

January 2009



NEWSLETTER

Kentucky Council of teachers of Mathematics

Message from the President

Happy New Year! For many, the beginning of a new year is a time to reflect on the past year as well as anticipate the upcoming year. As the new KCTM president, I look back on 2008 with pride and I look forward to 2009 with anticipation. In 2008, KCTM had another wonderful year highlighted by the KCTM Annual Conference in Louisville, Kentucky. I would like to highlight some of KCTM's accomplishments during 2008.

- A new website was developed. Visit www.kctm.org to see for yourself!
- Online conference registration was available. We appreciate all of you who used our new online system.
- Approximately 100 speakers held sessions at the 2008 annual conference.
- There were approximately 500 conference attendees.
- There were over 200 responses to our online conference evaluation. We have read your comments and they will help us to make the 2009 conference even better.
- KCTM received several donations from your NCTM membership renewals. Thanks for supporting us! (When you renew your NCTM membership, you are now given an option for part of your membership fees to go to support a local affiliate.)
- KCTM awarded three teacher support grants to Kentucky mathematics teachers. Learn more about how you can apply by visiting our website.
- KCTM welcomed the Kentucky Center for Mathematics as an affiliate.

Our officer elections were held online. Thank you for your participation in the election process. We welcomed the following officers to the KCTM executive board and committees:

Kari Ostby is the newly elected President-Elect.

Carlene Kirkpatrick is the newly elected High School Vice-President.

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Message from the President, contd.

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Jamie-Marie Wilder is the newly elected Middle School Vice-President.

Susan Collins was re-elected Secretary.

Martha Ferguson will be the new Newsletter Editor.

Emily Butler will be our new Products Chair.

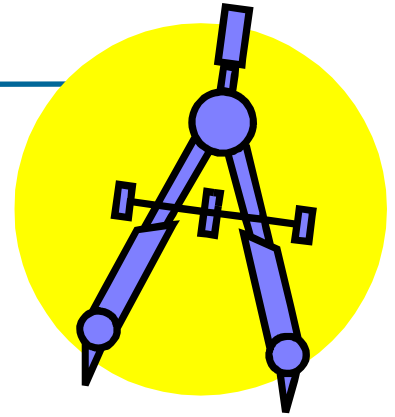
Margaret Mohr will be joining us as the BBCTM Affiliate representative.

In 2009, I anticipate that KCTM's momentum will continue to grow and we will see KCTM continue to flourish. The KCTM board is dedicated to improving member benefits. We welcome any suggestions from you regarding what we can do as an organization to help mathematics educators in Kentucky. Please send your suggestions, no matter how big or small, to me at noblittb@nku.edu. I would love to hear how we can improve our conference and how we can better serve our membership during the rest of the year! I look forward to hearing from you.

Finally, I would like to thank Maggie McGatha for her service as president of KCTM for the past two years. Her hard work and dedication to KCTM has been outstanding! The KCTM annual conferences under Maggie's leadership have been very successful. KCTM has grown in membership and activity under her presidency. I hope that I can serve KCTM as dutifully as she has. I will certainly try. Thanks, Maggie.

Sincerely,

Bethany Noblitt
KCTM President



KCTM 2009 Annual Conference Update

Once again, THANK YOU BALLARD HIGH SCHOOL for hosting this year's KCTM annual conference! And thank you to ALL 200 of you who replied to the survey regarding the conference. The board has read them all and will use them to help plan and carry out all future conferences - as best as we can.

We are currently planning next year's conference for Saturday, October 10, 2009. We have finalized the location to be at Bourbon County High School. This is only about 15 minutes outside of Lexington. The high school can be found just 1 turn off of Interstate 64. You will enjoy a beautiful drive down Paris Pike. The school has a great facility to host our conference and the entire staff is very excited about hosting. KCTM thanks them for their willingness to have us and we look forward to working with them throughout this next year.

One new change for next year's conference is that the MESA Banquet has been renamed by the board to be "The KCTM Conference Awards Banquet". The change is due to the exciting situation that MANY awards besides the MESA Award are now being given at this banquet. It just seemed appropriate to name it accordingly. We will continue to celebrate all of the wonderful accomplishments of all!

Check our website for updates: www.kctm.org. We hope to see you there.

Kari Ostby
KCTM President-Elect

Been to the NCTM National Conference Lately?



This year the annual conference is at Walter E. Washington Convention Center in Washington, DC on April 22-25. Learn from over 800 sessions, network with teachers from around the world, and explore the NCTM exhibit hall. Equity: All means ALL is this year's theme.

The following topics will be covered at the NCTM Annual Meeting and Exposition:

Algebra-Algebraic Thinking, Patterns, Functions

Assessment-High-Stakes Testing, Instructional Strategies, Classroom and Large-Scale Assessment, Formal and Informal Questioning, Policy Decisions, and Program Evaluation

Calculus & Discrete Mathematics-Calculus, Pre-calculus, Discrete Mathematics, Symbolic Logic, Sets or Set Theory, and Graph Theory

Communication, Connections, & Representation-Communications, Connections, History, Literature, Mathematics Applications, Integrated Mathematics, and Modeling

Data Analysis & Probability-Data Analysis, Probability

Equity & Diversity Issues-Equity, Diversity, Alternative Schools, Funding, Multilingual, Special Needs, Gifted, Community Relations, State and Federal Legislation, Outreach and Advocacy, and Accountability

Geometry & Measurement-Geometry, Measurement, Trigonometry, Patterns, and Functions

Hot Topic-Mathematics Education Contributing to Economic Competitiveness

Number & Operations-Number, Number Sense, Operations, Computation, Estimation

Problem Solving, Reasoning & Proof-Problem Solving, Reasoning and Proof, and Critical Thinking

Professional Development-Certification, International Perspectives, Analysis of Student's Work, Coaching, Alternative Certification, and Instructional Strategies

Research-Connecting Research and Practice, Classroom Research by Teachers, Research Insights

Technology-Using Calculators and Computers as a Tool

Take advantage of resources provided for teachers on the NCTM website:

NCTM offers a comprehensive and diverse array of professional development opportunities. In addition to the activities and lessons available at Illuminations, NCTM offers the following professional development resources:

- E-Workshops, online events led by grade band experts
- Regional Conferences and the NCTM Annual Meeting and Exposition
- Figure This! Math Challenge for Families, a site with puzzles and problems for kids and parents
- Reflections, a video-based professional development site where teachers can examine their practice
- Journals
- Teaching Children Mathematics (TCM) - a monthly journal for elementary teachers
- Mathematics Teaching in the Middle School (MTMS) - a monthly journal for middle school teachers
- Mathematics Teacher (MT) - a monthly journal for high school teachers
- ON-Math - a peer-reviewed school journal designed exclusively for the electronic medium
- Journal for Research in Math Education (JRME) - a research journal for math educators at all levels
- Catalog - a collection of books and other resources produced and distributed by NCTM

*Equity: ALL
means ALL*

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NCTM National Conference, contd.

- Principles and Standards for School Mathematics, a resource and guide to facilitate decisions affecting the math education of preK-12 students
- E-examples online activities to illuminate the Principles and Standards

Other benefits NCTM provides include:

A library of 100 online activities that help to make math come alive in the classroom

- A collection of 516 lessons for preK-12 math educators
- Learn about NCTM's Principles and Standards for School Mathematics
- Hundreds of exemplary online resources
- 724 links of math resources on the web
- And many other benefits!!!

And don't forget when renewing your NCTM membership to note your membership with KCTM—affiliate of NCTM. NCTM kicks back a percentage to KCTM, which helps us provide more resources and especially helps with conference expenses. Thank you!

Kari Ostby
KCTM President-Elect

The Lexington Council of Teachers of Math will host a textbook showcase at Paul L Dunbar High School on Thursday, January 22 from 4:00 – 6:30. All are welcome to attend. Just show up! LCTM will also host their “Math Madness” PD sessions on Wednesday, February 25, at 4:00 p.m. at Tates Creek High School in Lexington. Sessions for K-12 will be included. Contact us for more information!

Conferences and Workshops

February 2009

The Association of Mathematics Teacher Educators (AMTE) Thirteenth Annual Conference is scheduled for February 5 - 7, 2009 at the Orlando Airport Marriott Hotel in Orlando, Florida. Additional information is available online at http://www.amte.net/conf_index_2009.shtml. (College)

The Teachers Development Group 2009 Leadership Seminar on Mathematics Professional Development, February 11-14, 2009, at the Sheraton Portland Airport Hotel in Portland, Oregon. This annual event provides a forum for educators from across the nation to think deeply and dialogue about key issues related to mathematics learning, teaching, and leadership. Participants are individuals who facilitate, design, research, and/or organize mathematics professional development and typically include a well-balanced mix of mathematics teacher leaders, coaches, professional developers, school administrators, graduate students, and university mathematics educators and researchers. For additional information, please visit online at <http://www.teachersdg.org>.

March 2009

Society for Information Technology and Teacher Education International Conference (SITE 2009) is scheduled for March 2-6, 2009 @ the Embassy Suites Hotel/Convention Center in Charleston, South Carolina. This conference is organized by the Society for Information Technology and Teacher Education (SITE) (<http://site.ace.org/>) and the Association for the Advancement of Computing in Education (AACE)

(Continued on page 5)

Conferences and Workshops, contd.

(<http://www.ace.org/>). Additional information can be found online at <http://site.ace.org/conf/>. (College)

The Research Council on Mathematics Learning (RCML) seeks to stimulate, generate, coordinate, and disseminate research efforts designed to understand and/or influence factors that affect mathematics learning. RCML's 36th Annual Conference will be at Berry College in Rome, Georgia, March 5-7, 2009. RCML Speaker Proposal Form can be found at <http://www.unlv.edu/RCML>. (College)

The 35th annual Kentucky Mathematical Association of Two-Year Colleges (KYMATYC) conference will be held at Dale Hollow State Park on March 6-7, 2009. For additional information and/or for submitting a speaker proposal, please visit <http://ky.matyc.org/> (College)

TechEd 2009 is scheduled for March 22 - 25, 2009 at the Ontario Convention Center in Southern CA. Additional information can be found online at <http://www.TechEdEvents.org/>

2009 World Congress on Computer Science and Information Engineering (CSIE 2009) -- March 31 - April 2, 2009 in Los Angeles/Anaheim. Additional information can be found at their website: <http://world-research-institutes.org/conferences/CSIE/2009> (College)

April 2009

National Council of Teachers of Mathematics (NCTM) Annual Meeting and Exposition is scheduled for April 22-25, 2009 @ Washington, DC.

May 2009

The theme of the **2009 Dream Catching Conference** scheduled for May 3 - 6, 2009 in Winnipeg, MB is Connecting the Dots: Building a Pathway to Career Awareness through Excellence in Math and Science. For additional information, visit their website at <http://www.dream-catching.com/2009/Site/DC2009.html>.

The Eighth Annual Lesson Study Conference -- Building Our Professionalism through Lesson Study is scheduled for May 7 - 9, 2009 in Chicago, IL. The Chicago Lesson Study Group invites you to its eighth lesson study conference. For the last eight years, this conference has been one of the major lesson study conferences in the world, examining lesson study from a global perspective with speakers from Australia, Japan, Singapore and Hong Kong. As the practice of lesson study expands, we hope to have your input and contributions presented at the May 2009 conference. Please consider sharing your Lesson Study experiences with others at the conference. There will be several concurrent sessions available for presentations. Applications are due January 23, 2009. Contact Heather Brown at heather@lessonstudygroup.net for additional information.

June 2009

21st Annual Ethnographic & Qualitative Research Conference -- June 5 and 6, 2009. Hosted on the campus of Cedarville University in Cedarville, OH (near Dayton, OH). The call for papers and additional information can be found online at <http://www.cedarville.edu/academics/education/eqrc/index.htm>. (College)

The 2009 Informing Science + Information Technology Joint Conference (IⁿSITE) is scheduled for June 12-15, 2009 at Macon State College in Macon, GA. Information on the conference and submission of proposals can be found online at <http://informingscience.org/2009/index.htm>. (College)

ED-MEDIA 2009--World Conference on Educational Multimedia, Hypermedia & Telecommunications - June 22-26, 2009 @ Sheraton Waikiki Beach Resort in Honolulu, HI. Proposal submissions due Dec. 19, 2008. Additional information can be found at their website: <http://www.ace.org/conf/edmedia/call.htm>.

Conferences and Workshops, contd.

July 2009

The Ninth International Conference on Technology in Mathematics Teaching (ICTMT 9) will be in Metz, France July 4-8, 2009. Additional information about the conference, registration, and paper submissions can be found online at <http://www.ictmt9.org/>.

August 2009

13th Biennial European Association for Research on Learning and Instruction (EARLI) Conference -- August 25-29, 2009 in Amsterdam, The Netherlands. Additional information on the conference can be found online at <http://www.earli.org/>.

October 2009

The 2009 Association for Educational Communications and Technology (AECT) International Convention -- Integrative Approaches: Meeting Challenges is scheduled for October 27-31, 2009 @ the Galt House in Louisville, KY. The deadline to submit a proposal to speak is February 14, midnight (EST), 2009. Additional information on the conference and proposal submissions can be found online at <http://www.aect.org/default.asp>

NCTM Regional Conference for 2009 in Boston, MA (October 21 - 23, 2009) Please check the website at <http://www.nctm.org/conferences/> for additional information on the regional conferences.

2009 SSMA Convention -- October 22-24, 2009 @ Grand Sierra Resort (2500 East 2nd Street) in Reno, NV 89595; (800) 501-2651. For additional information, visit the website at <http://www.ssma.org/>

November 2009

NCTM Regional Conference for 2009 in Minneapolis, MN (November 4-6, 2009) Please check the website at <http://www.nctm.org/conferences/> for additional information on the regional conferences.

National Middle School Association (NMSA) - 36th Annual Conference and Exhibit will be in Indianapolis, IN on November 5 - 7, 2009. For information on the conference and/or to submit a proposal to speak, visit the website at <http://www.nmsa.org/> (Middle or High School)

NCTM Regional Conferences for 2009 in Nashville, TN (November 18-20, 2009) Please check the website at <http://www.nctm.org/conferences/> for additional information on the regional conferences.

Valeria Amburgey
KCTM Vice-President for College

Texas Instruments provides a wide variety of professional development opportunities for teachers of all levels. For information on workshops/conferences for your grade level, content area or geographic area, please visit the website at <http://education.ti.com/educationportal/sites/US/sectionHome/pd.html>.

From Blocks to Algebraic Functions: Patterning Can Move Students from Concrete to Abstract Algebraic Thought

My name is Jamie-Marie Wilder and I am honored to serve as Middle School Vice- President for the next term. This is my tenth year of teaching. I have taught at Lincoln County High School and currently am teaching at Lincoln County Middle School. I am at the point in my career where I am re-evaluating my teaching practices. Although I do want my students to do well on state testing, I also want to challenge my students. My wish is for my math students to leave my class with a greater understanding of how mathematics works around them daily. The question of my legacy was brought to the forefront of mind this weekend.

While Christmas shopping, I overheard a mother and her daughter talking. The daughter asked the mother if they could buy a gift basket for her math teacher. The mother coldly responded, “that teacher is not worth a gift basket.” Now I know that we as teachers are not out for the “gift basket”, but we would all like a little of appreciation for our hard work. I am sure that there are lots of reasons why this mother felt this way. However, I wondered what kind of math teacher this person is? Is it a math teacher that instructs students on algorithms or is it a math teacher that incorporates math that is taught in context? Perhaps I am not worthy of that “gift basket.” What if I tried to immerse this mother’s daughter into a world in which mathematics has meaning, and then perhaps the “gift basket” could be mine?

There are lots of natural fits for math to be taught in context. We can relate number computation to number lines, counters, and lots of problems with item prices from stores; we can relate geometry to art; and statistics to any sport known to man. However, how do we relate that abstract concept of algebra to our students?

I have been a part of the Math Leadership Support Network (MLSN) sponsored by PIMSER for the past four years. This cooperative from the University of Kentucky has pushed math teachers to get out of their comfort zone. This year’s focus is on teaching algebra in context. Most teachers see algebra as a bunch of variables and numbers. If you can convey the proper algorithms to your students, then they can understand algebra. The MLSN group is focusing on pushing students to discover patterns in the visual arrangements of items. Through the use of this patterning, we can introduce our students to the idea of rate of change or slope, variable and y-intercept. These concepts can come alive in a meaningful way, rather being stored in the brain as an arbitrary vocabulary word.

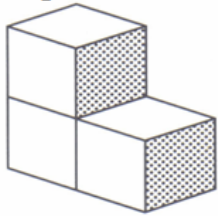
Lots of students can recognize patterns. From kindergarten on through elementary school, students have been exposed to visual patterns of shapes, colors, and blocks. However it seems that when a student enters the middle school or high school, we shift our focus away from one of the basic problem-solving strategies...patterning. This idea of patterning could greatly help students to make sense of such an abstract idea as algebra.

One of the first experiences that I provide for my students in algebra is using building blocks in order to build and manipulate patterns. Look at the example below that has been adapted from the book entitled, *Algebraic Thinking: First Experiences* by Linda Holden Charles and the Creative Publications:

From Blocks to Algebraic Functions, contd.

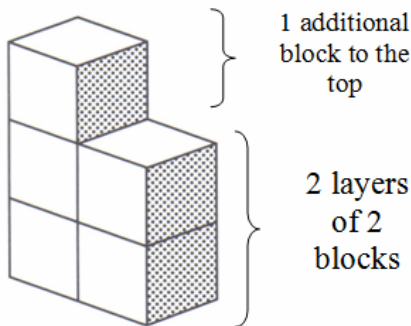
Patterns #9

Figure 1



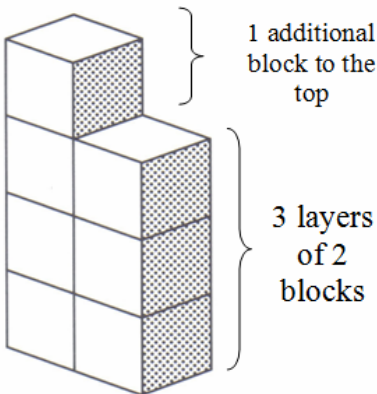
When working with this example, lead students to talk about the elements that make up this figure. How many layers does this figure possess? Can you relate the figure number to a layer of blocks? This would be a good time for students to write about how they would build this figure with their blocks.

Figure 2



From this point, start talking to students about how many total blocks is in this figure. Help them to see this is Figure 2, which has two layers of two blocks each with an additional one block on top. Lead the students to start creating a table of values that compares the figure number versus the total number of blocks used in that figure.

Figure 3



At this point, challenge the students to draw the fourth and fifth figures. If they can correctly draw the next figures, then they understand the pattern. You may have to help them communicate their patterning idea. Challenge students to tell you how many blocks will be in the 10th or 100th figure.

Most students at this point will be able to tell you that the 10th figure will have 10 rows of 2 and an additional one for $(10) \times 2 + 1 = 21$. Once a student can communicate this idea, they are ready to think about a function rule, thus $2n + 1$.

When I completed this activity with my students, I found that students could follow a visual pattern. They can talk to you about how to build the figure with layers building upon themselves. After a couple of examples, lots of students began trying to connect the figure number to some type of visual pattern within the figure itself. The most rewarding thing that came from this was the students were constructing their own meaning of rate of change and variable. I had a student tell me that the variable was the figure number because that value always varies. I had another student tell me that since he kept adding on a layer of two for each successive figure that this was the rate of change. I had never used that term in class, but he understood the concept! The teachable moments that patterning activities can provide for students studying algebra in both the middle school and high school are endless, but more importantly valuable to their understanding of the art of algebra itself.

From Blocks to Algebraic Functions, contd.

Below you will find more examples of patterning problems from the *Algebraic Thinking: First Experiences* that you can use in your classroom along with a lab sheet that I have developed for students to record their findings. The patterns we use are not just linear. There are patterns that are quadratic in nature too. We use all kinds of manipulatives to investigate these patterns. Students build figures with blocks, dots, shapes and several other materials. I do not know if this approach to algebra will garner me a “gift basket” this Christmas, but perhaps I can provide my students with the gift of patterning and critical thinking skills.

Patterns 6

Figure 1

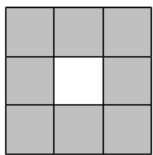


Figure 2

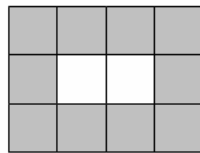
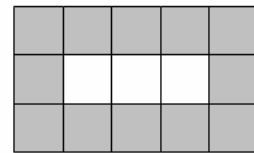


Figure 3



Patterns 7

Figure 1

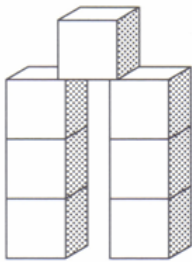


Figure 2

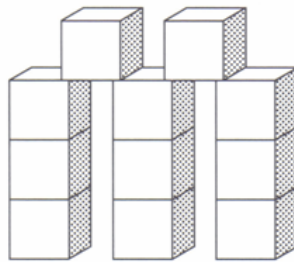
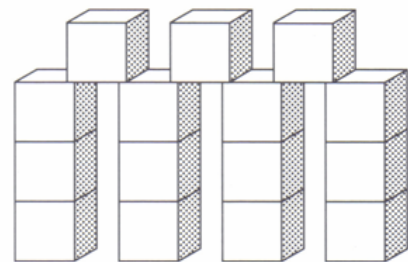


Figure 3



Patterns 12

Figure 1



Figure 2

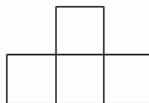
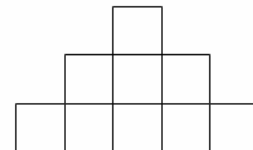


Figure 3



Patterns 13

Figure 1



Figure 2

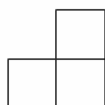
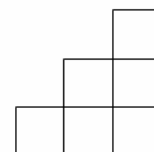


Figure 3



BLOCK PATTERNS LAB SHEET

This lab sheet is to be used with the Patterns lab series.

Directions: Write the pattern activity in the space provided. Then complete the table, draw the next two figures, and write a function rule.

PATTERN # _____

X	F(x)
1	
2	
3	
4	
5	
10	
100	

<div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;">4th Figure</div> <div style="border: 1px solid black; height: 150px;"></div>	<div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;">5th Figure</div> <div style="border: 1px solid black; height: 150px;"></div>
Describe the pattern (Write in sentences please!)	

F(x) = _____

PATTERN # _____

X	F(x)
1	
2	
3	
4	
5	
10	
100	

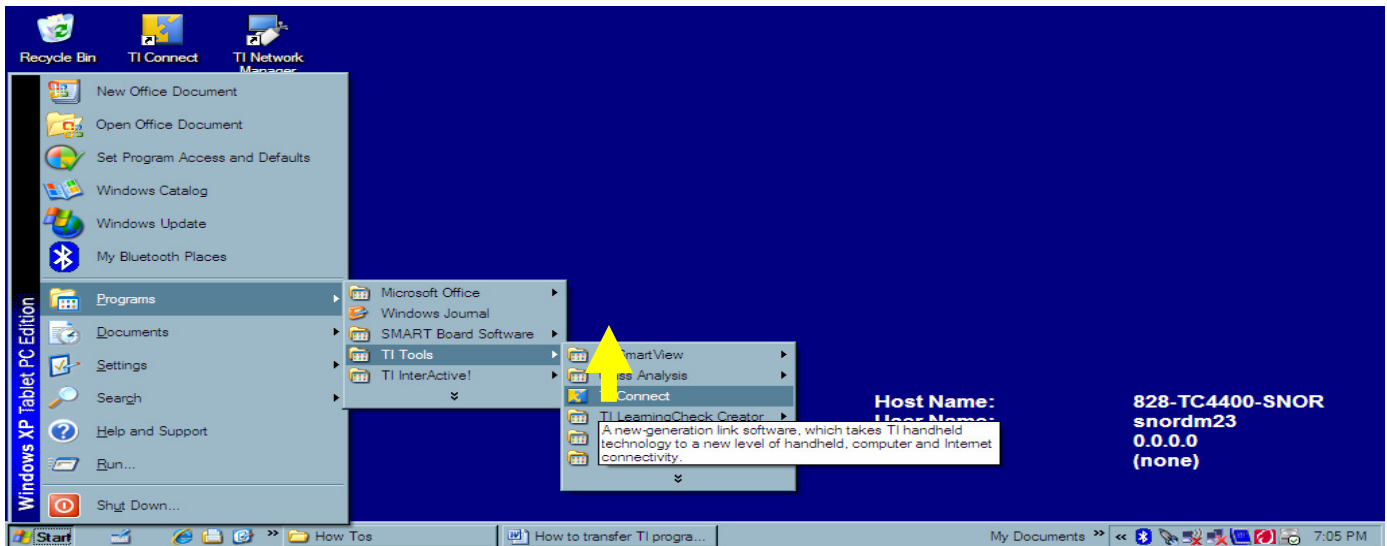
<div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;">4th Figure</div> <div style="border: 1px solid black; height: 150px;"></div>	<div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;">5th Figure</div> <div style="border: 1px solid black; height: 150px;"></div>
Describe the pattern (Write in sentences please!)	

F(x) = _____

How to transfer a Program OR Application from a TI- Graphing Calculator to TI-Smart-View

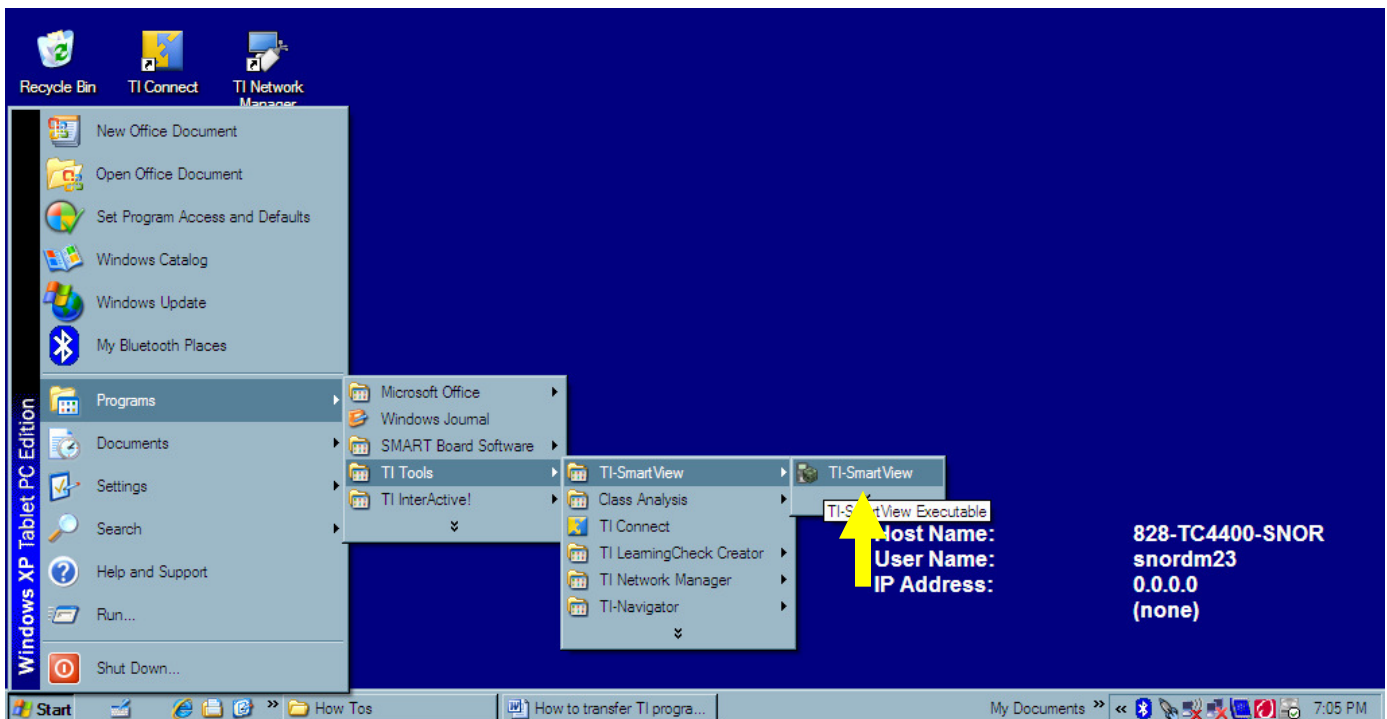
Developed by: Sarah Nordmann, JCPS Mathematics Resource Teacher

1) Click *Start@Programs@TI Tools@TIConnect* to open TI Connect



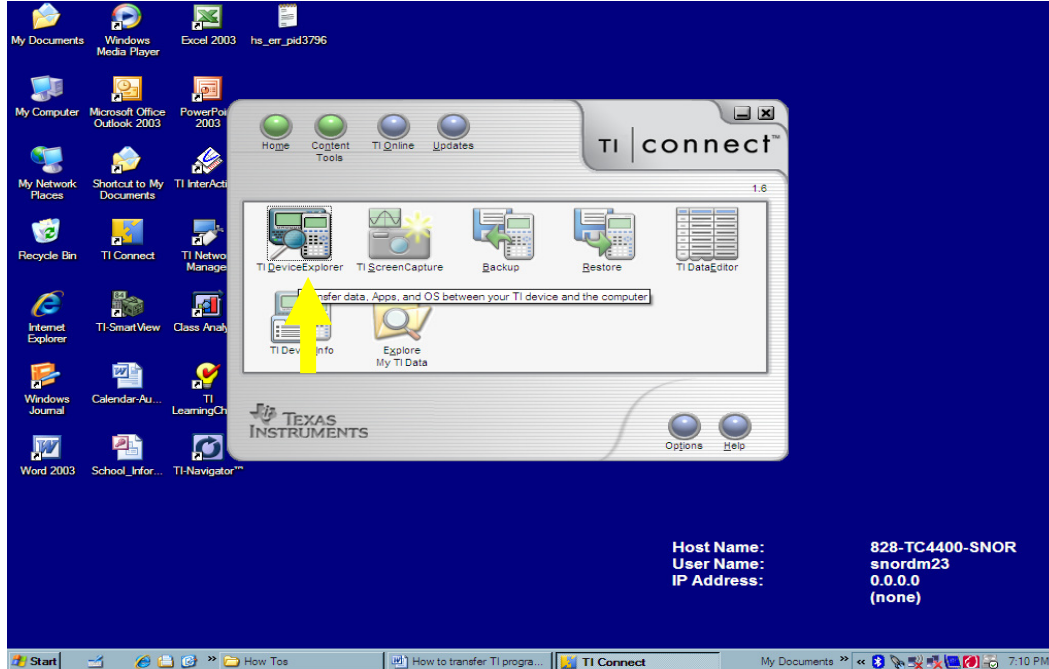
(If TI Connect is not loaded on your computer then download it onto your computer from the TI website before continuing with this process.)

2) Click *Start→Programs→TI Tools→ TI-SmartView→ TI-SmartView* to open TI SmartView

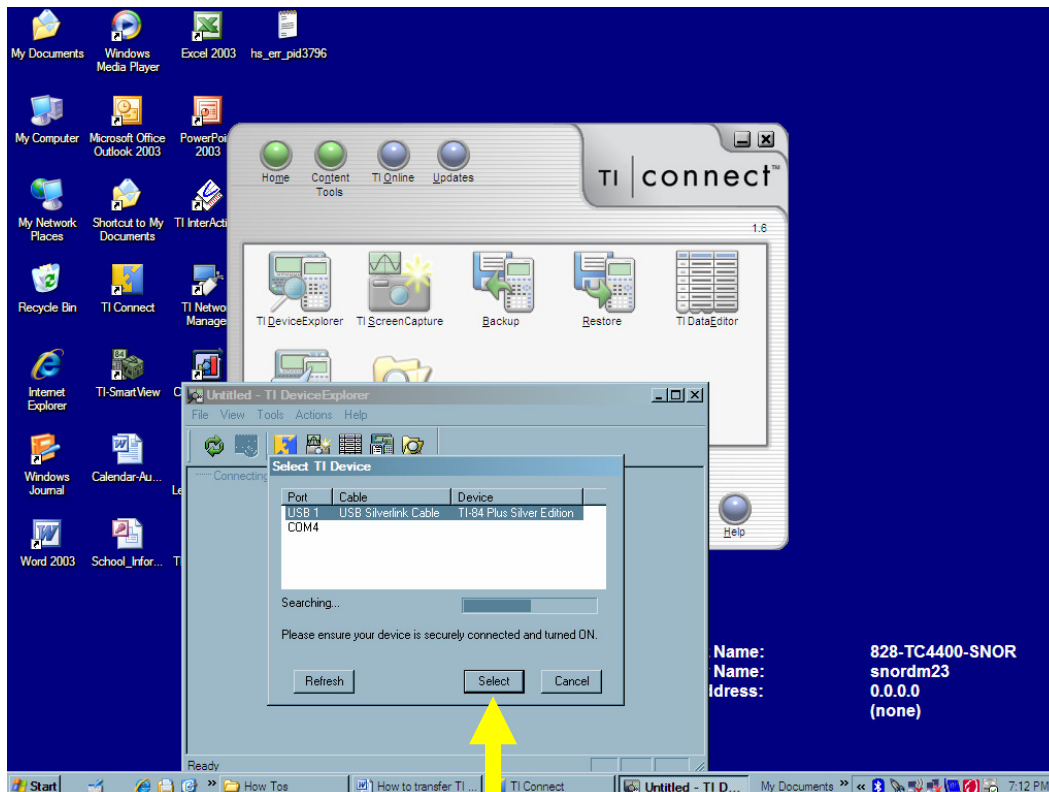


How to transfer a Program OR Application from a TI- Graphing Calculator to TI-Smart-View, contd.

- 3) Connect the hand held calculator to the computer with either a silver-link cable or a black USB cable. In TI Connect, click TI Device Explorer. TI Connect will search for your calculator.

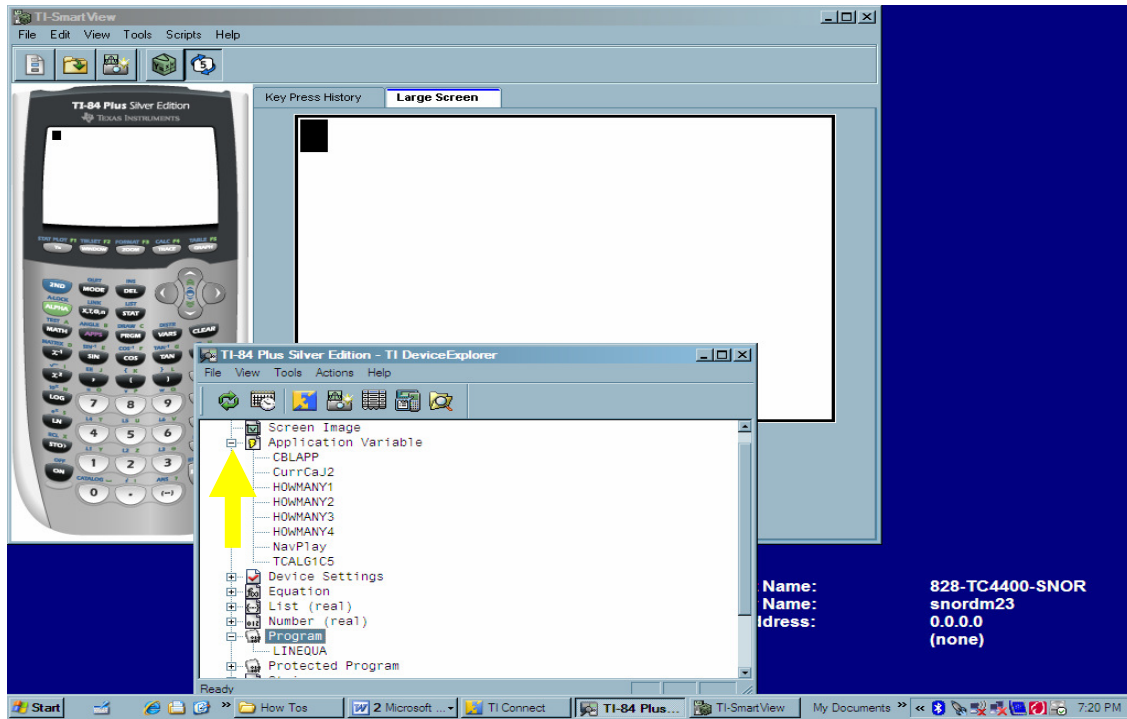


- 4) When TI Connect has found your calculator, the type of your calculator will appear in the Select TI Device window. Click *Select*. If your calculator is not found click *Refresh*. If it is not found after the second try then unplug the link cable from the current USB port, plug into another USB port on the computer, and click *Refresh*. (The USB port on the right side of the tablet PCs often does not allow the detection of the calculator so the use of the back and left ports are advised.)

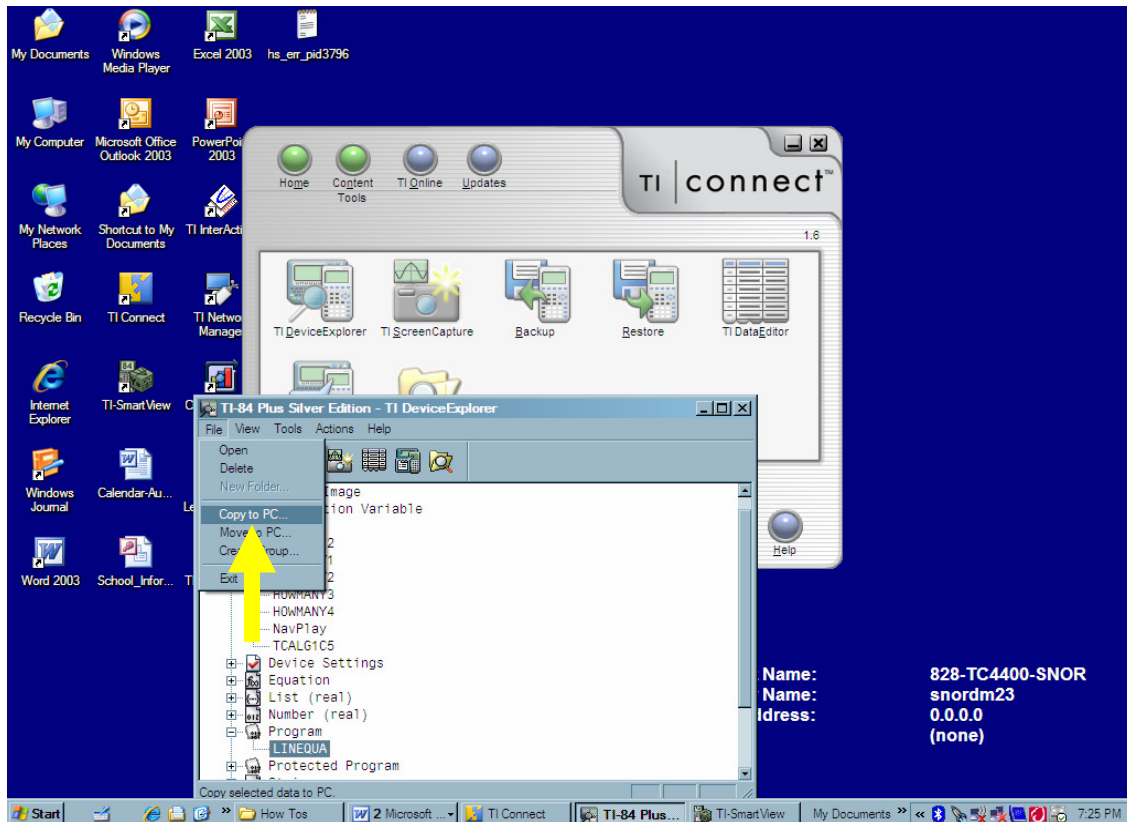


How to transfer a Program OR Application from a TI- Graphing Calculator to TI-Smart-View, contd.

- 5) Click the plus sign next to either *Application Variable* or *Program* to display the applications and/or programs on the calculator. There may be more than one *Application Variable* listed so it may be necessary to open multiple ones to find the desired application and/or program.

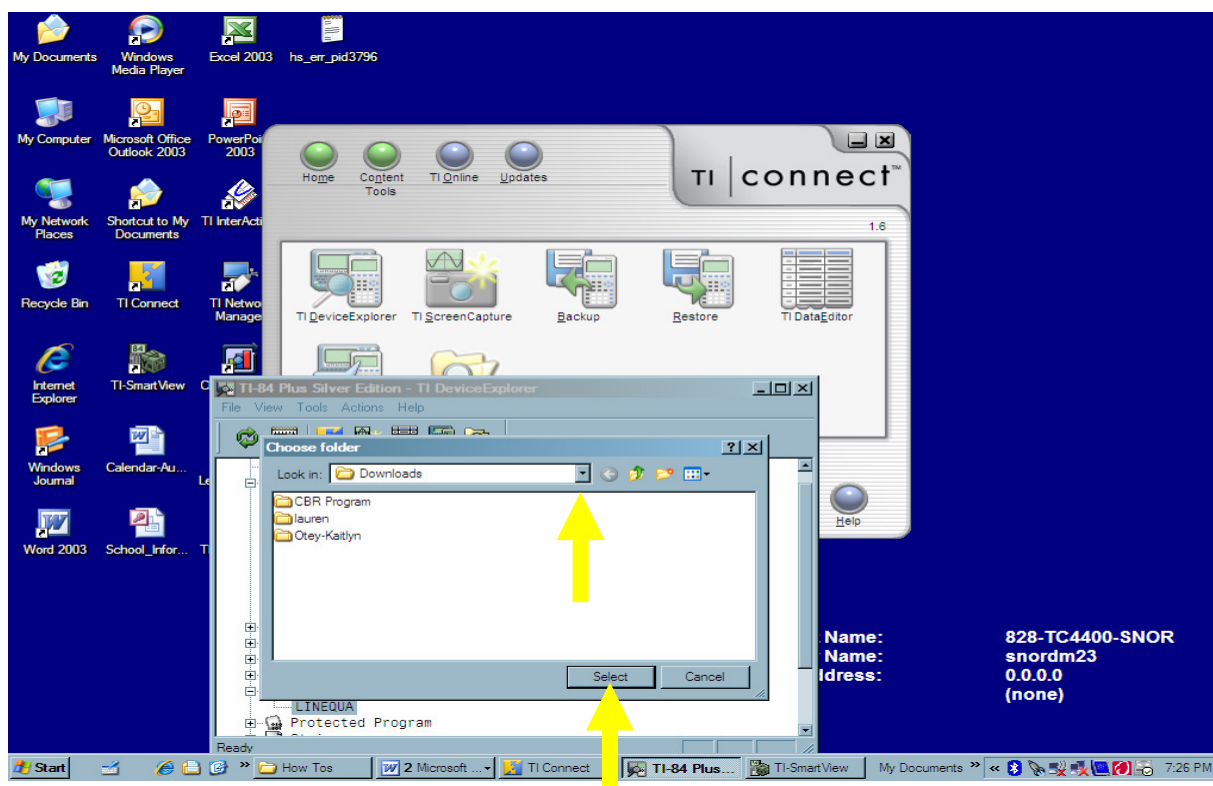


- 6) Click once on the desired application or program. Then click *File*→ *Copy to PC*

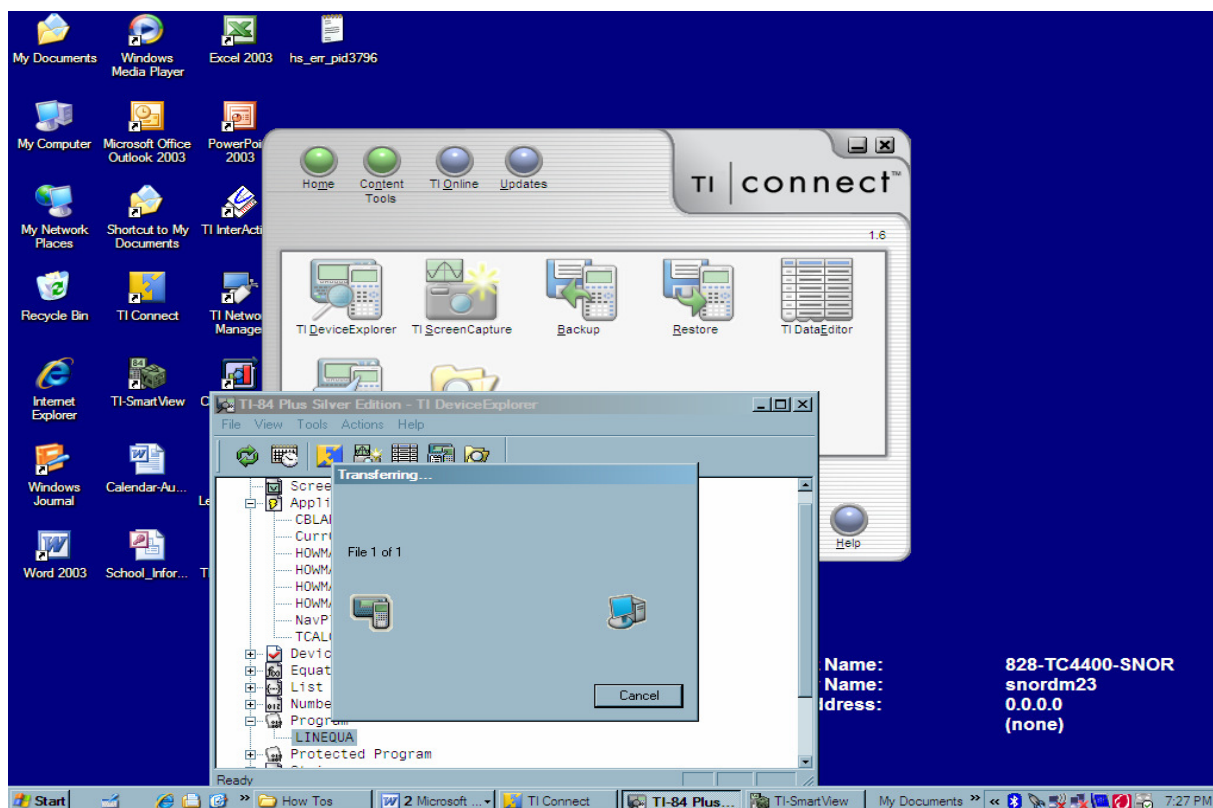


How to transfer a Program OR Application from a TI- Graphing Calculator to TI-Smart-View, contd.

7) Find the folder where the program is to be saved (it can be any folder) and click Select

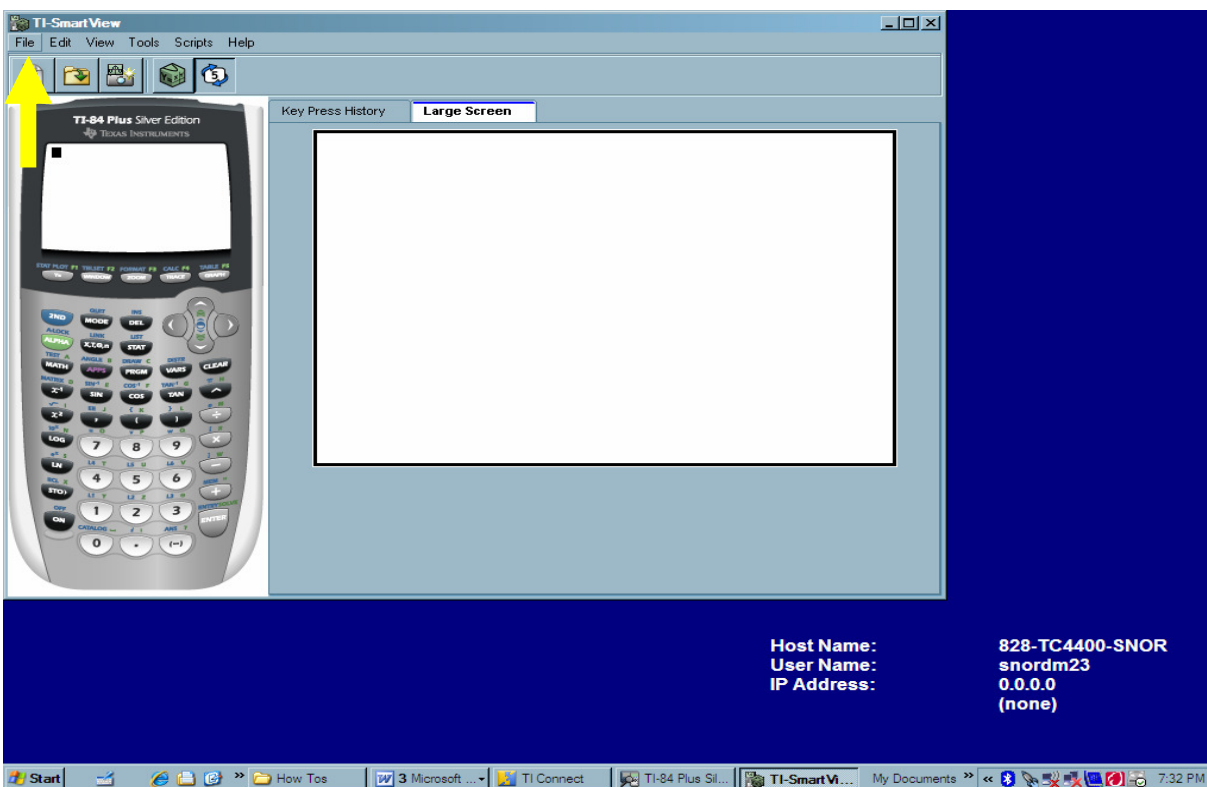


8) A transfer window will open and show that the program is being transferred.

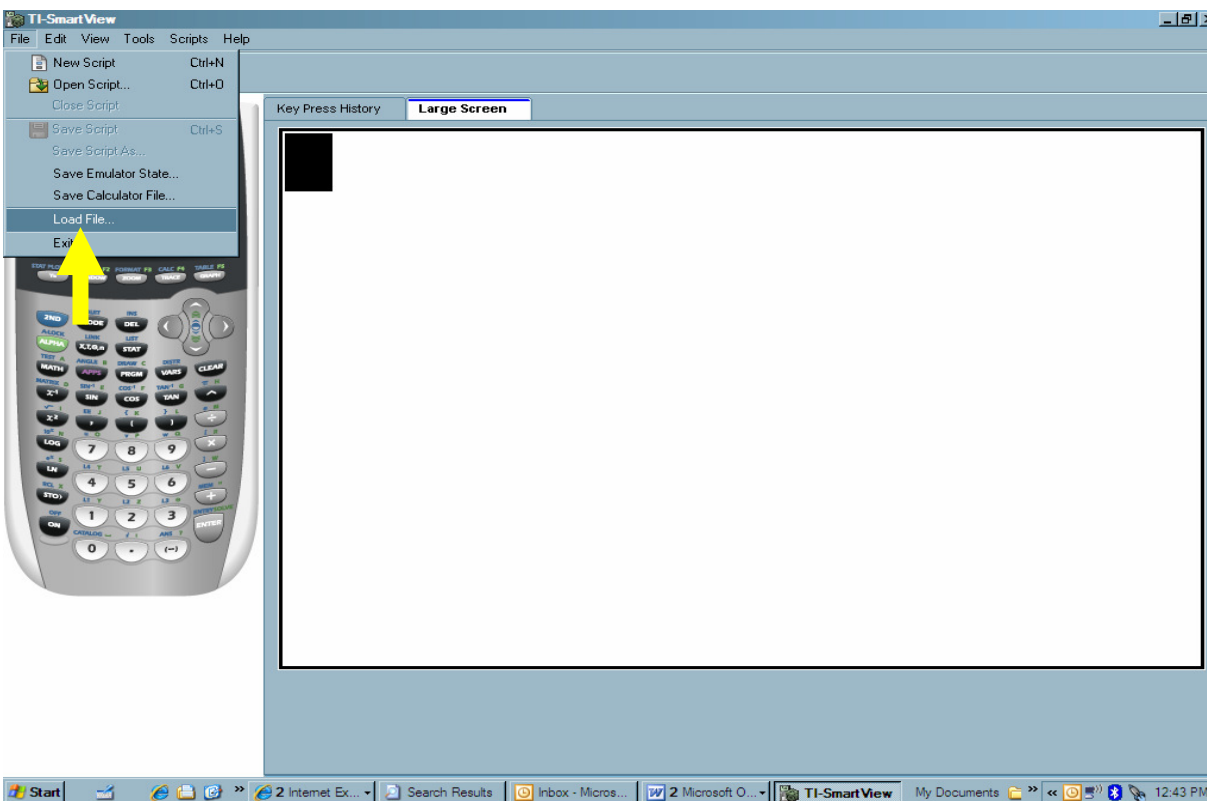


How to transfer a Program OR Application from a TI- Graphing Calculator to TI-Smart-View, contd.

9) Open TI SmartView on the bottom menu bar and then click File.

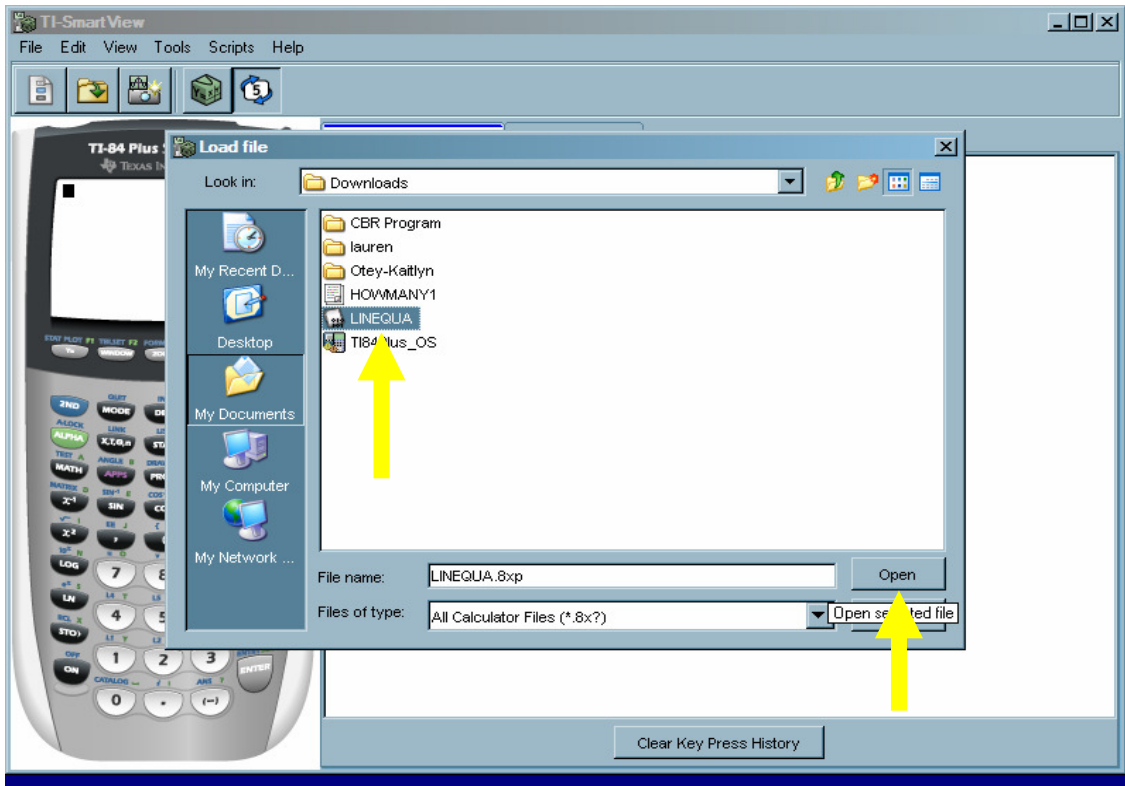


10) Click *Load File*.

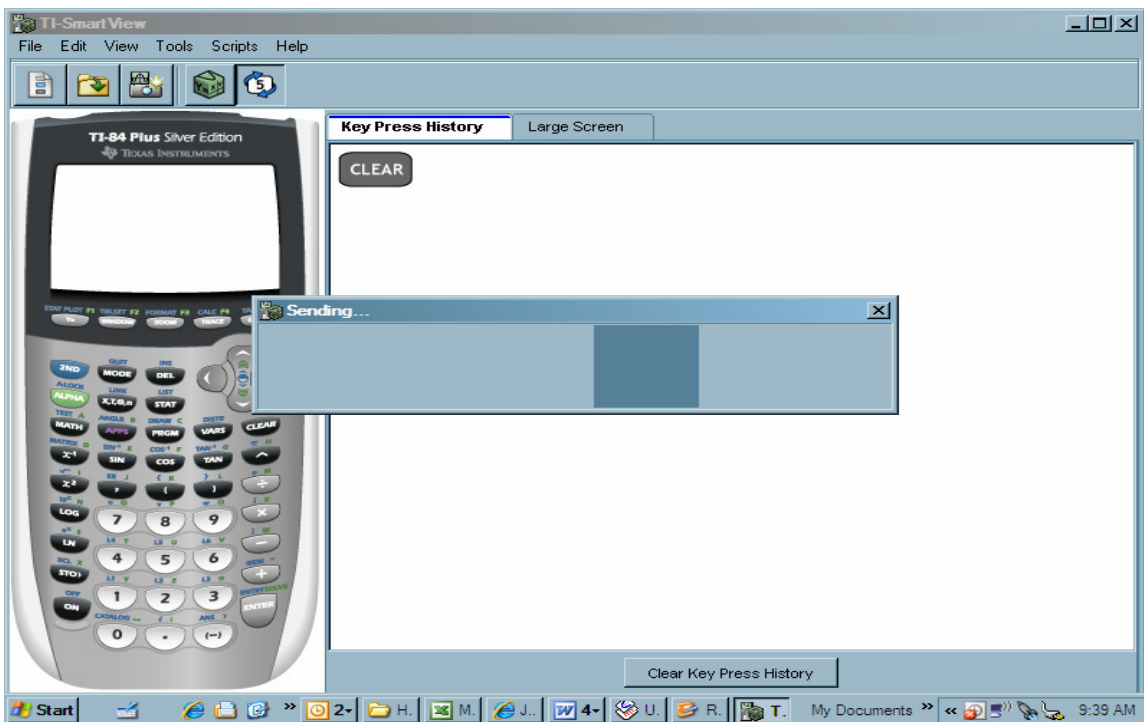


How to transfer a Program OR Application from a TI- Graphing Calculator to TI-Smart-View, contd.

- 11) In the Load File window, find the TI program file in the location where it was saved in step 7, click on it, and then click Open.



- 12) TI SmartView will open a dialogue box to show that the program is being sent.



- 13) Click Apps or Prgm on the TI SmartView keypad to determine if the application or program did transfer to TI SmartView.

KCTM Executive Board Meeting Minutes

November 15, 2008
Gheens Academy

Members Present:

Maggie McGatha	Beth Noblitt	Barb Jacobs	Susan Collins
Jamie-Marie Wilder	Carlene Kirkpatrick	Kari Ostby	Amy Herman
Martha Ferguson	Emily Butler	Bryson Perry	

Approval of August Minutes

Bryson made a motion to accept the minutes as presented. Beth seconded the motion. Motion passed.

Welcome to our new Board Members

Maggie thanked the outgoing officers for their service and welcomed the new officers.

Kari Ostby is the newly elected President-Elect.

Carlene Kirkpatrick is the newly elected High School Vice-President.

Jamie-Marie Wilder is the newly elected Middle School Vice-President.

Susan Collins was re-elected Secretary.

Beth Noblitt will be taking the helm as President.

Martha Ferguson will be replacing Kari Ostby as Newsletter Editor.

Emily Butler will be replacing Kathy Montgomery as Products Chair.

And Margaret Mohr will be joining us as the BBCTM Affiliate representative.

President's Report

Voting was on-line for the first time. Officer elections went smoothly with more than a 500% increase in the number of people voting in this year's election. The by-law changes were also voted for on-line and all proposed changes passed.

Barb made a motion to reimburse Karen Karp and Jane Jones \$45 each for their conference registration fee since they graciously assisted Emily at the KCTM products booth all day instead of attending sessions. Kari seconded the motion. Motion passed.

Bryson made a motion to pay Mike Waters and Beth Noblitt a stipend of \$300 each for their work in getting our new on-line system up and going. Kari seconded the motion. Motion passed. Maggie purchased a gavel to be used at the board meetings and a gift card for Susan (for getting the KCTM products from Lexington to Louisville.) Beth made a motion to reimburse Maggie for her purchases. Bryson seconded the motion. Motion passed.

Our tax exempt status had been revoked, but Maggie has been communicating with the IRS to get that reinstated. Our calendar year is currently July 1 to June 30, but forms have been filed to change that to Jan 1 to Dec 31. We will be required in the future to report to the IRS anyone that receives a stipend.

Laura Plante has requested affiliate status for the Kentucky Center for Mathematics. Barb made the motion. Kari seconded the motion. Motion passed.

Lori Durham (and all past presidents) should have a lifetime membership. We need to make sure our new system will recognize this. Perhaps we need to separate the conference fee and the membership fee. Currently Mike has to adjust the membership fees by hand. The suggestion was made to have a non-member and member price for conference registration and simply let non-members attend the conference at a higher price. Discussion followed, but no final decision was made.

(Continued on page 18)

The 2009 Board Meeting dates have been set and are as follow: Feb 21, May 30, Aug 15, and Nov 14.

2008 Conference Report – Beth

Close to 500 people attended the conference this year. A post conference survey was posted on-line. Beth shared 3 handouts with the board summarizing the results of the survey. In addition to completing the multiple choice questions, 42 attendees and 7 speakers wrote individual comments. Several people commented on a need for more High School sessions this year. Attendees were once again upset that the vendors left early. This seems to be an annual concern. Several comments asked for the conference not to be on Saturday. Offering more sessions with shorter time lengths was commented upon. Next year we may possibly offer attendees a choice between 1- 90 minute or 2 -40 minute sessions.

The on-site registration number was 46 this year. We need to consider letting the on-line system accept late registration at a higher fee to shorten the line on Saturday morning next year. A conference “cancellation with partial refund policy” also needs to be considered in the future.

2009 Conference Report – Kari

Mark Helton from Bourbon County contacted the board and has offered to host the 2009 conference. The board was pleased with Bourbon County’s interest, but was concerned with its close proximity to Lexington. We were hoping to move the conference to another area of the state since several recent conferences have been in the Louisville or Lexington area. Kari contacted our other affiliate groups throughout the state. The WKCTM affiliate group is interested in possibly hosting the 2010 conference in Bowling Green, but no other group responded with interest in hosting the 2009 conference. The board voted to have the 2009 conference in Bourbon County. If Bowling Green is selected as the 2010 conference location, the board would like for the Gatton Math and Science Academy at WKU to be spotlighted.

A motion was made by Bryson to change the name of the MESA banquet to “The KCTM Conference Awards Banquet”. Beth seconded the Motion. The motion passed.

Treasurer’s Report - Barb

Beginning balance \$11,144.77
Total Income \$29,926.14
Total Expenditures \$19,086.30
Ending Balance \$21,984.61

Barb shared a proposed budget for 2009. The conference breakfast and lunch was increased from \$3,600 to \$5,000. The Conference Program (printing) expense was increased from \$500 to \$1,000. The Conference Products was increased from \$3,000 to \$4,000. The NCTM Delegate travel expenses for the president-elect were increased from \$500 a year to \$1,000 a year. The Affiliate Leadership conference expenses were changed from \$500 to \$1000 so that Kari and Beth could attend the affiliate conference together and a budget line was added to include the state gift needed for the conference. A line for the Support Grants was added to the budget for \$1500. Susan made a motion to accept all the proposed budget changes, Beth seconded the motion. Motion passed.

Newsletter Report – Kari Ostby

8 articles were included in the newsletter which translated into over 20 pages of text. Only 2 people submitted answers for the newsletter contest. Both people received a certificate for \$20 worth of merchandise at the KCTM products booth. Three newsletters are published each year. January 1, Sept 1, and April 1 are the deadlines for submissions.

KDE Report – Robin Hill

Robin was unable to attend the meeting but sent a report to Maggie.

KDE is working on several initiatives to assist districts with secondary mathematics including providing a plan for self-evaluating mathematics programs with (possible) solutions and directions for improving student achievement. Professional Development across the state seems to be focusing on Secondary Mathematics, especially algebraic thinking and geometry.

2012 graduates will need Algebra I, Geometry, and Algebra II for graduation. (or their equivalents)

MLSN has been going strong with its focus on numeracy along with the Conceptual Change Model. The KDE Office of Teaching and Learning is working to have a representative at each workshop.

The 2009 textbook adoption link is <http://www.education.ky.gov/KDE/Instructional+Resources/Curriculum+Documents+and+Resources/Textbooks+and+Instructional+Resources/>

There is no state funding for the second administration of the ACT.

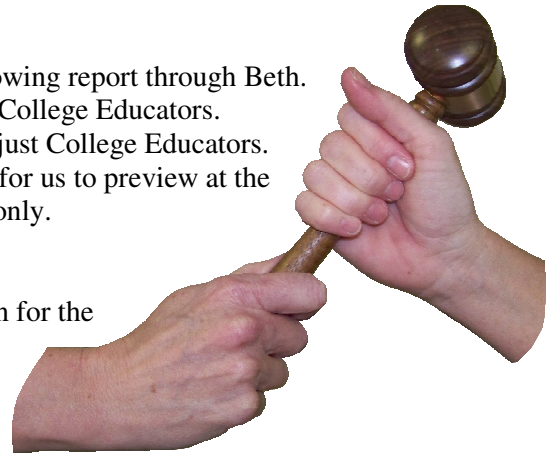
KY Mathematics Educators – Valeria (Beth)

Valeria was unable to attend the meeting but sent the following report through Beth. Valeria is asking to create a new place on our website for College Educators. Discussion followed about creating a place for more than just College Educators. Valeria will be asked by the board to create a sample link for us to preview at the next meeting. Access to the links would be for members only.

Passing the Gavel

Maggie passed the presidential gavel to Beth. Barb made a motion for the meeting to be adjourned. Bryson seconded the motion. Motion passed.

Susan Collins
KCTM Secretary



Websites of Interest

Conference Service - a website that provides a directory of conferences in mathematics can be found online at <http://www.conference-service.com/index.html>.

The Educator's Professional Development Provider also provides information on professional development opportunities for mathematics educators at all levels. This website can be found online at <http://www.solution-tree.com/Public/Main.aspx>

Microsoft® Math is interactive software designed to help students visualize tough math and science concepts. Microsoft Math offers: Step-by-step instruction from basic math to pre-calculus; A full-featured graphing calculator; Helpful tools, like a Formula and Equations Library, a Triangle Solver, and Unit Conversion. Download a no cost Microsoft Math trial good for 30 days @ <http://www.microsoft.com/learningspace/>

Crocodile Clips in Scotland (UK) is an educational software publisher specialized in Math and Science simulation

(Continued on page 20)

Websites of Interest, contd.

software for Middle and High schools -- <http://www.crocodile-clips.com/>

Math 911 software (originally Algebrax) has been around since 1988. Schools and students can download, install and activate Math 911 free of charge. Additional information can be found online at <http://www.math911.com/>.

Education & Information Technology Digital Library (EdITLib) -- <http://www.EdITLib.org>

Moody's Mega Math Challenge -- Registration deadline for the 2009 Challenge is Monday, March 2, 2009. For additional information, visit <http://m3challenge.siam.org/register/>.

The AACE Blog of the Association for the Advancement of Computing in Education can be found online at <http://blogs.aace.org/aace>

I Love Schools - matching teachers with donors for equipment and supplies -- <http://www.iloveschools.com/>

Phat Math, Inc. - free online help, math blogs and chat rooms -- <http://www.phatmath.com/>

The Center for Science and Mathematics Education Research: <http://www.umaine.edu/center/index.htm>

High Beam Research: <http://www.highbeam.com/>

Aha! Math: <http://www.learning.com/ahamath/>

Algebra Boot Camp: <http://www.algebrabootcamp.com/>

Math Playground: <http://www.mathplayground.com/>

Mathwire: <http://www.mathwire.com/>

Activities Integrating Mathematics and Science (AIMS): <http://www.aimsedu.org/index.html>

Valeria Amburgey
KCTM Vice-President for College

Publications and Projects

The Journal of MultiDisciplinary Evaluation (JMDE) is pleased to announce a call for papers for a special issue to be published in the spring of 2009. The theme of this issue is "Assessment for Learning" in the context of student evaluation. In spite of an acute professional awareness of a need to institute new forms of assessment as a way to improve learning and retention in STEM, research consistently indicates that teachers do not fully exploit the rich potential of using multiple forms of assessment. Improving assessment practices is most promising and effective for the most vulnerable student groups: minorities, low achievers, and those at risk of dropping out. This special issue is committed to advancing the research base of student evaluation design, implementation, analysis, and application and hopes to spark a change in practice by building capacity for developing and studying the impact of K-12 and higher education assessment for learning practices. See http://survey.ate.wmich.edu/jmde/index.php/jmde_1/announcement/view/13 for additional information.

INVESTIGATIONS IN MATHEMATICS LEARNING (formerly Focus on Learning Problems in Mathematics) -- This publication is the official journal of the Research Council on Mathematics Learning (RCML). The journal is published three times per year. RCML sees to stimulate, generate, coordinate, and disseminate research efforts designed to understand and/or overcome factors that inhibit maximal mathematics learning. Manuscripts from an

(Continued on page 21)

Publications and Projects, contd.

inter-disciplinary perspective are valued. Manuscripts for publications should follow the guidelines in the Publications Manual of the American Psychological Association (Fifth Edition), and include a statement that the paper is not in submission to another journal. Five copies should be submitted to the editor: Dr. Jean Schmittau; School of Education; State University of New York at Binghamton; P.O. Box 6000; Binghamton, NY 13902-6000

TEACHER KNOWLEDGE AND PRACTICE IN MIDDLE GRADES MATHEMATICS -- Gerald Kulm, Texas A&M University, USA (Ed.). This book presents a coherent collection of research studies on teacher knowledge and its relation to instruction and learning in middle-grades mathematics. The authors provide comprehensive literature reviews on specific components of mathematics knowledge for teaching that have been found to be important for effective instruction. Based on the analysis of video data collected over a six-year project, the chapters present new and accessible research on the learning of fractions, early concepts of algebra, and basic statistics and probability. The three sections of the book contain chapters that address research on the development of mathematics knowledge for teaching at the undergraduate level, instructional practices of middle-grades teachers, and the implications of teacher knowledge of mathematics for student learning. The chapters are written by members of a research team led by the Editor that has been working for the past six years to develop practical and useful theories and findings on variables that affect teaching and learning of middle grades mathematics. You can find a free preview at:

https://www.sensepublishers.com/product_info.php?products_id=653&osCsid=1a7a25254c30f7c81b52f872435532ec

A Decade of Middle School Mathematics Curriculum Implementation -- Lessons Learned from the Show-Me Project. Edited by: Margaret R. Meyer, University of Wisconsin-Madison and Cynthia W. Langrall, Illinois State University. Published by Information Age Publishing. Additional information can be found online at <http://www.infoagepub.com/products/content/p48ef966bc8db8.php>

NAVA BHARATH MATRICULATION SCHOOL; Rajapalayam - 626 117; Phone (04563)-222779 or (04563)-232779 - The Nava Bharath Matriculation School, Rajapalayam (India) is run by the Nava Bharath Educational Trust. The school (grades kindergarten to Std X) aims to provide sound and liberal education to create student scientists - not just science students. The school is in need of textbooks and reference books (for ages 3 through 15) for their school library. They are also requesting posters, models, imagery, slides, print materials, magazines, journals, films, videos and CDs on basic science (Botany, Zoology, Physics, Chemistry, Mathematics, Geo science and Space Research). The request is for instructional materials written in English.

Valeria Amburgey
KCTM Vice-President for College

Opportunities

KSTF Job Announcement -- Mathematics Program Officer -- Start Date: Negotiable - Summer 2009 latest, ASAP preferred -- The Knowles Science Teaching Foundation (KSTF), a rapidly growing multimillion dollar foundation located in Moorestown, New Jersey (just outside Philadelphia) is currently seeking a Mathematics Program Officer for planning, coordination, and management of the KSTF Mathematics Teaching Fellows Program.

Established as a non-profit 501 (c) 3 organization in 2000, KSTF supports three nationwide programs designed to improve the quality of high school science and mathematics teaching: Fellowships for outstanding beginning high

(Continued on page 22)

Opportunities, contd.

school science and mathematics teachers; Educational research through our Young Scholars Research Fellowships and internal research programs; Conferences on science and mathematics education

The primary responsibility of the Mathematics Program Officer will be the management of up to two groups of about 15 KSTF Mathematics Teaching Fellows each, which includes: the recruitment and selection of yearly cohorts; planning, conducting and evaluating a five-year trajectory of professional development and support for teaching fellows; and working with the program staff and institutions outside of KSTF to enhance the foundation's capacity to positively impact the profession of secondary science and mathematics teaching. The Mathematics Program Officer will function as a part of collaborative team of professionals that includes Program Officers for Mathematics, Physical Science and Biology and will report to the Senior Program Officer for Teaching Fellowships.

The ideal candidate for this position has a combination of the following strengths and abilities: Sophisticated understanding of mathematics education, specifically at the secondary level; Experience teaching high school mathematics in U.S. schools; Experience working with beginning high school teachers in U.S. schools; Deep and extensive mathematics content knowledge; Familiarity with the questions, methodology and conclusions of education research; An advanced degree in mathematics, education or a related field (or anticipating such); Self-motivation and ability to set clear priorities; Ability to initiate projects and work with a team to follow them through to completion; Ability to respond flexibly and creatively to the foundation's needs as they arise; Strong oral and written communication skills. Salary based on education and experience. Search will remain open until position is filled.

Interested applicants should review the KSTF website (www.kstf.org) and send a letter of interest and a resume or vita to: Nicole Gillespie, Senior Program Officer, ngillespie@kstf.org or 856-608-0008 (fax).

Knowles Science Teaching Foundation-- 2009 Teaching Fellowships --

The Knowles Science Teaching Foundation (KSTF) is seeking applicants for Biology, Physical Science and Mathematics Teaching Fellowships. The fellowship supports exceptional individuals who are committed to becoming outstanding high school math and science teachers. KSTF seeks to promote excellence in science and mathematics teaching in United States high schools in order to help maintain our nation's economic competitiveness and reverse the current national trend of high attrition rates among beginning teachers. We strive to elevate the perception of teaching as a complex, highly-skilled profession and to nurture future leaders and change agents in the field of education.

Eligibility Requirements: Applicants should have at least a bachelor's degree in science, engineering or mathematics, have received their most recent content degree within the past five years and be committed to teaching science or mathematics in U.S. high schools. Individuals who are currently enrolled in a secondary math or science teaching credential program are eligible if they are within five years of their most recent content degree and have not completed their credential before December, 2008. KSTF Teaching Fellowships are intended to support individuals early in their careers who have the potential to devote a lifetime to improving math and science education.

Award information: Fellowships will be awarded to up to 15 individuals in each of three disciplinary strands: biology, physical science, and mathematics. Benefits of the fellowship include: Financial and professional support for up to five years, including a maximum of \$10,000 tuition assistance per year for up to two years and a monthly stipend while fellows are enrolled in a recognized teacher credential program; Room, board, travel expenses and

Opportunities, contd.

fees for summer professional development activities as well as a monthly stipend during the summer; Yearly opportunities to apply for instructional materials, academic year professional development, school-site mentor support, support for National Board Certification and financial support for leadership activities; Membership in a professional organization; Room, board and travel expenses for three meetings per year with other KSTF Fellows.

Application information can be found online at www.kstf.org. The deadline for applications is Wednesday, January 14, 2009, at 5:00 pm Eastern Standard Time. Only online applications will be considered. For more information, contact: Beth DiGesare; Teaching Fellowship Program Coordinator; (856) 608-0001; teachers@kstf.org

Information on the American Diploma Project and the Achieve Program (Provided by Robin Hill)

Achieve, Inc. (<http://www.achieve.org/>) The following information is quoted directly from this website: "Created in 1996 by the nation's governors and corporate leaders, Achieve is an independent, bipartisan, non-profit education reform organization based in Washington, D.C. that helps states raise academic standards and graduation requirements, improve assessments and strengthen accountability. In 2006, Achieve was named by Education Week as one of the most influential education groups in the nation."

Achieve, Inc.'s American Diploma Project (<http://www.achieve.org/ADPNetwork>). The following information is quoted directly from this website: "The American Diploma Project (ADP) Network now includes 34 states that are dedicated to making sure that every high school graduate is prepared for college or work. Together, Network member states are responsible for educating nearly 85 percent of all U.S. public school students.... Governors, state superintendents of education, business executives, and college leaders are working to bring value to the high school diploma by raising the rigor of high school standards, assessments and curriculum and aligning expectations with the demands of postsecondary education and work. The Network is building on the work begun by the American Diploma Project (ADP), an initiative launched by Achieve in partnership with The Education Trust and the Thomas B. Fordham Foundation.... In 2004, ADP published *Ready or Not: Creating a High School Diploma that Counts*, the result of two years of research. The report includes English and mathematics benchmarks that describe the specific content and skills that graduates must have mastered by the time they leave high school if they expect to succeed in postsecondary education or in high-performance, high-growth jobs. Subsequent reports have assessed the rigor of state high school exit exams and high school requirements.

Research shows that ADP expectations are significantly more rigorous than current high school standards, resulting in an expectations gap that explains why many high school graduates aren't prepared to succeed when they arrive at college or the workplace.

Valeria Amburgey
KCTM Vice-President for College

