The ARSI Teacher Partners and Their Reflections on Their Work as Leaders

Through our visits and conversations with students, teachers, and administrators involved in the Appalachian Rural Systemic Initiative (ARSI) over the past decade, we at Inverness Research Associates came to believe that ARSI served as an important leadership capacity-building effort for improving mathematics and science education in Appalachia.

In particular, the Teacher Partners (TPs) were classroom teachers who took on a wide range of leadership roles and responsibilities through ARSI. As they went about the business of supporting math/science improvement in their schools and districts, they learned much along the way, developing ever greater knowledge and skills as their experience increased. Through our research over the years we began to better understand the nature of Teacher Partner work, as well as the contextual features and challenges of the environments that affected it. As a result, late in the winter of 2005 we were able to formulate some preliminary "findings" about ARSI TPs' leadership, but we also realized that our perspective as outsiders might be limited.

For that reason we wrote to the Teacher Partners to invite them to participate in formal reflection about their leadership work. We felt that their thinking would augment, and most importantly, bring to life the lessons we had learned about the nature of ARSI leadership. We sent the TPs a document that described our preliminary "findings." Each of our findings was described by a statement, as well as by a direct quote (with one exception) from someone with first hand knowledge of ARSI. We invited the TPs to take an hour to select and reflect on one or two of these findings, and to write their personal responses. We asked the TPs to consider, in particular, the following questions as they thought about their ARSI experiences:

How does the finding reflect or not reflect your own experience as an ARSI Teacher Partner?

Do you have a particular story or incident to tell that illustrates how the finding does or does not match up with your own experience of working as a Teacher Partner?

What else do you have to add to the finding? What else would it be important to understand?

Are there additional ideas or thoughts that you have that are sparked by reflecting on the finding you've selected?

What follows is a selection of some of the most illuminative and insightful Teacher Partner reflections we received. They are the ones that struck as most poignant or most evocative of what we heard more generally from others as we visited schools and classrooms across the ARSI districts.

We have deliberately left the Teacher Partners' writing almost verbatim, editing with the lightest of hands, correcting only spelling or punctuation. For the most part we have left the reflections as they were written by the teachers who shared them with us.

We have also let them stand on their own, without including our own editorializing. Our preference is that the Teacher Partner voices speak for themselves. Then the reader is free to listen. We trust that learning about leadership at the grass roots level, from the voices of those who experienced it first hand, will be of interest to many others who wish to improve math, science and technology education in their home locales.

The term Teacher Partner is significant. ARSI deliberately did not select a more commonly used title, such as lead teacher, teacher mentor, or master teacher. Rather, the Teacher Partner "title" expressed an important ARSI principle, the principle of partnership. ARSI encouraged and modeled partnership and relationship as the foundations for building and maintaining math and science improvement efforts in local Appalachian communities.

We spent a good part of our 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

~Regional Teacher Partner

- ❖ I tried not to intimidate the teachers that I came to visit. I didn't want to force my way into a classroom and impose anything on these teachers. Most classroom teachers resent it when the hear someone say, "We are from the Board of Education and we are here to help you." My attitude was that I could share things with them and at the same time learn from every one of them."
- ❖ I certainly did not feel that I was "the guru" of math and science. Instead I realized that I was given the opportunity to focus my instruction, study, and resources in these areas. I was a learner with a goal—to be an advocate for math and science and to continuously strengthen my own experience in the instructional best practices of math and science. ARSI's teacher "partner" philosophy resonated with me—I was going to be afforded the opportunity to study with a focus group and become a much more effective partner with the teachers whose time and development in math and science I was being entrusted.
- ❖ The title of Teacher Partner helped me to be accepted more readily into the classrooms in my district. As a Teacher Partner, I attended our monthly Teacher Partner meetings and brought back new instructional materials and new instructional practices to our district. Instead of just telling teachers about these new ideas, we planned together and taught lessons together. We also developed a Math/Science Cadre that met once a month to share ideas for improving math and science instruction.

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.

- ❖ One of the advantages of having a TP has been the availability of someone to go to for help and that will usually respond immediately (as opposed to weeks of waiting on responses from someone less available) It has taken many years to break down the barriers with some but there have been dramatic improvements. When others see a willingness to help (and not criticized), the availability of resources and the positive affect of change; it is easier to get them on board. I have found that a TP should not only be competent and hard working but personable, fair and caring. This is important to people in this region (kind of goes back to the "they don't care how much you know until they know how much you care.")
- ❖ Next year, even after ARSI is gone, I will be released again full time to continue the work we have started. I feel the teachers saw and accepted me exactly as our title stated, a Teacher Partner. They knew I had been in the trenches, and as I did they wanted more and better for themselves and our students.

ARSI gave Teacher Partners roles and resources, but did not dictate to them what to do or how to do it. ARSI did not advocate a "one size fits all" model for working with teachers and administrators in the ARSI districts. Rather, ARSI supported Teacher Partners in finding their own way that worked best in their own local community.

Was ARSI clear about what they wanted Teacher Partners to be doing? No ... we were developing that as we got there. And as it developed each Teacher Partner played an important part in structuring their role.

- ARSI did not necessarily advocate a "one size fits all" model for working as a teacher partner within a district. However, having the opportunity to share at ARSI teacher partner meetings validated beliefs I held about how to bring about change within my district. Common experiences that other TPs shared helped me to refine my position as a resource teacher. Over the past seven years, my position has evolved. I was given a voice at these meetings and I heard from other TP's experiences. This allowed me to become an advocate for my position itself. At first others defined my role as a resource teacher, now I define my role based on experience and knowledge gained.
- ❖ The finding is indicative of what I feel is the most important aspect of preparing lessons. Each lesson can be delivered in a different manner each time it is taught. There is no one "right" way to teach the water cycle or how to graph using Microsoft® Excel®. I like that ARSI was such a flexible program. I could tailor professional development sessions, modeling lessons, and working with administrators to my catalyst school and district. I like that because each school and district is unique and one strict cookie cutter model would have probably failed both the faculty and students that ARSI impacted. Teaching and learning is an on-going process and ever changing. ARSI gave me the tools to enhance my teaching both to students and faculty.

ARSI offered diverse entry points for teachers of varying abilities and backgrounds to develop their leadership potential. Particularly for women, ARSI provided opportunity for personal and professional growth.

The leaders were there, waiting to be trained.

~Alice Lloyd, 1900

- ❖ My experience as a Teacher Partner has been the single most life-changing experience I have had in my professional career. I have met some of the most interesting people, gone to places I would not have had the opportunity to go, and learned many new and wonderful things. I gained a global perspective of my district and felt like I was able to make a real difference. I will always remember my years as a Teacher Partner.
- ❖ Being an ARSI Teacher Partner truly changed the course of my life and my career ... I have now completed the coursework on a doctoral program and am planning on taking comprehensive exams some time this summer.
- ❖ As a TP I became a stronger leader in my community and school district. I now speak often and to numerous groups about varying issues concerning math and science. Likewise, I have presented at state and college levels. I have been elected now to my second term for Board of Directors for the Tennessee Science Teachers Association. These experiences I would never have experienced had it not been for my having been involved with the ARSI project as a TP.
- ❖ I am part of a group of six former teacher partners who still keep in touch with one another. We try to get together about once a year to see how everyone is doing and to talk shop. This group offers an excellent example of the leadership development that ARSI provided. For the record, all six are women. We also cover the whole spectrum that ARSI served. We are from Tennessee, Kentucky, and North Carolina. About half are in science and the other half in mathematics. We split evenly between high school and elementary. However, since ARSI, our careers have evolved. Two of the women are now retired. One of them is now serving as a teacher intern mentor for the state of Kentucky. She just recently completed a tern as a state officer with the Kentucky Science Teachers Association. Another woman ended up working in her district's central office dealing mostly with curricular issues. Though she is now no longer teaching, she does work for a science education related agency.

Two of the women in this group became school principals. They have made a significant impact in math and science in their schools from what they learned as ARSI teacher partners. Two of us are still classroom teachers, but our duties have expanded. I still work half-time as a teacher partner in science, math and technology. Two years ago I applied for a central office position to serve as director of grant projects, testing and special programs. Though I did not get the job, I was one of the two people interviewed. I would not have considered applying if it had not been for my experiences with ARSI. I have also become a National Board Certified Teacher. Working as a teacher partner made it easier to even consider attempting the certification process. It gave me the background I needed to understand the National Standards and know how to teach toward the standards.

❖ This finding reflects on my own ARSI experience in that I have grown tremendously as a leader. For most of my life, both personally and professionally, I have not been outgoing or verbal in nature. I was a follower with leader thoughts. For example, while working on a Master's degree, I was involved in a rather large and time consuming group assignment. I agreed with more verbal or outgoing group members on what we should do but secretly thought the ideas ludicrous at best. I just didn't possess the ability to tactfully suggest ideas. Through ARSI I have overcome my "fear" of leading and have become a leader. I no longer worry or wonder what people will think of what I say or do. I have learned that just because someone is a leader, that doesn't mean that he or she possess ALL the knowledge but that we should work together to reach a common goal.

ARSI has a philosophical commitment to the individual and a deep belief in the power of an individual to make change in their community. The Teacher Partners were viewed as people who, given time and support, would take on leadership roles to grow better math and science education efforts in their home communities.

ARSI invested in me... They gave me all kinds of experiences and support, and then they trusted me to do the best I could back in my district.

- ❖ This philosophical commitment to providing an individual with the time, resources and encouragement to make a change did more for science in our district than had ever been accomplished. It brought parents into the school with a pure curiosity for science and math that never would have stepped foot on our campuses. It raised test scores to help produce math and science scores in the 80th percentile and helped to create two schools reaching "School of Excellence" status in our district. It provided support and interest from county administrators in science that was previously nonexistent. Most importantly it changed the way in which teachers teach science and math in my district. Watching this change was exhilarating motivating me to pursue greater accomplishments in science administration. Thank you for this wonderful opportunity.
- ❖ I would like to give you a little background on what opportunities being an ARSI TP has provided for us. From the eight people who spent one or more years as part of our district's TP team, three moved into leadership positions as school principals, one moved into a central office position as a supervisor, one is in a school coach's position for a school-wide reading initiative (Reading First), one went back into the classroom to use what she had learned through ARSI, and two of us are in district leadership roles for our content areas. I would think that would be pretty strong supporting evidence for this finding!!!!
- ❖ After the first year of ARSI training, I no longer had "free time" after school, on the weekends, holidays or during the summer. Math and science improvement became my life. How do I approach changing a teacher of 28 years who has experienced so many reform efforts? I worked on the premise that change occurs internally and individually. And I set out on a path to develop the opportunities for the teachers to attend quality conferences in math and science, to be exposed to quality materials in math and science, to be exposed to new technology and new

instructional strategies, and to be aware of what is happening in education outside of our school district. Other disciplines in our district began complaining about the math and science efforts becoming more important than theirs. I thought that was a good problem to have.

- ❖ I have had the honor of being an ARSI TP for the last three years in my district, and I really do mean "the honor" of being an ARSI TP. Becoming a TP was a career changing moment for me. I did not know at the time, but being an ARSI TP would help me become more involved and determined to make a difference in the math and science programs within our district as well as other districts.
- ❖ The ARSI Teacher Partner Meetings in the beginning was total submersion in math/science content at all grade levels. We were exposed to middle and high school content as well. Each month for two days we were trained on the latest standards based resources, technology, inquiry teaching methods, and other resources too numerous to mention. Those two days each month energized us and we were so eager to return to our districts to share what wonderful things we had learned. This sharing might be going into classrooms and working with teachers and students or it might be through cadre meetings or scheduled professional development with ongoing follow up in the classroom. As I look back over the last 4 years it is amazing to see the growth of the person/teacher that I have become since I began with ARSI. Also, it amazes me at the programs we have built in our community over that time period.
- ARSI is the one program that provides the tools necessary for teachers to facilitate change and then provides the time essential for taking it into the lives of teachers in the classroom. By having a math and science resource person with time to talk to the teachers, develop resources, model instruction, enhance curriculum, there can be programmatic change. I have never seen a program with such a powerful effect.

Especially when they first began to take up leadership roles, ARSI Teacher Partners lacked knowledge about the hierarchical nature of relationships and management in their districts. Many TPs felt intimidated, thinking of themselves as "just teachers" without the authority or stature to talk with principals or other district administrators. Through time and experience TPs gained confidence and learned how to "work the system."

I was a little teacher and you need to understand there is a hierarchy in the school district. None of that is written, but it is there. I didn't want to make waves with anybody.

~ARSI Teacher Partner

❖ I thought I understood the workings of my school. I had taught there for 20 years, but I had spent the time mostly in my classroom. During those 20 years, I felt like I didn't need to know what was going on with the administration or with other teachers. I just accepted the students that were given to me and took them as far as I could in a semester's time. I was living in my own little world and found success there.

When I started with ARSI, I quickly realized that if I was going to share with other teachers, I would need the support of the administrators. I soon learned who was my ally and who supported me. Rather than force my way into other classrooms, I made suggestions to my friends in math and science. It was a slow process, but after a few years, word of mouth from teachers who had tried something new or attended an ARSI summer workshop gave me credibility among my colleagues.

- ❖ I realized not long ago how much I have learned since I began as a teacher partner. There are a lot of things about math and science instruction that I know now that I had once been seeking the answers to. For example, I just completed a math workshop for teacher assistants in my district. My preparation time was relatively short because I had the resources I needed and I already had a pretty good idea what we needed to discuss. Another example is that I keep having an on-going argument with our district's human resource director. She wants me to teach a reading workshop on how to teach math word problems. I keep telling her that isn't an issue of reading the words, but an issue of understanding the math concepts. So it doesn't need to be a reading workshop.
- ❖ When I became a Teacher Partner I did not understand the bigger picture of fitting science and math and technology into the scheme of a whole school district. But, by the time I chose to leave my school and position of

Teacher Partner, I helped create the math and science section of not only our school's improvement plan, but the entire district's improvement plan. I could not have done this without training about funding (such as how Title II worked), and training on personality styles, and how to deal with others. I feel that after I learned about myself, I was able to better position myself to work at the district level to lobby for math and science, better able to speak up for all the other teachers who would be affected by these improvement plans, but could not be at the meeting.

ARSI served as a window to the larger world of math and science education reform outside of Appalachia. ARSI provided TPs with the most current thinking in instruction, assessment and professional development as well as many opportunities to travel outside their home schools and districts to learn about high quality math and science. In turn, the Teacher Partners took new ideas and practices back home to their local schools, districts, or even TP regional networks. In this way one might think of ARSI playing an important exporting and importing function—bringing new ideas in and out of the schools and districts where TPS worked.

ARSI exposed me to different educational journals, and audio tapes, and trainings ... It was an eye-opening experience for me, becoming aware of all the various instructional strategies, and educational research. I became really interested in what was happening in education.

- As a classroom teacher enjoying the benefits of ARSI when it initially started, our teachers in science and math were exposed to many professional development meetings, workshops and conferences that recharged our thought about teaching, science, and mathematics. These gave us hope to finally find ways to introduce technology and integrate science, math and technology into our classrooms. In addition, it gave us a way to fund some of the technology that otherwise we would not have received ... We also got to see "how the other half lived" by experiencing other school systems in neighboring counties and cities within our own state that were located hours away.
- ❖ ARSI has provided me with the most current thinking in instruction, assessment and professional development. I have mostly benefited from the text resources provided by ARSI and the inner quest/incentive to seek new information that allow me to acquire on-my-own the knowledge that gives me the opportunity to help staff and administrators in our Appalachian school districts. Some of the topics discussed in the ARSI TP meetings include curriculum, content, desegregation of data, national and state standards, informal and summative assessment, inquiry based learning, investigations/problem solving techniques for classroom instruction and exploring information on how people learn and how the brain learns. The ARSI TP network is a world within itself and I just wish that more persons could have been involved.

- ❖ The most important thing that I have learned with the ARSI program is the ability to continue my own education through the many wonderful resources provided by ARSI and the encouragement by ARSI to read, read, read and study. We need to keep up with current research in education and continue to educate ourselves as educators in order to know how to make changes to improve our education system; thus providing our students with the best opportunities to learn and understand what is being taught. I now understand that we must educate both our students and our teachers.
- ❖ ARSI helped make the world smaller for me and much more accessible.

The ARSI Teacher Partner network provided both a support community and a source of inspiration to TPs. While Teacher Partners often felt isolated and alone in their own districts, the network of people focused on a common vision and a common task of math and science improvement served as an important professional home to TPs.

In my own district I had felt really isolated, like there was something wrong with me. But working with the group of teachers that were TPs and building a network I had people I could call and I had people I could email. I looked forward to each meeting because we would have an exchange of ideas about what we were doing and how things were working. As we worked through that I had a growth in confidence in what I was doing.

- ❖ I felt so inferior at the first ARSI meeting that I attended. I was scared as if I may be asked something or asked to do something that would embarrass me or maybe question my mathematical background. I could not have been more wrong. The other Teacher Partners made me feel so comfortable, they actually asked for my opinions and comments. TPs are such smooth talkers that they are actually teaching all of the time. They engage you in conversations and you are sharing weaknesses and fears without even realizing it or being ashamed of it. This is a unique crowd of people. I found myself being asked to present professional development in our district. I would prepare the materials for the session and take it with me to our TP meetings and ask them to preview it and give me feedback. I knew right away that these seasoned presenters would help me make it the best they could.
- Like most teachers I sat in the isolation of my classroom trying to do a good job without much help from outside. Along came ARSI and opened a window for me. I was suddenly surrounded by a support system of Teacher Partners and others who could help me grow professionally. When I need help with choosing technology for my school, I email a TP. When I need advice on high school math materials, I email a TP. And the answers come! It is good to be surrounded by inspiring educators who truly believe that our Appalachian children deserve the best. The thought of change does not cause alarm in these people. They accept the challenge. I was happy to be involved with others who had a positive outlook on things rather than the negative we often hear.
- ❖ I had always been open to learning new ways to help my students learn math, but my training as a Teacher Partner took that a step further. I learned a lot from the experts who sometimes presented at our monthly

- meetings. But mostly I was influenced by the material that was shared by my fellow Teacher Partners. I knew they had tried the techniques either in their own classroom or somewhere in their district.
- ❖ The ARSI project provided me with a host of new contacts both at other school districts and with university personnel. I still use these contacts today and they have proved to be valuable in instruction and moral support. It will take years to determine if the systemic change was effective. I can assure you, the consortium was beneficial to me and more importantly to my students. During my tenure as a teacher partner I received many opportunities in professional development that were of high quality and were put to immediate use in many classrooms. Our scores showed dramatic improvement, and I believe it was the input provided by the ARSI contacts that made that happen.
- ❖ I found that I was going to be involved in more than just increasing my own knowledge and skills, but that I would be also be working with teachers at the middle and elementary schools. That definitely pushed me out of my comfort zone. I had had some experience in presenting professional development to small groups, but not as a part of my every day job. I enjoyed and found personal satisfaction in learning and sharing with other teachers and being called the "math lady" by students when I team taught. And in my TP role I was working with district level personnel, the instructional supervisor, and the school building principals in a way that was very different from the past. As I continued with the work, I found that nothing was expected of me for which was I was not prepared and supported by the ARSI network.
- ❖ Teacher Partners came from many different backgrounds. Some were high school, middle school or elementary. Likewise, some TPs have a science background, while others were strictly math. A few had in depth experience in both subject areas. The broad range of TP experience turned out to be in my opinion, one of the largest strengths of ARSI, regarding the improvement the involvement of TPS in districts. As TPs we experienced feelings and emotion of each other. For example, if we were doing a science activity the math TPs would at times feel out of sync. We discussed and learned from each other and often related our feelings to those which a student would have when learning material for the first time.
- ❖ This year I have had the opportunity to meet the other TPs and talk with them about problems that occurred at my high school and received numerous recommendations from the TPs that made much sense and

were very useful. Being part of the network of TPs provided me with a communication network through which I could seek information and support at any time. Much vital information and training is now passed through this network to the Appalachian districts. If the ARSI TP network did not exist then the Appalachian districts would still be in isolation with their teachers still struggling with no outlet. The ARSI TPs provide a strong group of leadership across the state and are the foundation for the future success of AMSP and the NSF in their quest to close that achievement gap that exists in the Appalachian areas. Thank you again ARSI for giving me the confidence to grow my leadership skills and become a leader in our quest to eliminate the achievement gap that exists in our Appalachian school districts.

Maintaining school improvement in math and science is an ongoing and continuous process that depends on the convergence of leadership, resources and commitment. Teacher Partners know that changes in any of these factors easily threaten the fragile stability and future continuity of the work they and others have done to build an improvement effort.

For 5 or 6 years we had Wednesday afternoons off, and it was fantastic, because we could talk with each other and with our Teacher Partner. But now things have changed, all our meetings have to be after school. We talk at recess, whenever we can, but we have little time to plan together like we used to.

~Catalyst School Teacher

❖ This statement is an experience that our district has gone through. For the last four years we have had district grade level professional development trainings in math and science. Our district would pay for the subs so each grade level teacher could attend a day of training in either math or science. After the training the TP's would work in the teachers classrooms helping them implement the professional development they had learned from the training. Then we would have another training in the spring with the same format.

What we started to realize was teachers needed time to have dialog about what was going on in the classroom. They felt like they could express their concerns more openly and at the same time look at what best practices offered to solve their problem. Our trainings were modeled after the ARSI meetings. This gave the teachers time to look at the barriers for instruction and some strategies that could help them get past these barriers.

Our superintendent did not see the value in having teachers come together during the school day. The superintendent said that if our teachers are not in the classroom teaching then our students will not learn what is needed. She said that we could still have the meetings but after school. This of course ended our trainings. I feel like our roles as TP's were never bought into by the top leadership. I still don't know why she allowed us to have the four years of training and then stop all of the sudden. I also think she needed some money for her own projects.

❖ I believe myself to be very fortunate to have participated in the ARSI project during the 2000-2001 school year. While I was only permitted one year of performing as a teacher partner it happen at a time that was good for me as a science instructor. It allowed me to recharge my batteries and realize why I became a teacher to begin with. I will be honest, I still bear

some hard feelings toward the administration at that time for not continuing the program. The math program continue to exist for several years, the science portion was only given two years and I was lucky enough to have been involved the second year. However in my twenty-four years as a public school teacher I have worked for eleven different superintendents and nine different principals. The politics and power plays change, but little change in the direction of the school system.

- Systemic change takes time and change is the hardest part of our job... getting people to understand that change will not happen overnight, that it is necessary and not a bad thing. Our school systems have such a need for change and it can't be viewed as bad... just as everything can stand improvement, it doesn't mean that what we were doing before was so wrong, just that there might be a better way and why not find it.
- ❖ I know ARSI has impacted the attitudes and changed the thinking of some hard-nosed teachers in my district. I just hope the principals and administrators in my district value this impact enough to see it carried on in each building by prioritizing resources to most support the staff as they continue the lifelong process of change.

Teacher Partners face the challenge of working in counties in Appalachia where the people have endured decades of poverty and isolation that have often created a pervasive sense of fatalism and an underlying lack of confidence in their own capacity to affect change.

Unless someone shows us a better way, we don't know how to change.

~Elementary school principal

- ❖ This statement speaks volumes to what I have had to deal with in my district as a TP. Change takes years ... you must first begin with changing a culture, which is almost impossible to do. Living in an impoverished area has almost disabled us by allowing us to become used to certain things. Overall, we accept mediocrity more often than not, and have actually lowered our expectations because of our culture. I do think, however, that ARSI has given us a good start in making change happen.
- When I first started with ARSI, I heard someone say that "The further a child lives from the county seat, the less we expect of him." Unfortunately I found this to be somewhat true. This attitude was held by most parents, teachers, and administrators.
 - I have worked as an ARSI TP with 11 schools for 7 years. Two of my schools are very isolated and very small. At one of them, 97% of the children qualified for free or reduced lunches. The school consistently had the lowest standardized test scores in my county. As I talked to teachers there, I would hear them say, "Our kids are just little poor country kids. If we had parents who were doctors and lawyers, we would have the same test scores as the schools near town." The principal there had a similar attitude. He had lived in that community his entire life and had been at that school as a teacher and then a principal for over 20 years. His comment was, "You can't make a silk purse out of a sow's ear." He cared for his students and wanted good things for them, but was unable (or maybe unwilling) to change the way that things had been done there for years.
- ❖ While it is true that our people have endured decades of poverty, I think there is a problem equally as important. I do not think that poverty is just about economic status. I see students who are suffering from *poverty of spirit* and *poverty of aspirations*. They have not had role models to see how far a good math or science education can take them. Some children come from homes where no adult is employed. They do not realize that people

need to work to support a family. Yes, it is difficult to concentrate on getting an education or getting homework done when feeding and clothing the family is consuming all the energy of the parents. Our area depends upon coal mining, and mines are closing all the time. People are moving away. Schools have closed. Businesses are shutting down. That makes it more important than ever to offer our children the high quality math and science instruction they deserve. This is where ARSI has been a benefit. ARSI teaches us that not only can all children learn, but that all children **must** learn. No excuses!

❖ I am hungry for what ARSI has taught me to expect.