



MINORITY STUDENT ACHIEVEMENT NETWORK

Notes from the Math Mini-Conference  
Cleveland Heights, Ohio  
May 2, 2008

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***“What we learned about One Algebra – The Gateway to Higher Levels of Math...”***

**Keynote: Evanston’s Journey**

- The mini-conference showcased the work and journey of Evanston Township HS.
- The keynote began with an exploration of ETHS data trends. ETHS has begun to see quantitative evidence of supporting students through the One Algebra gateway, on to higher level mathematics.
- The presenters shared their process for change, that resulted in a shared understanding and commitment for the following:
  - An exploration and consideration of changes they found to be necessary within their Department and One Algebra Course (i.e.: Articulation with Middle Schools, timely intervention, common goals and objectives, identification of best practices, preconceived notions about math ability and intelligence, etc.)
  - This brought them to focused SMART goals.
  - They went on to speak about the curricular, instructional, additional supports for students that were enacted to align with their goals.
  - Critical to their work was a clear purpose and use of PLC’s. They went on to share about the role of PLC’s at ETHS.
    - *This section showcased their instructional alignment, department commitments and beliefs about high quality teaching and learning, common One Algebra syllabus and their use of Agile Mind.*
  - Next, they demonstrated some of the activities that are taught as part of the ETHS Algebra Allies program (which is the Academic Youth Development component where students are taught about topics such as beliefs about intelligence and attribution theory).
  - Finally, they spoke, again, about their beliefs related to intelligence and attribution theory. This is now a part of the Studying Skillful Teaching course that is taught to all teachers at ETHS and whose strategies they monitor in practice.
- ETHS modeled effective leadership, communication practices that were both inclusive and engaged everyone in collective inquiry.

## General Observations

- We discovered that all attending districts within the MSAN network are engaged in a discovery of best practice and research related to One Algebra.
- All attending districts have identified, to varying degrees, the following: core strategies, reform curriculum, pyramids of support and intervention frameworks and course pathways. These course pathways are meant to be communicated to parents and students prior to HS enrollment.
- All attending districts are engaged in vertical articulation work with their middle and elementary levels.
- Most are working to meet a District goal of ensuring success in Algebra I by the freshman year.
- All attending districts are experiencing more minority enrollment in One Algebra.
- All attending districts are experiencing differences related to race and socioeconomic status, of those involved in One Algebra vs. higher levels of mathematics.
- All districts are attempting to provide in-house or job-embedded professional development. To date, the PLC format is finding the greatest success (vs. One-time PD). Yet, there is a widespread feeling that technology networking could further enhance this format.
- Districts expressed the following challenges and/or questions:
  - Limited and inconsistent research about how to best address the achievement gap
  - Lack of common secondary formative assessments
  - Lack of creativity in scheduling... some daily schedules do not allow enough time for teachers to collaborate and there is lack (in some districts) of the information technology to allow students to be identified and tracked properly in order to meet benchmarks for college readiness related to math (Taking a Proactive vs. Reactive approach).
  - Greater examples of 'constructivist learning' are needed. Most districts have very experienced staff in the Math Department
  - Finding creative formats to implement the needed instructional work is limited
  - What improvement models best achieve consistency in instructional practice across schools, within buildings and across a district?
  - Districts reminded themselves of the need to set, celebrate and monitor incremental goals.

## Maximizing the potential of the MSAN Network

**Essential Question:** What ‘next steps’ would you like to see the MSAN Network take?

The following suggestions were made by those in attendance...

- Teachers would like to become more knowledgeable about proven strategies and to have them categorized by: race, gender, course level or age (i.e.: Is there research on algebra achievement and girls?)
- Teachers would like to see an examples of how MSAN District’s have aligned their ‘Pyramids of Support’ for Algebra I
- Teachers are hopeful that we can video tape best practice related to the Agile Mind use (for PLC discussions)
- Teachers suggested that they would appreciate a discussion regarding African-American student success specifically – with best practice data to back it up
- There is an interest in discovering what MSAN Districts have done to align their curriculum and supports from level to level (i.e.: Elementary – Middle – HS)
- Teachers are interested in how we can best use technology to create a ‘virtual network of best practice’ (i.e.: “Can we find a way to share via web site, etc. what teachers are doing in the classroom that seems to work?”)
- Teachers want the next work to explore a schedule site visits in conjunction with mini-conference gatherings (i.e.: “we want to see best practice in action”)
- Incorporate the importance of the position of the teacher in the students’ hearts
- Teachers are interested in a dialogue on creative scheduling to learn more about how other districts are providing more time for math
- Host an Instructional Coaches Academy for Math or the STEM content areas

**‘Big Ideas’ that resulted from this MSAN gathering (direct quotes from exit slips):**

- “More work is needed!”
- “There needs to be more frank and consistent discussions about the achievement of minority kids.”
- “How can we continue to follow up, i.e., collect data, on what Evanston is learning and how successful we have been in using some of their strategies? After all, we are a research/practitioner network!”
- “I would have liked to see some data on Evanston’s success with minority students as reflected in their standardized test scores--if in 2004 only 25.2% of their black students were passing One Algebra.”
- “We’d like to see specific data that provides concrete reasons why we should investigate AYD, new scheduling approaches, etc.”
- “What can the network share about ways to involve and engage parents?”
- “ We must motivate students to think about success and intelligence; that teaching math must be more practical & conceptual; using Agile may improve confidence, motivation and performance”
- “Agile Mind has potential for use in our school. We need to do something if other schools are having 60% of their geometry classes made up of freshman. I want to use AYD – need to sell it to my peers!”

- “After seeing all the things that Evanston has done – I think my district is in desperate need of curriculum reform. I like the way Evanston did it with the committee. I also think that we need to look further into possibly adopting AM and AYD”
- “Get smarter” – students need to learn that they can become smarter.
- “I love brain theory and am inspired to show animation on the topic.”
- “I’d love to know more about the entity theory vs. incremental theory.”
- “More time should be spent discussing learning itself with students and helping them realize that they can be successful.”
- “Creative scheduling; the power of encouragement.”
- “More time needed in 9<sup>th</sup> grade algebra; curriculum committee needed; love the idea of scope and sequence on-line; like upping the amount of algebra in geometry.”
- “I need to change my language for the students.”
- “I plan to research and utilize Agile Mind site; I’d like to incorporate academic youth development into my lessons.”
- “I appreciate ideas and modeling related to a more interactive classroom; more time for math.”

**MSAN MATH MINI-CONFERENCE:  
SUPPORTING THE SUCCESS OF ALL STUDENTS THROUGH ALGEBRA INTERVENTIONS**

May 8, 2008

Agenda

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| 8:00-8:30 am    | Coffee and pastries   |
| 8:30-8:45 am    | Welcome<br>Deb Delisle, Superintendent, CHUH High School<br>Darcel Williams, Principal, CHUH High School  |
| 8:45-9:00 am    | Introductions and Processing Partners - Laura Cooper,<br>Assistant Superintendent for Curriculum and Instruction, ETHS  |
| 9:00 am         | The ETHS Algebra 1 Journey, - Gena Brelia, Mathematics Chair, ETHS <ul style="list-style-type: none"><li>• Background &amp; History of Change*</li><li>• The Algebra 1 Curriculum</li><li>• Agile Mind Lessons** - Margaret Petrof*, Math Teacher, ETHS</li><li>• Scheduling, Teacher Collaboration and Student Supports</li><li>• Scheduling</li><li>• Hopeful Results and a new idea*</li></ul> |
| 10:15-10:30 am  | Break   |
| 10:30-11:45 am  | Addressing the Social & Emotional Factors to Math Success - Laura Cooper <ul style="list-style-type: none"><li>• Teacher Observations and <u>Studying Skillful Teaching</u></li><li>• Lesson #1: Beliefs about Intelligence**</li><li>• Lesson #2: Attribution Theory and Retraining**</li></ul>  |
| 11:45-12:45 pm  | Lunch and Informal Discussion   |
| 12:45-1:15 pm   | Creating Academic Youth Development Program - Laura Cooper <ul style="list-style-type: none"><li>• A short and unusual history</li></ul>  |
| 1:15-2:45 pm    | Experiencing Academic Youth Development - Margaret Petrof <ul style="list-style-type: none"><li>• The elements of the program</li><li>• Experiencing Lessons:**<ul style="list-style-type: none"><li>-Getting Smarter</li><li>-Attributions</li></ul></li><li>• Connecting social and emotional with problem solving</li><li>• Hopeful results*</li></ul>   |
| 2:45-3:15 pm    | Questions and Discussion  |
| 3:15 pm-3:30 pm | Closure <ul style="list-style-type: none"><li>▪ Evaluation and feedback</li><li>▪ Closing Comments</li></ul>  |

\*\*Interactive

\*We will pause at this point to process this topic.