

# Inverness Research Reflections on ACCLAIM

May 25, 2009

Cherry Valley Lodge, OH

# Inverness Research, Inc.

- 15 researchers
- 40-50 projects
- Mostly contracts, some grants
  - NSF initiatives and projects
  - National Writing Project
  - Stuart Foundation
  - Other Foundations (Pew, Packard, Annenberg/CPB)
- Studies of investments in the improvement of some aspect of the education system



# This presentation is NOT...

- An overview of our evaluation of ACCLAIM (see the paper on ACCLAIM's website for that)
- A summary of findings from our evaluation work with ACCLAIM
- A final assessment of whether or not ACCLAIM was successful in meeting its goals



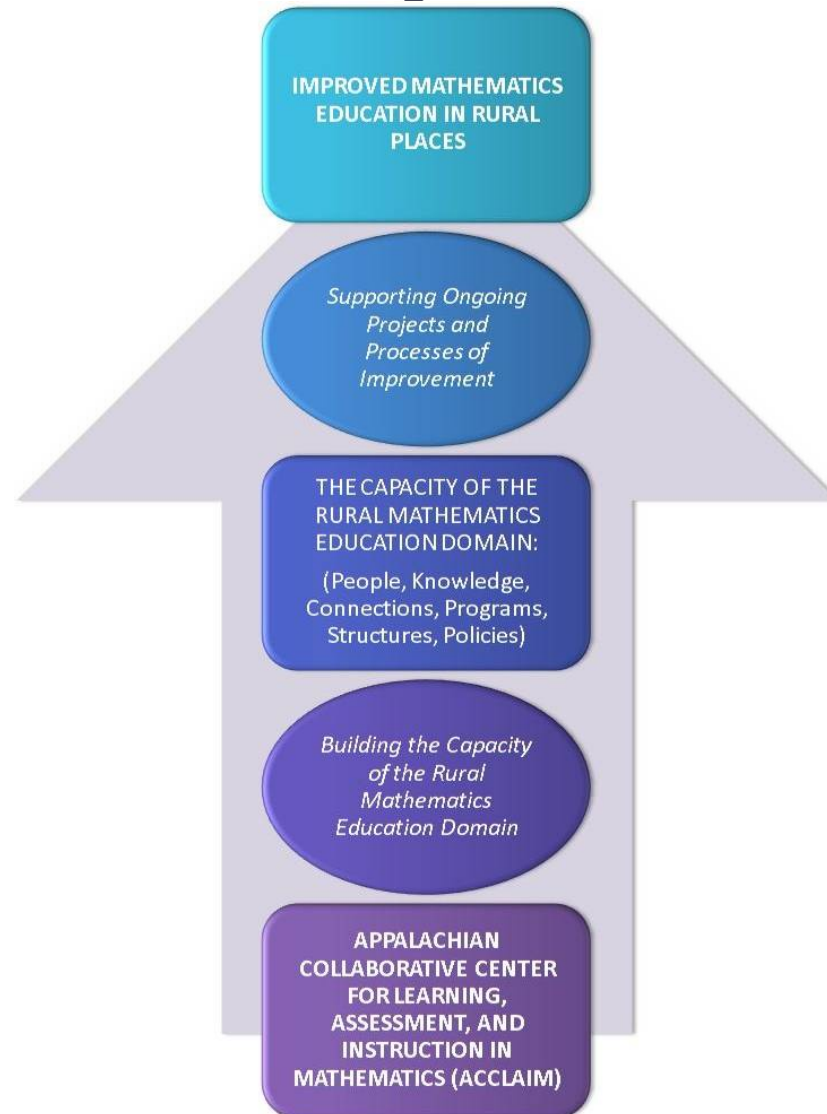
## Instead, this presentation IS...

- An opportunity for us to share a little about what we learned about Centers from ACCLAIM
- An opportunity for us to share a little about our perspective on the accomplishments of ACCLAIM
- An opportunity for you to hear what people in and outside the Center have to say about it
- An opportunity for us to express our gratitude for being a part of this work

# A bit of background on CLTs

- NOT intended to provide direct service
- NOT funded to do research
- Funded to build the capacity of domains within fields
- Capacity-building outcomes (“drivers”):
  - Leadership
  - Knowledge
  - Relationships and connections
  - Structures, programs, policies
  - “Centerness”

# ACCLAIM's Theory of Action





# The Focus of this Presentation

- Building Indigenous Leadership Capacity in Doctoral Students and Faculty
- ACCLAIM's Research Initiative



# The ACCLAIM Doctoral Program: Some highlights

- The Cohort Model
- The Doctoral Internship
- Exploring Rural
- Faculty Perceptions



# The Multi-Institutional Cohort Model

- Interviews, surveys, observations in summers and at meetings confirmed a strong sense of professional community among the doctoral students
- Many reported that their cohort colleagues strongly influenced their decision to stay, and their ability to succeed
- Students often identified as an ACCLAIM doctoral student over their institution
- Cohorts can bring the best – and the not so good – out of people

# Comment about Cohort Support

*[Within the cohort] we talk about the fact that some people have strengths and some people obviously have weaknesses, and when we have a problem we band together and help each other out. ... Sometimes it is just a matter of sitting down and having somebody to talk to. I don't think I would have gotten that at any institution if I were doing this on my own. I really couldn't trust somebody to be a sounding board.*

# The Doctoral Internship

- Non-traditional program required non-traditional residency requirement
- Created a mentored, individualized internship program that required students to gain experience in several dimensions: e.g. k-16 teaching, designing and doing research, writing a grant proposal, and writing a paper for publication, designing and conducting professional development
- Students reported almost universally that the internships provided unique and valuable opportunities

## Comments from students about the internship experience

- *The internship was the key component in my developing leadership. There are things I had to do related to the field that I would not have done had it not been for the internship.*
- *The ACCLAIM Internship provided me the opportunity to think about and focus in on my research ideas and to also see what research is already being done in mathematics education.*
- *Without [ACCLAIM] and understanding how things work at a national level, I don't think I would have had the confidence in myself to have a session lined up against all of these other people that you read about. ...Without the ACCLAIM program and [internship experiences], I don't think I would have had the confidence to be involved in such a project.*



# Making the rural connection

- Over time, we heard more and more about the influence of the rural sociology courses and discussions about rural issues in and out of courses
- Students talked about their renewed or new-found appreciation for or understanding of the importance of a rural perspective

## Comments from students about the rural connection

*[Most people] operate on the idea that there is something wrong with being a small rural school. ...There is value in being a small school, being a small community, being inter-dependent to survive, knowing everybody around you and choosing not to leave that place. There is value in that, and I had never thought of that [before]. ...That schooling has taught kids to want to get out of their place, that the grass is greener somewhere else, and that they really haven't accomplished anything unless they have left, is just perverse.*

## another comment about rural...

*I came into the program thinking math ed, math ed, math ed, and now it is the rural sociology stuff that interests me more. At one time our joke was we complained about being required to have rural [issues in our dissertations]. I was talking to Dr. Howley, and told him that I was going to ask Dr. Bush if we had to have the math! I now have an entirely different perspective on rural. I guess I grew up with the deficit model in my head and [ACCLAIM helped me to see] a different perspective.*



and just 2 more...

*[ACCLAIM] has made us more aware that rural is a culture. As far as mathematics education is concerned, you need to address that culture along with the math. Math is not this universal science taught in a universal way: you need to look at those who receive it and make it work where they are. It is not dumbing-down the curriculum, it is not making it different. It is just making a difference, and making it more relevant. ... It is making it work.*





...and one from a co-PI

*There is only one person on the MT that had ever written a word about rural prior to ACCLAIM, and [that person] had never used a math word. It certainly took me to a place that I had never, ever been. Even though I grew up in a very rural place, I really never ever thought about it until this stuff got put on the table. That was critical.*

## Faculty weigh in on the doctoral students

- *I was really impressed, and you could just tell that these were people coming into their own intellectually. They've never had the opportunity to think so broadly and deeply about these kinds of issues, and I think they will be great spokespersons.*
- *I think they are a better caliber than the last bunch of students that I taught. They write better and they seem to be able to suspend disbelief about their own correctness, disbelief about their own certainty. The class [I taught] was probably the high point of my teaching career, and I hope I don't have to teach again, because I don't want to lose that feeling.*

last faculty comment about the doctoral students...

*My biggest impression of them is they are very dedicated. I think they are very capable and strong mathematically... All of them are gaining from the rural aspect that probably none of them have experienced before. The students bring a level of teaching experience too, and one of the things about having these place-based type programs where people can stay put, is that they have been in a place – maybe for a long time – with this goal [of getting a doctorate], and they have been leaders. They have done a lot of good work in trying to lead education in the area that they are in, but they haven't had a means of getting this degree [until now].*

ok, one more - this one from an "impartial outsider" ...

*I don't think many other people are [preparing indigenous leaders]. [ACCLAIM is] fostering the creation of leaders in regions where they work, leaders that are well-prepared to do scholarly work as well as professional development. ...It seems to me that the way they have planned things, the way they have connected their students with mathematicians and with researchers that are not related to ACCLAIM and are doing other kinds of work, they have been carefully providing experiences that would help their graduate students, and maybe the faculty working with them, to be better-prepared to be leaders in the kind of work that they do.*

# Building Faculty Capacity

- ACCLAIM drew the attention of 5 institutions and participation of senior faculty
- Faculty reported that their participation in the Center was professionally valuable
- Some reported research and teaching interests were influenced and improved by their participation in ACCLAIM

## Some comments about the value to faculty of participating in ACCLAIM

- *I get to shape a research agenda and to talk to people who are interested in doing that, and we are not overly concerned about offending anybody... In that sense it is intellectually, professionally and emotionally satisfying.*
- *I am just so much more fulfilled and happier because of ACCLAIM than I would be otherwise, and I am unequivocal about that. And there are other things, too, like the PI meetings. I have built ties with...top people in the field. ACCLAIM has had that added value for me... We have interacted with a host of marvelous people. So my professional experience has been so much richer. I am pleased to know all of the cohort people and I am impressed with them. ...That has been a joy. It has been very fulfilling and a greatly widening experience for me. That is very genuine.*



# The ACCLAIM Research Initiative

- CLTS were NOT funded to do research, but expected to
- Most Centers relied on faculty to continue or build on existing research programs
- ACCLAIM took a different path and funded its own research, commissioned papers, created and maintained a website, and held symposia
- Challenge: Establish, with empirical evidence and theoretical arguments, that the rural context matters in math teaching and learning

# Creating and Sharing Knowledge

Research Products (partial list): Rural Mathematics Educator (7 Volumes), working papers (38), occasional papers (14), monographs (4), peer reviewed articles from this work (18), dissertations (9 - so far!)

Research Symposia: Experts in math, math ed, teacher ed, rural ed, rural sociology, and ACCLAIM doctoral students convene to share and discuss issues facing the domain of rural mathematics education.



## Comment from “impartial outsider” on the ACCLAIM research effort:

*I am not aware of other groups that are working on rural education [in mathematics]. I think there is research done by [individual] people, but not with this coherence. They share a lot of not only the willingness to do this kind of work, but also the willingness to set an agenda and set some structure to future research in this area. In that sense, I think that work will be conducive to create some leadership in this particular area. I don't see anyone else is doing that, with that seriousness.*

# Comments on the Symposia

- *I learned a great deal from the research symposia and the people that I would not have heard at AMTE or NCTM. It brought a new dimension to my thinking.*
- *I have a lot of respect for what they are trying to do and the depth of the convictions with which they are doing it. I was incredibly impressed with how [the last symposium] was organized [and implemented]... My experience is that it is very, very difficult to orchestrate things with that many players over a short period of time, and to bring in various voices and give the students a chance to do this. To me, it was incredibly well done.*

# Reflections on the Research Initiative

The ACCLAIM research initiative succeeded on many fronts:

- Productive! Generated and shared new knowledge;
- Helped begin to define the domain of rural mathematics education;
- Acted as a focal point for the intersection of different disciplines and perspectives

\*\*Doctoral students were working practitioners – they brought with them a grounded sense of the issues, needs, and interesting questions about teaching math in rural settings. Brought imp't dimension to the research.



And...

All of these and other Center activities would not have been possible without the leadership from the ACCLAIM management team and the dedicated scholars who led the research initiative!

# FINAL THOUGHTS

*This Center had power to compel unexpected and unanticipated action.*

*-Center co-PI*



## Flexibility and Frugality - the secret weapons!

ACCLAIM was flexible and frugal with the budget, sharing a mindset that they would fund work that was good for the Center.

*This group wasn't into the money. Our discussions were around what do we want to do. ... I don't know how you can do that without having the flexibility of moving your budget around. . . . We spent a lot of time setting goals and setting priorities.*

# Investment in Human Capital

- ACCLAIM created the foundation of an improvement infrastructure for mathematics education in rural Appalachia. It is prepared for future investment.
- Key piece of infrastructure is human capital: Doctoral program, Leadership Institute, AAMTE, PDTs, Research Symposia – all developed the skills and knowledge of a group of people now positioned to continue work in the region.

# Patience & Persistence

- Only had five years of NSF funds to create and run the Center
- Results at the most distal end – improved math education in Appalachia – will take persistence, time, and further investment
- The foundation has been created – build on it!
- Stay the course, you are doing great work!