assistance in instruction from my ERS’ (Mean 3.64) with a drop of .23 from 2011-2012. The areas receiving the lowest rating in the follow up survey was the statement ‘There are specific areas in my instructional practice which my ERS can help me improve’ (Mean 3.63). This rating shows a significant drop of .59 from 2011 to 2012.

Table 20: Educational Recovery Efforts: Cohort 1 Teacher Survey Central (Jefferson) Region

Please rate your level of agreement:	2011			2012		
	N	Mean	Std. Dev.	N	Mean	Std. Dev.
The Professional Learning Community in which I'm engaged provides me opportunities to learn from my peers.	24	4.25	0.847	44	4.23	1.273
My ERS supports me in a constructive and non-judgmental manner.	22	4	1.309	37	4.05	1.224
My ERS and I have established a positive collaboration in working on classroom practices.	23	4.13	1.254	36	4.03	1.158
Math and literacy teachers in this school are open to having the ERS work with them to improve instructional practice.	21	4.38	0.973	34	4.03	1.193
Since working with my ERS, I have a better understanding of how to use formative assessment data in planning classroom instruction.	23	3.96	1.147	35	4.00	1.213
I am becoming a more effective teacher due to the assistance in instruction from my ERS.	23	3.87	1.254	36	3.64	1.496
There are specific areas in my instructional practice which my ERS can help me improve.	23	4.22	1.085	38	3.63	1.324
Overall Agree		4.12			3.94	

*1= Strongly Disagree, 5= Strongly Agree

Figure 4: Educational Recovery Efforts: Cohort 1 Teacher Survey Central (Jefferson) Region



Central (Jefferson) Cohort 2 schools

Thirty-four teachers from Cohort 2 schools in the Central region responded to a survey which asked respondents to rate statements related to the leadership environment in their schools, their instructional practices, and educational recovery efforts. Teachers were asked to express their agreement with statements on a five-point scale with 5 representing 'Strongly Agree' and 1 representing 'Strongly Disagree'. The overall means for all four major variables were high, with mean ratings above 3.5 on a 5 point scale. The 'management practices' variable had a higher overall mean (4.64) and the 'ER efforts' variable had a relatively lower overall mean (3.53) relative to other variables

School Leadership: Cohort 2 Teacher Survey Central (Jefferson) Region

Respondents from Cohort 2 in the Central region were asked to rate statements related to their school's leadership in a survey. Thirty-four teachers responded. Teachers rated highly all statements concerning their school leadership. They strongly agreed that their principal models and continuously communicates high expectations for significantly improved student achievement (Mean 4.79). In addition, they rated positive that their school personnel are open to change and to interventions for school improvement (Mean 4.73). Teachers also rated the statement 'The Principal participates actively with our school's Instructional teams' (Mean 4.64) with an average of "Strongly Agree". The statement 'Our Principal spends a significant portion of time working directly with teachers to improve instruction' was rated lowest but still fairly high (Mean 4.21). Table 21 provides the ratings for all the statements concerning school leadership.

Table 21: School Leadership: Cohort 2 Teacher Survey Central (Jefferson) Region

Please rate your level of agreement:	N	Mean	Std. Dev.
Our Principal models and continuously communicates high expectations for significantly improved student achievement.	33	4.79	0.485
Our school personnel are open to change and to interventions for school improvement.	33	4.73	0.45
The Principal participates actively with our school's Instructional teams.	33	4.64	0.653
Our Principal closely monitors curriculum and classroom instruction.	33	4.48	0.755
Our school leadership actively collaborates with faculty in reviewing progress and making recommendations for change.	32	4.44	1.014
Our Principal spends a significant portion of time working directly with teachers to improve instruction.	33	4.21	0.927
Overall Average		4.55	

*1= Strongly Disagree, 5= Strongly Agree

Instructional Practices: Cohort 2 Teacher Survey Central (Jefferson) Region

Second, respondents were asked to rate statements about their classroom instructional practices. Teacher responses were positive in all statements related to classroom instructional practices. Teachers strongly agreed that they individualized instruction based on results of formative assessments to provide learning support for some students and to enhance learning opportunities for others (Mean 4.71). Other statements receiving an average of strongly agree were 'I frequently assess my students using a variety of evaluation methods' (Mean 4.66), 'My school's leadership regularly monitors school-level student performance data' (Mean 4.63), and 'My instructional team uses student performance data to plan instruction.' (Mean 4.63) In addition to these positive ratings teachers agreed that their instructional team develops standards-aligned units of instruction for math and literacy at each grade level (Mean 4.23). Table 22 (on the following page) provides the ratings for statements concerning classroom instructional practices

Table 22: Instructional Practices: Cohort 2 Teacher Survey Central (Jefferson) Region

Please rate your level of agreement:	N	Mean	Std. Dev.
I individualize instruction based on the results of formative assessments to provide learning support for some students and to enhance learning opportunities for others.	31	4.71	0.529
I frequently assess my students using a variety of evaluation methods.	32	4.66	0.483
My school's leadership regularly monitors school-level student performance data.	32	4.63	0.793
My Instructional Team uses student performance data to plan instruction.	32	4.63	0.793
My Instructional Team develops standards-aligned units of instruction for math and literacy at each grade level.	30	4.23	1.331
Overall Average		4.57	

*1= Strongly Disagree, 5= Strongly Agree

Classroom Management: Cohort 2 Teacher Survey Central (Jefferson) Region

Third, respondents were asked to rate statements on classroom management. Ratings were fairly high for most statements, with teachers strongly agreeing that they balance instruction in their classroom between lecturing and having students work in small group activities (Mean 4.81), that they engage all students in classroom discussions and activities (Mean 4.72), and that they differentiate assignments (individualize instruction) in response to student performance on formative assessment (Mean 4.72). Other areas that were rated high were that their teaching practices reflect that different learners learn differently (Mean 4.66) and that they maintain a record of each student's mastery of specific learning objectives (Mean 4.52). Teachers rated lowest their clearly informing students of lesson objectives and expected learning outcomes (Mean 4.41) though the results here were still positive. Table 23 provides the ratings for statements concerning classroom instructional practices.

Table 23: Classroom Management: Cohort 2 Teacher Survey Central (Jefferson) Region

Please rate your level of agreement:	N	Mean	Std. Dev.
I balance instruction in my classroom between lecturing and having students work in small group activities.	32	4.81	0.397
I differentiate assignments (individualize instruction) in response to student performance on formative assessment.	32	4.72	0.581
I engage all students in classroom discussions and activities (e.g., encourage silent students to participate).	32	4.72	0.457
My teaching practice reflects that different learners learn differently.	32	4.66	0.483
I maintain a record of each student's mastery of specific learning objectives.	31	4.52	1.208
I clearly inform students of lesson objectives and expected learning outcomes.	32	4.41	0.756
Overall Average		4.64	

*1= Strongly Disagree, 5= Strongly Agree

Educational Recovery Efforts: Cohort 2 Teacher Survey Central (Jefferson) Region

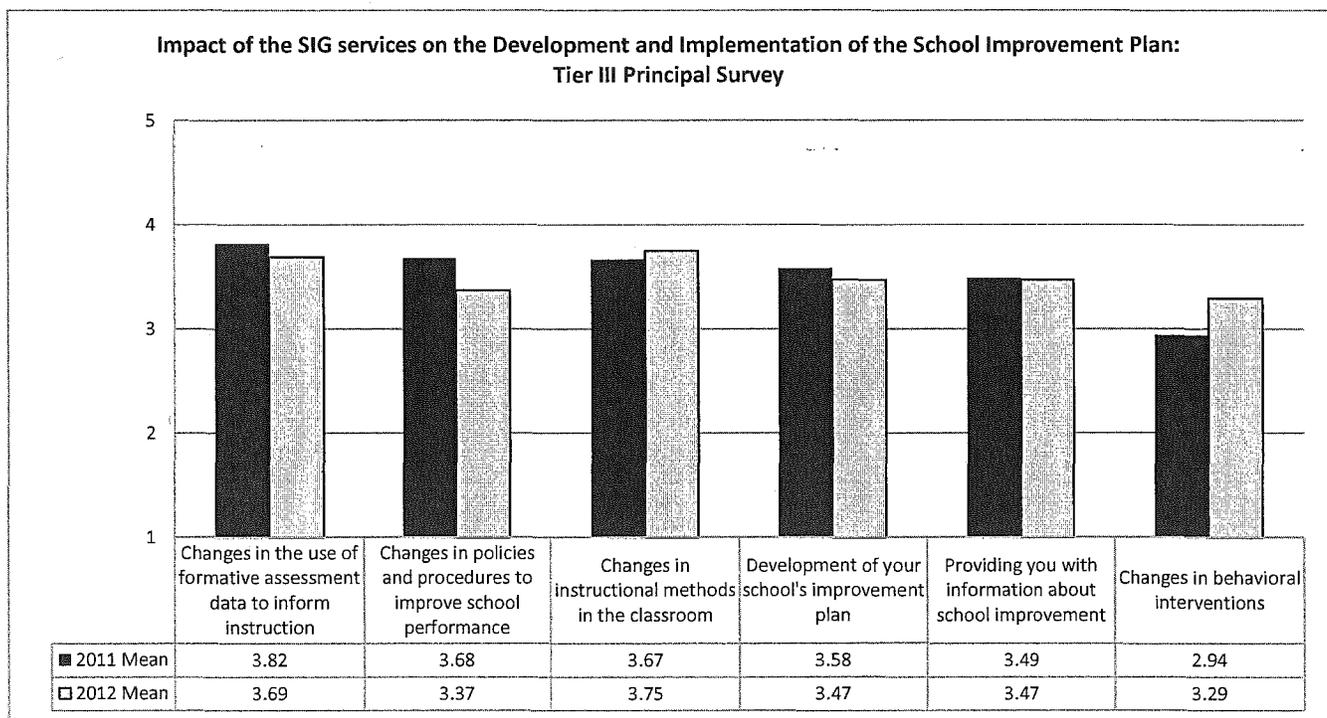
Finally, teachers were asked to rate statements about educational recovery efforts. Teachers overall strongly agreed that the PLCS in which they were engaged provided them with opportunities to learn from their peers (Mean 4.74) and agreed that math and literacy teachers in their school were open to having the ERS work with them to improve instructional practice (Mean 4.04). Teachers rated lower, but still with an average rating of "Agree", the statement 'There are specific areas in my instructional practice which my ERS can help me improve' (Mean 3.64). Rated slightly lower were the statements 'My ERS treats me in a constructive and non-judgmental manner' (Mean 3.29) and 'My ERS

Table 26: Impact of the SIG services on the Development and Implementation of the School Improvement Plan TIER III Principal survey

	2011			2012		
	N	Mean	Std. Dev.	N	Mean	Std. Dev.
Changes in instructional methods in the classroom	39	3.67	1.177	51	3.75	1.129
Changes in the use of formative assessment data to inform instruction	38	3.82	1.136	52	3.69	1.147
Development of your school's improvement plan	38	3.58	1.106	53	3.47	1.17
Providing you with information about school improvement	37	3.49	1.096	51	3.47	1.222
Changes in policies and procedures to improve school performance	37	3.68	1.132	53	3.37	1.244
Changes in behavioral interventions	36	2.94	1.094	48	3.29	1.254
Overall Average		3.53			3.51	

*1= No impact, 5= Very large impact

Figure 5: Impact of the SIG services on the Development and Implementation of the School Improvement Plan: Tier III Principal Survey



Implementation of Instructional Best Practices in Reading and Math: Tier III Principal Survey

In order to further examine the changes made as a result of school improvement plans, the respondents were asked to identify the best practices that were implemented in their math and reading classrooms. Table 27 (on the following page) shows the results of the survey taken in 2011 and 2012. In 2011, of the individuals who responded to the items, all had reported that there was a stronger alignment of standards, curriculum, instruction and assessment as a result of the school improvement plans. Approximately 90 percent of respondents had reported having regular PLC meetings, formative testing of students, and the use of assessment data to inform instruction. Less than 75% of respondents had reported that their schools had instructional teams at each grade level. Respondents in the 2011 survey and in the follow-up survey in 2012 noted a stronger alignment of standards, curriculum, instruction and assessment due to the SIG. In addition to this increase, the areas which received ratings in the 70's as being implemented increased to 96% or higher in 2012.

Table 27: Implementation of Instructional Best Practices in Reading and Math: Tier III Principal Survey

Item	2011				2012			
	Math		Reading		Math		Reading	
	No	Yes	No	Yes	No	Partial or Full	No	Partial or Full
Stronger alignment of standards, curriculum, instruction and assessment		100%		100%		100%		100%
Regular meetings of Professional Learning Communities	8.30%	91.70%	11.10%	88.90%		100%		100%
Formative testing of students at least three times during year to track progress in achievement	8.60%	91.40%	8.60%	91.40%		100%		100%
Use of assessment data to drive classroom instruction	8.60%	91.40%	8.60%	91.40%		100%		100%
Increased involvement of school leadership in monitoring school performance	8.80%	91.20%	8.80%	91.20%		100%		100%
Curriculum changes	25.00%	75.00%	22.20%	78.80%	3.64%	96.36	4.00%	96.00%
Development of Instructional Teams at each grade-level	27.30%	72.70%	27.30%	72.70%		100%		100%

* No=No implementation, Yes= Implemented, Partial or Full=Partial or Full implementation

Receptivity of stakeholders: Tier III Principal Survey

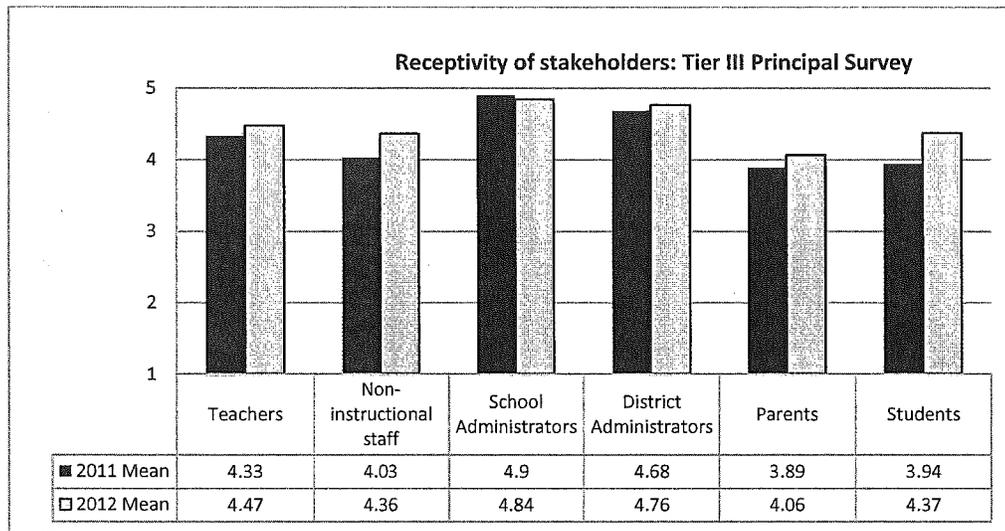
Since the Tier III schools had to make changes, as outlined in their school improvement plan, the principals were asked to rate the receptivity of stakeholders to the various changes that had been made in their schools. Table 28 and figure 6 show the ratings in these areas when principals completed the survey both in 2011 and in 2012. Respondents in 2012 rated the receptivity of all stakeholders as high (all ratings above a 4.0 on a 5 point scale); teachers (Mean 4.47), non-instructional staff (Mean 4.36), administrators (Mean 4.84), district administrators (Mean 4.76), parents (Mean 4.06), and students (Mean 4.37). In comparison, respondents taking the survey in 2011 also rated the receptivity of the stakeholders highly, with exception of parents (Mean 3.89) and students (3.94). All ratings, with the exception of a slight drop for school administrators, saw an increase in ratings from 2011-2012.

Table 28: Receptivity of stakeholders: Tier III Principal Survey

	2011			2012		
	N	Mean	Std. Dev.	N	Mean	Std. Dev.
School Administrators	39	4.9	0.447	55	4.84	0.42
District Administrators	38	4.68	0.739	51	4.76	0.551
Teachers	39	4.33	0.955	55	4.47	0.663
Students	36	3.94	1.013	54	4.37	0.734
Non-instructional staff	37	4.03	1.013	53	4.36	0.653
Parents	35	3.89	1.051	50	4.06	0.793
Overall Average		4.30			4.48	

*1= Not at all receptive, 5= Highly receptive

Figure 6: Receptivity of stakeholders: Tier III Principal Survey



Barriers to college and career readiness: Tier III Principal Survey

"We still are behind in math and literacy. The primary area is math. Students do well through 5th grade. It appears the students do not progress from arithmetic to algebraic concepts. We are working on how to help students bridge that gap. Many students do not have any support at home or even a structure at home for basic food or safety needs. After school homework or learning opportunities are just not happening... Unfortunately, many of our students are required to watch younger siblings with no other adult help. We are battling environmental issues. We have seen success, but many have faltered as they progress through high school without guidance and controls during their out of school hours."—Tier III principal

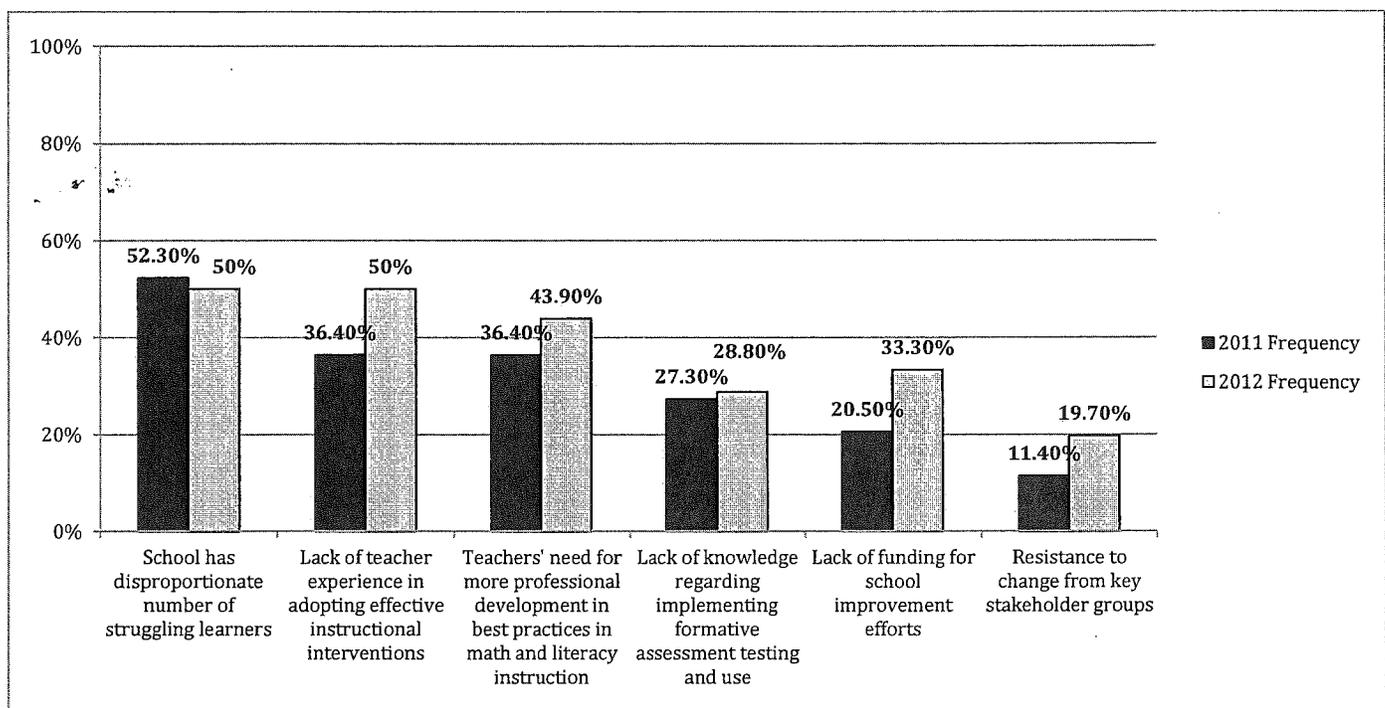
Finally, respondents were asked to identify the barriers they face in ensuring that all their students are college and career ready. Table 29 and figure 7 show the results of the survey when principals took it for the first time in 2011 and results from the follow-up survey in 2012. In 2011 and in 2012, the most common challenge identified was the disproportionate number of struggling learners followed by lack of teacher experience in adopting effective instructional

best practices. This continues to show a need for more professional development in the schools. Rated nearly as high was the teacher's need for more professional development in best practices in math and literacy instruction. In comparison to 2011, principals identified more barriers to college and career readiness.

Table 29: Barriers to college and career readiness: Tier III Principal Survey

Barriers	2011	2012
	Frequency	Frequency
School has disproportionate number of struggling learners	52.30%	50%
Lack of teacher experience in adopting effective instructional interventions	36.40%	50%
Teachers' need for more professional development in best practices in math and literacy instruction	36.40%	43.90%
Lack of knowledge regarding implementing formative assessment testing and use	27.30%	28.80%
Lack of funding for school improvement efforts	20.50%	33.30%
Resistance change from key stakeholder groups	11.40%	19.70%

Figure 7: Barriers to College and Career Readiness Graph



Academic Outcomes

This section of the report discusses the trends in academic student outcomes. During the grant period, Kentucky adopted a new assessment and accountability system, 'Unbridled Learning: College/Career- Ready for All'. As a part of the new accountability system, a new statewide assessment was administered. While comparisons are made across years, it should be noted that the assessments were different in 2012 from the previous years. The data should be cautiously interpreted across years and 2012 state level data would be more applicable for comparison purposes. Table 30 compares the average percent of students scoring proficient and above in reading and math in SIG Cohort 1 and 2 schools versus the state. Similar to the state, there was a significant drop in the number of students scoring proficient and above in 2012 from 2011 for both Cohort 1 and 2 schools. Cohort 1 schools had a slightly higher average percent students scoring proficient and above in reading than Cohort 2 schools. However, Cohort 2 schools had a much higher average proficient percent than Cohort 1 in Math. This is partly due to the fact that the Cohort 2 Western School had 50.0% of its students scoring proficient and above in Math and this increased the overall average of Cohort 2 schools in Math.

Table 30: Overall Change in Mean Percent of Students Scoring Proficient & Above in SIG Schools*

	2010	2011	2012	Change from '12 to '11
Reading				
SIG Cohort 1 schools	54.89	64.84	31.64	(33.20)
SIG Cohort 2 schools	43.89	57.51	30.72	(26.79)
State	61.34	65.91	38.4	(27.51)
Math				
SIG Cohort 1 schools	24.49	41.07	24.36	(16.71)
SIG Cohort 2 schools	26.79	37.31	35.58	(1.73)
State	40.28	45.98	27.9	(18.08)

*Cohort 1 and 2 middle schools were not included in the calculation

A trend analysis was done for each cohort in a region involving a two step comparative analysis of the academic outcomes. The first step explored the trend in students scoring proficient and above on the annual Kentucky Core Content Test. The mean percent of students scoring proficient and above in each region was compared to the state mean percent of students scoring proficient and above. Since there are a number of high schools and middle schools in Jefferson County, the overall SIG data was also compared to the overall district outcome data. In the second step, the trends of students scoring below proficient were examined. The student outcome data was downloaded from the KDE website (<http://applications.education.ky.gov/SRC/>).

Eastern Cohort 1: Academic Outcomes

Reading

The mean percent of students scoring proficient and distinguished in Cohort 1 Eastern schools was slightly below (34.4%) the state average (38.4%). The mean percent scoring novice or below was higher than the state average by 5%.

Figure 8: Mean percent of students scoring proficient and distinguished in Reading (Eastern Cohort 1 High Schools)

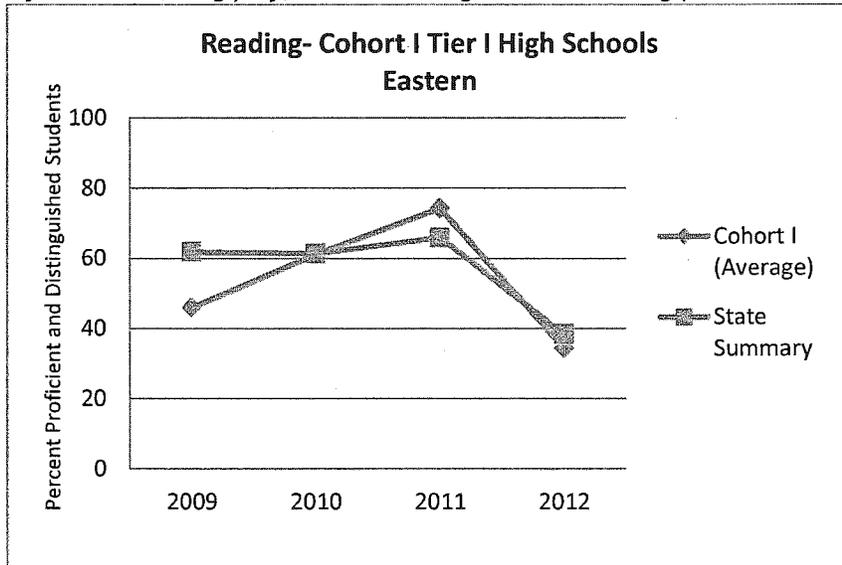
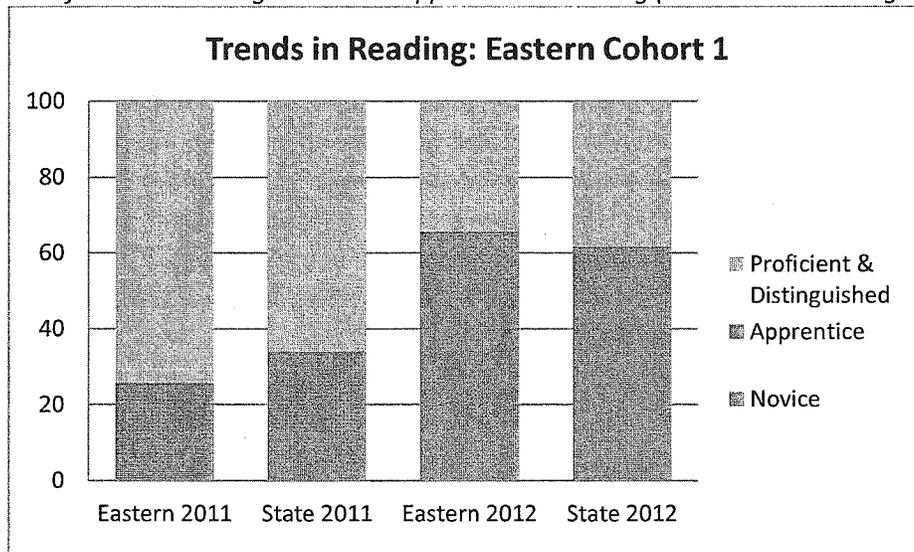


Figure 9: Mean percent of students scoring novice and apprentice in Reading (Eastern Cohort 1 High Schools)



Math

The mean percent of students scoring proficient and distinguished in Cohort 1 Eastern schools was below (13.75%) the state average (27.9%). The mean percent scoring novice or below was similar to the state average. However, the mean percent scoring apprentice was approximately 15% higher than the state average.

Figure 10: Mean percent of students scoring proficient and distinguished in Math (Eastern Cohort 1 High Schools)

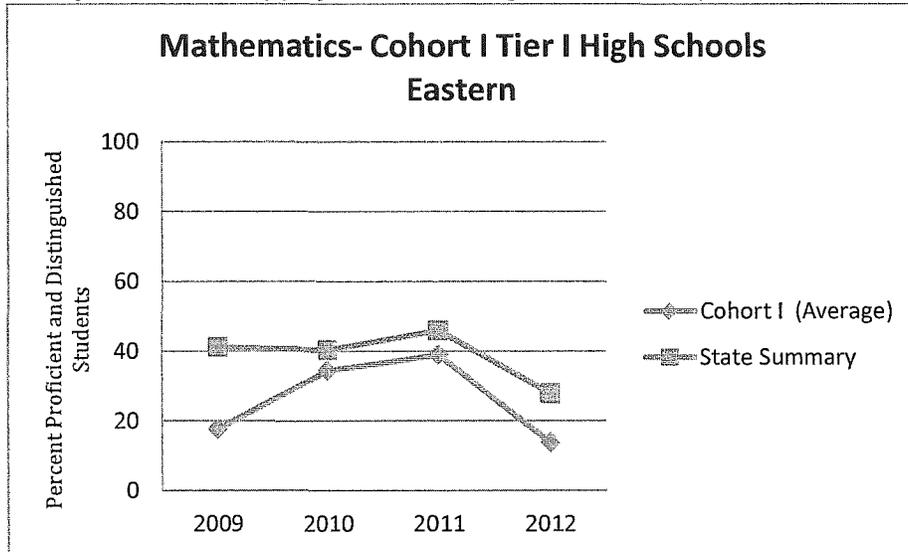
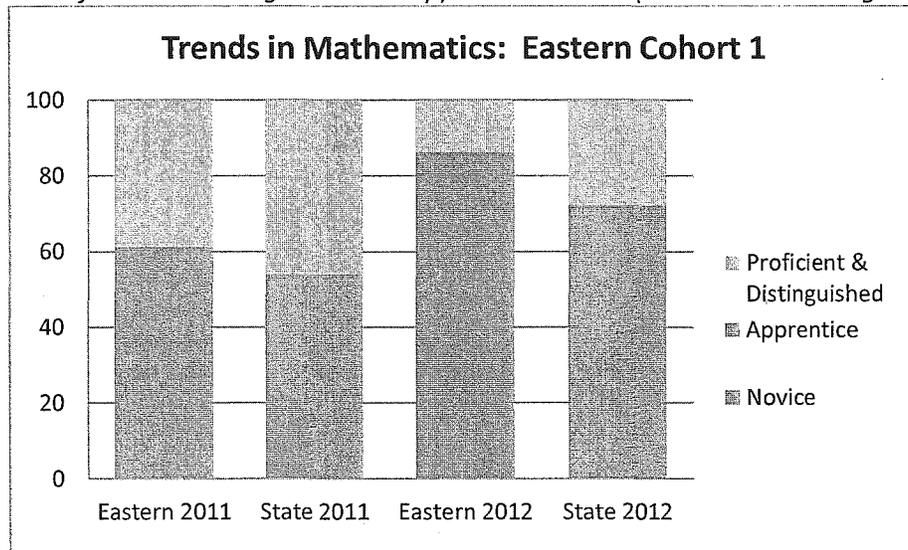


Figure 11: Mean percent of students scoring novice and apprentice in Math (Eastern Cohort 1 High Schools)



Eastern Cohort 2: Academic Outcomes

Reading

The mean percent of students scoring proficient and distinguished in Cohort 2 Eastern schools was below (30.48%) the state average (38.4%). The mean percent scoring novice or below was higher than the state by 7.45%.

Figure 12: Mean percent of students scoring proficient and distinguished in Reading (Eastern Cohort 2 High Schools)

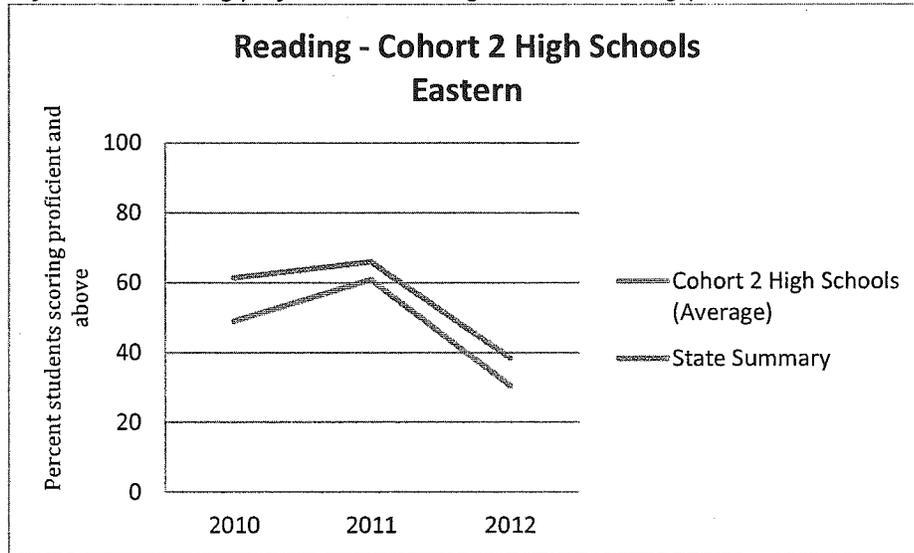
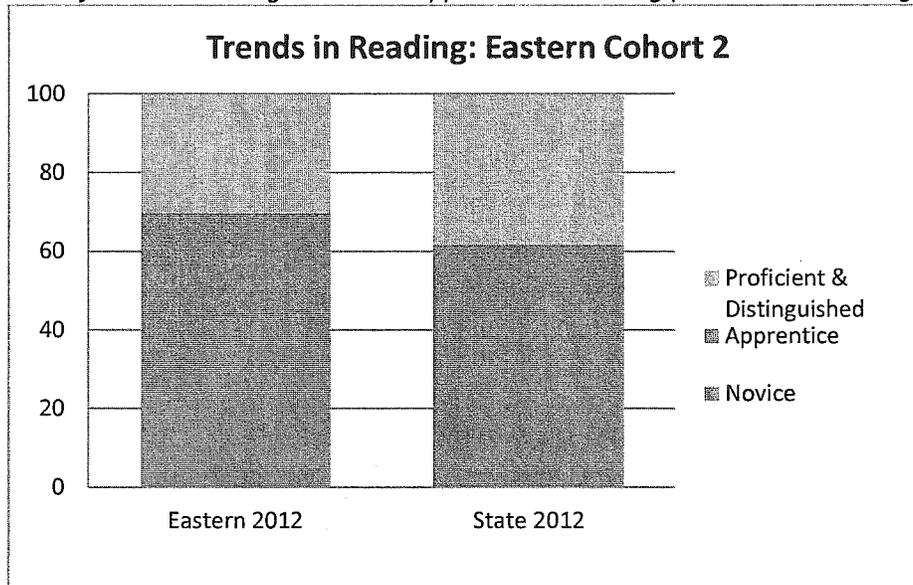


Figure 13: Mean percent of students scoring novice and apprentice in Reading (Eastern Cohort 2 High Schools)



Math

The mean percent of students scoring proficient and distinguished in Cohort 2 Eastern schools was slightly below (24.53%) the state average (27.9%). The mean percent scoring novice was slightly higher (38.88%) than the state average (35.6%).

Figure 14: Mean percent of students scoring proficient and distinguished in Math (Eastern Cohort 2 High Schools)

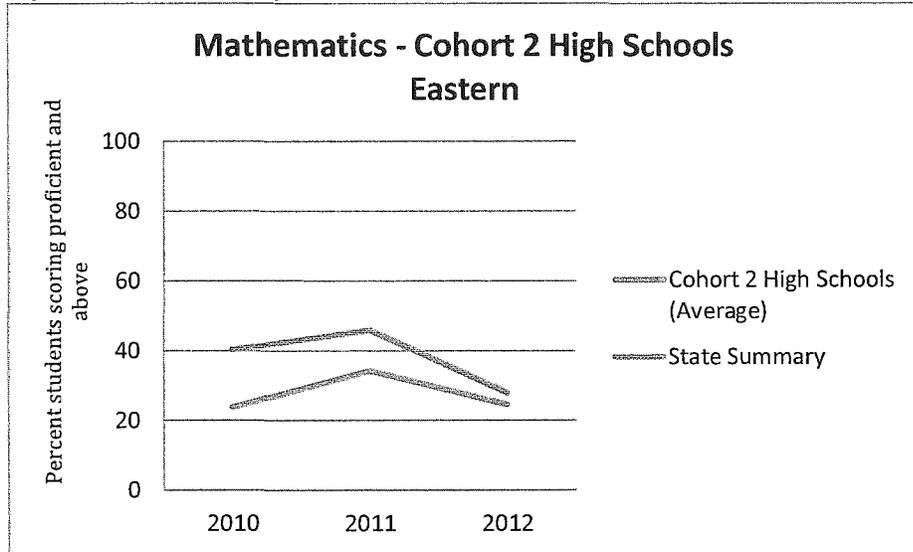
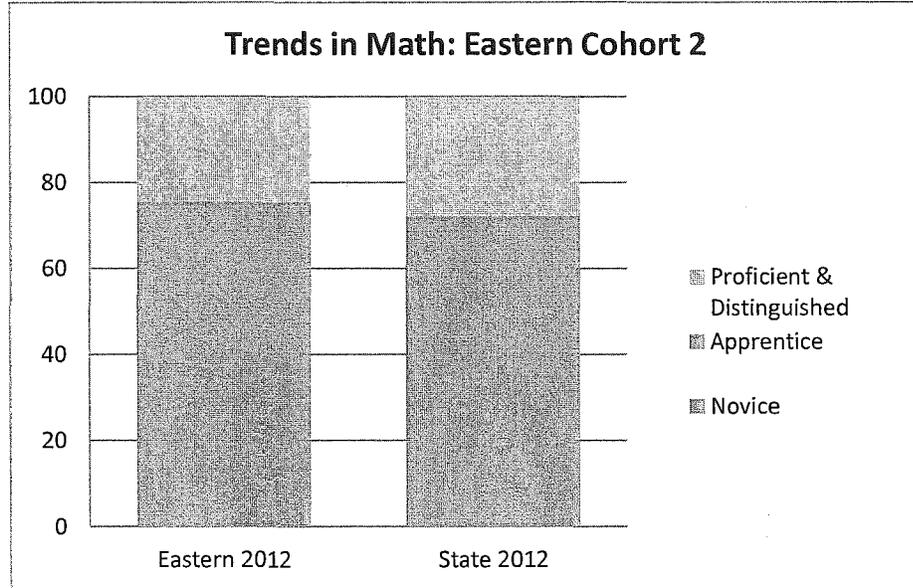


Figure 15: Mean percent of students scoring novice and apprentice in Math (Eastern Cohort 2 High Schools)



Western Cohort 1: Academic Outcomes

Reading

The mean percent of students scoring proficient and distinguished in Cohort 1 Western schools was slightly below (34.75%) the state average (38.4%). The mean percent scoring novice was similar to the state average. The mean percent scoring apprentice was lower than the state average by 2.75%

Figure 16: Mean percent of students scoring proficient and distinguished in Reading (Western Cohort 1 High Schools)

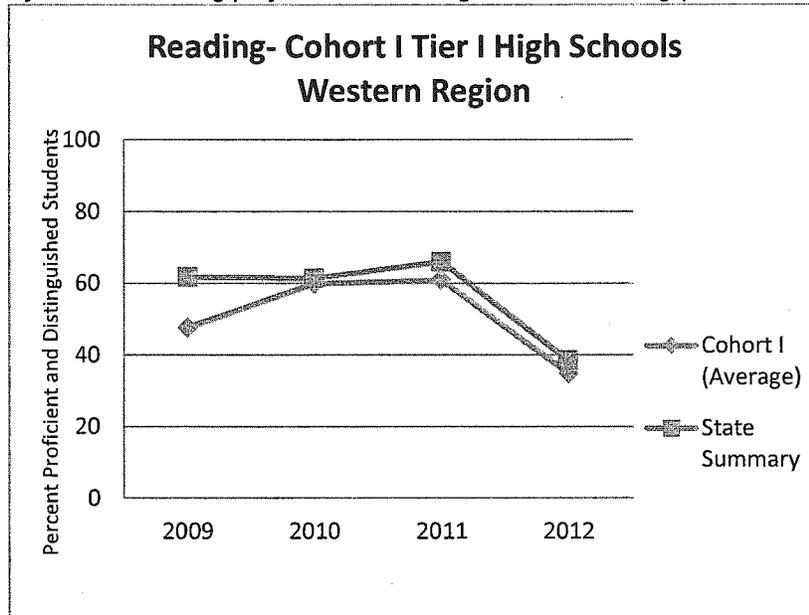
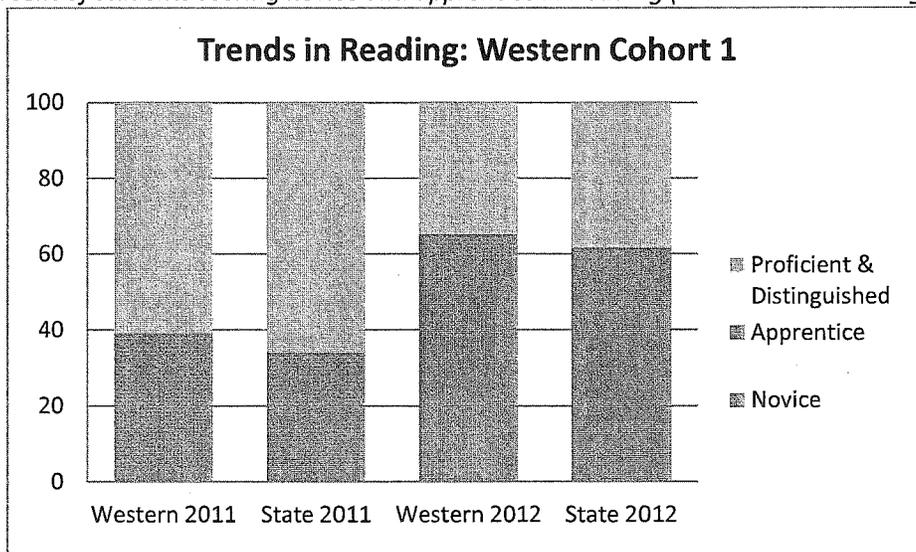


Figure 17: Mean percent of students scoring novice and apprentice in Reading (Western Cohort 1 High Schools)



Math

The mean percent of students scoring proficient and distinguished in Cohort 1 Western schools was higher (37.7%) than the state average (27.9%). The mean percent scoring novice (19.95%) was well below the state average (35.6%).

Figure 18: Mean percent of students scoring proficient and distinguished in Math (Western Cohort 1 High Schools)

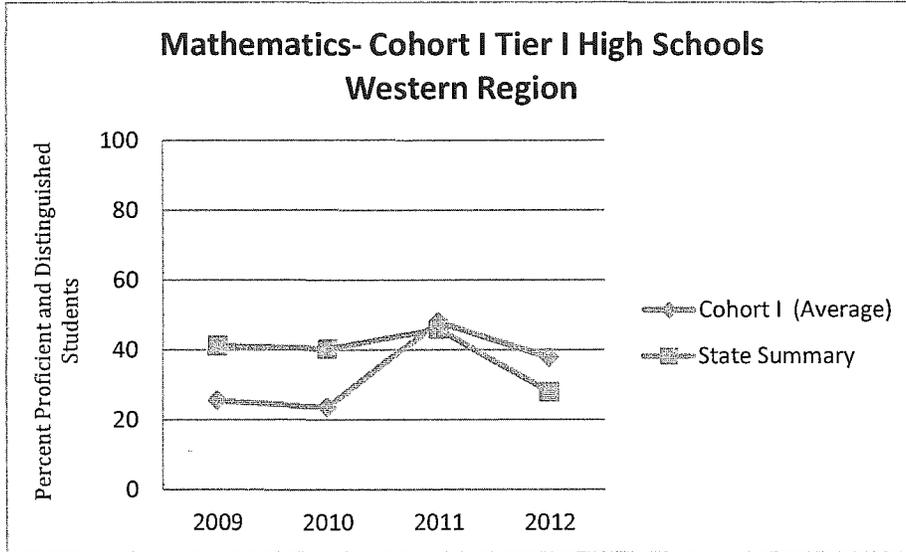
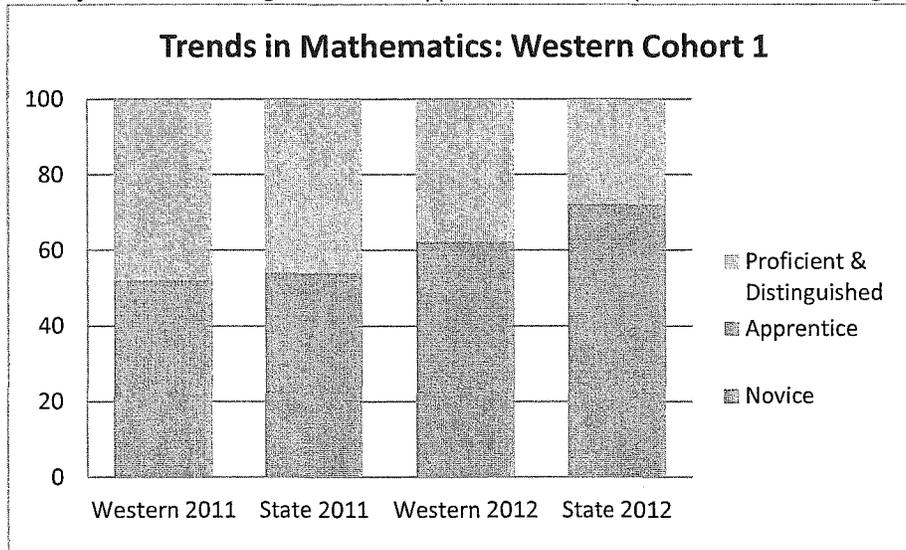


Figure 19: Mean percent of students scoring novice and apprentice in Math (Western Cohort 1 High Schools)



Western Cohort 2: Academic Outcomes

Reading

The mean percent of students scoring proficient and distinguished in Cohort 2 Western school was slightly below (33.6%) the state average (38.4%). The mean percent scoring novice was similar to the state average. The mean percent scoring apprentice was lower than the state average by 2.8%.

Figure 20: Mean percent of students scoring proficient and distinguished in Reading (Western Cohort 2 High Schools)

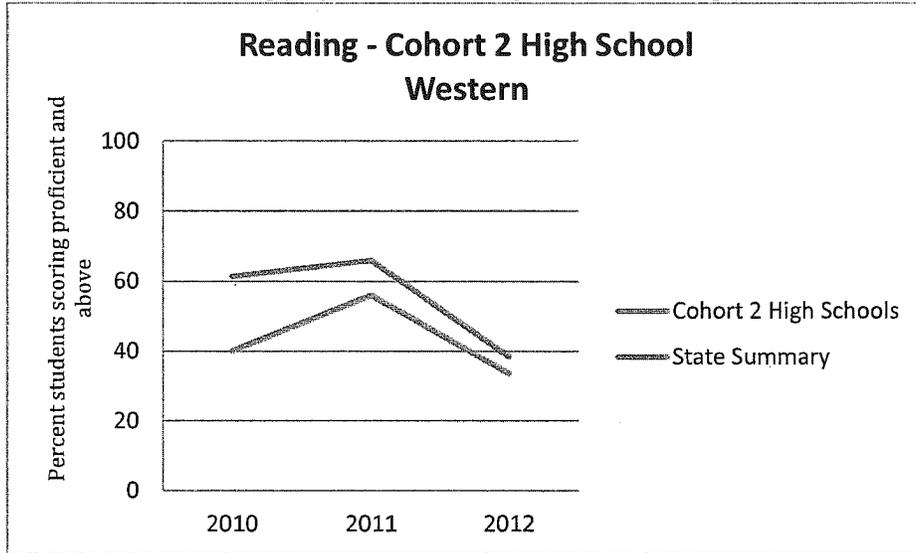
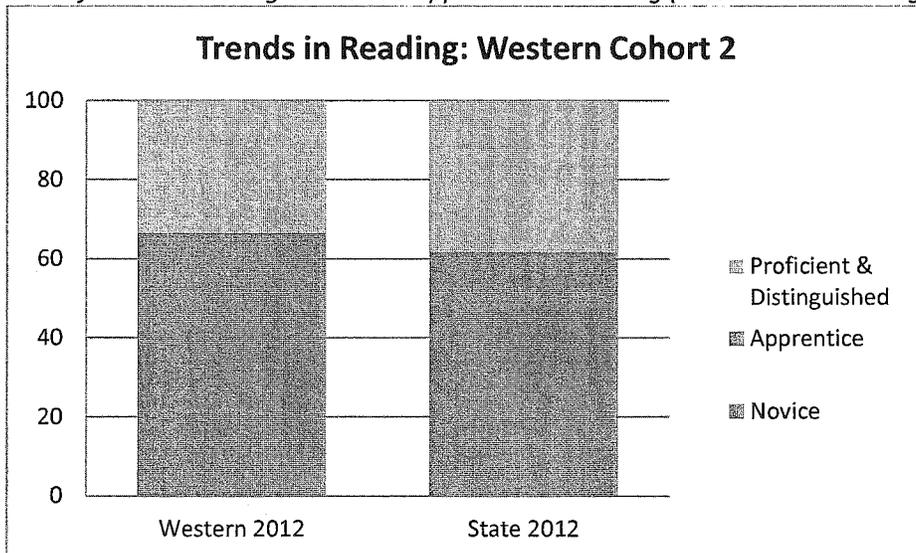


Figure 21: Mean percent of students scoring novice and apprentice in Reading (Western Cohort 2 High Schools)



Math

The mean percent of students scoring proficient and distinguished in Cohort 2 Western school was much higher (50.0%) than the state average (27.9%). The mean percent scoring novice (14.4%) was well below the state average (35.6%).

Figure 22: Mean percent of students scoring proficient and distinguished in Math (Western Cohort 2 High Schools)

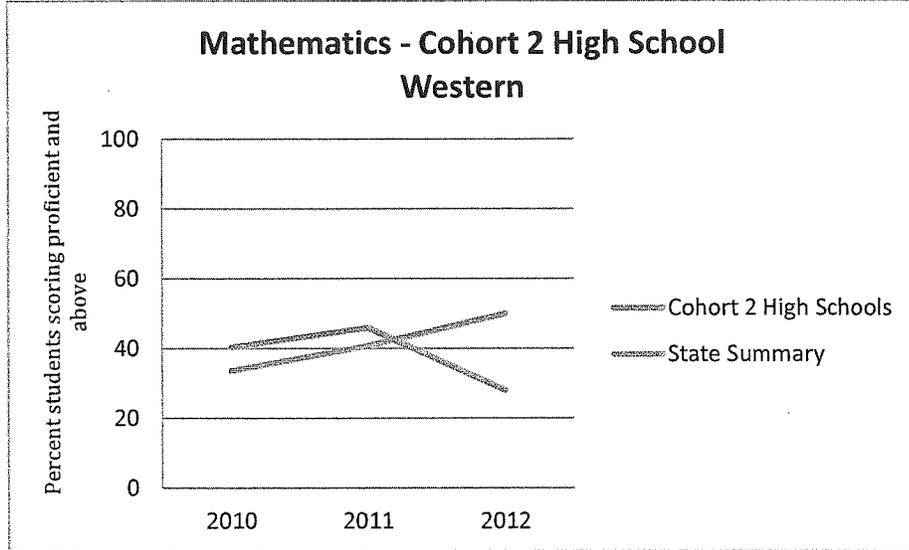
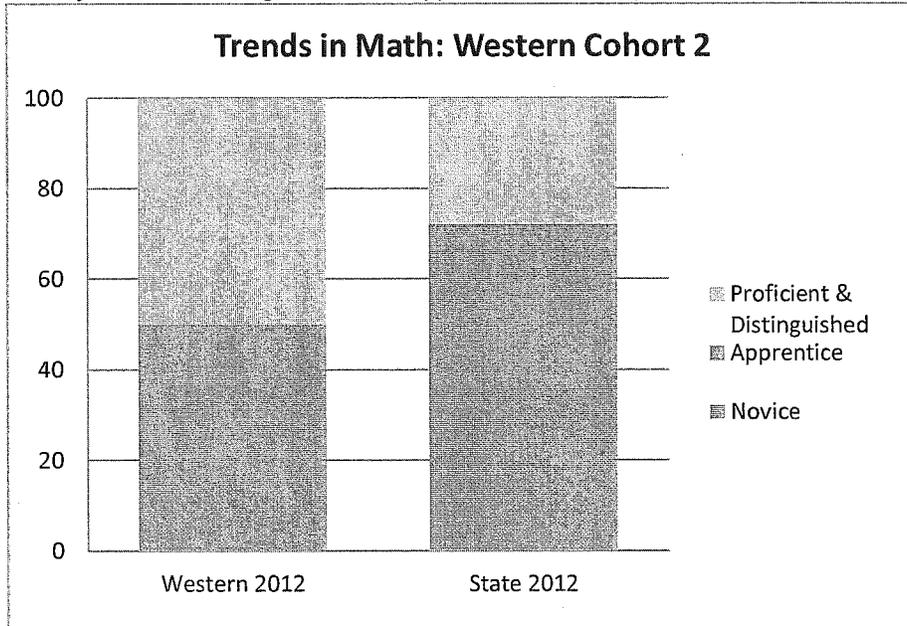


Figure 23: Mean percent of students scoring novice and apprentice in Math (Western Cohort 2 High Schools)



Central/Jefferson Cohort 1: Academic Outcomes

Reading High Schools

The mean percent of students scoring proficient and distinguished in Cohort 1 Central schools was below (25.78%) the state and district average (38.4%). The mean percent scoring novice (60.8%) was much higher than the state average (48.7%).

Figure 24: Mean percent of students scoring proficient and distinguished in Reading (Jefferson Cohort 1 High Schools)

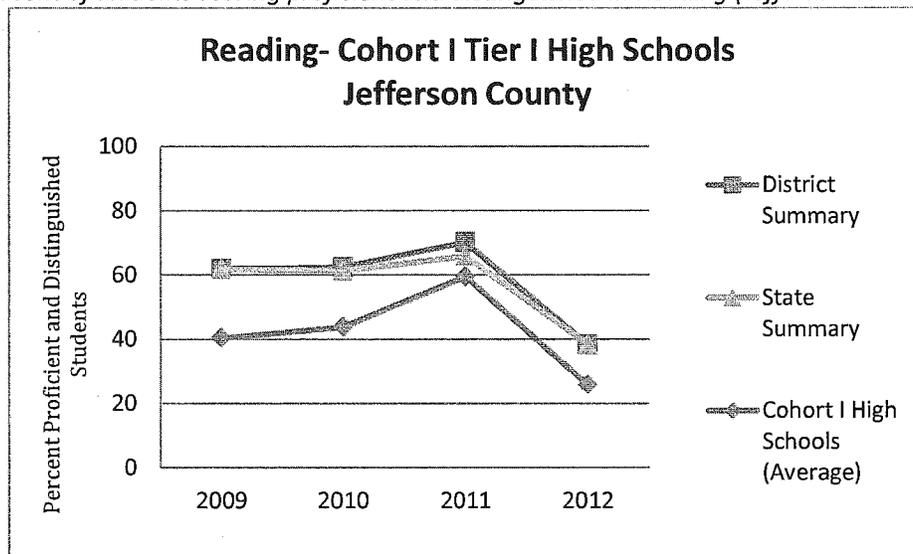
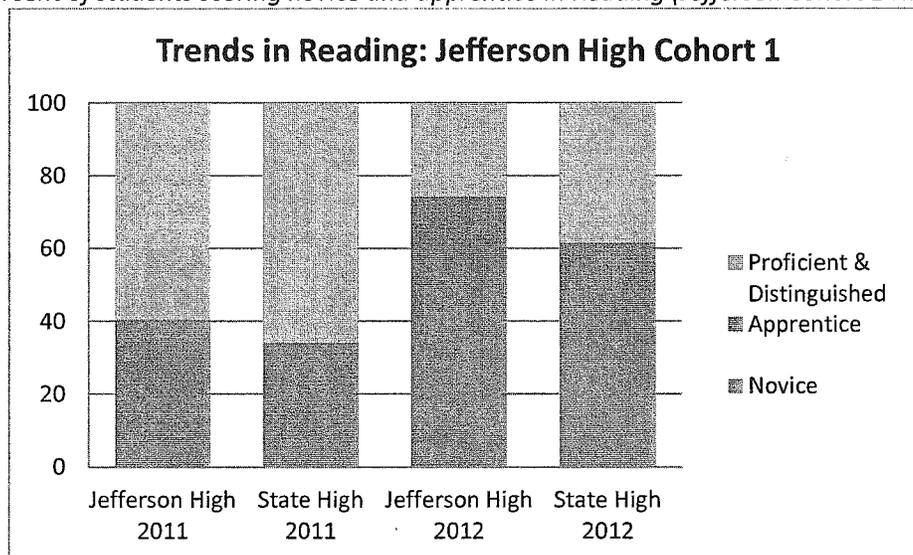


Figure 25: Mean percent of students scoring novice and apprentice in Reading (Jefferson Cohort 1 High Schools)



Math High Schools

The mean percent of students scoring proficient and distinguished in Cohort 1 Central schools was below (21.63%) the state (27.9%) and district average (35.1%). The mean percent scoring novice (43.8%) was higher than the state average (35.6%).

Figure 26: Mean percent of students scoring proficient and distinguished in Math (Jefferson Cohort 1 High Schools)

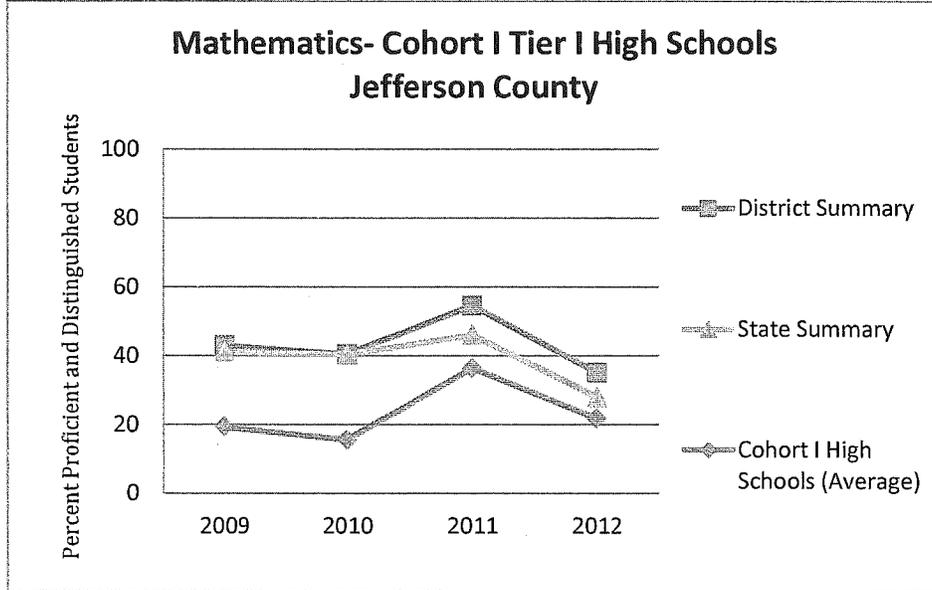
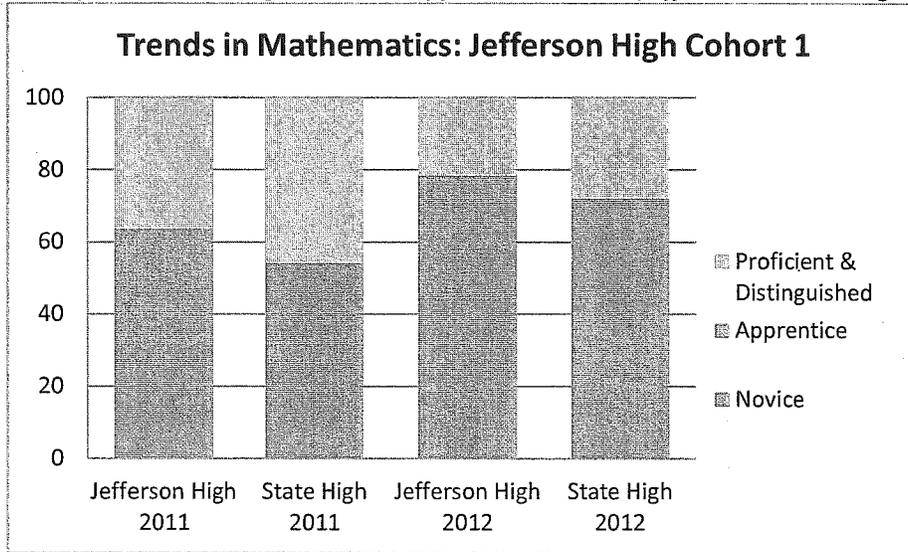


Figure 27: Mean percent of students scoring novice and apprentice in Math (Jefferson Cohort 1 High Schools)



Reading Middle Schools

The mean percent of students scoring proficient and distinguished in Cohort 1 Middle Central schools was below (20.7%) the state (34.8%) and district average (27.6%). The mean percent scoring novice (55.45%) was higher than the state average (38.6%).

Figure 28: Mean percent of students scoring proficient and distinguished in Reading (Jefferson Cohort 1 Middle Schools)

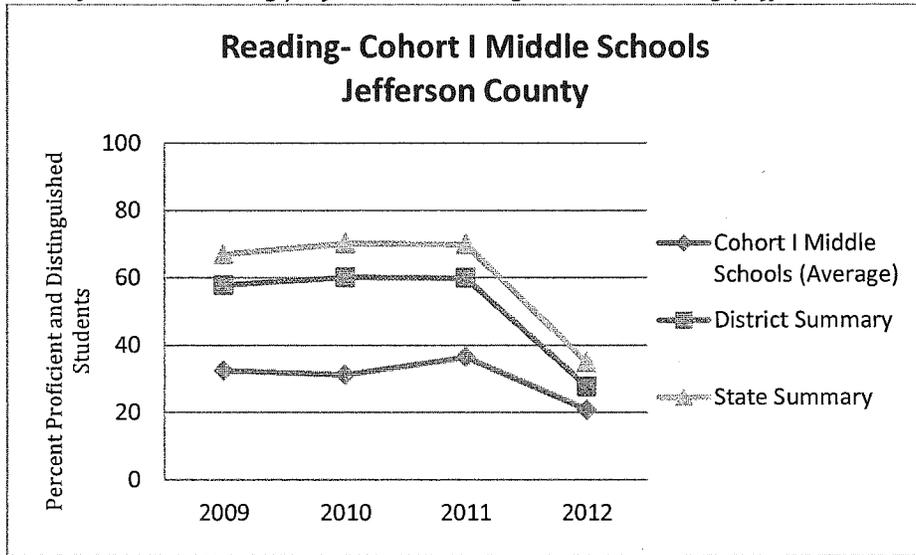
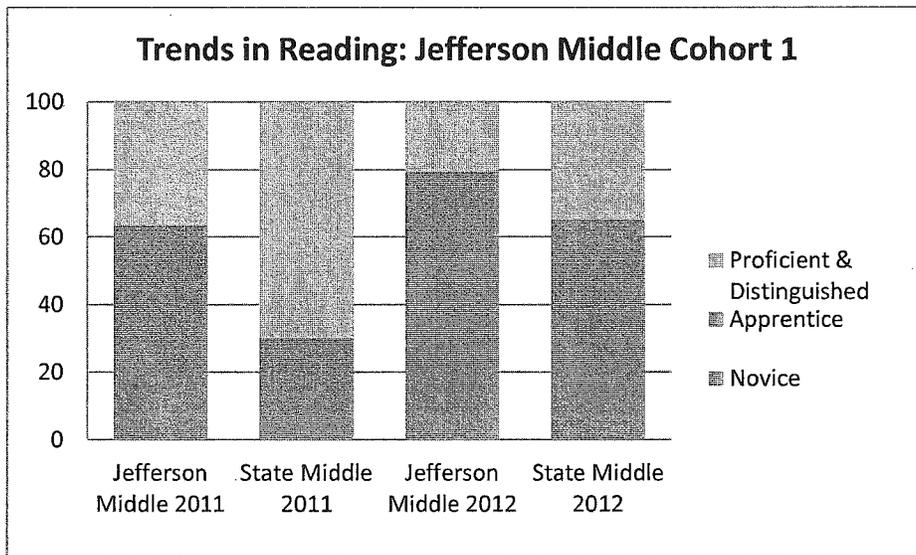


Figure 29: Mean percent of students scoring novice and apprentice in Reading (Jefferson Cohort 1 Middle Schools)



Math Middle Schools

The mean percent of students scoring proficient and distinguished in Cohort 1 Middle Central schools was below (15.25%) the state (28.7%) and district average (22.4%). The mean percent scoring novice (42.2%) was much higher than the state average (28.9%).

Figure 30: Mean percent of students scoring proficient and distinguished in Math (Jefferson Cohort 1 Middle Schools)

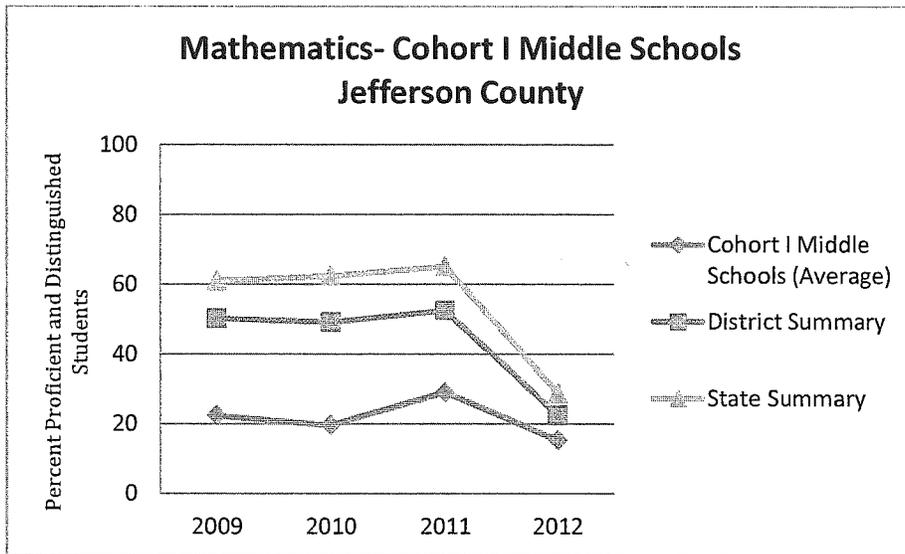
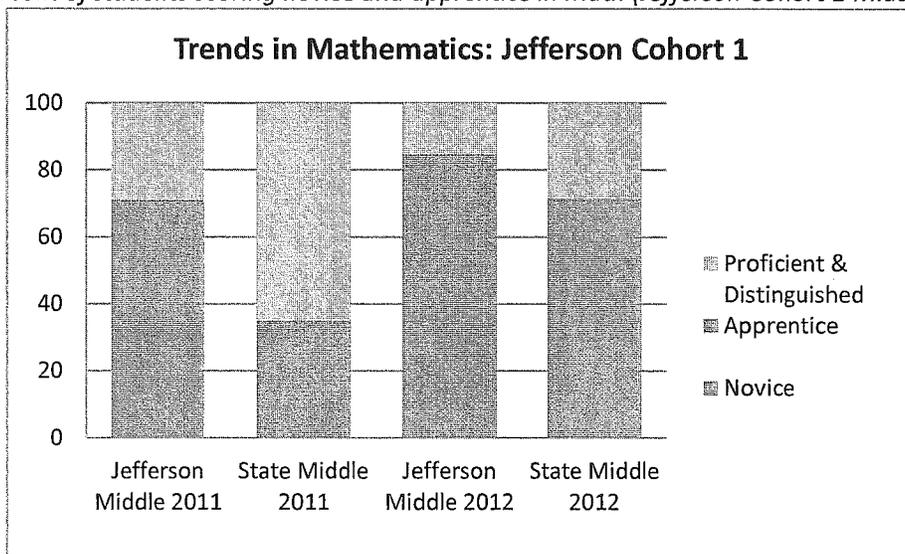


Figure 31: Mean percent of students scoring novice and apprentice in Math (Jefferson Cohort 1 Middle Schools)



Central/Jefferson Cohort 2: Academic Outcomes

Reading High Schools

The mean percent of students scoring proficient and distinguished in Cohort 2 Central schools was below (28.08%) the state and district average (38.4%). The mean percent scoring novice (59.72%) was much higher than the state average (48.7%).

Figure 32: Mean percent of students scoring proficient and distinguished in Reading (Jefferson Cohort 2 High Schools)

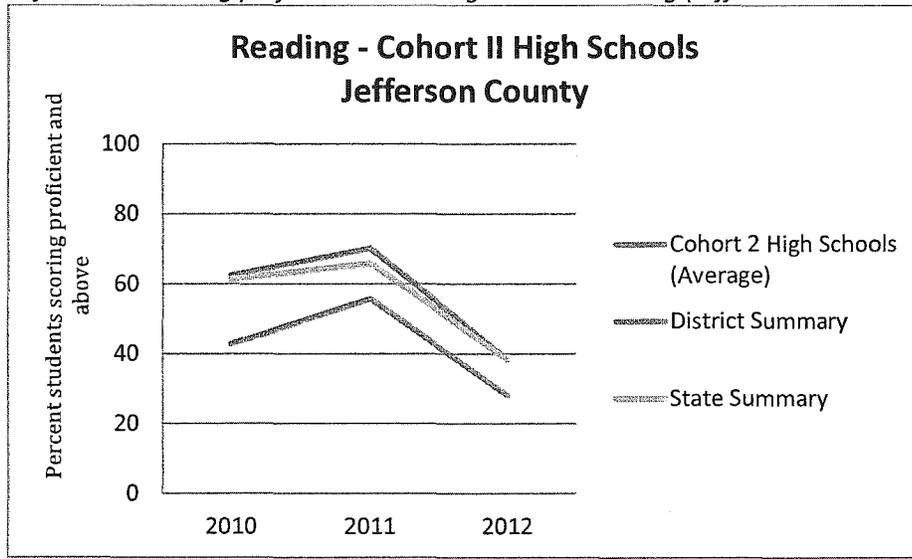
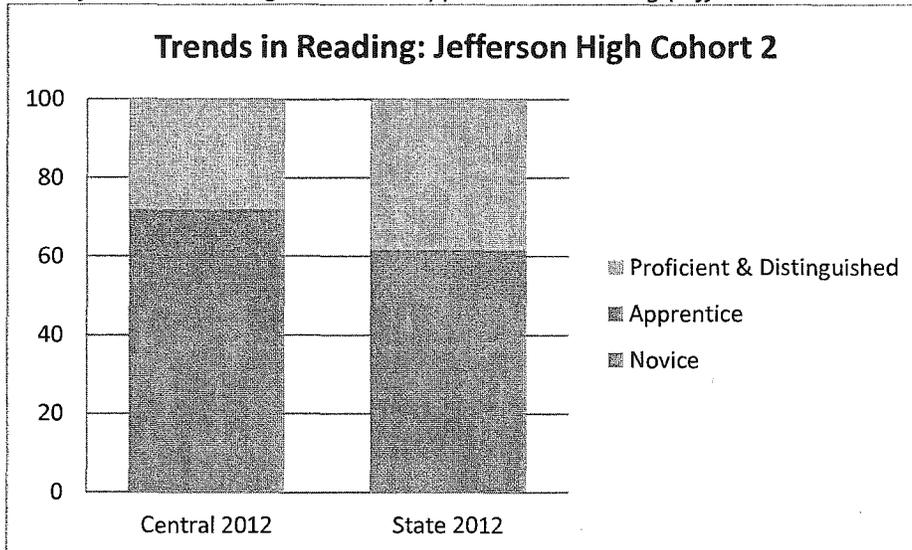


Figure 33: Mean percent of students scoring novice and apprentice in Reading (Jefferson Cohort 2 High Schools)



Math High Schools

The mean percent of students scoring proficient and distinguished in Cohort 2 Central schools was slightly higher (32.2%) than the state (27.9%). The mean percent scoring novice (33.53%) was slightly lower than the state average (35.6%).

Figure 34: Mean percent of students scoring proficient and distinguished in Math (Jefferson Cohort 2 High Schools)

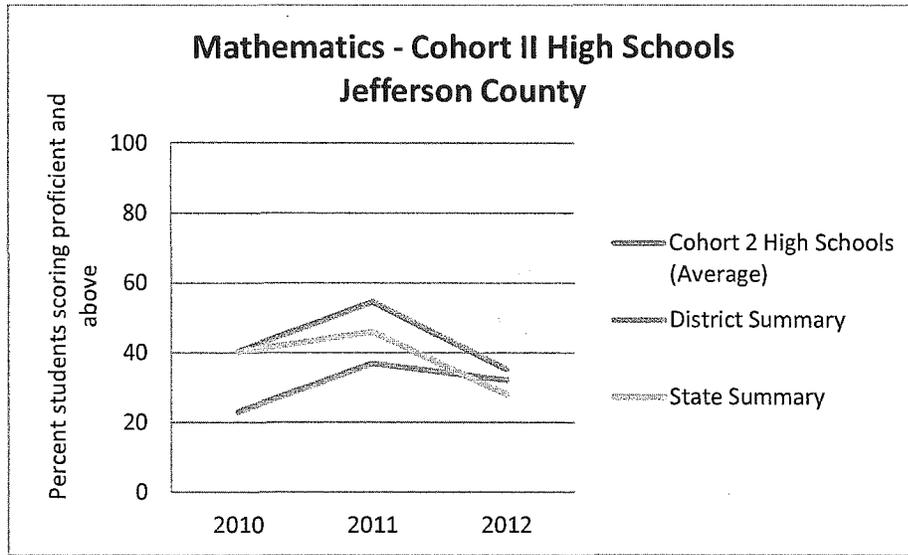
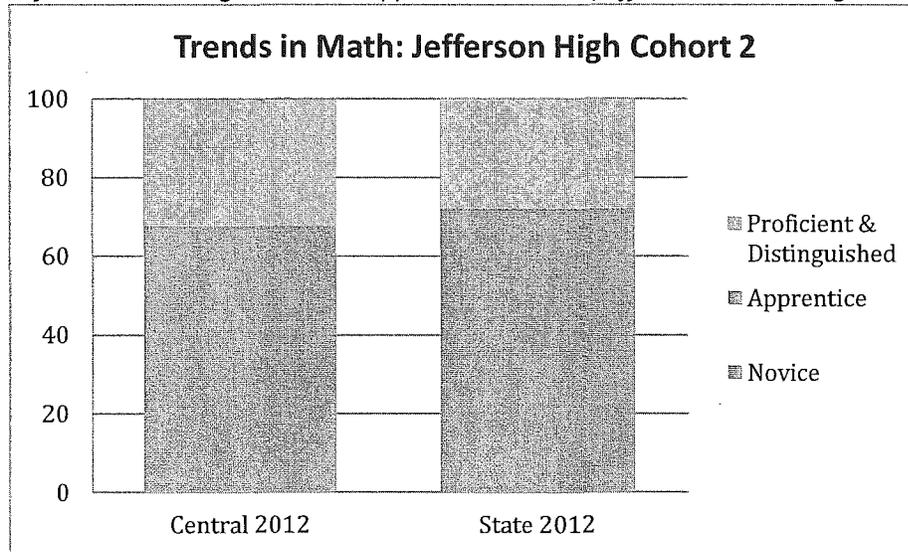


Figure 35: Mean percent of students scoring novice and apprentice in Math (Jefferson Cohort 2 High Schools)



Reading Middle Schools

The mean percent of students scoring proficient and distinguished in Cohort 2 Middle Central schools was much lower (12.6%) than the state (34.8%) and district average (27.6%). The mean percent scoring novice (58.7%) was higher than the state average (38.6%).

Figure 36: Mean percent of students scoring novice and apprentice in Reading (Jefferson Cohort 2 Middle School)

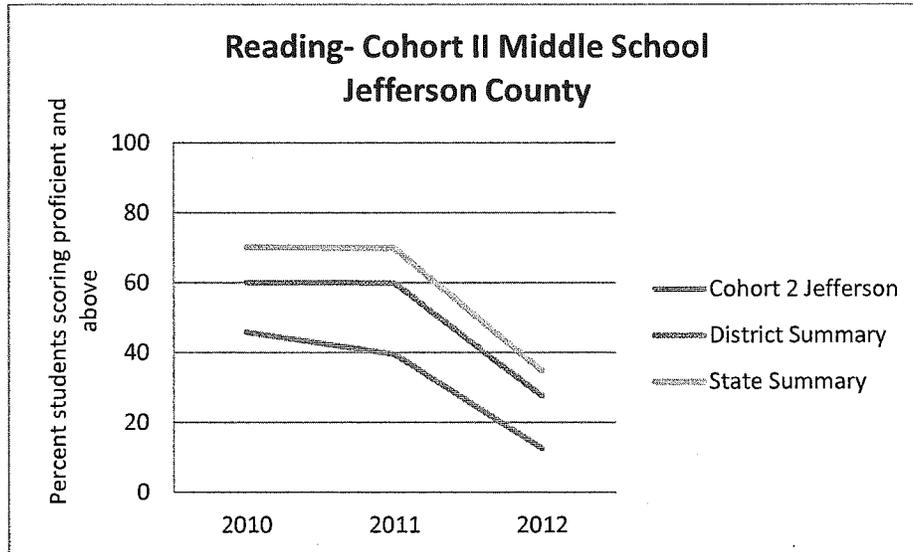
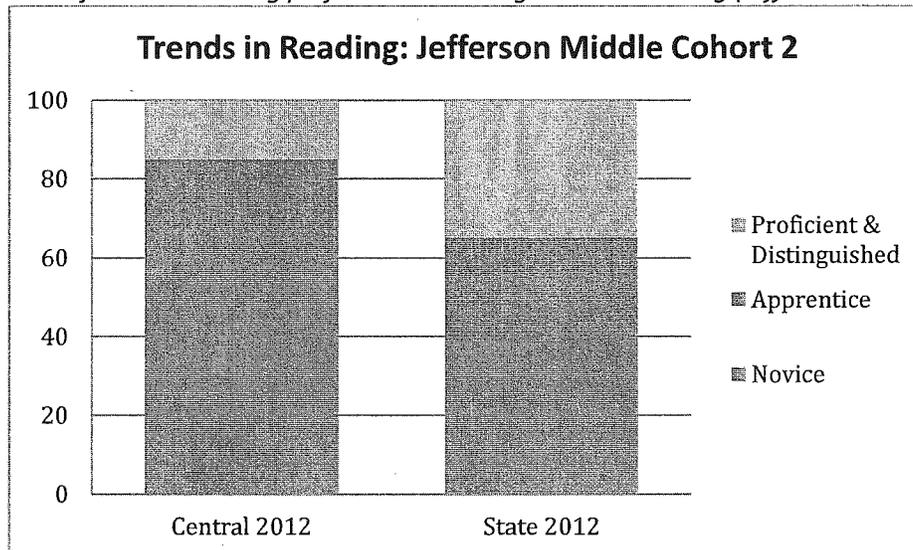


Figure 37: Mean percent of students scoring proficient and distinguished in Reading (Jefferson Cohort 2 Middle School)



Math Middle Schools

The mean percent of students scoring proficient and distinguished in Cohort 2 Middle Central schools was below (11.8%) the state (28.7%) and district average (22.4%). The mean percent scoring novice (46.8%) was higher than the state average (28.9%).

Figure 38: Mean percent of students scoring novice and apprentice in Math (Jefferson Cohort 2 Middle School)

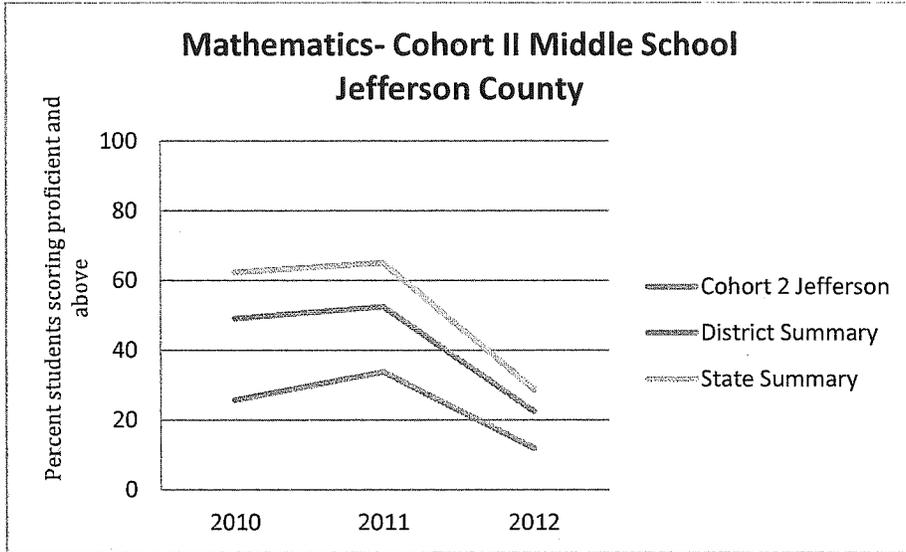
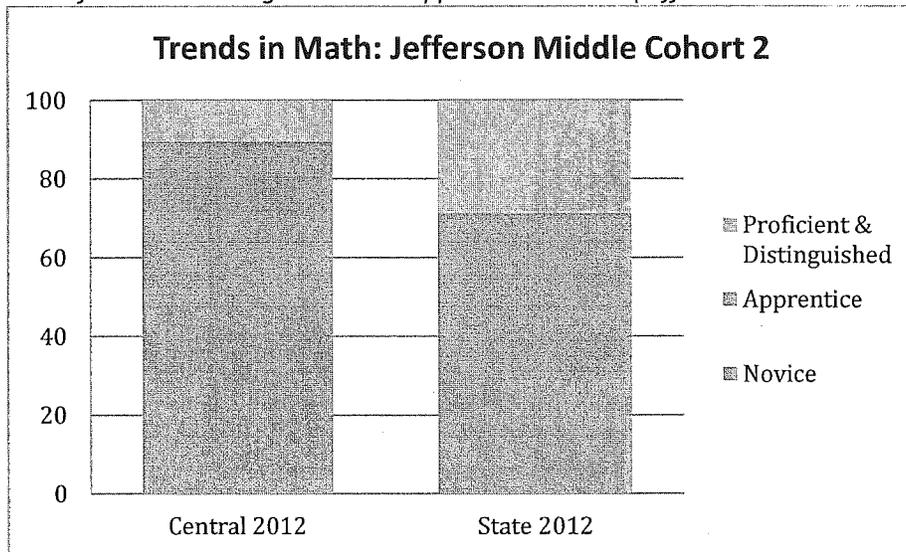


Figure 39: Mean percent of students scoring novice and apprentice in Math (Jefferson Cohort 2 Middle Schools)



Nonacademic Data

Graduation

In order to further understand the college and career readiness of the SIG school students, the graduation rate and college and career readiness rates were examined. The baseline graduation rate had been steadily increasing for four of the eight Cohort 1 schools and five of the eleven Cohort 2 schools. East Carter high school and Greenup High School were the only SIG schools with a higher graduation rate than the state. Leslie County high school had the most decline in graduation rate over the past few years from 73.8% in 2010 to 66.5% in 2012. The graduation rates were accessed from the KDE website. Tables 31 and 32 display the graduation rates for Cohort 1 and 2 schools respectively.

Table 31: KY Averaged Freshman Graduation Rate (AFGR) for Cohort 1 SIG schools

School Name	KY AFGR Grad Rate(2009)	KY AFGR Grad Rate(2010)	KY AFGR Grad Rate(2011)	% Change from '10 to '11
Western				
Caverna High School	59.86	74.3	68.5	(5.80)
Metcalfe County High School	60.99	65.9	76.3	10.40
Eastern				
Lawrence County High School	58.92	57.3	69.2	11.90
Leslie County High School	72.91	73.8	66.5	(7.30)
Central (Jefferson County)				
Fern Creek Traditional High	73.30	64.6	67.4	2.80
Valley Traditional High	58.36	52.6	52.4	(0.20)
Western High School	66.55	52.5	68.3	15.80
The Academy @ Shawnee	50.00	47.2	42.3	(4.90)
STATE TOTAL	78.04	76.7	77.8	1.10

Table 32: KY Averaged Freshman Graduation Rate (AFGR) for Cohort 2 SIG schools

School Name	KY AFGR Grad Rate(2010)	KY AFGR Grad Rate(2011)	% Change from '10 to '11
Western			
Christian County High School	64.6	77.0	12.40
Eastern			
East Carter High School	81.1	81.8	0.70
Greenup High School	81.1	80.3	(0.80)
Sheldon Clark	69.9	70.1	0.20
Newport Independent	62.0	64.1	2.10
Central (Jefferson County)			
Iroquois High School	40.5	40.5	0.00
Doss High School	60.9	59.5	(1.40)
Seneca High School	64.9	59.7	(5.20)
Southern High School	61.9	61.3	(0.60)
Fairdale High School	62.1	76.5	14.40
Waggener High School	59.2	59.1	(0.10)
STATE TOTAL	76.7	77.8	1.10

College and Career Readiness Data

The College and Career Readiness (CCR) rate includes students who have met college or career ready benchmarks. Students who have passed a college placement test or COMPASS are considered to be “college ready.” A student who is preparatory in a “Career and Technical Education career major and has reached the benchmarks on WorkKeys or ASVAB and KOSSA or an Industry Certification” is considered to be career ready (<http://education.ky.gov/educational/CCR/Pages/default.aspx>). The CCR rate was obtained from the KDE website and only non-duplicated counts were considered for the analysis.

The 2011 CCR rates for SIG schools were considerably lower than the state for the following Cohort 1 high schools—Caverna, Valley Traditional, Western and Academy @ Shawnee. The 2011 CCR rates were close to the overall state CCR rate for the following Cohort 1 high schools—Metcalf, Lawrence, Leslie and Fern Creek. Table 33 displays the CCR rates for the Cohort 1 SIG high schools.

Table 33: 2011 College and Career Readiness (CCR) rate for SIG Cohort 1 schools

	CCR Rate (2011)
Western	
Caverna High School	2%
Metcalf County High School	36%
Eastern	
Lawrence County High School	28%
Leslie County High School	36%
Central (Jefferson County)	
Fern Creek Traditional High	31%
Valley Traditional High	4%
Western High School	11%
The Academy @ Shawnee	6%
STATE TOTAL	38%

The 2011 CCR rates for SIG schools were 50% or more lower than the state rate for the following Cohort 2 high schools—Iroquois, Doss and Southern. Seneca and Greenup had the highest CCR rates (31%) among the Cohort 2 high schools. Table 34 displays the CCR rates for the Cohort 2 SIG high schools.

Table 34: 2011 College and Career Readiness (CCR) rate for SIG Cohort 2 schools

	CCR Rate (2011)
Western	
Christian County High School	24%
Eastern	
East Carter High School	24%
Greenup High School	31%
Sheldon Clark	27%
Newport Independent	21%
Central (Jefferson County)	
Iroquois High School	11%
Doss High School	10%

Seneca High School	31%
Southern High School	13%
Fairdale High School	20%
Waggener High School	18%
STATE TOTAL	38%

Appendix A: Tier III Schools

DISTRICT NAME	SCHOOL NAME
Jefferson County Public School	Thomas Jefferson Middle
Jefferson County Public School	Doss High
Jefferson County Public School	Iroquois High
Jefferson County Public School	Knight Middle School
Jefferson County Public School	Stuart Middle
Jefferson County Public School	Conway Middle School
Jefferson County Public School	Fairdale High School MCA
Jefferson County Public School	Lassiter Middle School
Jefferson County Public School	Myers Middle School
Jefferson County Public School	Westport Traditional Middle
Jefferson County Public School	Moore Traditional School
Jefferson County Public School	Waggener Traditional High School
Jefferson County Public School	Central High School
Jefferson County Public School	Farnsley Middle
Jefferson County Public School	Southern High School
Jefferson County Public School	Stonestreet Elementary
Jefferson County Public School	Whitney Young Elementary
Jefferson County Public School	Lincoln Elementary Performing Arts
Jefferson County Public School	Rangeland Elementary
Jefferson County Public School	Coral Ridge Elementary
Adair County	Adair County Middle School
Allen County	Allen County Intermediate Center
Berea Independent	Berea Community Middle School
Boone County	Hillard Collins Elementary School
Bowling Green Independent	Bowling Green Junior High
Boyd County	Boyd County Middle School
Breckinridge County	Breckinridge County Middle School
Bullitt County	Bullitt Lick Middle School
Bullitt County	Zoneton Middle School
Bullitt County	Hebron Middle School
Calloway County	Calloway County High School
Carroll County	Carroll County Middle School
Carter County	East Carter Middle School
Carter County	Heritage Elementary School
Christian County	North Drive Middle School
Christian County	Christian County Middle School
Christian County	Hopkinsville Middle School
Christian County	Martin Luther King Jr. Elementary School
Clark County	Central Elementary School
Clay County	Clay County Middle School

Cumberland County	Cumberland County Elementary School
Estill County	Estill County High School
Fayette County	Bryan Station High School
Fayette County	Russell Cave Elementary School
Fayette County	Crawford Middle School
Fayette County	Tates Creek Middle School
Fayette County	Leestown Middle School
Fayette County	Cardinal Valley Elementary School
Floyd County	South Floyd High School
Floyd County	Betsy Layne High School
Fulton County	Fulton County High School
Garrard County	Garrard Middle School
Grayson County	Grayson County Middle School
Hardin County	Bluegrass Middle School
Hardin County	North Hardin High School
Hardin County	John Hardin High School
Hardin County	East Hardin Middle School
Hardin County	Meadow View Elementary School
Hardin County	Central Hardin High School
Hardin County	North Middle School
Hardin County	James T Alton Middle School
Hardin County	Parkway Elementary School
Hardin County	West Hardin Middle School
Hardin County	Vine Grove Elementary School
Henderson County	Henderson County South Middle School
Hopkins County	Browning Springs Middle School
Hopkins County	James Madison Middle School
Jackson County	Jackson County High School
Jackson County	Jackson County Middle School
Jessamine County	East Jessamine Middle School
Jessamine County	Rosenwald Dunbar Elementary School
Knott County	Beaver Creek Elementary School
Knox County	Lynn Camp High School
Knox County	Knox Central High School
Knox County	Knox County Middle School
Knox County	West Knox Elementary School
Lee County	Lee County Middle School
Livingston County	Livingston County Middle School
McCreary County	McCreary Central High School
McCreary County	McCreary County Middle School
Middlesboro Independent	Middlesboro High School
Monroe County	Monroe Co Middle
Morgan County	Morgan County Middle School

Newport Independent	Newport Middle School
Oldham County	South Oldham Middle School
Owsley County	Owsley County High School
Paducah Independent	Paducah Tilghman High School
Paducah Independent	Paducah Middle School
Robertson County	Deming School
Russellville Independent	R E Stevenson Elementary School
Silver Grove Independent	Silver Grove School
Taylor County	Taylor County High School
Taylor County	Taylor County Middle School
Trimble County	Trimble County Middle School
Union County	Union County Middle School
Union County	Morganfield Elementary School
Whitley County	Whitley County Middle School
Wolfe County	Wolfe County High School

Educational Assessment, Evaluation and Accountability
Beyond Measure: Questions Arising from the debate on Teacher Observation and Feedback
--Manuscript Draft--

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Full Title:	Beyond Measure: Questions Arising from the debate on Teacher Observation and Feedback
Article Type:	Special Issue: Teacher Effectiveness and Evaluation
Keywords:	Scientism; managing teaching and learning; competencies; teacher roles and responsibilities; corporatization of education; measurable models.

Beyond Measure: Questions Arising from the debate on Teacher Observation and Feedback

Abstract:

Measuring teacher effectiveness is a contentious issue within the education profession. There are conflicting approaches and arguments, along with many diverse methods employed throughout the educational sector. Everyone, from parents, children, corporate leaders and their employees, even heads of state have an opinion on how teachers ought to be doing their job. This article raises and addresses key questions on whether or not it is at all possible to effectively measure the many and varied roles any teacher, course instructors, lecturer, or professor assumes in the course of their day-to-day teaching. It argues that in an occupation and profession which must compete and engage with an ever increasingly aggressive consumer culture, and the ongoing corporatization of education along with its subsumation into the corporate IT sector, it is not possible to render an effective system of measuring and quantifying the role of a teacher in the 21st century.

Introduction

The college drop-out and former CEO of Microsoft, Bill Gates, recently likened teaching and learning to factory production in his argument that teachers objecting to an administrator coming into their classrooms to evaluate their performance, are like a group of workers in a factory refusing entry to the owner. (Gates, 2009) Leaving aside the naivety of the claim, and the complete lack of understanding of the processes involved in teaching and learning, he conveniently overlooks the fact that Frederick Taylor's factory model of education was abandoned by the behaviorists for a more deterministic model in the early part of the 20th century. However, the point here is more one of how the corporatization of education is affecting the profession in the long term, and driving the contentious nature of how teachers are measured as effective in managing, delivering, and performing in their role as educators.

The descendants of Scientism, the social sciences are the harbinger of quality control in today's teaching and learning processes. These disciplines which at their core may include education, economics, anthropology, cultural and multi-literacies, sociology, communication studies and psychology foreshadow attempts at fully measuring and controlling the way teaching and learning is carried out throughout all educational institutions in the world in

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the early years of the 21st century. They are attempts at quantifying, measuring and controlling how students learn and how teachers teach.

Yet they embrace some of the most controversial theories and practices in attempting to capture the very human trait of intra and interpersonal communications which is to be found at the heart of the teaching and learning process, notwithstanding whatever tools or methodologies are utilized to convey, disperse, integrate or build on knowledge via a formalized curriculum.

While it is argued that the current systems for measuring teacher effectiveness are inadequate (Gates Foundation, 2010), these are arguments which attempt to find solutions within the very disciplines which have proved inadequate in the first place. Attempts by the social sciences to fully capture and measure the totality of the human experience in general have never been successful. It is a reasonable assertion to make that attempting to capture and measure the intricacies of the human experience through teaching and learning will be less so.

Teaching and learning embraces the totality of the human experience. It is dependent upon a highly socialized process embedded within both the explicit and implicit curriculum. How teachers teach and how students learn depends not only on the added value of test scores and statistical outcomes, but also on the highly emotive, often inexplicable, irrational and unchoreographed personality inter-play between teachers and learners, in addition to class sizes, curriculum type and content, how English language learners, and special education students are transferred into mainstream classes, differentiation models, individual learning style models, gifted learners needs, instructional time made available, availability of specialist help and support, resources, finance, home and community support and challenges, individual students' and teachers' needs, abilities, health, attitude, and attendance, youth and consumer culture and its impact on education in general and teaching and learning in particular, and the health of the global geo-political and economic outlook in an inter-connected globalized technopoly. And while a set of competencies may be developed and designed to capture significant aspects of all of the above, for the most part they are beyond measure.

Scientism and the Managing of Teaching and Learning

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Postman (1993) claims that through scientism it just isn't possible to quantify human behaviors. He argues that simply applying the rigors of scientific principles established through the natural sciences will not produce objective and verifiable theories and facts in other disciplines. Furthermore, it just isn't possible to apply scientific principles, to the human condition thus establishing universal laws (Postman, 1993). The foundation for this approach to understanding the human condition is to be found in the works of Claude-Henri de Saint Simon, Prosper Enfantin, and Auguste Comte. These three men claimed that it was possible to effectively measure and understand the underlying principles of human behavior thereby directing a society to be reorganized within the paradigm of behaviorism. As a consequence two competing views of education dominated the developing field of education toward the end of the 19th century and the beginning of the 20th century. The first was introduced in the research and writings of John Dewey and the second notion was presented by the factory owner and founder of time and motion studies, Frederick Taylor.

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Dewey claimed that education had to be founded upon growth-growth of the individual learner, growth of societies and positive transformational growth through the world in order to allow the further development of democratic ideals for everyone, everywhere. He supported such progressive ideas as the integration of content areas, differentiation based on student learning needs, the connection of classroom with the real world and student-centred education. These concepts were supposed to be the means of establishing the link between what was taught in a formal learning environment, and what lived and experienced in families, wider communities and societies.

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On the other hand, Taylor put forward a crude scientific interpretation of education. He believed that the approach to factory based production would have a positive influence

1 on education. Taylor claimed that the only goal of human labour and thought was efficiency
2 in getting a task-any task done (Postman, 1993). His principles of factory management
3 were soon applied to the supervision of schools and teachers, as well as the teaching and
4 learning process:
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7 *Our schools are, in a sense, factories in which the raw products (children) are to be*
8 *shaped and fashioned into products to meet the various demands of life. The specifications*
9 *for manufacturing come from the demands of the twentieth century civilisation, and it is the*
10 *business of the school to build its students according to the specifications laid down*
11 *(Mathison & Ross, 2007)*
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17 In the early 20th century, Taylor's model caught the attention of Ellwood Cubberley, a
18 former Dean of the Stanford University School of Education, who became one of the first
19 educators to develop an administrative tier in the teaching profession, and to apply
20 scientism to the management of schools and their teachers. However, Cubberley's social
21 engineering approach to education was controversial, and soon competing views were
22 eschewing a factory model of teaching and learning and embracing a more deterministic
23 one: the use of reliable measures for student learning, the setting up of quantifiable and
24 clear goals for teachers and students, including aptitude tests for the ability determination
25 of every school aged, college and university student (Mathison & Ross, 2007)
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35 Effective measurable teaching was beginning to be recognised as the main aim of
36 education together with quantifiable and measurable data about teacher performance.
37 Models were established which were designed to facilitate a collaborative dialogue between
38 administrators and teachers:
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42 ***Original Clinical Models.*** *The original models proposed by Goldhammer and Cogan offer a*
43 *blend of empirical, behavioral, phenomenological, and developmental perspectives. These*
44 *approaches emphasize the importance of collegial relationships with teachers, cooperative*
45 *discovery of meaning, and development of unique teaching styles.*
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50 ***Artistic/Humanistic Models.*** *The perspectives of Eisner and Blumberg are based on aesthetic*
51 *and existential principles. These approaches forsake step-by-step procedures and emphasize*
52 *open interpersonal relations and personal intuition, artistry, and idiosyncrasy. Supervisors*
53 *are encouraged to help teachers understand the artistic and expressive richness of teaching.*
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58 ***Technical/Didactic Models.*** *The approaches to clinical supervision proposed by Acheson and*
59 *Gall and by Hunter draw heavily on findings from process-product and effective teaching*
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research. These approaches emphasize techniques of observation and feedback that reinforce certain “effective” behaviors or predetermined models of teaching to which teachers attempt to conform.

Developmental/Reflective Models. The models of Glickman, Costa and Garmston, Seichner and Liston, Garman, Smyth, and Waite are sensitive to individual differences and the social, organizational, political, and cultural contexts of teaching. These authors call on supervisors to encourage reflection among teachers, foster growth, and promote justice and equity. (Pajak, 2003)

As a reaction to these models, an administrative lead supervisory process soon became regarded as an essential aspect of continuous enhancement in teaching and learning:

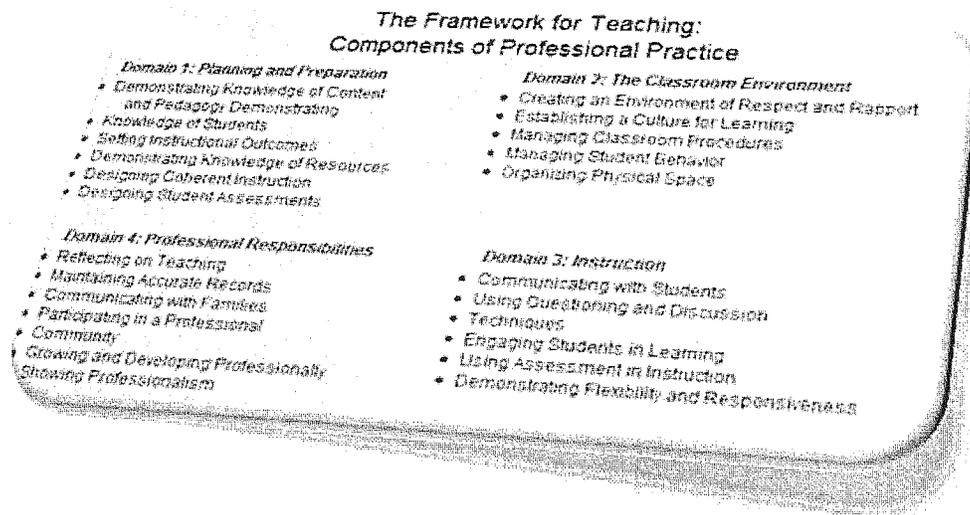
In this sense, the teacher involved in observation must be perceived as a practitioner fulfilling one of the first requirements of a professional - maintaining and developing his competence. He must not be treated as a person being rescued from ineptitude, saved from incompetence, or supported in his stumbling. He must perceive himself to be engaged in the supervisory processes as a professional who continues his education and enlarges his competences (Cogan, 1973).

The interaction of student and teacher was viewed as the complete practice of teaching, and the supervision by administrators was the means for measuring efficient and competent teaching and learning processes.

However, educators like Glickman, Costa and Garmston argued that the teacher as the professional should have some sense of control and input over their professional development. In addition, opportunities for professional growth had to be given to teachers on the basis of their individual needs. They argued strongly for a broad range of reform and professional development for teachers which included action research, curriculum development, professional development, group development and direct assistance for individual teachers not meeting requisite benchmarks laid down by local and national governmental bodies. Their contributions to the debate and further development of teacher effectiveness provided the main arguments against the harsh application of a deterministic model of teacher observation and laid the groundwork for the accent on a teacher’s overall skill development as an essential part of their professional lives.

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The Danielson behaviourist model of teacher evaluation presented in the mid-1990s is one of the many complex models which attempt to capture the whole professional dynamic of a teacher and student life in the formal learning environment. Within each of the four domains a classification of competencies were developed to describe the necessary disposition, skills and knowledge requisite in the teaching and learning environment:



(Danielson, 2013)

These competencies were further classified into the four discrete levels with performance indicators (distinguished, proficient, basic and unsatisfactory) measuring whether teaching and learning was effective. This was one of its more controversial aspects with teachers arguing how such competencies as reflection, inter-personal communications and engaging students are able to be measured effectively. Yet its supporters claim that the framework of Danielson is wide-ranging as it comprises all phases of teaching and can be used in many disciplines and at different levels. Similarly, the teaching and learning model of Robert Marzano attempted to further define teacher effectiveness for the 21st century. Similar to Danielson, it includes formative and summative standard-based evaluation practices, which use the multiple measures of student learning. High expectations of learners, functional, professional student-teacher relationships, effective management of the classroom, the engagement of students for understanding, students' interaction with new knowledge, and the establishment of learning objectives Marzano considers axiomatic for effective teaching and learning today (Marzano, 2007) However, notwithstanding the

1 evolution of measuring teacher effectiveness is its reliance on scientism to rightly determine
2 whether or not a teacher is fulfilling the expectation within their professional role. This is a
3 process which needs to be analysed more closely.
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7 **Imagining a Teacher's Role**

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9 Teaching it seems goes to the very depth of the human experience which at a glance
10 seems beyond measure. Among their many roles teachers are the facilitators, providers and
11 filters of knowledge and information. They have an astounding responsibility to move
12 students toward a deeper and fuller understanding of a particular subject or set of subjects.
13 Their school communities, wider societies, countries, and the world ascribe to them role
14 model status. They are looked up to as examples of professional and moral virtue in a world
15 of conflicting social, moral and ethical discourses. It is an expectation that they reflect a
16 positive image all the time so that children youths and young adults will respect, trust and
17 understand others, as well as model their behavior. They are at all times expected to lead by
18 example. More often than not they find themselves in the role of surrogate parents. Their
19 students from elementary school all the way through to University or College, rely or lean
20 on them for positive, life- affirming adult contact. They are charged with ensuring their
21 students learn, understand and integrate new knowledge into their lives. They must assess
22 and evaluate and make professional, objective judgments about the effectiveness of their
23 students' learning, and more often than not this is used to judge their own effectiveness as
24 teachers. They are expected to be expert organizers of their own time and the time of
25 others. They must plan meticulous lessons around learning outcomes designed by others,
26 and they must interpret these in a way which takes into account the many theories and
27 approaches to teaching and learning as well as the multiple, diverse arguments which
28 abound about how students learn and what their individual learning styles are, and how
29 best they will be successful in any area of specialization. Teachers must act as futurologists
30 too-often projecting success so that at any given moment their students are ready for the
31 next induction into a new phase of learning. They are also required to be resourceful. It is a
32 professional expectation that they keep ahead of the myriad methods and approaches to
33 teaching and learning that abound in the 21st century. They must be adept, creative and cost
34 efficient in creating resources, as well as being informed and knowledgeable on the latest
35 up-to-date findings and research which circulate in their given field or discipline. Teachers
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assume a plethora of professional duties within their respective institutions too: Head of
Year, Team Leader, Dean, Head of Department, Sports coach or Pastoral Care Coordinator.
Finally, it is an unspoken professional expectation that they assume other roles too. They
are special events planners, conference organizer, writers, publishers, IT experts and fixers,
editors, travel agents, film and theatre producers and directors, first-aid givers, conflict
managers and negotiators, confidants, peer mentors, and often they assume roles as
security personnel ensuring the safety of the hundreds and perhaps thousands of students
who roam the halls, corridors and avenues of their institutions. There is no other critical
role in our society, no other vocation apart from the responsibility humanity ascribes to
parenting, in which a professional is expected to assume a role akin to Nietzsche's
Übermensch.

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After their initial four years of study, and obligatory rite of passage through their first
year of teaching many teachers may come to the realization that despite all their study and
preparation, at the end of the day teaching and learning is a highly socialized process,
dependent on the development of strong effective intra and inter-personal skills. And,
regardless of their training and teaching practicum, for the most part their profession is
solely reliant on their ability to communicate and understand another human being.
Furthermore, whether in a classroom or lecture theatre, how their students perceive them
is an entirely different matter. From the tone of their voice, to the clothes they wear, to
their age, the color of their hair or lack thereof, to their build, their mannerisms, their race,
their gender, their nationality, age or the rumors-whether they like it or not- which always
circulate about their private lives, or just plain simply the combination of their subject and
their perceived personality-they are either liked, disliked, accorded hero status or vilified.
Such is the combination of fickleness of the human personality and the psycho-dynamic of
teacher-student relations in the field of education. We all remember clearly from our own
days as students the teachers we liked, and disliked; those whom we perceived as treating
us well or mistreating us-whether through a look, a word or a grade. So, how do we quantify
such a vast array of phenomena in the teaching and learning profession? Is it possible to
measure its effectiveness with truth, clarity and objectivity taking all of the above into
account? How do we understand how successful, or not, teachers are at doing their job?

Corporate Culture and the Appropriation of Education

1 Before we begin to address these three profoundly complex questions we must first
2 ask another: Who are the most influential teachers of our children in the 21st century?
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4 Barber (1998) argued in the late 20th century that popular culture with its vast revenues for
5 advertising and entertainment are the true teachers and tutors of our children. His claim
6 was sustained in the early years of the 21st century in a report by the American
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8 Psychological Society, in which it is asserted that the advertising industry spends up to \$12
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10 billion per year on advertisements targeted to children and young people. These
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12 advertisements are reaching children and older students through diverse media platforms
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14 both in and out of schools, universities and colleges including television, the internet and
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16 mobile telephone companies' practice of unsolicited textatising. Moreover, the pervasive
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18 use of corporate sponsored educational materials and products placed in text books, online
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20 and in a variety of digitally reproduced educational materials is a subtle and perfidious way
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22 to educate students as life-long consumers, rather than lifelong learners. The American
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24 educator Henry Giroux suggests that the way in which corporate culture targets educational
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26 institutions is not simply as an " investment for substantial profits, but as a training ground
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28 for students to define themselves as consumers, rather than multifaceted social actors, "
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30 who learn to become critical thinkers and appraisers of their social milieu. (Giroux, 2000).
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32 The American Academy of Paediatrics warns that young people are subjected to more than
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34 40,000 advertisements per year which target their emotional lives and sell them myths and
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36 fantasies of who they ought to be, rather than who they really are. (Committee on
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38 Communications, 2006). It claims that a young person views more than 3000
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40 advertisements per day on television, via the internet or mobile devices, on billboards and
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42 in magazines and newspapers. They claim the motive behind the ubiquitous assimilation of
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44 advertising into the lives of the young and very young is to "establish a brand-name
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46 preference at as early an age as possible" (Committee on Communications, 2006). Moreover
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48 they cite advertising as a \$250 billion a year industry with up to one million brands on offer
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50 to sell and that children and adolescents and young adults are considered essential
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52 consumers in the global capitalist market place. It is further claimed that teenagers spend
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54 \$155 billion per year, while children less than 12 years another \$25 billion and both these
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56 age groups are able to influence an adult market, including parents worth in excess of \$200
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58 billion dollars a year. (Committee on Communications, 2006) Yet, even though there are
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60 perceived tighter rules on advertising in Europe, Professor David Buckingham, from the
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Institute of Education of the University of London, warns that in the United Kingdom, children and their parents are also being “held captive by the rise of “aggressive” advertising aimed at their home, school and leisure time”. (Buckingham, 2013). While it may be argued that educational institutions are powerful sites for cultural reinforcement and creating an identity, clearly in the 21st century, where the boundaries between formal knowledge and access to ubiquitous information no longer exist there’s a powerful argument to be made for the waning influence of teachers, schools and the formal curriculum on the lives of children and young people. But, such an argument is not new. Over forty years ago, Illich argued:

A second major illusion on which the school system rests is that most learning is the result of teaching. Teaching it is true may contribute to certain kinds of learning under certain circumstances. But most people acquire their knowledge outside of school and in school only insofar as school, in a few rich countries, has become their place of confinement during an increasing part of their lives. (Illich, 1971)

In the 21st century education it seems is a field caught up in a web of competing interests of a commercial and consumerist nature. It is a profession which has been forced over the last several decades to conform more to the needs of the market place rather than to its traditional role as the arbiter and critical appraisal of that market place. It has become a vehicle in which the teachers’ and students’ roles have been transformed from one of private citizens with a right to teach, learn and criticize, to one of educational and commercial consumers who must conform. (Giroux, 2000). In such an environment is it possible to accurately measure the performance of teachers when powerful vested interests appropriate education for their own ends and appear to undermine the day-to-day role of educators as teachers and facilitators of learning?

A Conflicted Profession: The Changing Concept of Education in the 21st Century

In a recent report, BBC writer Tom Chatfield posed the question ‘Can schools survive in the age of the web?’ He means to ask: are institutions willing and prepared to transform from organizations which lays claim to being conveyors of official knowledge to establishments which acts as a conduits for learning and understanding in an age of competing ideologies and powerful vested interest groups?

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Education in the general sense has always been contentious. Questions about what is taught and how it is taught have been (and still are) at the forefront of teaching and learning. Paulo Friere's critical pedagogy in teaching and learning challenges educators to critically appraise their knowledge and information societies and cultures and the processes through which they enable them to learn and have free unfettered access to knowledge and information in the 21st century. The antithesis to this approach can be seen in the 2011 movie *Detachment*. The film portrays the aimless and depressing life of a 21st century substitute teacher who seems to drift from one temporary teaching post to another, aware to a degree of the cycle of success and failure within traditional forms of education, yet seemingly incapable of doing anything about it-the film is a kind of nihilist response to Peter Weir's 1989 film *Dead Poet's Society*. One of the key terms used in *Detachment* is ubiquitous assimilation; the idea that if cultures and societies are flooded with constant, repetitive information and knowledge on a subject they will eventually accept it without any kind of critical appraisal. Chatfield's article embodies this approach to understanding the debate or lack thereof about the assimilation of education into the corporate sector in general and the technology sector in particular.

His analysis of the impact that technology is having on education is limited to its capacity to deliver educational program, not in its ability to help people learn. His discourse is padded with examples and opinions. For instance the Bill and Melinda Gates Foundation are reported to have invested a million dollars into *edX*, claimed to be the world's largest online learning initiative. *Udacity* has over 160,000 students in its online courses. *The Khan Academy* delivers online learning to tens of millions of autodidacts, and Ted talks have billions of views. (Chatfield, 2012). He cites Wikipedia, and the arguments put forward by Clay Shirky and others that contemporary education is being disrupted by "a new story rearranging people's sense of the possible." (Chatfield, 2012)

What is not revealed or highlighted in his hyperbolic report for this disruption is the lack of credible researched evidence that everyone is learning better and that what they are learning is creating better societies and a better world. For example, the work of Sugata Mitra and the aims and objectives of the *One Laptop per Child Organization* are innovative, and admirable, but only up to a point. Neither initiative provide us with any evidence that children who have access to knowledge and information via a laptop or a computer embedded in a concrete block in a New Delhi slum, are learning and retaining knowledge.

1 Leaving aside the ethics of Mitra's approach to educational research and his extraordinary
2 claims it is disingenuous to assert that initial intrigue and interest in a piece of new
3 technology to the uninitiated is going to enable them to gain access to a place in their
4 respective highly competitive and class driven literate societies, let alone teach themselves
5 the foundations of literacy. Moreover the further assertions and speculation which have
6 arisen from Mitra's "experiments" are also highly questionable. Chatfield cites an MIT
7 review which opinionates that "if kids in Ethiopia learn to read without schools, what does
8 that say about kids in New York City who do not learn even with school?" (Chatfield, 2012).
9 The answer to that question while partly educative has more to do with the competing
10 interest of a selfish consumer based culture, and the undermining of the traditional role of
11 education in society. It is also about the quality of life afforded to certain classes and
12 cultures which city kids belong to in New York, not what kinds of resources they have access
13 to in their day-to-day lives.
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25 Furthermore the spectacular claims made about autodidactic learning and
26 educational technologies are a part of a growing myth being propagated through the
27 corporate IT sector in promoting their products. Microsoft and Apple Inc. are at the
28 forefront of the push to technologize education at the expense of understanding the
29 specialisation of how we learn. For example, the audacious claim that children in rural
30 Ethiopia are able to move from rudimentary literacy skills in a second language to being able
31 to hack the operating system indicates the failure of that project from both a moral and
32 pedagogical perspective.
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40 Education has always been an uncomfortable space to inhabit-its very essence is to
41 question and to debate what is of benefit to itself and to future generations of learners.
42 There just isn't the evidence that the quality of learning, the building on our current
43 extensive bodies of knowledge, and the quality of life on the planet is going to substantially
44 improve in the near future, no matter how many laptops, iPads, iPhones or other mobile
45 learning devices are distributed to the privileged, poor or disenfranchised, especially when
46 there's anecdotal evidence along with research which suggests that online learning and the
47 use of technology in teaching and learning to the privileged hasn't significantly improved
48 their successful learning outcomes. So, why have teachers if they can be replaced by
49 autodidactic learning experiences? What is the function of a teacher in the brave new world
50 of a technology -defined, market-driven global education system? These are central
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questions to be addressed if we are to be able to develop a coherent understanding of any requirement to measure teacher effectiveness in the 21st century.

There is no doubt that the role and professional expectations of a teacher are changing rapidly. We've all heard the clichéd derogatory idioms about the 'sage on the stage' and 'guide on the side' and so on, and how teachers are shifting from a didactical role to that of a facilitator in the classroom. But let's examine such a claim for a moment and see how practical and realistic these kinds of *innovative* approaches to teaching and learning are on the teaching profession at all levels in the education sector. The key assumption that we adjust to a facilitating role is based on an abstract ideal that our students are more or less at an equal level intellectually, self-directing personally, adept at learning independently, learn at approximately the same pace, have the requisite IT or digital learning skills, are well prepared and have met requisite levels of performance prior to commencing a new program and have a foundation of knowledge on which they may build and develop their prior understanding. Whether this be in pre-school or a post-graduate university or college course—such an assumption is false. Moreover, there is a certain air of self-righteousness in these clichés about how we should teach in the 21st century too—a hint of the kind of anti-intellectualism that Ronald Reagan was famous for when he quipped, "Why should we subsidize intellectual curiosity?" when asked why he was cutting educational funding. (Reagan, R, 2012).

There remains an important role for didactic teaching in the 21st century. Firstly, for the most part in terms of their area of specialization, teachers will generally know more than their students. Secondly, teachers do not perceive themselves as higher beings, and holders of secret knowledge. On the contrary, they have undergone a period of training to enable them to be experts in their fields, and they share this expertise with their students. Finally, when they are ready, they are more than willing to guide students towards their own learning and discovery as and when appropriate. It seems that in the debate on how they ought to teach the very foundations of how students learn are being forgotten. Hence a further question arises as to what key areas of the constantly changing roles and expectations of a teacher can be measured effectively to demonstrate their competencies in the field?

What is a measurable model of 21st Century Teaching and Learning

1 Models of teaching and learning abound everywhere. For example most countries
2 have a formal educational sector which prescribes teaching standards and core
3 competencies for their teachers. UNESCO, the OECD and the European Parliament all have
4 official documents which outline core skills which teachers ought to have when they enter
5 the profession, along with suggested developmental pathways to become masters of their
6 craft. Yet, what is interesting and most significant about all of these rules, rubrics and
7 standards is how much they vary according to local cultures, communities, states, provinces,
8 countries and internationally. While there may be general agreement on broad teaching
9 standards and competencies, when it comes down to specifics a wide variety of differences
10 appear. For example in Australia, each state has its own schooling, college and university
11 system with varying sets of standards and expectations for its teachers which the Federal
12 government has been attempting to regulate in recent years. Aspland captures this
13 conundrum succinctly:

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25 *The intense interest in schools, the work of teachers and teacher education is*
26 *reflected in the many government reports undertaken around Australia in the last two*
27 *decades. These include: the Teacher Education in Australia report (National Board of Teacher*
28 *Education and Training, 1990); the Beginning Teachers' Competency report (Louden,1992);*
29 *the National Competencies Framework review (Australian Teaching Council, 1996); the New*
30 *South Wales Review of Teacher Education -Quality Matters (Ramsay, 2000); the National*
31 *Standards and Guidelines for Initial Teacher Education (Australian Council of Deans of*
32 *Education,2001); Teacher Standards and Professionalism report (Australian College*
33 *of Education, 2001); Teacher Quality and Educational Leadership (MCEETYA, 2001) and the*
34 *refreshing review of the teaching profession. Prepared to Teach (Louden et al, 2004), which*
35 *provides abroad data-base on which to critique teacher preparation programs in*
36 *Australia. Most recently, a report entitled Teacher Education Accreditation (Ingvarson,*
37 *Elliott, Kleinhens, and McKensie, 2006), advocates a central regulatory teacher education*
38 *authority in Australia and a national approach to teacher education accreditation. (Aspland,*
39 *2006)*

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54 In the United States individual States and localized districts set a wide range of varying
55 standards and competencies for their teachers, so much so that a voluntary National
56 Standards group is attempting to promote the development of a set of National Teaching
57 Standards which would be implemented nationwide. (Education World, 2013). This has
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already occurred in the United Kingdom, which in September 2012 implemented a set of national teaching standards and competencies, replacing those which had been set by a variety of local educational syndicates. What is most interesting here is the reassertion of a kind of neo-colonialism embedded in the standard's pre-amble with its emphasis on British values and its token acknowledgment of the country's multi-cultural populations:

- *Improving the rigor of teaching standards and ensuring they focus more on the essential teaching skills required in the classroom.*
- *Recommending a single set of standards for all teachers, replacing the current duplication of different standards issued from different bodies.*
- *Setting a clear expectation that teachers must not undermine fundamental British values, including democracy, the rule of law, individual liberty and mutual respect, and tolerance of those with different faiths and beliefs. (Department for Education, 2011).*

Yet despite attempts to rationalize and promote consistency and uniformity across the educational sector both nationally and internationally; individual schools, whole school districts, the world's tertiary institutions, and some corporation are all engaged in promoting their own models of 21st century teaching competencies. For example, the Microsoft Corporation has its own set of teacher competencies which it promotes aggressively using its marketing and branding power. These include corporate terminologies like customer care, strategic agility and innovation, intellectual horsepower, managerial courage and drive for results (Microsoft Corporation, 2006), and for the most part are not measurable or quantifiable from the point of view of evaluating teacher effectiveness in or out of the classroom. Moreover, their corporate nature affirms the earlier arguments of how education has been appropriated by corporate culture to serve its own end, something once repugnant to progressive educators who believed in the idealism of John Dewey, and George S Counts. Counts argued that teachers should go beyond abstract, philosophical conceptions about society and teach explicitly about political power and processes along with social injustice. He wanted teachers to count among their primary goals the building of a better social order, not to be subsumed into a decrepit failing one and then be measured on how effective they are in propping it up.

Theodore C. Smith, of Axia College, outlines fifty-one competencies which University teachers must have when teaching an online course. Among these are, fostering learner centeredness, and when appropriate using humor. (Smith, 2005). Surely, all of this is as

1 Postman (1993) argues just the desperate hopes and wishes of bureaucrats, educational
2 administrators, and corporations that some standardized set of procedures within the field
3 of the social sciences can provides us with an irreproachable source of moral authority, an
4 almost divine like basis for answers that every teacher anywhere is a competent teacher.
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7 **Conclusion**

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9 Teaching and learning is a multi-faceted, multidimensional process which at its core is held
10 together through the art of human communication. Its primary aim is to contribute to
11 building a civil society, in which knowledge, human reason and understanding, along with
12 sound ethical and moral principles will enable each generation to grow, prosper and
13 flourish. At the same time it is a highly contentious profession too. Everyone from children
14 to those who hold the highest offices in the land have an opinion on education and how
15 teachers ought to do their job. It is also one of the most over-assessed professions. Teachers
16 are on average evaluated three times a year, and in some cases more as position holders
17 feel the need to show cause for their position and devise more and more ways to ensure
18 that 'quality control' is operating in their educational environment. All of this is spurred on
19 by the self-help culture of the West and the subsumation of education into the corporate IT
20 sector.
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24 Seldom are lawyers, dentist, chiropractors or Wall Street bankers interrupted by a
25 colleague or supervisor, clipboard or iPad in hand ready to do an evaluation. In the case of
26 the latter if this had been the case, perhaps the world's economic and trade outlook would
27 not be so bleak. But, the point is so much of teaching and learning cannot be measured. So
28 many questions about how effective teachers are cannot be answered. The phenomena
29 associated with being a teacher is beyond measure. Notwithstanding standardized tests,
30 measurable competencies and the clichéd catch-phrase 'value added' much of teaching and
31 learning isn't quantifiable. It is about communities of learners who come together with the
32 shared goal of educating one another for the benefit of everyone. Despite the many
33 diagrams, tables, graphs, charts and statistics which show how teachers are doing their job;
34 daily throughout the world millions of children and young people continue to receive an
35 education. They progress from one stage to the next, and eventually graduate with the
36 immeasurable, unquantifiable and selfless unbounded help of a teacher.
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