NAECTE Regional Reports Fall 2009

REGION 1 REPORT

Pat Cantor

CONNECTICUT

Regina Miller, University of Hartford, CT-AECTE

We have had two very successful collaborative group meetings representing our 2 year and 4 year institutions of higher education as well as community stakeholders (community programs, governmental representation). This group engaged in visioning in May 2009 and will develop some action plans this fall. The new strategy for meeting the needs, time constraints, and responsibilities of all early childhood faculty at both the 2-year and 4-year institutions across the state has groups meeting on the same day at the same location with side-by-side meetings in the morning and a joint meeting in the afternoon. Communication so far has been found to be easier and relationships seem to be easier to forge.

The Standards Committee that was formed to address the identified Workforce needs for many additional teachers for publicly funded programs (i.e., School Readiness, Head Start, etc.) and was charged with the development of standards for an early childhood teacher credential that will be attainable at the 2 year and/or 4 year degree levels concluded the work of the group in June 2009. This group addressed issues of articulation between 2 and 4 year degree schools, alternate routes and accelerated track options, assessment of programs and students and issues relating to practicum. This group is operated under the umbrella of the CT Department of Higher Education. This group regularly reported out at CT-AECTE meetings and several members of the CT-AECTE group were part of the Standards group.

The CT Early Childhood Alternate Route to Certification (CT-ECE ARC) is launching a third cohort. Individuals eligible for this program have worked in the field for 3 – 5 years with backgrounds that include community preschool, public special education (preschool and elementary), kindergarten teaching, and early intervention programs. This very rigorous program was developed by the CT-AECTE group through a very collaborative process. This program is an excellent and successful model for what can actually evolve in a small state with few resources at each individual higher education institution.

RHODE ISLAND

Mary Ellen McGuire-Schwartz, Rhode Island College

At Rhode Island College, the Early Childhood Program and the Feinstein School of Education and Human Development are planning to hold our first Reggio Emilia Institute, Learning, Connections, and Threads of Research, from October 29-30, 2009 on the Rhode Island College campus. The speakers will be Lella Gandini, Karen Haigh, and Kristin Brizzolara. The registration form is attached. Registration information is also available at

http://www.ric.edu/feinsteinSchoolEducationHumanDevelopment/announcements.php.

In addition, there have been changes to our program mandated by the Rhode Island Department of Education. The Rhode Island State Department of Education has notified the Feinstein School of Education and Human Development at Rhode Island College of new requirements for teacher education programs:

New Minimum PPST Score for Writing

The minimum score for PRAXIS I Pre-Professional Skills Test (PPST) Writing has changed. The new score is 170.

Any candidate admitted to FSEHD after August 24, 2009 will need to achieve the following scores on PRAXIS I tests; Writing 170, Reading 170, and Math 170.

New Student Teaching Requirement

Any candidate admitted to FSEHD after August 24, 2009 who majors in Elementary Education or Early Childhood Education or Secondary Education and a Teaching concentration in Special Education will be required to complete one full semester of student teaching in each certification area.

NEW HAMPSHIRE

Pat Cantor, Plymouth State University

As Leslie Couse of the University of New Hampshire points out, "The biggest update in early childhood education for New Hampshire is that this fall we (finally) cleared the hurdle for kindergarten and have kindergarten available in all districts." This was a long time in coming. In 2007, the state passed legislation requiring every district to offer kindergarten. Full implementation was delayed for a year after some districts requested more time and others considered legal action. Finally, as of this fall, every district is offering kindergarten.

REGION 2 NEWS

Holly Seplocha

New York ACETE News

New York AECTE is still heavily invested in an advocacy campaign to keep kindergarten as part of the Early Childhood Special Education certification, and not to include it in the childhood (1-6) certification as now proposed to ---but still not acted on by the NYS Regents . They have met with Regents Chancellor Tisch and have outreached to several Regents. At present they are meeting with the new NYS Commissioner, Dr. Steiner who appears to be an EC advocate.

NYAECTE continues to work collaboratively with ACESSS, New Beginnings and NYSAEYC to plan meetings and do joint advocacy.

NYAECTE had a successful spring meeting prior to the NYSAEYC Conference held at the Brooklyn Marriot, where was had three guest speakers - inclusive of Recy Dunn, NYC's newly appointed czar of early childhood. It looks as if a promising relationship is possible. We also had Dr. Mary Ellen Feeney, former president of ASCD speak on the Whole Child Initiative begun under her presidency. Finally five NYC deans contributed funds to the event, making it possible to offer refreshments and it was the first time such an effort was made to ask for their support.

NY chapter is happily in the black, and has over 40 state memberships independent of the national with many overlaps.

NJAECTE News from New Jersey

The membership of New Jersey AECTE elected new officers in May 2009. The chapter is energized as we amend our By-Laws and plan for a conference in May 2010. We are preparing for our September meeting which will include a sharing of favorite course assignments, handouts, textbooks, web-based activities and/or articles.

Kudos to Karen Nemeth on the publication of her new book <u>Many Languages</u>, <u>One Classroom: Teaching Dual and English Language Learners</u> (Gryphon House, 2009).

In order to support the quality of alternate route teacher preparation, NJ Department of Education's Office of Licensure and Credentials and Division of Early Childhood Education finalized revised regulations governing P-3 alternate route certification candidates. Several of our members provided input into this new requirement to

strengthen teacher competency. As of September 1, 2009, all candidates seeking a Certificate of Eligibility for P-3 certification must complete a minimum of 24 hours of study offered through a state approved provider (college or university) or through equivalent coursework (from a regionally accredited 4-year college or university). They must demonstrate knowledge of basic pedagogy skills appropriate to preschool education, including, but not limited to, classroom management, teacher-child interaction preschool and early elementary curriculua, New Jersey's Core Curriculum Content Standards and Preschool Teaching and Learning Standards (Adopted in 12/08, N.J.A.C. 6A:9-11(a)4). Following completion of this new 24-hour requirement, P-3 alternate route candidates must complete a state approved minimum 15-credit higher education program, along with passing the Early Childhood Content Knowledge Praxis, and complete a year-long mentoring and evaluation process by their district/school in their teaching position.

Ellen Frede and Steve Barnett, co-directors of the National Institute for Early Education Research (NIEER), wrote an Op-Ed piece on New Jersey's publicly funded pre-k, in *The Record*, a NJ newspaper, on August 13, 2009. The article highlights the strengths and importance of this program in our troubled financial times (http://www.northjersey.com/news/opinions/op-ed/prek_081309.html).

Contact NJAECTE's VP for Membership, Joanne Vesay at jvesay@rider.edu for information about our upcoming conference, May or September meetings, or to join the NJ affiliate chapter.

Region IIIRoberta Schomburg

Region III includes members from the District of Columbia, Delaware, Maryland, Virginia, Pennsylvania, and West Virginia. Currently we have 42 members in this region.

Pennsylvania reports a flurry of activities in the past year, including the following:

• Program-to-Program IHE Articulation in ECE Pilot Project

Three grants were funded by the Office of Child Development and Early Learning through The Pennsylvania Early Learning Keys to Quality (Pennsylvania Key).

The Office of Child Development and Early Learning (OCDEL) and Pennsylvania Key have joined together to create opportunities for two and four year institutions of higher education, which offer associate and baccalaureate degrees in early childhood education or child development, to work on program-to-program articulation agreements. The three lead institutions are Bloomsburg University, Shippensburg University, and Slippery Rock University. Each group

includes approximately 6-8 partner two and four year institutions who are working together to develop common articulation agreement models.

• State Funding for the Gate Opener Project

Nine institutions of higher education were funded to offer a variety of exciting opportunities to reduce the barriers facing early learning practitioners who seek to continue their education. Seven barriers were identified and projects seek to reduce the barriers by providing support to teacher certification candidates in these seven areas: student teaching, program accessibility, PRAXIS tests, costs of tuition, certification requirements, transfer credits and life experience, and fears/anxiety associated with a return to school. The nine institutions are: Arcadia University, Carlow University, Eastern University, Indiana University of Pennsylvania, Keystone College, King's College, Lock Haven University, Point Park University, and Shippensburg University.

• New Early Childhood Teacher Certification and Guidelines

In 2013, the Early Childhood Education teaching certificate in Pennsylvania will include PreK through Grade 4 competencies. New guidelines for early childhood education were developed and aligned with NAEYC guidelines. They include a strong emphasis on child development and include the role of play in the curriculum. Teacher Certification programs have been submitting their revised program plans for the new Early Childhood Education certificate since the beginning of the year.

• Planning for a Collaborative Doctoral Program in Early Childhood Education

Statewide collaborations are underway to create a shared doctoral program in early childhood education to prepare more candidates for faculty positions in higher education.

• Early Childhood Information for School Principals

Collaboration with the National Institute for School Leadership (NISL) and the Pennsylvania Inspired Leadership (PIL) initiative is leading to inclusion of early childhood modules to meet professional development needs of school principals.

Region 4 Report

By Lynn Hartle

Florida

Florida Teacher Educators, parents, and supporters are engaging in advocacy campaigns to urge our legislators to pass the The Student Aid and Fiscal Responsibility Act to gain

funds from this federal initiative could be used to improve pre-k for Florida which now ranks next to last in quality for pre-k education nationally.

Nancy Brown, Director of The Toppel Family Early Childhood Education Institute at Florida Atlantic University (FAU) reports that FAU has established this Institute, and interdisciplinary academic learning community dedicated to the promotion of scholarship and research, teaching and learning, and community service in the field of early childhood education. Emphasizing diversity and democracy, the Toppel Institute engages in a range of projects and activities to benefit all children and ensure their rights.

Also, the College of Education at FAU is now offering a new Bachelor of Early Care and Education (BECE) degree for teachers specializing in the education of young children from birth to five. Students have been veryenthusiastic and enrollment is substantial, indicating great commitment on behalf of early childhood teachers.

Lynn Hartle at the University of Central Florida reported modernizing the EC Master degree for 21st Century young children and their families' varied community needs and involvement. The Master of Science in Early Childhood Development and Education degree is designed for candidates with undergraduate degrees in a wide range of areas related to early childhood education, such as child development, psychology, communication disorders, sociology, nursing, theatre, music, or other degrees.

The program of study includes advanced professional development in early care and education for careers with direct and indirect services for young children and families. Direct early education services to young children and families can include homes, schools, and other community settings, such as child care and Head Start. Indirect services can include: child assessment, program evaluation, child care resource and referral, early learning coalitions, and community college instruction. Graduates of this program are expected to partner and bridge school and community with direct and indirect services. The program course work also nurtures graduate students' leadership and advocacy skills.

http://education.ucf.edu/ece

Darlene DeMarie, at the University of South Florida spent (July 2007 to July 2008) in



South Africa as a Fulbright Scholar. She created a child care center for the University of Limpopo, which is in the northern, rural part of South Africa. The center opened on May 5, 2008. It was a magnificent year, and she was able to apply all the knowledge acquired in recent years. She saw and learned more about the power of culture's effects on

children's thinking. (Vygotsky was quite right).

Her Fulbright was renewed, and she returned for eight additional months. The next step was to create an early childhood teacher professional development institute. Kindergarten recently was funded (not fully, but it's getting there), and they currently have people without any college education who are teaching preschool and kindergarten. The teachers and schools I visited were very hungry for knowledge. Photo of a Xerox representative from the Limpopo Province Region presenting a check to us to purchase equipment for the child care center. They gave us 50,000 South African Rand (with 8 Rand per dollar, currently) on June 18, 2008. The people in the photo (from left to right), are Magdeline (teacher), Dr. Lily Cherian (Professor of Educational Psychology at the University of Limpopo), representative from Xerox, Mr. Raymond Olander (Chief Financial Office of the University of Limpopo), Dr. Darlene DeMarie (Fulbright Scholar, University of Limpopo, & Educational Psychology Coordinator, University of South Florida), and Sarah (teacher). The top row consists of children from the center on top of the playground structure, and I do have their parents' permission to publish their photographs in print or on line.

Also at the University of South Florida, Ilene Berson and Michael Berson will soon publish their International edited book with timely subjects. **High-Tech Tots: Childhood in a Digital World,** A volume in *Research in Global Child Advocacy Series*, Series URL: http://infoagepub.com/series/Research-in-Global-Child-Advocacy is *Sponsored by the Research in Global Child Advocacy SIG of the American Educational Research Association.* This volume examines the interface between young children and information and communication technology (ICT) from a global perspective. There are three primary areas of emphasis: (a) ICT as a teaching and learning tool across cultures and countries to promote the social and cognitive development of young children; (b) research on developmentally appropriate education on cybersafety and cybercitizenship; and (c) studies on the influence of digital technologies on young children, including exposure to inappropriate content and participation in online social networks. Other NAECTE members as well as noted international scholars are also contributors to this volume.

Georgia

Dr. Ursula Thomas. Of the University of West Georgia and your new NAECTE Region 4 Representative took part in one of the three NAEYC Office of Applied Research(OAR) sponsored sessions at the June 2009 NAEYC's National Institute for Early Childhood Professional Development.

Their session was titled: **Moving the EC Faculty Pipeline Discussion Forward** and featured Mon Cochran, Elaine Wilkinson, Keri Harvey, **Ursula Thomas**, Alicia Biggs, Alison Lutton, and Linda Halgunseth. Ursula shared the process and history as she works

to solidify the universal articulation agreement recently accepted in the State of Georgia between two-year and four-year institutions.

South Carolina

Dee Stegelin from Clemson shared that: South Carolina managed a severe budget shortfall last academic year but this year seems more predictable.

Clemson had several major events occur related to Early Childhood Teacher Education. Clemson sponsored a Summit on the Value of Play this summer and keynote speakers included Dr. Joe Frost, Dr. Stuart Brown, and other notable researchers who spoke on the interdisciplinary value and need for play across all ages. The Clemson College of Health, Education, and Human Development sponsored the event, and we had good attendance especially from across South Carolina.

Clemson has also have expanded their early childhood education faculty and program at Clemson with two new faculty members: Dr. Sandra Linder is a tenure-track faculty member with expertise in early childhood and mathematics & Dr. Lady June Hubbard-Cole, a clinical faculty member and a former professor at Wheelock College.

Dee also reported that she is completing her term as SCAEYC President and the annual conference in October will feature Dr. Larry Schweinhart and a policy leadership day to include faculty from teacher education programs.

Darlene M. Maxwell from Coker College, Hartsville, SC, also reported play advocacy efforts with their 3rd Annual PlayDay on April 7, 2009. Over 450 preschool children from both public and private settings enjoyed outdoor games lead by college students, on-campus clubs, community agencies and organizations such as First Steps, Head Start, Hartsville's Southside Early Learning Center/Darlington County Schools, the South Carolina Department of Education, and EdVenture Museum for Children from Columbia, SC. Even the Mayor of Hartsville stopped by for a short visit. Almost 500 people participated as sponsors of activities or game leaders. Darlene continues her work on board of the American Association for the Child's Right to Play, a branch of the International Play Association (IPA) and they will present some of their advocacy efforts, including organization of playday s at the NAEYC November Annual Conference in Washington, DC.

Tammy Pawloski at Francis Marion University in South Carolina reposed that lead by the ECE Program there, they completed a 5th year of funding for its Center of Excellence to Prepare Teachers of Children of Poverty. This research-based center works to support

the needs of teachers in high-poverty school and focuses on specifically preparing its teacher candidates for this important work. The FMU School of Education has recently adopted six standards which have been infused into all undergraduate and graduate teacher education programs with a mastery test that will be piloted beginning Fall 2009.

Region 5 - Wendy McCarty

MINNESOTA:

Our Minnesota Association just asked a representative from the Minnesota Board of Teaching to come to our fall meeting to talk about program changes to implement the following new rules:

- 1. Reading preparation for teachers
- 2. Middle level preparation
- 3. Technology-related licensure

The implementation timeline is relatively short, and if folks have not begun working towards the changes by this fall, we are afraid that there simply will not be sufficient time to get the changes made. This is what is proposed.

General Timeline

2009

Spring / Summer BOT action to adopt new rules

Academic Year Program changes made at all institutions

2010

January 1 – May 31 Program approval submission window

July 24 Final test administration for current content, pedagogy, and

paper/pencil-based tests

August 31 Program reviews completed

Final test administration for computer-based basic skills

September 1 All program changes finalized; revised programs launched

September 1 New tests operational; old tests will no longer be available

ILLINOIS:

The Illinois Association of Early Childhood Teacher Educators will launch its new website in November of 2009. The address will be www.ilaecte.org

The Illinois Association of Early Childhood Teacher Educators will host its fall meeting in Chicago, Illinois on November 13, 2009. The guest presenter will be Stephanie Feeney PhD. Dr. Feeney's presentation is titled: "The NAEYC Code of Ethical Conduct: Where we have come from and where we are going (with an emphasis on teacher education)"

Kathleen Sheridan PhD, Vice President and President elect of the ILAECTE and Leslie Curda PhD ILAECTE member, have been named the winners of the NAECTE Technology Leadership Award, awarded in collaboration with the Technology ResearchNet.

REGION 6 NEWS

Kathryn Castle, Region 6 Representative

ARKANSAS

Please welcome member **Candice Barnes**, University of Central Arkansas, who plans to become involved at the state and regional levels.

Welcome Candice!

LOUISIANA

Publication News from LSU and Cynthia F. DiCarlo: Guan, X. & **DiCarlo, C.F.** (2009). Minimizing stressors in the early childhood classroom. *Collaborations*, 2, 22-23

DiCarlo, C.F. & Vagianos, L.A. (2009). Preferences and play. *Young Exceptional Children*, 12(4), 31-39.

DiCarlo, C.F., Schepis, M., & Flynn, L. (2009). Embedding sensory preference in toys to enhance toy play in toddlers with disabilities. *Infants and Young Children*, 22(3), 187-199.

Flynn-Wilson, L, & **DiCarlo, C.F.** (2009). Transdisciplinary intervention: What does it look like in community-based child care? *Collaborations*, 1, 30-32. (a peer-reviewed practice journal)

DiCarlo, C.F. (2009). Teacher as Researcher: Playing alone or with peers? *Collaborations*, 1, 8.

Renee Casbergue is beginning her first full implementation year of an Early Reading First project targeting seven preschool classrooms serving high poverty families in New Orleans public schools. Interventions include enhanced language and print environments, implementation of research-based early literacy curricula, and extensive inservice and classroom-based professional development supported by intensive coaching. Data measuring children's expressive and receptive language, knowledge of print concepts, alphabet knowledge, and phonemic awareness is collected for the treatment and nine control classrooms twice annually. Ongoing research investigates the relationships among gains in children's achievement and various measures of teachers' knowledge, skill, and development of enhanced strategies for interacting with children.

Two books were released this September that might interest our NAECTE colleagues. They are both about Katrina and its aftermath, but one takes a developmental perspective and the other has a more clinical approach. Three of us worked on chapters that reported findings from a study of early childhood teachers conducted immediately following Katrina and Rita. Katie Cherry's book *Lifespan Perspectives on Natural Disasters:*Coping with Katrina, Rita and other Storms was published by Springer. Our chapter reported findings from the study about young children's knowledge about hurricanes in general and Katrina and Rita in particular. The second book, Helping Families and Communities Recover from Disaster: Lessons Learned from Hurricane Katrina and its Aftermath by scholars at UNC-Charlotte was published by APA and reports our findings about early childhood teachers' classroom responses to the hurricanes.

From Jennifer Baumgartner, Ph.D.

Assistant Professor, Family Child and Consumer Sciences School of Human Ecology 225-578-0312, jbaum@lsu.edu<mailto:jbaum@lsu.edu>

OKLAHOMA

The Early Childhood Association of Oklahoma (ECAO) is having a 50 year anniversary this year. The annual conference, Celebrating Children 50 Fabulous Years, is scheduled for Sept. 24-26. The **OAECTE** is meeting at the conference September 25. OAECTE members will share their current research/projects and Jan Wetsel will talk about her study trip to Europe.

Anita Ede published a book in July - *Teacher Beliefs about Grade Retention - Risking Children's Academic, Social, Emotional and Behavioral Well-Being.* VDM, Saarbruecken: Germany. ISBN 978-3-639-16357-5.

Debbie Stoll, Cameron University, received a service-learning grant from Oklahoma Campus Compact for the Fall 2009 semester. Her Home, School and Community class is partnering with Success by 6/Smart Start and Crossroads Youth and Family Service to publish a brochure of ways parents can play with their children. These brochures will be distributed to Head Start/Early Head Start/First Start parents throughout Comanche County. This is an enhancement to the InAsMuch Foundation Grant that Success by 6/Smart Start received to provide training and play materials for Head Start/Early Head Start/First Start staff and parents.

TEXAS

Texas Christian University (TCU) College of Education EC-4 program was awarded the International Reading Association Certificate of Distinction! http://www.newsevents.tcu.edu/1665.asp

From Mary Martin Patton, TCU

ACT CONFERENCE IN MEXICO Oct. 30-31 (see attached registration form)

Emilia Ferreiro and Yetta Goodman will be keynote speakers. There will be a boat excursion to the museum and time to visit some great restaurants. http://www.allaboutmonterrey.com/ This is a website about Monterrey that you might find helpful. Also, http://www.ichotelsgroup.com/h/d/hi/1/en/hotel/mtycc is the hotel website

Julie Bullard

Montana

Although Montana still has a budget surplus, the economic condition of the country has led to very conservative spending. As a result, vacancies are not being filled and the Board of Regents is insisting that there be no cost of living increases. The area in early childhood most affected is in regard to master's degrees in early childhood. Montana State University and The University of Montana both offered master's degrees related to early childhood. However, at this time neither will be offering them. Therefore, students will need to obtain their master's degrees from out-of-state institutions. This is an economic hardship for many of our place bound early childhood professionals. Even if they can receive the degrees on-line, they must often pay out of state tuition. The Montana Early Childhood Higher Education Consortium will be meeting to try to determine steps to resolve this issue.

Utah

Higher education has been hit hard in Utah. At Weber State no new faculty or staff for the next two years. Adjuncts can be hired only in emergencies. No salary increases are foreseen. Money for basic operations is very limited. Early retirements have been encouraged. The state universities are in much the same situation. Another issue in Utah is the change in licensure requirements. Starting this year students can be certified K-6 without any specific early childhood requirements. A proposal will be presented to the College of Education Deans that outlines essential elements of ECE. This licensure threat is probably the biggest threat to ECE training in higher education in Utah.

Colorado

In Colorado the P-3 Subcommittee of Governor Ritter's P-20 Education Coordinating Council worked closely with the Colorado Department of Education (CDE) to develop Colorado's description of school readiness. The P-3 Subcommittee work plan addresses the need for a P-3 teacher licensure and has contributed a considerable foundation for conversations and strategies around building a high-quality early learning system. Nine early childhood councils have established professional development offices in their local communities. The focus is on building a highly-trained and competent workforce by providing scholarships and providing coaching and mentoring for early care and education professionals to support their college experience. A primary focus of these projects is to retain early childhood professionals. Local projects develop systems to track information on individual scholarship recipients including their level of credential and job history.

North Dakota

The economic crises has had little impact on early childhood higher education in North Dakota. Enrollment figures have been pretty study in early childhood education programs across the state. The state allocated 5% increases to all faculty and we were one of five states with a budget surplus. The North Dakota Early Childhood Higher Education Consortium still meets twice a year and has almost completed common course numbers,

common course titles and learning outcomes for two year, four year public and private colleges. This also includes tribal colleges.

Region 10

Fostering Quality Teaching and Learning at Arizona State University

Arizona State University is deeply committed to fostering quality teaching and learning for all students. With a renewed vision and commitment to education, ASU has created the Mary Lou Fulton Institute and Graduate School of Education, focused principally on graduate education and research.

All bachelor's and master's-level teacher certification degree programs are now being administered by ASU's College of Teacher Education and Leadership (CTEL) across ASU's four campuses under a reorganization that was approved by the Arizona Board of Regents on May 1, 2009. Teacher Education faculty, including those in the Early Childhood Education program, were given the option to choose an affiliation with the College of Teacher Education and Leadership or with Fulton Education based upon their primary professional focus. Some clinical as well as tenured/tenure-track faculty have elected to join the faculty at CTEL or adjust their primary and secondary campus affiliations in accordance with their teaching and research interests.

The Fulton Institute and Graduate School of Education aspires to be the premier graduate school of education in the nation in which knowledge for the improvement of education is created, shared and implemented. Recognizing the critical need for solutions to problems of importance to the state and nation, our work is research-intensive, generating solutions to the problems of education even as we strive to understand those problems and project a new, more vibrant future for the intellectual, economic and cultural capital provided by education to our society at large.

The merger of all ASU teacher certification programs under the auspices of the College of Teacher Education and Leadership is strengthening opportunities for students wishing to become teachers. And, at the same time, the creation of the Fulton Institute and Graduate School of Education is bolstering intellectual connections among scholars across ASU and creating previously unimaginable opportunities for students pursuing advanced degrees in education.

From Elaine Surbeck ASU