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# NCMATYC NEWS Fall 2012

# www.ncmatyc.matyc.org

# The President's Message by Ann S. DeBoever, Catawba Valley CC

It is a very exciting time to be a part of the mathematics community in the NCCCS right now! And I am very much honored to be the new President of NCMATYC. This is a great organization that helps keep its members informed of the many changes our schools have faced and are facing in the next few years. Our



annual conference is a good time for each of us to share with other NCMATYC members how we are approaching the upcoming changes as well as the continued successes we experience at our own schools.

Please make plans now to attend our Annual Spring Conference at Haywood Community College in Clyde, North Carolina on March 14 and 15, 2013. It will be a celebration of **25 YEARS of NCMATYC**! We are excited to recognize the founders of NCMATYC and to share our history.

You will find several articles in this newsletter giving information regarding the conference. We have very informative conferences and that happens because so many of you are willing to share your expertise and experiences from the classroom and also your ideas regarding implementing changes in our programs.

While some schools have implemented the changes in developmental math that came from the Developmental Education Initiative, most will begin their new programs in the fall of 2013. Our conference is a good time to share what works and what does not work in getting these new courses underway. Come with questions and ideas. Let's discuss what is best for our students.

Central Piedmont Community College is leading the effort in the Math Curriculum Improvement Project (CIP). Suzanne Williams, former president of NCMATYC, is the director of the CIP. She has an article in this newsletter explaining the process and goal of the CIP. The CIP will be a hot topic of discussion at our conference as well. We will be hearing from members of the Steering Committee of the CIP as well as national speakers who will share research done on the changing thoughts regarding community college math courses.

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The NCMATYC NEWS is an official publication of the North Carolina Mathematics Association of Two-Year Colleges. Articles for publication and comments should be submitted electronically to dzemanek@email.pittcc.edu. The deadline for the spring issue is April 15, 2013.

### The President's Message

#### Continued from Page 1

At the recent AMATYC Conference I attended in Jacksonville, Florida I heard many encouraging comments regarding NCMATYC. Our conference is considered the one of the best (if not the best) in the Southeast Region. Our Southeast Region Vice-President, Annette Cook, commented on our newsletter and wanted information on how we create such a professional looking and informative newsletter. Of course we give recognition to Daniela Zemanek for her great work and also to everyone who submits an article.

I also want to recognize our Executive Board and the dedication they have toward this organization. I am fortunate to have several returning members to the board and also two new members. Dr. Jeannie Hollar from Caldwell Community College and Technical Institute is our Western Region Vice-President. Our Eastern Region Vice-President is Calvin Stansbury from Halifax Community College.

As you finish up this fall semester, please be planning to attend our conference and also thinking about presenting a session on something that you are passionate about in math education.

Thanks to all who contribute to the success of NCMATYC. It is truly a joint effort of all who care deeply about the success of the organization and care even more about the success of our community college students.

### NCMATYC 2012 Budget

### by John Bakken, Treasurer, Wake Technical CC

The board has added a few items to the budget in the past couple of years. Most notably the Calculus Competition and the President's Speaker. This year the President's Speaker was Karen Gaines. Her talk on Crime Scene Mathematics was very well attended, and the board is so glad she agreed to come. The board feels that bringing an AMATYC speaker to our state conference was a wonderful idea, and have budgeted money to continue this practice. However, this means that our budgeted expenses now exceed our income from 2012.

We are fortunate that in most cases, our actual expenses were less than budgeted. So currently, we are not losing money. But as the 2013 conference approaches, the board will again review expenses, and the support we offer the membership. It may be that we have to consider increasing dues. The board has resisted increasing dues for a long time, while increasing the impact each dollar has on the membership.

We will continue to analyze how every dollar is spent, and how we can best use all of our association funds to better community college mathematics education across the state.

If you have any questions, comments, or concerns, please feel free to contact me at jrbakken@waketech.edu.

Expenses	Budgeted
Spring Newsletter	\$700.00
Fall Newsletter	\$600.00
Board Meetings	\$2,500.00
Calculus Competition	\$200.00
Executive Travel	\$1,500.00
NCMATYC Travel Award	\$750.00
AMATYC Travel Award	\$1,000.00
Excellence Award	\$325.00
SML Awards	\$600.00
Door Prizes	\$250.00
Breakfast	\$1,700.00
Decorations	\$250.00
Hospitality	\$350.00
Lunch	\$2,500.00
Bags	\$0.00
Printing	\$250.00
Stamps	\$20.00
Conference Bags	\$600.00
Other Conference Expense	\$0.00
FML	\$60.00
President Speaker	\$1,200.00
Miscellaneious	\$150.00
Total Budgeted	\$15,505.00
Income Source	
Dues	\$1,745.00
Conference Registration	\$7,355.00
Vendor Registration	\$4,260.00
Total Income:	\$13,360.00

# **Proposed Changes to the NCMATYC Constitution**

The Executive Board of NCMATYC is proposing a change to the NCMATYC Constitution. This proposed change is the result of new initiatives that have developed in the past few years.

Article 7. Officers Section 6e. currently reads:

6e. The Regional Vice-President shall:

- 1. Be in charge of local arrangements when the Spring conference falls in his/her region.
- 2. Coordinate communication among members in his/her region.
- 3. Solicit members from his/her region.

The Executive Board proposes the following change to Article 7, Section 6e.

- 6e. The Regional Vice-President shall:
  - 1. Coordinate Communication among members in his/her region.
  - 2. Solicit members from his/her region.
  - 3. Each Vice-President shall serve in one of the following roles as directed by the Executive Board:
    - a. Be in charge of working with the vendors for the Spring Conference.
    - b. Chair the Awards Committee. (Excellence in Teaching Award, Excellence in Math Award, Travel Grant)
    - c. Be the Campus Representative chair.

The proposed change will be voted on by conference attendees at the Business Meeting during our 2013 Spring Conference.

# **NCMATYC Wants You** by Valerie Melvin, Secretary, Cape Fear CC

How can a new faculty member speed to become experienced? How can anyone participate in all the professional development opportunities available? Obviously, it is not possible. The next best thing, however, is to join the North Carolina Community College Association of Two-Year Colleges to collaborate and participate in the worthwhile educational exchange.

The association endeavors to establish channels of communication, to promote cooperation, to encourage professional development and improve mathematics-related experiences of two-year college students and math faculty alike. Through our Newsletters and conferences we can experience the sessions and professional improvement undertakings of others. When our colleagues travel and share those experiences it is as if we also attended.

Our exposure will only be as strong as our membership. We currently have 254 members; this number is down from our spring conference high of 312. If you have new faculty members at your college, please encourage them to become members of NCMATYC. If your membership has lapsed take this opportunity to renew your commitment to our state association.

# **2013 NCMATYC Conference** by Rudranath Beharrysingh, Haywood CC

It is with great pleasure and honor that Haywood Community College welcomes NCMATYC members to campus for the 2013 conference on March 14th and 15th. Set in the wise old mountains of Appalachia, the campus is actually a beautiful arboretum and also serves as a classroom for our forestry and horticulture majors.



When you visit, be sure to check out our LEED certified Creative Arts Building boasting the latest in renewable and sustainable technology.

While in the area you may want to experience the mountain town of Waynesville, or the eclectic city of Asheville. If winter sports are your thing, you can take a ride to the Cataloochee ski area. Perhaps calculating the slope of a hill may be in order. Or, knowing what you expect to lose, bring some "extra" dollars to play at the casino in Cherokee.

Regardless, the folks at Haywood Community College look forward to meeting you all as we host this wonderful event.

# Lodging for the 2013 NCMATYC Conference by Ann S. DeBoever, President, Catawba Valley CC

We are very excited that Haywood Community College in Clyde, North Carolina will be hosting our spring 2013 NCMATYC Conference on March 14 and 15, 2013. We have made arrangements with The Waynesville Inn Golf Resort and Spa for our lodging accommodations. It is just a few minutes from the HCC Campus.

You may begin booking your room now by calling the Reservations Department at the Inn at 828-456-3551. You may not book online. You should tell the Reservation Agent that you are with NCMATYC in order to get the special room rate of \$69.00 per person, single occupancy or \$39.00 per person, double occupancy. Reservations must be made by March 1, 2013 in order to guarantee the special rate. The group rate will be honored one day prior and one day following our conference if you would like to arrive early or stay afterwards to visit the surrounding areas.

Make your plans early and I look forward to seeing everyone in Clyde!

# **Travel Assistance for 2013 NCMATYC Conference** - **Applications due January 15, 2013** by Jeannie Hollar, Western Regional Vice- President, Caldwell CC

Haywood Community College will host the NCMATYC annual Spring Conference March 14 and 15, 2013. The NCMATYC board continues in its efforts to improve the conference each year, keeping it as both a valuable professional development opportunity as well as a great value for the dollars spent! This year in particular, funding is very tight and many schools are struggling to provide travel expenses.

In order to enlarge our membership and to offer an opportunity to all community college math instructors in the state, we have created the NCMATYC Travel Grants. Applicants for the grant must be NCMATYC members. Preference will be given to applicants who have not attended an NCMATYC conference previously and to applicants from schools that have historically been underrepresented at the conference. We will award \$250 to each of three grantees. These funds are to defray expenses of attending the conference (including mileage, meals, lodging, and registration). The application deadline is January 15, 2013.

An application form can be found in this newsletter as well as on the NCMATYC web site. It is not too late to join NCMATYC before applying. In fact, membership forms may be sent along with travel grant applications. The selected applicants will be notified by January 28, 2013.

# Let's Give Back! by Ann S. DeBoever, President, Catawba Valley CC

The down turn in the economy in North Carolina has made it difficult for many and especially difficult for many of our community college students. Most of us know students who struggle not only to pay tuition, buy books, and to buy gas but to also keep their households running. I believe that NCMATYC can make a small but important difference in the lives of some of those who are struggling to feed their families.



I asked the site coordinator at Haywood Community College (HCC), Rudy Beharrysingh, to find an organization in the community surrounding HCC that will help us with this endeavor. He was able to contact an organization called "Open Door" that is willing to assist us.

I am asking each NCMATYC member to bring a few canned food items or other non-perishable food items to our conference in March. There will be boxes located near the registration area where you can leave your donations. The Open Door organization will take those items to their food bank and make them available to area families in need.

Perhaps we can make this an annual event and donate to those in need surrounding the community college that hosts our annual conference. We can "Give Back" to those communities that support our schools.

So, let's pack an extra bag full of food items as we head to HCC for our conference!

### Math Task Force Update – November 2012 by Tammy Bishop, Co-chair of the DEI Math Task Force Committee, Wayne CC

This past summer and currently this fall the task force has been busy implementing the new DMA courses, and communicating to others the lessons that have been learned from the transition. A number of task force members have been corresponding with different schools to provide any help with the curriculum changes with the DMA courses. At the October System Conference, three separate sessions were held on the new DMA courses. Topics covered were implementation, content and curriculum, and lessons learned. In November, a conference call was held with the system office to talk about how the implementation was coming and to do some troubleshooting.

Looking forward into the future, there will be sessions on the redesign at a variety of conferences in the Spring Semester. We are encouraging many schools that have made or begun the transition to, please, present at the different conferences next semester. Please do not hesitate to call a task force member if you have a question. We may not have all the answers, but we can help the best we can.

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# Math CIP Update by Suzanne Williams, Central Piedmont CC

I hope your fall is going well. Those of us involved in the Math Curriculum Improvement Project (Math CIP) have been very busy. I wanted to take this opportunity to update you on where this initiative stands. In late July, each CAO received an invitation to appoint a liaison to the project. So far, 54 liaisons have been appointed. In August, the CIP kick-off was held at the McKimmon Center in Raleigh. Since then, we have been busy pulling things together as we begin our work in earnest. "We" refers to the Steering Committee, the Math CIP team from the System Office, my husband Ron, and me. The Steering Committee was chosen from the appointed liaisons. They are helping with the heavy lifting of the CIP. At the end of this article, you will find a list of this group.

### Math CIP Update

#### Continued from Page 5

Our Guiding Principles, posted at the Math CIP website, refer to "creating rigorous and relevant math pathways" for our students. We have been working to define what is meant by a pathway and to begin the discussion about what the pathways for North Carolina might be. For the purposes of our CIP, A Math Pathway is a focused group of processes and courses that guide a student through his/her math curriculum, from the first connection with advisement and assessment until completion of the math needed to reach his/her goal. We are looking at developing several pathways, based on a student's goals. For more discussion of pathways, you may want to view the video of Uri Treisman's address to the Developmental Math Kick-off at the Success NC website http://www.successnc.org/webinars/rethinking-developmental-math-ncccs-math-faculty-convening.

In order to facilitate student progress and to make the scheduling of courses easier, a part of the CIP will also be to consolidate some of the courses in the Common Course Library. We also plan to develop a new "Quantitative Literacy" course that can be used more broadly by our programs, will be college transferable, and will include skills and competencies suggested by program and liberal arts faculty. This will be done with input from all our liaisons, from program faculty, from our State Leadership Team and with conversations with our university partners. If you are interested, I would encourage you to read a chapter in the book "Mathematics and Democracy: The Case for Quantitative Literacy". The chapter "The Case for Quantitative Literacy" is the one that gives a framework for thinking about the concept of quantitative literacy. http://www.maa.org/ql/mathanddemocracy.html.

We are planning to have regional meetings in January to fully discuss the Math CIP progress and goals. The liaisons will attend, and they will then be seeking your input as we move forward. We will also solicit input from our program faculty and business and industry partners.

You will have an opportunity to hear about the Math CIP at the NCMATYC Conference. We will be sponsoring a speaker, Amy Getz, who is Manager of Community College Services at the Dana Center, University of Texas at Austin. We will also hold several concurrent sessions.

Don't forget to visit the MathCIP website, which the VLC has graciously agreed to host. The link is http://vlcbb.nccommunitycolleges.edu/webapps/portal/frameset.jsp. Guests to the site may use the guest option. The username is: mathcipguest and the password is: mathcip (all lowercase). Guests will not have access to the 'Discussion' area; however, we welcome discussion through NCMATYC Listserve. If you have problems with the site, please send an email to Ron Williams at ron.williams@cpcc.edu.

Please email me at suzanne.williams@cpcc.edu if you have questions or comments...this is important work that promises to have a very positive impact on our students. It cannot be done unless we all pull together.

Suzanne Williams Math CIP Director

### Math CIP Steering Committee:

Michael Bradshaw, Caldwell CCTI Dale Gaddis, Isothermal CC Dave Gavasci, Robeson CC Quillie Hunt, Central Piedmont CC Amanda Klinger, Davidson County CC Jonathan Loss, Catawba Valley CC Chris Mansfield, Durham Tech Terri McKnight, Rowan Cabarrus CC Hilary Seagle, Southwestern CC Laura Taylor, Cape Fear CC Sharon Welker, Wake Tech Lisa Williams, College of The Albamarle

# Developmental Math Re-design and Much More!

What makes a developmental mathematics program truly effective? I was certainly challenged to go back to my campus, gather some data and find the results for our college, based on the metrics defined in a workshop by John Squires and Anita Polk-Conley from Chattanooga State, held at the 38<sup>th</sup> annual AMATYC conference in Jacksonville, Florida, November 8 -11, 2012. What a wonderful time of the year to come to the Hyatt Regency at the Jacksonville Riverfront, and what wonderful professional development activities! Having the conference in the hotel was certainly an added convenience, allowing me to soak up the content of so many more sessions.

All total, more than 70 of the 187 sessions dealt with developmental math redesign, in addition to several of the 25 poster sessions, which covered a variety of topics. The session on effectiveness of the developmental mathematics program was one of the first of many sessions that I attended dealing with the redesign efforts sweeping the country. In addition to a variety of sessions, there were more than 40 exhibitors, showcasing books, software, calculators, and items of interest for the mathematician and educator in all of us. Several book authors were present, and welcomed your questions and conversations, and I can say that my group had a wonderful time. We even made it over to the beach for fresh seafood and walking along the shore.

Five of my colleagues who teach mathematics, ranging from developmental mathematics through calculus III were fortunate enough to be given the opportunity to attend this conference. Since our teaching assignments covered the range, our attendance at the sessions covered the span, as well. You can imagine how exciting our dinner conversations became and how exciting our discussion was on the drive back to North Carolina. Only one of the five instructors had previously been to an AMATYC conference, so four of the "NC fabulous five" were first time attendees.

Since I had served on the NC Redesign Task Force for Developmental Mathematics, I was curious to see what was happening in other states, as well as pick up on their "lessons learned." I gathered information from Tennessee, Michigan, South Carolina, Iowa, Massachusetts, Maryland, Washington, New Mexico, Pennsylvania, Arizona, Illinois, and Louisiana, by attending sessions that dissected re-design and spoke of lessons learned. My recent observations are these:

- Mastery is the right approach-students should master the material before moving forward, thus filling the gaps in their understanding; mastery ranges from 70-85%, depending on the state
- Modularized instruction appears to give students more manageable chunks of information to master
- Students need assistance in learning how to become successful, utilizing time management and note-taking, as well as goal-setting and organizational tools
- College is now Grade 13 for some of our high school graduates, or traditional students, so we must become more of a diagnostician to catch students when they begin to slip and encourage and move them forward
- "Self-paced" has a different connotation for some students, and may need to be replaced by "flexible" or "at pace or faster" in order to give students the idea that there is indeed a pace that leads to becoming more successful
- Accelerating the learning helps to move students into curriculum classes sooner and cuts down on boredom for the student who does not need a full semester of remediation or review; by setting higher expectations, even weaker students are challenged and perform better
- Collaborative learning with active learning strategies interwoven, helps students to conceptualize more---some schools have mandatory attendance for one or two of these required lab days per week
- Students in a redesigned classroom are engaged and actively involved in learning; contextualizing the instruction is helpful as well as going back to the concepts that students somehow missed in the foundations of basic arithmetic as well as algebra

### **Developmental Math Re-design and Much More!**

• Instructors are facilitating instruction, individualizing the learning, and "teaching deeper" with more understanding, challenging the beliefs of their students.

I cannot think of a more exciting or challenging time to be a developmental educator. There is still much work to be done! We are in the business of changing lives and giving students second chances. I am excited about the work we have done, and how it has shaped what we do in the classrooms; even more, I look forward to the changes that still lie before us, and how we can shape the lives of our students, giving them more hope for the future, giving them a better foundation in mathematics. Let's help them get what they need and move them forward, helping them become the problem solvers that are needed to re-shape our country!

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# **The MAP to Higher Achievement: Maximizing Academic Persistence** by Michelle Power, Central Carolina CC

Central Carolina Community College has just been awarded the largest grant in its 50-year history: a five-year, \$1.65 million TitleIII Strengthening Institutions Program (SIP) grant from the U.S. Department of Education.

The college's grant project, "The MAP to Higher Achievement: Maximizing Academic Persistence," will supplement and build on existing college-wide efforts at the Chatham, Harnett and Lee campuses to maximize student success, retention and graduation.

The grant-funded project will maximize student access and success with the creation of a College Success Center within the college's Division of Student Learning, according to Brian Merritt, dean of Student Learning. It will also provide for the development and sustaining of high-performing employees who will use technology to improve student achievement. In addition, it will enable the implementation of effective technologies such as academic advising (AA) / early-alert (EA) software.

The AA/EA will facilitate the early recognition of students in need of intervention and support to be successful, he said. The funding will also provide for full-time professional math coaches, full-time college success coaches, full-time writing center coordinator, additional training for peer tutors, and expansion of college success courses for first-year students.

Success coaches will proactively identify at-risk students in need of increased levels of intervention, such as peer tutoring, professional tutoring, major/career guidance, and additional advising sessions. The coaches will encourage them to recognize and accept support and intervention. Research indicates that students who do so achieve greater levels of college success.

With the implementation of the College Success Center, the college anticipates enhanced success by students as demonstrated by increased full-time enrollment and higher retention and graduation rates.

The College Success Center project will be piloted during the spring and summer semesters and launched collegewide in fall 2013.

Articles for publication and comments should be submitted electronically to Daniela Zemanek at dzemanek@email.pittcc.edu. The deadline for the spring issue is April 15, 2013.

# 38<sup>th</sup> AMATYC Annual Conference Jacksonville, Florida by Luke Walsh, the Recipient of the 2012 NCMATYC Travel Assistance Award, Catawba Valley CC



When someone asks me, "Did you have a good conference?" I often reply, "How could I not?" and then continue to share all the wonderful events at the conference. To quickly sum up my AMATYC 2012 experience I got my math on, gave an Ignite talk (https://sites.google.com/site/2point718271827459045/), got my math on some more, celebrated in the evenings, got my math on, and did my delegate duties. Feel free to look up my tweets from the conference for some extra inside scoop, #AMATYC12. Filling in all of the details would take too

long, so I will only offer one short experience.

I attended three days straight of amazing sessions! In each one of those sessions, people would ask thoughtful follow up questions and offer excellent feedback. For example, I was in a talk that gave some ideas to spice up a trig course. The person that I was sitting next to mentioned to the presenter, "Just skip the ambiguous case stuff. Use the Law of Cosines for Angle Side Side and then apply the quadratic formula." The presenter paused for a moment and replied exactly with what I was thinking, "I have never thought about it like that." That 15 second comment was the golden nugget that I carried away from that session, inspiring me to create this graph of Angle Side Side, which can be seen here https://www.desmos.com/calculator/xubckxlnba, and write a blog entry about it http://t.co/aNGEHAoH.

What happened in that session was not an isolated event, and, as with every other session I have attended, I have been overwhelmed with great ideas. Yet, trying to fit in all of those ideas into my currently overwhelmed scheduled just makes me feel more overwhelmed. Plus, my frugal instinct tells me not to let go of anything because I might find a time to use it. Yeah, right! That strategy has resulted in stacks of materials gathering dust on my shelf. Maybe there needs to be a session called "What to do with all that professional development you just had." Am I the only one who walks away from an outstanding conference and only applies a small portion of it?

Perhaps there is a difference between an educator who attends conference and one who efficiently applies the conference. This reminds me of another AMATYC session I attended where the speaker had their students discuss the characteristics between an A student and a C student. The data in their survey showed that one perception of students is that doing homework is the main characteristic of an A student. As an educator, I know

that being an A student is much more than just attending class and practicing a few exercises. But let's make a switch and apply it towards professional development, like an AMATYC conference. What are the different characteristics of an A teacher versus a C teacher? Does a C teacher do professional development differently than an A teacher?

My first intention was not to give a talk at AMATYC or to be a North Carolina delegate. After fulfilling those duties, I am thankful that I had a nudge from our current NCMATYC president to participate in those events. Being active at the conference helped challenge me professionally. Plus, just being around other people who are active in AMATYC is inspiring! Chat with them for a bit and you can see that they have many characteristics of an A teacher. I hope to carry this motivation forward with AMATYC and NCMATYC. Not only do I want to attend, I want to be involved. Not only do I want to participate at the conference, I want contribute throughout the year. Before going to Jacksonville, my perspective on joining AMATYC was "What could they do for me?" I now wonder if this is a characteristic of a C



teacher. I imagine that an A teacher would step up to the challenge and say, "What can I do for AMATYC?"

# **AMATYC Presentation: Spent Fuel and Circuit Gain: What's in a Log?** by Ann S. DeBoever, President, Catawba Valley CC

Steven J. Wilson of Johnson County CC, Overland Park, Kansas and Stephen Hayton, Minot State University, Minot, North Dakota presented a session entitled "Spent Fuel and Circuit Gain: What's in a Log?" on the first day of AMATYC Conference. Mr. Wilson and Mr. Hayton discussed logarithms and what their studies found that our students understand about logarithms.



Their discussion was not based on the actual rules and calculations of logarithms but the conceptual understanding of how logarithms are used in applications of distance, time, money, temperature, ph level and earthquake intensity problems. A very interesting problem discussed was the actual amount of increase when sound intensity increases by just .1 of a decibel. The idea of a logarithm describing order of magnitude is a concept that most of our students do not understand and it is not always mentioned in college algebra textbooks.

Mr. Wilson and Mr. Hayton were wonderful speakers and were obviously very passionate about helping math students understand the entire realm of usefulness that surrounds logarithms. Here is their contact information if you would like to learn more about their presentation: swilson@jccc.edu and stephen.hayton@minotstateu.edu.



Math Instructors representing the 58 community colleges of North Carolina at 2012 AMATYC Conference

# Images from 38th AMATYC Annual Conference Jacksonville, Florida











## Wake Tech Tops Field at 2012 NCMATYC Math Competition by Chris Mansfield, Central Region Vice-President, Durham Technical CC

The third annual NCMATYC Math Competition was held on Saturday, November 17<sup>th</sup> at Gaston College. Six schools registered a total of 58 students, both figures the largest in the three-year history of the event. Wake Tech earned overall honors this year, becoming the third winning school in three years. Last year's champions Durham Tech finished in second place and the winners of the inaugural competition, Catawba Valley, took third.

The competition comprises two events. The first of these is a 40-question, 90-minute calculus test that each student takes individually. The top four scorers win a plaque and a check from NCMATYC. The checks ranged from \$120 for the winner to \$30 for fourth place. Wake Tech students William Newlin, Jacob Walsh, and Diwash Thapa claimed the first, second and third places respectively, while Durham Tech student Eeyi Oon took fourth place, beating out three other students in a tiebreaker.

The second event is a team competition in which students are grouped into teams of three or four and collaborate to solve problems in a range of precalculus subjects as quickly as possible to earn as many points as possible over ten rounds. This portion of the competition generates the most drama as students can track how their team score stacks up against those of their peers after each round. There was even more tension than usual this year as the top seven spots ultimately were separated by no fewer than six points and the order of the top seven teams changed dramatically from round to round. In the end Durham Tech placed teams first and third, with one of Wake Tech's teams coming in second. Members of the top three teams received Olympic-style medals and gift certificates from Best Buy.

I want to thanks folks at Gaston College for their instrumental role in making the competition a success, particularly site coordinators Bill Burgin and Sholeh Shariat. Thanks also to Beth Tsai, Alison Schubert, and Cathey Jordan of Wake Tech, James Walters of Cape Fear CC, Lica Marhao and Jonathan Loss of Catawba Valley, and Dale Boger and Hidemi Arai of Forsyth Tech for putting together teams and spending a Saturday in the service of their students.

Lastly, I would like to encourage other schools to participate. I have never heard of anyone—sponsor or student—who regretted attending this competition. To the contrary, everyone has a great time and many students walk away from the event with more self-confidence in and a more positive attitude toward mathematics. Please feel free to contact me at mansfieldc@durhamtech.edu for information about next year's competition.

# ICME-12 by Valerie Melvin, Secretary, Cape Fear CC

The Twelfth International Congress of Mathematical Education was held in Seoul, South Korea July 8 – 16, 2012 and, due to the generosity of the National Science Foundation and the National Council of Teachers of Mathematics I was able to attend. I received a \$2500 grant from NSF through NCTM to attend ICME-12 and participate in the topic student group entitled "Analysis of uses of technology in the teaching of mathematics."

The ICME experience is an educator's utopia, a place of mathematical bliss and wonderment. From the opening ceremonies to the end of my stay I was constantly



reminded of the importance of mathematics education. The opening ceremonies included the traditional Korean five-drum dance, Ogomu, and an inspirational welcome from the President of the Republic of South Korea, Lee Myung-Bak. These events set the tone of importance, sophistication and honor that carried throughout the seven day congress.

### **ICME-12**

### Continued from Page 11

I felt as though I were attending the math Olympics. Opportunities to explore new cultures and values abounded throughout the week during discussion groups and following topic study groups and plenary activities. Attending the twelfth International Congress on Mathematical Education has been the highlight of my mathematical career; and, I appreciate the roles both NCTM and NSF played to get me there.

My general assessment of uses of technology in the teaching of mathematics globally is that the United States excels and leads the world in availability and usage. The US enjoys a vast array of choices of computer software and hand-held technologies, unlike our global counterparts. I am reminded of the biblical quote which can be found in Luke 12:48, "For everyone to whom much is given, from him much will be required." The US should provide a larger presence at ICME through attendee presentations or poster sessions. Furthermore, the US community college system is extremely under represented at ICME; and, there is a great global interest in this institution of higher learning.

What can we gain from the international experience? The US could learn from some of the many cultural differences present at ICME including the Asian's innate respect for the endeavor of education. Although the US has extraordinary technological resources for education, our students are not leading internationally in the STEM fields. I ponder whether the entertainment factors of educational technologies have depleted the rigor of basic education in the US. PISA (Program for International Student Assessment) and TIMSS (Trends in International Math and Science Study) scores reveal countries with far less technological resources surpassing the US. My professional opinion, based on eighteen years of experience at the Community College level in North Carolina, is that we need to increase our expectations, introduce concepts earlier and keep calculators out of student's hands until at least middle school. I believe the secondary school common core being adopted by the majority of states will address the first two issues, rigor and expectations. However, it will take a concerted effort on the part of elementary school teachers to require more mental math and less calculator computations.

ICME-13 will be held in Hamburg, Germany July 24 – 31, 2016; for more information visit this site http://www.icme13.org/. Make plans now to attend; the congress is only held every four years.

# Travel Assistance for AMATYC Conference, Oct. 31 - Nov. 3, 2013, Anaheim, CA Applications due April 30, 2013 by Nancy J. Rivers, Past President, Wake Technical CC

Each fall, hundreds of mathematics instructors come together to share ideas and network at the AMATYC conference. In an effort to support and promote faculty involvement and leadership in NCMATYC, we will offer a grant to attend the 2013 conference. According to the program planners, the theme, "MATH: There's no end to the fun!" reflects both the unique physical setting for the conference as well as the professional development available through a wide variety of outstanding presentations designed to challenge and inspire conference participants. If you want further information about the conference, go to http://www.amatyc.org/Events/conferences/2013Anaheim/.



NCMATYC will offer travel assistance of up to \$1000 and AMATYC has provided a grant to cover the registration fee for one North Carolina Community College instructor to attend this national conference. Criteria for selection include NCMATYC membership of at least two years, previous attendance at an NCMATYC conference, and an appropriate letter of support from an NCMATYC member. Those who receive the award are expected to share ideas gained at AMATYC by leading a session at the spring NCMATYC conference and by contributing an article to the NCMATYC newsletter.

The board of NCMATYC understands the importance of developing the leaders of tomorrow today. If you want to get more involved in shaping math education for the future, check out the application form enclosed in this newsletter. The form must be postmarked or emailed by April 30, 2013.

# **New Mathematics Instructors**

The Mathematics Discipline of Durham Tech Community College is pleased to announce the addition of **Kitzeln Siebert** to its full-time faculty. Kitz has a B.S. and M.S. from Ohio State University, where he majored in math and was a member of the varsity fencing team. Kitz comes to us via the Gateway to College program at Durham Tech, where he has been teaching for two years. In addition to his classroom duties, he is also helping coach Durham Tech's Math Team. On a personal note, Kitz and his fiancée Metta are getting married this spring. Kitz is an avid disc golfer who plays in professional tournaments throughout the southeast.

**Sydia Gayle-Fenner**, from Central Piedmont Community College, is a native of Jamaica West Indies, and brings fifteen years of experience teaching mathematics at the middle school, high school and college level. Equipped with a bachelor's degree in Mathematics and a master's degree in Integrating Technology in the classroom, Sydia is a goal oriented educator who believes that everyone has the ability to learn.



"My philosophy in life is that I was not placed on this earth just for myself. That, along with the great experience I had as a student are the main reasons I became a teacher. I enjoy teaching Mathematics and I am anxious to see how the redesign of Developmental Mathematics can help change the thought processes of our students."



**Christie Williams**, from Central Piedmont Community College, is born in Asheboro NC, graduated from UNC Charlotte with a degree in Electrical Engineering. During college she worked for Charlotte Mecklenburg School system with the AVID inschool academic support program. After graduating from college she further explored her calling to become an educator by teaching for several years in the middle school math classroom. Later, she transitioned into higher education as an adjunct instructor in developmental math. Christie currently teaches developmental math and Algebra/Trigonometry I and II.

**Sheri Zehrung**, from Central Piedmont Community College, is a graduate of the Secondary Math Education Program at Clemson University. Her experience in the field of education began with teaching middle school mathematics in South Carolina before transitioning to instructing adults in the Workforce Development Division of Goodwill Industries in Charlotte in 1998. Sheri has been a Developmental Math Instructor at Central Piedmont since spring 2009. When not in the classroom or developing instructional materials, she loves to travel with her husband Bill and their two school-aged children, Emily and Bennett.



### Mathematics Excellence Award by Jeannie Hollar, Western Region Vice-President, Caldwell CC

North Carolina is blessed with many outstanding mathematics educators in its community college system and NCMATYC wants to recognize their contributions. We are seeking nominations for our third Mathematics Excellence Award to be given at the 2013 NCMATYC Conference at Haywood Community College. The award is intended for educators who have made outstanding contributions to mathematics or mathematics education in the North Carolina Community College System. Nominations for the award will be considered by a subcommittee of the NCMATYC board.

The Mathematics Excellence Award Committee will consider each of the nominations in accordance with the following criteria:

- Statewide reputation
- Leadership and activities in professional organizations
- Professional talks and presentations
- Awards and grants received
- Publications
- Professional activities on a regional and state scale
- Teaching expertise
- Other contributions to mathematics and/or mathematics education.

Nomination materials should include:

- A resume, not to exceed 3 pages, and
- Three letters in support of the nomination, one of which is a letter of nomination.

At least one of the three letters should be from outside the nominee's region of the state (eastern, central, or western). Letters of support that elaborate on qualities described in the resume or highlight additional exemplary characteristics of the nominee are more helpful to the committee than letters that reiterate items mentioned in the resume.

In an effort to compare all candidates on the same basis, any additional materials submitted will not be considered.

Incomplete nominations will not be considered. Materials may be mailed or emailed.

## Nominations must be received by January 21, 2013.

Submit nomination materials to:	Jeannie Hollar
	Caldwell Community College and Technical Institute
	2855 Hickory Blvd.
	Hudson, NC 28638
	jhollar@cccti.edu

Articles for publication and comments should be submitted electronically to Daniela Zemanek at dzemanek@email.pittcc.edu. The deadline for the spring issue is April 15, 2013.

## North Carolina Mathematics Association of Two-Year Colleges

# 2013 Conference Attendee Registration Form Haywood Community College, Clyde, NC March 14 – 15, 2013

A.	Personal	Information	(Please	print	clearly	or type)	
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	• Name:			
B.	Please indicate your N	CMATYC membership sta	tus	
		t Member	□ Non-Member (not joini	ng)*
	□ Renew	ing Member	□ Non-Member (joining)	
	R	enewing and Joining mer	nbers need to include a membership	application
C.		ested to help keep the mem noice at the conference.	bership and conference fees as low as	possible. It will not be possible

Thursday Lunch:	□ Non-Vegetarian	□ Vegetarian	$\Box$ No Meal
Friday Breakfast:	□ Non-Vegetarian	□ Vegetarian	□ No Meal

D. Registration Fees (includes lunch on Thursday and breakfast on Friday)

	Early Registration ( <b>postmarked by Feb 22<sup>nd</sup></b> )	□ \$40.00
	Registration	□ \$50.00
	*Non-Member surcharge (includes 1-year membership)	□ \$10.00
	Graduate Student Registration	□ \$10.00
	Membership Fee (1–year)	□ \$10.00
	Membership Fee (3-year)	□ \$25.00
E.	Grand Total	\$

Make checks payable to NCMATYC

Mail form and payment to:

John Bakken Wake Technical Community College 6600 Louisburg Road Raleigh, NC 27616-6328

- •Refund Policy: no refunds will be issued after Feb 22<sup>nd</sup>, 2013
- Conference registration fees are the same for presenters and non-presenters
- Vendors should register with the Vendor Liaison
- Receipts will be issued upon sign-in at the conference
- Registrants names and e-mail addresses will be provided to conference vendors upon request
- By attending the NCMATYC 2013 Conference, you agree to have your picture taken and used by the NCMATYC board. Including, but not limited to publication in the NCMATYC newsletter.

### 2013 NCMATYC CONFERENCE PRESENTER'S FORM

### NORTH CAROLINA MATHEMATICS ASSOCIATION OF TWO-YEAR COLLEGES Hosted by Haywood Community College, Clyde, NC March 14 - 15, 2013

If you are willing to present at the 2013 Conference, please complete the following form and return it no later than January 18, 2013.

(Please type or print neatly)	
Name:	
	School:
Office Phone Number:	Email Address:
Work Address:	
Description of Presentation:	
Is there any day/time you cannot presen	nt?
TYPE OF SESSION:         Quick Presentation (15 min         Regular Presentation (45 min)         Workshop (90 min)         Other (Please specify on the	in) Liberal Arts Math Math Intensive

We expect all sessions to be in smart classrooms. Therefore, you will have internet access for your presentation or you can bring a flash drive. We ask that you provide your own calculators. Let me know if there is any other equipment that you need for your presentation.

# PLEASE INDICATE HERE IF YOU NEED TO BE IN A CLASSROOM WITH COMPUTERS FOR PARTICIPANTS. \_\_\_\_Computer Lab

Thank you for agreeing to enrich our conference with your experiences and expertise.

Send to: Glynis Mullins Pitt CC PO Drawer 7007 Greenville, NC 27835-7007

or email: gmullins@email.pittcc.edu Phone: 252-493-7538 Fax: 252-321-4613

# Application for NCMATYC Travel Assistance Award to Attend the 2013 NCMATYC Conference

### Form must be POSTMARKED or EMAILED by January 15, 2013.

NCMATYC will offer travel assistance of up to \$250 for up to three North Carolina community college instructors to attend the Spring 2013 NCMATYC Conference. The travel assistance is intended to encourage membership and active participation in NCMATYC. People from underrepresented schools are encouraged to apply.

- **NOTE:** Awardees are expected to contribute an article telling of their experience at the NCMATYC conference for the Fall 2013 newsletter.
- A. Print or type the following information.

Name:			
School:			
E-mail address	:		
Preferred maili	ng address:		

- B. Member of NCMATYC? If No, please enclose membership application and dues. \_\_\_\_\_Yes \_\_\_\_\_No
- C. Please attach a brief statement (50 words or less) explaining why you would like to attend NCMATYC.

Mail form to:

Jeannie Hollar Caldwell Community College and Technical Institute 2855 Hickory Blvd. Hudson, NC 28638

You may also scan the completed form and email it to jhollar@cccti.edu. If you have not received acknowledgement of receipt within one week, please call 828-726-2355.

# Application for NCMATYC Travel Assistance Award to Attend the 2013 AMATYC Conference

# Form must be POSTMARKED by April 30, 2013.

NCMATYC will offer travel assistance of up to \$1000 for a North Carolina Community College instructor to attend the AMATYC Conference in Anaheim, California, October 31 - November 3, 2013. NOTE: AMATYC will provide additional funds to cover registration. AMATYC desires that their award goes to an individual who has not previously attended an AMATYC Conference. The NCMATYC travel assistance is intended to support and promote faculty involvement and leadership in NCMATYC. Criteria include NCMATYC membership of at least two years, previous attendance at an NCMATYC conference, and an appropriate letter of support from an NCMATYC member. Those who receive the award are expected to share ideas gained at AMATYC by leading a session at the spring NCMATYC conference and contributing an article to the NCMATYC newsletter.

A.	Print or type the following information.
	Name: School: E-mail Address:
	Preferred mailing address:
B.	Are you an AMATYC member? Yes No
C.	Number of AMATYC Conferences you have attended
D.	Identify NCMATYC Conferences that you have attended

E. Please attach a letter of support from an NCMATYC member.

F. Please write a brief statement (50 words or less) explaining ways you have supported NCMATYC.

Mail form to:

Jeannie Hollar Caldwell Community College 2855 Hickory Blvd Hudson, NC 28638

You may also scan the completed form and letter of support and email them to jhollar@cccti.edu. If you have not received acknowledgement of receipt within one week, please call 828-726-2355.

# North Carolina Mathematics Association of Two-Year Colleges

# Membership Application (Please PRINT CLEARLY or TYPE)

A.	Personal Information
	Name:
	Position:
	College name:
	Mailing Address:
	Phone – Including Area Code:
	E-mail Address:

### B. Type of Membership

 $\Box$  1 – Year for \$10.00

 $\Box$  3 – Years for \$25.00

C. I would like information on how I can get involved in the following committees:

□ Developmental Mathematics

 $\Box$  Accessibility

□ Student Math League

D. Make funds payable to NCMATYC

Mail to: John Bakken Wake Technical Community College

6600 Louisburg Road Raleigh, NC 27616

PRESIDENT Ann DeBoever Catawba Valley CC 2550 Hwy. 70 SE Hickory, NC 28602 adeboever@cvcc.edu

PRESIDENT-ELECT Glynis Mullins Pitt CC PO Drawer 7007 Greenville, NC 27835 gmullins@email.pittcc.edu

PAST-PRESIDENT Nancy Rivers Wake Technical CC 6600 Louisburg Rd Raleigh, NC 27616 njrivers@waketech.edu

SECRETARY Valerie Melvin Cape Fear CC 411 North Front Street Wilmington, NC 28401 vmelvin@cfcc.edu

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EASTERN VICE-PRESIDENT Calvin Stansbury Halifax CC 200 College Drive Weldon, NC 27890 stansburyc@halifaxcc.edu

CENTRAL VICE-PRESIDENT Christopher Mansfield Durham Technical CC 1637 Lawson Street Durham, NC 27703 mansfieldc@durhamtech.edu

WESTERN VICE-PRESIDENT Jeannie Hollar Caldwell CC&TI 2855 Hickory Blvd. Hudson, NC 28638 jhollar@cccti.edu

Daniela Zemanek, Editor Mathematics & Physics Dept. Pitt Community College PO Drawer 7007 Greenville, NC 27835 dzemanek@email.pittcc.edu



Announcing Our 2013 NCMATYC Conference March 14 and 15

Hosted by

**Haywood Community College** 



Articles for publication and comments should be submitted electronically to Daniela Zemanek at <u>dzemanek@email.pittcc.edu</u>. The deadline for the spring issue is April 15, 2013.

Mail to: