

THE EVALUATOR'S SUMMARY STATEMENT:

TEN YEARS OF THE APPALACHIAN RURAL SYSTEMIC INITIATIVE

In our role as evaluators of the Appalachian Rural Systemic Initiative (ARSI), we at Inverness Research Associates offer the following summary of the major contributions ARSI has made over the last ten years. We also describe how ARSI has helped to create local assets which can be drawn upon in future improvement work.

From our perspective ARSI represents a long-term investment in improving science and mathematics education in roughly 30 of the nation's poorest rural counties. This investment has yielded returns in multiple forms. Over ten years the ARSI project has:

- Helped hundreds of individual teachers deepen their knowledge of math and science content and pedagogy.
- As a result of their greater knowledge, these teachers have improved their classroom practice.
- The ARSI classrooms we have observed show a quality better than the national average and comparable to the classrooms of other NSF-funded projects that have been studied and documented across the country.
- The work of the ARSI project has also helped teachers and administrators working together in hundreds of schools to more closely examine their overall math and science programs, and then to work collaboratively to pursue systemic improvements.
- As a result, thousands of Appalachian students have benefited from better overall programs, and thus enhanced opportunities to learn mathematics and science. In our interviews many ARSI counties attribute gains in student achievement scores to the work of ARSI.

Moreover, through the process of engaging in educational improvement efforts for almost a decade, ARSI has developed local capacities that will allow for the continuing improvement of mathematics and science education in the Appalachian region. These capacities reside primarily in what might be called

“an improvement community” of people, consisting in particular of ARSI Teacher Partners, District Liaisons, and Resource Collaborative Coordinators.

- The ARSI Teacher Partners, who include some of the region’s most accomplished mathematics and science teachers and who have extended their knowledge and expertise through ARSI even further, are individually and collectively highly skilled in assisting their local colleagues and improving their local math and science programs.
- ARSI District Liaisons are district administrators who have participated in ARSI events, worked closely with their Teacher Partners, and have provided key access and connection to district decision-making regarding resource allocation, professional development and policy issues.
- The university-based Resource Collaborative Coordinators have supported the ongoing growth and development of the local leaders in their regions, as well as providing them with access to a wide range of outside resources.
- Proving once again that the whole is always greater than the sum of its parts, taken together these members of the ARSI community comprise a strong, viable network. This ARSI network of educators, knowledgeable about and devoted to mathematics and science education improvement, stands as one of the chief accomplishments of the ARSI effort. Today then, the community or network serves its members to continue, sustain and expand efforts to improve math and science education efforts throughout Appalachia.

Finally, it is important to understand that the investment in the ARSI project has been relatively small compared to the scale of the region and the scope of the problems it has addressed. Nonetheless, as we have just described, the investment has yielded important returns, the many direct and tangible outcomes for teachers, schools and students. In addition however, because NSF provided ten years of steady funding, and because the work of ARSI has focused on developing capacity in a cumulative fashion, there are strong residual benefits that remain. ARSI has not solved all the challenges of improving education in Appalachia, but because of ARSI, those challenges can be better addressed by future projects. Already the Appalachian Mathematics and Science Partnership (AMSP), Appalachian Collaborative Center for Learning, Assessment, and Instruction in Mathematics (ACCLAIM), and many other initiatives, including state MSPs in Tennessee, Kentucky, and Virginia, have drawn upon ARSI-

developed expertise and relationships, and on the human resources of the ARSI developed improvement community of network. Because of the work of ARSI, the Appalachian region is now a strong candidate for other future investments. In this way, the most important legacy of ARSI resides not only in the good work it accomplished during its lifetime, but also in the foundational capacity it provided to all the future improvement efforts that will be able to draw upon the assets ARSI put in place.