A Portrait of Two ARSI Regional Teacher Partners in Lincoln County, Kentucky

By Jenifer Helms

The title "Teacher Partner" was no accident. It emerged after long discussions about the appropriate title for the teacher leader positions during the proposal writing phase of ARSI. The Teacher Partners (TPs) had to be optimally positioned to be accepted by the classroom teachers they were intended to help. That meant they had to be seen as colleagues. The extra training and support they would receive from ARSI would equip them with new knowledge and expertise, but Teacher Partners should, at the end of the day, be equals and peers to those they served.

In Kentucky, one of the six participating ARSI states, the Teacher Partner concept soon gave rise to the Regional Teacher Partners (RTPs). This complementary project, known as the "Master Teacher Project," was designed after the Teacher Partner model but with one key difference. Rather than supporting their home district exclusively, the five designated Kentucky Regional Teacher Partners and one Tennessee Regional Teacher Partner focused on providing support to individual schools across a region of the state, often encompassing more than one district.

Ann Booth, one of the two RTPs profiled in this portrait, recalled one of the first meetings of the Regional Teacher Partners:

At the first meeting we said, 'We can't call ourselves master teachers. We can't go out and say – here I come!' That is not going to work. We spent a good part of that very first meeting deciding what we were going to call ourselves, and it wasn't going to be master teacher. That just doesn't cut it. I really feel that I am learning as much as anybody in the building. Besides, nobody ever gets to be a master teacher.¹

Although the "master teacher" moniker stayed as the official title of the program, Ann's reaction to the discussion reflected important underlying aspects of the ARSI culture which permeated the efforts of its teacher leaders. First, it

¹ We taped and transcribed interviews from the ARSI educational leaders and other interviewees presented in this report. The quotes we used are not always literal, direct quotes. Rather, we have at times used our best judgment to edit them lightly to either make them more readable, or to convey more accurately the intention of the remarks.

exemplified the strong egalitarian norm that infused the ARSI project throughout its many expressions in Appalachia, including the creation of Teacher Partners and components of the Regional Teacher Partner program. Second, it highlighted the belief that teacher leaders would be best utilized as facilitators, not as authorities, as colleagues bringing resources to inform and assist fellow teachers, not as experts to 'show and tell'. Third, Ann's words showed her desire to continue to learn. She, like the great majority of ARSI teacher leaders, considered herself a participant with much to learn in an ongoing effort to improve student learning. Finally, Ann's reactions highlighted the notion that it takes more than a single person to bring about significant change, that two heads are much better than one.

The portrait that follows describes the experiences and impact of two Regional Teacher Partners in Lincoln County, Kentucky. Ann Booth and Gloria Davis served as ARSI RTPs, Ann from Fall of 2001 to Spring of 2005, and Gloria from Summer of 2002 to Summer of 2005, providing support to teachers beyond their home county to surrounding school districts. Both women shared a strong commitment to standards-based instruction, to the improvement of student learning, and to helping other teachers in any way that they could. They were also both very committed not only to the theory, but also to the practice of collaborative work in the service of mathematics and science education improvement. While each had her own style and way of working with teachers, they relied on one another for knowledge, motivation, and strategy, as well as reassurance that they were on the right path.

Theirs is a story of partnership-in-action. We have chosen to tell their story because it exemplifies how ARSI teacher leaders went about the work of improving mathematics and science education in their local regions—drawing on each other for support, using whatever resources or influence they had at hand, seizing opportunities as they appeared, and rarely flagging in their energy for and commitment to making the schools they served better. Ann Booth and Gloria Davis used ARSI principles and values to guide and strengthen their work, and one another.

Lincoln County: The County and the School District Context

Lincoln County, Kentucky sits in the south central region of the state, an area that straddles both the Bluegrass region in the north and the area known as the Southern Knobs in the south. The mountainous Knobs form part of a circle of ridges that enclosed this part of Kentucky.

The county seat is Stanford, a town of roughly 3500. According to the most recent census data (2000), there are 23,361 people living in Lincoln County overall, roughly 70 people per square mile. Not unlike the surrounding counties, the unemployment rate is high, and of those who do work, many tend to hold part-time, minimum-wage, or low-wage jobs. Of the 9,210 households that reported income in 1999, the median income was \$26,542. Of the 1,107 families living in poverty in the county, 22% include children under 18, while 29% include children under 5.

Many of the people live in mobile or small homes; the average price of a home is roughly \$65,000. Those who make their living in agriculture are either tenant farmers or own farms that have been in their family for generations. Those who own family farms usually require a second income outside of the farm, typically taken on by the female in the home.²

Many of the working population in Lincoln County has no education beyond a high school diploma or GED. There are only 10 public schools in Lincoln County: seven elementary schools, one middle school, and two high schools, one of which is a very small alternative high school with only 62 students. These 10 schools with a total staff of 274 classroom teachers serve approximately 4,400 students.

Not surprisingly, the elementary schools in the district tend to be important community gathering places, along with the local churches. As in many rural school districts, sports and athletics tend to be the "glue" that brings the people and schools together. Excellence in this realm is highly valued, often more highly than academic achievement.

Introducing Two ARSI Regional Teacher Partners: Ann Booth and Gloria Davis

Ann Booth – A High School Mathematics Teacher

After earning a degree in mathematics, Ann Booth taught mathematics in middle school, in high school, and in a distance learning format for over 20 years. Her first teaching job was in Daytona Beach, Florida, on an emergency credential; she needed a job fast, and there were few options for math majors at the time. Many years later, after her children were born and grown, she went back to school to obtain her teaching certification in mathematics and then returned to teaching at

² The information reported here was obtained through interviews, observation, and published census data.

the high school level. When her husband died suddenly at age 43, Ann left Florida to return home to Stanford, Kentucky for something "a littler slower and a little quieter." She taught at Lincoln County High School for the next 5 years.

Ann has been a leader not only in education, but also in her community. She was at one time a member of the city council, and has stayed active in her civic duties. Ann has very strong beliefs about the needs in her community, and has not been afraid to take a stand on what she values. For example, during her tenure at the high school in Lincoln County, a principal was hired who she did not believe was the best choice for the school. As a result of the hiring, Ann resigned her position, and posted a sign in her front yard protesting the hiring and explaining that she quit her job because of it. Soon afterwards, she developed and taught distance learning courses through Kentucky Educational Television (KET) for 6 years. (Later in 2001, she eventually returned to LCHS where she culminated her classroom teaching career.)

Ann Booth is well-respected within her community, the schools, and ARSI. She has developed a reputation for being smart, knowledgeable, and effective. As Kim Zeidler, the ARSI Resource Collaborative Coordinator put it:

Ann is very politically savvy and she is respected by every administrator. She knows what she is talking about and they know it. Ann also really knows her content background; just the way that she is able to talk about things is amazing. She has a very in-depth knowledge and understanding of things.

In her capacity as a Regional Teacher Partner, Ann worked with three schools: Lincoln County Middle School, Rockcastle High School and Pikeville High School. Each of these schools, as Ann described it, had its own unique issues and problems. She deliberately tailored what she did according to the needs of each of these schools. As an ARSI RTP, Ann saw her role as helping each school identify its problems, brainstorm possible strategies to solve them, and put the school on a path to action. For example, at Pikeville, the teachers identified assessment as an area needing improvement. Her hope was that through a series of monthly meetings plus summer work, the group would be able to develop a plan for implementing new formative and summative mathematics assessments.

Ann has been responsive not only to various contexts but also to their evolution over time. For example, before Ann became an RTP, when she was a part-time ARSI Teacher Partner and full-time teacher at LCHS, she primarily focused on gathering and interpreting data on course-taking and achievement, and on creating curriculum "maps" for the mathematics program. Eventually, and especially after she retired from the classroom to begin her RTP work there, Ann began spending more time in other teachers' classrooms, helping with a lesson,

modeling an activity, or just providing moral support. One teacher at Lincoln Middle School looking back on the year, described Ann in the following way:

She was a really good motivator. If she was in the building, she would always stop by your room and say, "How is it going? What are you teaching? Do you need anything from me? You are doing a great job!" That is something that everybody needs — to have somebody come by and ask, "What can I do to help you?" She is a wonderful asset here.

Ann herself told us that she believes her ARSI RTP experience has taught her more than how to help teachers improve their mathematics instruction. She has also come to better understand the place of a mathematics program in the larger school or county system. It has taught her how to negotiate the power landscape within a school, and to "develop some interpersonal skills" to assist her in doing that. Finally, she said, her RTP experience showed her firsthand that each school has different needs and concerns—one size does not fit all.

Gloria Davis – An Elementary Teacher

Gloria Davis completed 29 years in education in 2004. Twenty-five of those years were spent in Lincoln County, and 23 of the 25 were spent teaching at Stanford Elementary School. Gloria taught all grades one through eight, but during the last 9 years at Stanford, Gloria focused on teaching science and mathematics to upper elementary grade students. In her final three years of classroom teaching, Gloria was released half-day as an ARSI Teacher Partner. After leaving the classroom completely, Gloria was the district-wide elementary math and science resource teacher for two years before joining the Regional Teacher Partner project in the Summer of 2002.

Gloria graduated with a B. S. in Elementary Education in 1969, and an M. A. in 1970-71. She received her Rank I in Elementary Education in 1977. At the time she became a TP with ARSI, she was at a crossroads in her career. She explains:

I am not saying that I am at the top of the heap, but I probably have come farther in my journey, because I had farther to come than most Teacher Partners. I had just gone through about 6 years where I had a lot of personal obligations with my parents' health, and so I had gotten out of the loop of things. I had always told myself that I would only teach if I found that I was thoroughly enjoying it and I felt like I was doing what I needed to do for students. I had just gotten into that slump.... I was ready to either quit or do something different. I really needed a refresher. I needed something to bring me back, to making learning exciting again. And I didn't feel like there were a lot of things going on with my colleagues that were giving me what I needed. So, when I went as a guest to an ARSI session to work on curriculum, I left thinking, "This is going to be it!"

The Teacher Partners were really excited about learning, and student learning, and learning themselves, and I could tell that they were people who were looking at a lot of things that they hadn't done before, a lot of opportunities to try new things. They wanted to improve, they wanted change, and that was pretty much where I felt like I was. I either needed those opportunities or I was about ready to give it up.

Gloria has worn many hats in the Lincoln County district. She has worked as an ARSI Teacher Partner, elementary resource teacher, and Academic Performance Specialist³. As an RTP she often worked with the 4th grade science and 5th grade mathematics teachers in Lincoln County, because those are the "accountability grades" in the district; that is, they are the two key testing grades for science (4th) and math (5th). She focused her efforts at McKinney Elementary School, spending approximately 10 days a month there to develop sustainable program improvements in mathematics.

Like Ann, Gloria believed that a large part of her role was to build the leadership and instructional capacity of the teachers and principals. She hoped that long after the ARSI support was gone, a cadre of teachers would still flourish as leaders in the district, continuing the charge for improvements in mathematics and science instruction.

It has been interesting in my math and science cadres — I don't think that I started necessarily with leaders. In fact I had some very timid and shy teachers, some teachers who were relatively new to teaching who were with some veteran teachers who were well established and very vocal. That has been one of the most rewarding things about cadre — they have almost all emerged as leaders. They have become a voice that is heard and respected in their schools. As I go from school to school, often when there are decisions made, you will hear them say, "Well, let's ask so and so." With the exception of the principal, I think those teachers are among the strongest voices in the schools ...

³ Academic Performance Specialists (APS) have been placed in each school in the district to assist in

Community Coordinator since September of 2005. (The professional learning community is now the vehicle for continuing improvement.)

curriculum alignment, the interpretation of assessment data, and the implementation of the school improvement plan. The position was created as a result of the visible success the ARSI Teachers Partners were having in the district in the improvement of math and science. This position continued to receive funding, whereas the ARSI elementary math and science cadre work was eliminated from the district budget at the end of 2003. Each of the seven elementary school principals used their school funds to continue the elementary math and science cadres through the Spring of 2005. Ann still has a math cadre at the middle school. Gloria has continued her work at McKinney elementary as Professional Learning

The Growth of The Partnership

I knew who Ann Booth was before ARSI, but we were not well acquainted, even though I have lived in Stanford all of my life and Ann has lived here most of her life as well. That says volumes about the communication gap between our high school folks and elementary folks since we were both very "math focused" teachers. As our ARSI partnership has grown, so has the personal friendship we share. I think Ann and I both work with the other feeling eager to be supportive and to share.

As Gloria described above, the partnership between Ann and Gloria evolved into more than a collegial relationship. Their bond of personal friendship deepened their working relationship, and strengthened their mutual resolve to create a strong K–12 improvement infrastructure for math and science education in the region.

Their collaboration proved to serve them well. Educational improvement could have been lonely work. There was the isolation of schools in rural areas in general, as Gloria attested. Also there was the traditional separation between grade levels. Gloria's expertise was in elementary, and Ann's was in secondary. The ARSI improvement work in Lincoln County could have easily remained as two parallel, but disconnected efforts. Ann explained why working in a partnership mode was critical to strengthening their individual efforts:

Part of our relationship has to be built on the fact that we are doing work that nobody else does. It is a fairly lonely job... we rely on each other for a lot of support and a lot of bouncing ideas around. We are trying to do our job in a better way, to improve on it, but in order to be able to do that, you have to have this base knowledge. I think Gloria and I are really, really lucky because we are both in the same county, which is something that other ARSI TPs do not have.

Rather than viewing their expertise in different grade levels as the basis for dividing up the work, Ann and Gloria recognized the opportunities to learn from each other. For example, in Lincoln County, the elementary schools serve grades K-6. Gloria worked primarily with grades 4 and 5, and Ann with grades 6-12. The grade 5-6 "transition year" overlap was the context for opportunities to share what they knew with one another to ease this sometimes difficult time for students. As another example, when Ann was faced with a situation where she needed to quickly facilitate a process for the middle school to develop mathematics curriculum documents that aligned with the state framework, she called on her partner for help. Knowing that Gloria had been working on a similar document for the last few years with the elementary teachers, she asked her to present the documents and process to her middle school teachers. Gloria's

help gave Ann and her teachers a model to work with that eventually helped the middle school teachers meet their deadline.

Roles between the two partner RTPs shifted too. One of the major areas of focus for both Ann and Gloria was the use of data collection and analysis as a catalyst for change in their schools. They believed that one could "use data to move people's thinking forward, rather than simply supporting one's own position or someone else's." In the beginning, Ann was the data "expert" and often supported Gloria in her efforts to use it in her work with teachers. Later, after ARSI sent Gloria to several workshops on data use, she taught Ann new things. Ann and Gloria made a point to model their collaboration. They wanted teachers to see how there were lessons to be learned from other teachers, all along the K-12 continuum. They believed their partnership represented a good example of reaching beyond one's immediate context and goals toward a larger purpose, namely supporting the growth and development of each student. As Ann put it:

I am very pleased with the sense of continuity and scope, and the attitude that the teachers have developed. They now say, 'These are <u>our</u> children. We take them in kindergarten and we release them after year 12. We need to make sure that we are all doing what we need to do to make that kid successful.'

In the end it was trust between them that has allowed their relationship to flourish. In addition to reform work being isolating, it could also be very stressful, with a myriad of pressures coming from all angles of the education community. Ann and Gloria relied on one another to be honest, and to let the other know when she was on the wrong track. Gloria described:

It has been critical that the relationship or the partnership go beyond just work. We are much, much more at ease in taking a risk, and putting things on the table and laying it out bare, 'This is not working for me,' or 'I am not doing well with this.' If it is convenient, I can run down to Ann's, and she can run to me, and we don't have to get dressed and have a schedule and go into some building to meet... It is wonderful work and I have enjoyed it, but it is stressful from time to time. I think each of us would feel comfortable in bringing ideas to the table, like, 'The direction you are going in may not be the right direction right now, so let's take a second look and really talk about it and see what we can do to assure that it doesn't end up off the path.'

As with almost any successful partnership, the keystone for the Ann and Gloria partnership is mutual respect and admiration. They each speak highly of the other, and don't hesitate to credit the other for their own successes. Gloria reflected about their partnership with these words:

A critical element has been that Ann and I have always held and shown a high level of respect for the other person's knowledge, experiences, abilities, and opinions. When we disagree, we say so but in a most agreeable fashion. When we are thinking alike, we see our thoughts as complementing each other, but our different ways of thinking seem to enrich and challenge the other to deeper and broader understanding. Other key factors are that we both very much want to be life-long learners and that we think children come first and improvements in learning are the prizes we get for the work we do. It has also been very important to each of us that the other was able to find success and lead improvements in the ARSI work at our individual schools and in our individual roles. We strive to demonstrate a high level of professionalism in our work and are determined 'To make this work better!' I am not sure I can pin down any key turning points; I just think our partnership has grown over time.

Finally, the relationship between Ann and Gloria was in large part shaped by their experiences, just as their experiences as RTPs defined their partnership. While they collaborated and communicated often, and shared their successes and failures with one another, at the end of the day their main commitment was to the teachers they supported. They both agreed that their partnership improved their ability to lead their "own" teachers. Gloria said:

Seldom a week goes by that Ann and I don't communicate by e-mail, phone, or in person. Yet, we both think of our focus schools and cadres as our own individual treasures. This allows us to become a part of the school communities where we work, where we go in our separate (and sometimes very different) directions because these groups often have different needs and are at different places along the growth continuum that we design with them.

How Two ARSI RTPs Built Teacher Capacity in Lincoln County: The Teacher Cadres and Leadership Teams

In this section of the portrait of Ann Booth and Gloria Davis we highlight specific structures and strategies the two partners used to develop Lincoln County teachers' capacity for the improvement of mathematics and science education. The structures and strategies they employed reflected the same ARSI principles Ann Booth expressed when she described why the term Teacher Partner emerged early in the initiative. ARSI values—such as egalitarianism, non-authoritarianism, collaboration, and the belief in the benefits of continuous learning—appeared throughout Ann and Gloria's work with teachers and schools.

The strategy for facilitating change and improvement for the Kentucky Collaborative was based on a concept they call the Teacher Cadre. The Teacher

Cadre was invented when Teacher Partners, including Ann and Gloria, decided they were not making sufficient impact in their schools and districts through individual classroom support. They found it was simply not possible to bring about substantive change in classrooms when their time with individual teachers was so limited. They decided that a structure needed to be created whereby teachers were released during the school day to come together to address their instructional questions and needs.

For example, one day each month, all the 4th grade teachers in the Lincoln County district met with Gloria for a half day, and all 5th grade teachers met for the other half of the same day. The content of the meetings varied, depending on and responding to the immediate needs of the teachers. Interestingly, Lincoln County hosted the longest-running Teacher Cadres of all the counties in the Kentucky Collaborative. In fact, 2005 marked year seven of the 4th and 5th grade Teacher Cadres.

The Teacher Cadres

Ann and Gloria's work in Lincoln County, both as ARSI TPs and later as RTPs, involved working with the Teacher Cadres. At the beginning, they concentrated on creating curriculum frameworks that aligned with the state standards. This focus was motivated by both the existence of new state content standards, as well as the problem of student transience within the district. Teachers wanted to ensure that students were neither losing ground, nor receiving a double dose of content when they changed schools.

Once the frameworks were completed, the Kentucky Collaborative TPs, together with the members of their Teacher Cadres, identified the need to know more about students and why many were not achieving at the level they should. Ann came to ARSI with a strong background in data analysis, which helped her in guiding her Teacher Cadre to explore their question about student achievement. She had discovered through her work with classroom teachers that there was often a mismatch between teachers' perceptions of their students' abilities and their actual abilities. Ann believed that one way to help teachers see the discrepancy was to confront their perceptions in light of actual achievement data. One of Ann's Teacher Cadre members recounted:

We [in the cadre] focused on specific characteristics of a "proficient student." We looked at individual students that had scored as proficient, and Ann had us predict what our students from that year would do in the next... It helped us pinpoint what we expected a proficient student to look like... She helped us look at the characteristics of those students and try to develop those characteristics in all of our students...

Thus the focus for Ann and Gloria and their cadres shifted toward helping teachers and schools use data, such as student achievement data, student and teacher surveys, etc., to make instructional, curricular, and programmatic decisions. Both Ann and Gloria attended several RTP meetings on the topic, and attended professional workshops on data-based decision-making. As a result Ann and Gloria worked together to make data a priority in Lincoln County.

Although Ann came to ARSI with some experience, Gloria was new to this way of working and counted on Ann for help.

Ann has been my support in putting the emphasis on looking at those test scores and those results... When the numbers say something, it is really hard for the teachers. They go into denial for a little while, but eventually they have to come back. We have broken [the numbers] down into subgroups and have really dug down into those scores with them. It is then hard for them to say: 'We don't need to do this, we need to do something else.' Ann and I are data driven – very data driven. Ann has been the person who has pushed me in that direction and I think that is such a good thing.

As Gloria learned from Ann about using data to drive instructional decision-making, so did the two partner RTPs ask their Teacher Cadre members to learn too. Ann and Gloria established the working assumption that the "bottom line" was student performance. As Ann put it, "We don't care if the adults in the world are happy about the numbers or not ... student performance is the name of the game and what those numbers are all about." However, they did take care to make sure the data was presented in a form that teachers could easily understand. They trusted each individual to interpret the data and to draw their own conclusions.

We make it very simple and easy to read. Teachers don't really care about the nuances, they are 'bottom-line' kind of people. When I walked into one of the high schools and said, 'The largest group of students in your high school went down one performance level while they were with you,' — that was a pretty telling piece of information. The next largest group didn't do anything, they just stayed the same. Something is not going on here that ought to be going on. That begins the conversation. Then we talk about the kinds of things we need to do to change those statistics.

Teachers working with Ann at Lincoln County Middle School reported that learning about students from the data perspective was very enlightening. Also, it was hard to dispute. One teacher recounted her experience with Ann and their Commonwealth Accountability Testing System (CATS) data:

Ann did correlations with students' 7th grade science scores and their 8th grade math scores. We saw that there was a direct correlation between their score in 7th grade

science, and what they scored in 8th grade math. There was a very, very strong correlation, and so we said: 'Here are these kids that are scoring right here at this edge, we are going to focus on these kids and push them over... what can we do?' So we were actually able to pinpoint kids to work with.

The other thing she did that was really neat, she gave us a list of all of our kids that we taught last year and she said: 'Put down what you think they scored on the CATS test.' We made projections, and then she gave us what they really scored. Well, that was really neat ... I had kids that I knew were never going to exceed "novice thinking," there was no way they were going to get out of the novice level, they knew nothing. But they scored apprentice! I just about fell out of my chair. So then Ann asked, 'What did you do to make them score apprentice?' I didn't know! But it made me think, what did I do with that kid? Obviously I did something, because that kid was so low they were barely making it, but by the end of the year, they scored apprentice. Now they can guess somewhat [in] the test, but I don't think they can guess into the apprentice level. I started going through what I had taught, and I thought, this must be working, because it is moving people. That was a big eye opener for me, personally, and I think several other teachers felt the same way.

Another teacher reflected:

I think one of the greatest assets that I have gotten from Ann is she came and pulled test scores from our kids and looked at them. Then she said, 'Okay, this is where your kid is, you need to move them this far this year.' She changed our mindset at the beginning... it is possible to move these kids, and here is all the stuff I am going to give you to help you with these kids. That has been the greatest help.

The Leadership Teams

As part of the design of the grant that supported them as Regional Teacher Partners, Ann and Gloria assembled Leadership Teams (LTs) at each of their schools. Each Leadership Team consisted of the Regional Teacher Partner, the school principal, two or more mathematics cadre teachers, a teacher of children with special needs, a parent, and a district level administrator. The teams met once a month, typically the day following a Teacher Cadre meeting. Their purpose was to review the goals, progress, questions, and barriers the Teacher Cadre members were experiencing in an ongoing fashion.

They also served the function of broadening the base of support for mathematics and science improvement in each school. In particular the LT meetings were instrumental in garnering administrator support for the work in which Ann and Gloria and their cadre teachers were engaged. Often it was in these meetings that administrators had the opportunity to hear what was actually happening in the classrooms or what concerns teachers had about their instructional practice.

David Pensol, assistant superintendent of Rockcastle County School District, believed that having someone who was not an employee of the district—that is, someone like Gloria or Ann serving in the ARSI RTP position—facilitate the data-driven conversations provided an opportunity for group learning that might not otherwise take place.

[Through the Leadership Team process] I have certainly learned more about what has been going on in the classrooms. The whole [Teacher Cadre] concept has been very instrumental in getting our math people together to have really good conversations. [Their conversations] have been... about what they like to teach and what they don't like to teach, what the problems are, what the scheduling problems or the time problems are, what the issues in the school are.

Ann has been the facilitator of all of that discussion, discussion that would have not taken place without... an outsider, if you call Ann an outsider. There's an outsider sitting at the head of the table, generating those conversations. The most unique thing I believe about that approach has been that it is all based on data. Ann became very knowledgeable about the data at that school, and about the results. She went back several years and looked at the results of the student performance and that generated questions which generated conversations within that group of teachers.

Pensol described the LT meetings as opportunities for the leadership in the district to keep in touch with what was happening at the school and classroom levels. He seemed to understand how Ann tried, not only to expand the support for mathematics and science improvement, but also to imbue the broader circle of influence with the ARSI principles that guided her work.

At the leadership meetings Ann tried to bring the leadership group a little bit closer to the ranks in a very subtle, progressive way. She didn't pull. A lot of the things that we have been involved in will pull teachers out to another county, or to a big meeting. The Teacher Cadre and the Leadership Team meetings [on the other hand], are local, being done with our people, meeting our immediate needs. [Our people] are getting to drive the agenda. I like that.

Building Capacity at the Neediest Schools: An ARSI RTP at McKinney Elementary School

The story of Gloria Davis's work at McKinney Elementary School illustrates how an ARSI RTP's growing skills and stature helped develop capacity of the teachers and administrators at one of the neediest schools in Lincoln County. It shows how the process of capacity building, under her gentle but firm guidance, involved bringing an ARSI "culture" into the school. Gloria treated the principal

and teachers as colleagues and equals; she called on an extended base of support; she insisted on and supported new learning; and she taught members of both the school and local community to re-envision the possibilities for McKinney's students as well as for themselves.

When Gloria Davis began working with McKinney Elementary School it was a small, poor, rural school with a history of low performance as measured on the state assessments. McKinney had a total of 173 students and only nine full-time classroom teachers. Seventy-one percent of the children received a free or reduced cost lunch, the highest percentage in the county.

McKinney's local economy was severely depressed. There were few jobs in town. Most shops and services were closed down or relocated, and what few businesses remained were locally owned and often marginally successful. Although almost all of the students lived within a short distance of the school, their parents—if they were able to find jobs—were forced to work in nearby towns. Many of the parents, however, received state subsistence and tended to stay close to the home community. As a result of such meager economic incentives, few new families ever moved into the area. As the principal of McKinney put it, the net effect on the school and local community, was not having "control of our own destiny."

In 2002 McKinney was declared "in crisis" by the state of Kentucky, as determined by consistently poor performance on state exams. Shortly thereafter it went through what is called a "scholastic audit." Following the audit, teachers at McKinney were understandably discouraged. It was then that Gloria Davis stepped in. She wrote a grant and received a small amount of money from the School Board and from ARSI. Through that funding Gloria was contracted to spend up to 10 days per month helping McKinney create improvement plans addressing their state scholastic audit report.

A new principal took over right after the audit took place. Gloria began working hand-in-hand with him on many issues, but primarily the improvement of mathematics and science. She also began to meet with all of the teachers there at least once per month. They worked hard to change their classroom instruction. With the addition of Gloria to the school, both teachers and students, according to the principal, flourished.

I am happy with our staff because through that period of crisis, they went through so much, so many changes, so many mandates for change. Human nature would tell you that eventually you will become resistant to any kind of change, and [ARSI] was another new program so to speak, as far as our staff saw it. But credit to Gloria, when she came in, she didn't push herself. She came in and offered herself and her

assistance to teachers in the classroom. She is just one of us now. The teachers go to her for resources, they go to her for instructional discussions. Sometimes they get confirmation, and sometimes, she says well you might try this, and so it gives them some validation of what they are doing in the classroom is correct. Sometimes that is all that an uncertain teacher needs. It makes them feel more confident.

The McKinney principal practiced the kind of administrator support both Ann and Gloria asserted was necessary for their improvement strategy to succeed in the district. In addition to Gloria's work with the entire staff, all 4th and 5th grade teachers attended the district Teacher Cadre meetings. Following a meeting, the principal set aside time in a staff meeting for one primary and one intermediate teacher to share what they had learned in cadre. Perhaps it was an instructional strategy, a protocol for reviewing student work, or an idea for integrating mathematics and science. The sharing the principal helped promote also successfully encouraged the teachers not directly involved in the cadre to seek out the cadre teachers for suggestions and feedback.

When Gloria talked about McKinney in retrospect, it was obvious to the listener how proud she was of her work there. When she arrived at McKinney, she knew that the first thing she needed to do was learn as much as she could about the school. She found and read their program improvement reviews, she surveyed the teachers to find out where they thought they were on the path to improvement, she administered a state-sanctioned "perception" survey to parents, and she revisited the scholastic audit to see what needs were identified and what goals the school had set to address them. All of these data sources were analyzed to help her understand what role she could play in moving the school forward. All of this, as Gloria put it, was done 'hand in hand' with the principal's blessing and support.

As she worked with the principal, the teachers, the leadership team, and the data, it became clear that a common vision for the improvement efforts was needed.

As we talked as a faculty about what we wanted for that school it became a school community vision. The vision was we wanted those children to feel really good about themselves, and we wanted them to have reason to feel good about themselves. We wanted them to be problem solvers, to be able to investigate, and to leave there with the background and the skills that would take them to the middle school. We wanted them to go into that school and hold their heads up and say, 'I can do what anybody else can do, I can do it well, and I can be successful.' They would leave with such a good feeling that the pride in the community would grow. Since it is a small community and it is very supportive of the school, we began to realize that we were really looking at 'What is the future for the school and community?'

The next step, Gloria reasoned, was to create a plan for getting from the present to the future vision. Together with the classroom teachers, Cadre Teachers, Leadership Team, and principal, Gloria helped draft a seven-year plan that she hoped would lead them well.

We decided that what we needed was not just to think about where we wanted to go, but we needed a plan to get there. We don't have specifics and details, but we did a framework or skeleton of what we want to do for the next 7 years. Hopefully at the end of that 7 years—I am not saying we will be where we want to be, because I think we will always want to improve — we will be much closer to the vision that we have.

Gloria's experiences at McKinney opened her eyes to a new way of viewing "improvement." She learned what it meant to really change a school – not just adjust the mathematics or science program. Working at McKinney was a pivotal professional experience for Gloria, one which she fully credited ARSI for having equipped her with both the courage and the skills to pursue.

To me, this journey has been the real key, and the ARSI training has been essential. I couldn't have done it without the ARSI training and the ARSI support. I had never taken the step of saying that the math and science program had to be only one part of a school-wide vision, a community vision.

Multiple Levels of Influence of the ARSI RTPs

What happened at McKinney Elementary School is a particularly vivid example of the kind of work Ann and Gloria as ARSI Regional Teacher Partners achieved in Lincoln County. But there are other illustrations of the extent to which and ways in which these two women influenced mathematics and science improvement in the county and beyond. The following describes how their work affected multiple levels of the system, ranging from classrooms to the overall county.

Influence on Teachers and their Classrooms

Through working with teachers on data-driven instructional decision-making and other professional topics, Ann and Gloria influenced their Cadre Teachers' classroom practice in numerous ways. One teacher reported that her overall stance toward teaching has changed dramatically as a result of her work with Ann. Importantly, Ann also helped her actually implement the changes she had envisioned but been unable to do alone.

I am now definitely less textbook-based. I have wanted to make a fundamental change in my teaching practice for years. But you have to have the stuff to use, and you have to know how to use it and bring it across to the kids. And, they have to get something out of it; they can't just play with the manipulatives. Students have to actually make connections and start picking up the concepts, and if you are not getting them to do that, then it is kind of pointless. I think ARSI and Ann both gave us the tools that we needed to make that transition, to move away from that textbook. Every year I am using textbooks less and less and less. The support in that sense has been a big thing.

Similarly, a teacher at Rockcastle High School reported that Ann's presence and support in the school gradually shifted the department's definition of a "proficient" student. Through the presentation of data and numerous discussions with the department and administrators, Ann helped them identify characteristics of proficient students that they decided they would try to develop in all of their students. What has been the result? One teacher explained how his teaching repertoire has expanded as a result of his ARSI experiences:

Ten years ago my teaching was almost exclusively distributing information in class. That's how I saw my role as a teacher 10 years ago. If you distribute the information, it is up to the students to understand... Now however, because of the reform and the growth of my experience I see teaching as a lot more than that. I think part of it is breaking the class up into segments with block scheduling. I pull in a lot of review of old content... Part of it will be lecture or demonstration. But I also try to pull in manipulatives and activities for students, which I just didn't do 10 years ago. Algebra tiles, algebra blocks and equations, ways to demonstrate equations and things — that has been totally different in the last few years. And then there is the idea of applying concepts to real life, that's important. That's been a recent major emphasis, giving the students a reason for knowing the information that you are teaching.

Teachers in Gloria's science cadre also benefited from her expertise in inquiry pedagogy and from her encouragement to go beyond the textbook. One teacher described her experience in gaining greater autonomy in her teaching:

Throughout one year, Gloria came into my classroom and worked with me. She showed me actually how to do different types of lessons. I felt the fun... this was great, I loved it! She helped me get other resources, and now, in fact, when I use the book it is more for the pictures or the diagrams or the glossary.

Influence on Indigenous Leadership Development

From Gloria's perspective, the Cadre Teachers and their growing leadership potential were the most important and visible legacy of ARSI in Lincoln County. She believed that even with the turnover, budget restrictions, and other

impediments, these groups of teachers grew not only in their own teaching practice, but also as leaders in their schools and in the district. It was her belief that long after ARSI disappeared, these individual teachers would continue to strive for improvement and exert their influence. They would remain in Lincoln County as local advocates and change-makers.

Cadre teachers have become outspoken leaders. They are moving towards setting long-term goals, and they are developing the vision of what they want their school and their district to provide to them and the community and for students. I think that they will be a little grassroots effort in each little school, those people who keep saying: 'We did this in cadre, and it was good, and we need to continue to try to set goals.' I think that they will be the people who reach out for opportunities for professional development... they will be the vehicles of change, progress, and growth in their schools.

Influence on the County's "Improvement Infrastructure"

ARSI made a lasting mark in Lincoln County through the formation of the Academic Performance Specialist (APS) position. The successes of Ann and Gloria in bringing new ways of thinking about teaching and learning in the district influenced Lincoln County school administrators to create a support position at each school modeled after the ARSI Teacher Partner role, namely the APS, whose purpose would be to support and sustain ongoing improvement efforts. Thelma Blair, of the district, described the relationship between APS and ARSI this way:

We modeled what the APS were going to do and their role in the school after what the ARSI program had done with the Teacher Partner. In other words, they were meant to serve as coaches. They were not administrators, and they were in there helping teachers. They had release time to be able to do this. We took the components that we had seen with Gloria and Ann and what they had done... We actually modeled it after the ARSI Teacher Partner.

Rockcastle County schools also adopted the APS as a way to improve teaching and learning across the district. David Pensol also attributed the impetus and design of this role to the positive work of the ARSI Teacher Partners:

We saw the positive things that the ARSI partnerships created, and so we wanted to try to continue some of that work and do some of those things. The only problem that we are having now is that most districts are under a financial crunch. We have really had to look at everything closely, I guess, to decide what we support. We just saw the benefits of the way that ARSI worked.

Stacy Carrier, an APS at Stanford elementary, explains how she sees the connection between ARSI and APS:

I think it was really the beginning of starting the whole curriculum alignment process. Now we are into doing every subject area and I think that the cadre meetings had a lot to do with the position that I am in now, beginning this Academic Performance Specialist position. District leaders really saw how helpful it was for representatives from each school to be able to get together and discuss things and to share ideas that are working well at each school. That is what we do as APS, we meet at least once a month and we are able to share things that we can take back to our own schools to help. I think we feel much more of a community feeling, because of that.

She went on to explain her role at her school:

My main duties were to work with curriculum, doing a lot of curriculum alignment. I also helped the teachers and administrators to implement our school improvement plan. Really I am kind of a Teacher Partner too, kind of a juggler of all things. But mostly I worked with the teachers as sort of a resource teacher, helping them with instructional materials and things like that, whatever they really needed of me.

ARSI Values, The Partnership and Their Legacy: The Researcher's Perspective

Looking back on the work of the ARSI Regional Teacher Partners in Lincoln County, we see that the range of their influence was wide and the depth of their affect on others was often profound. The unusual success of their efforts was due in large part, we believe, to the *stance* from which they served their fellow educators. The ways in which they approached the students, teachers and administrators was formed in large part by the professional culture of which they were a part. As we have mentioned, the ARSI network espoused values such as egalitarianism, cooperation, and respect for and trust in the individual learner, whether adult or child. Ann and Gloria took up the ARSI values, designing their work in Lincoln County to reflect and promote those same values.

Both Ann Booth and Gloria Davis believed firmly in the value of collaboration and collegial interaction. Both the Cadre and Leadership Team structures were founded on the assumption that inclusiveness is a stronger, more effective strategy than exclusiveness. The principle of inclusiveness served as the foundation of their improvement work. Ann represented Gloria too when she explained:

I wanted my schools to direct what they wanted to do. I didn't want to ride in on a white horse and say, 'This is what you need to have done,' because that is fatal. If you are on a white horse, you get shot off pretty quick. I had some instruments and some surveys, and everything we needed to start to pinpoint the work. All I did was to try to shake them up so they would begin to think.

Later, in a conversation about the teachers she works with, she explained how the value of collegiality guided her goals for their future, and her way of interacting with them as a teacher leader.

Collegially is how we want it to be, because that is how you make progress. If they don't buy in, and don't journey with you, when you are gone the journey ends. I don't want that. I want them to blossom.

Ann strongly believed that teachers (and some administrators) already knew what they needed to do. They simply didn't have the time or the skills to implement what they envisioned. Part of her responsibility as an RTP, as she saw it, was to create the forum and opportunity for all, not just some, of the stakeholders to understand the problems and participate in the design of the solutions. The fundamental belief in the efficacy of supporting the interaction of stakeholders in identifying the problem and designing the solution was the cornerstone of the work Ann and Gloria do. In the schools they worked, they created strong cultures of collaboration. It was their intention that when the money dried up local teachers, administrators, and parents would carry the improvement work forward.

The strategies for change the RTPs used—namely the collaborative Leadership Teams and the Teacher Cadres—reflected their commitment to ensuring a representation of multiple voices in the change process. One teacher at Rockcastle High School, one of Ann Booth's focus schools (though not in Lincoln County) described Ann's contribution:

She has set it up so that the math department is released one day a month to work with her during school, and then the following day we have a leadership team meeting. There have been a lot of good things that have come out of these meetings. We have been able to really specifically look at quality education and what it takes to have students work proficiently. Where other groups that have worked with us have touched surfaces and worked with us in general, the work that Ms. Booth has done with us has been very specific, something that I think has been helpful this year.

In her role as Regional Teacher Partner, Ann noted that ARSI provided "the support, the help, the instruction and the strategies" for people to help themselves.

In May, 2003 Lincoln County school district decided to cease all district funding for the elementary cadre meetings, and any other support for the ARSI Teacher Partners. However, the story did not end badly. In fact the teachers with whom Ann and Gloria worked took up their own cause, practicing the principles of leadership, cooperation, and the self-respect with which their ARSI experiences had been imbued. The schools continued to fund the work through May 2005, and McKinney has continued the work by funding a school-wide professional learning community that Gloria still coordinates.

The Cadre Teachers approached their principals, insisting that they needed the continued support of the RTPs. Ann and Gloria knew that it would not be enough, so they "got creative." The Kentucky Education Association provides its members with small amounts of money to participate in a program whereby teachers are released up to five days a year to observe another teacher, investigate a model program, or meet with a mentor. Both Ann and Gloria tapped into this resource to release teachers to meet in the cadre.

Teachers at the 7 elementary schools put enough pressure on the principals so that they agreed to pay for both the 4th grade science and 5th grade mathematics cadres to meet. Each school continued to pay for its teachers to attend out of its professional development funds. In addition, Rockcastle and Pikeville high schools have agreed to pay for Ann and the cadres out of their professional development funds.

Just as the ARSI RTPs had hoped, when the money "ran dry" local educators banded together. They continued to insist upon collegial, collaborative opportunities to address challenges together and to learn from one another, all in the service of improving student learning in Lincoln County.