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**Minutes**  
**City Council Education, Technology & Economic**  
**Development Committee**  
**November 6, 2007**

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**Minutes of the Council Education, Technology and Economic Development Committee held on November 6, 2007, 2:00 p.m., at the Tempe Historical Museum, 809 E. Southern, Tempe, Arizona.**

**Committee Members Present:**

Councilmember Onnie Shekerjian, Chair  
Councilmember Barb Carter

**City Staff Present:**

Jennifer Adams, Dep Pub Wrks Mgr	Gene Obis, IT Mgr
Kathy Berzins, Dep Comm Svcs Mgr	Sheri Partridge, Council Aide
Tom Canasi, Comm Svcs Mgr	Mark Richwine, Parks & Rec Mgr
Kate Hanley, TCC Exec Dir	Dr. Alex Smith, Tech Dev Spec
Don Hawkes, Water Utilities Mgr	Lynette Stonefeld, TCC Comm in Schools
Shelley Hearn, Comm Rel Mgr	Judy Tapscott, Dep Comm Svcs Mgr
Ted Hoffman, Deputy IT Mgr	Sheri Wakefield-Saenz, Econ Dev Dir
Jan Hort, City Clerk	

**Guests Present:**

Julia Alvarado, University Public Schools/ASU  
Chris Bustamante, VP, Rio Salado College  
Susan Carlson, AZ Business & Education Coalition  
Debbie Cassano, AZ Academic Scholars  
Brandon Coakley, Williams & Associates  
Barbara Khalsa, Rio Salado Community College  
Diane Meulemann, Tempe Union High School District  
Amanda Burke, ASU, Associate Director of the Office of University Initiatives  
Elaine Stover, ASU, Career Services

**Chair Shekerjian called the Technology portion of the meeting to order at 2:06 p.m.**

**Technology**

**Agenda Item #1 – Public Appearances**

None.

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**Agenda Item #2 – Approval of Minutes for September and October meetings**

Councilmember Shekerjian asked that the second sentence under Item #4 of the Education portion of the September 4<sup>th</sup> Minutes be changed to read: "...staff met with the Arizona League of Cities and Towns and discussed setting up a separate focus group discussion prior to the annual meeting."

Councilmember Carter asked that at the bottom of page 6 of the September 4<sup>th</sup> Minutes, the second paragraph of Item #7 be changed as follows: "...a 'Friends of TCA' group has been formed and the primary mission is to raise money for arts programming. Trick's restaurant is hosting a fundraiser and proceeds are for youth arts programs."

Councilmember Carter moved for the approval of the meeting minutes for the September 4<sup>th</sup> as amended and October 2<sup>nd</sup> as presented. Second by Councilmember Shekerjian. Motion passed.

**Agenda Item #3 – Technology-Based Educational Best Practices**

**Agenda Item #5 – Business Use of Internship Website**

Items #3 and #5 were combined.

Alex Smith summarized that

- As of today, there have been 2,384 hits on the website since its inception in April. The website is structured so that a user can go to the main page, or directly to business or students. The numbers indicate that business is the priority, followed by the main page, with the student area significantly less.
- A Technology and Education Forum was held last month, and this site was marketed at that event. Staff is working with Medtronics as beta tester for the website. An update was sent out with an attached survey with about 3,000 names, as well as posted on the website in the "news" section.
- Staff has coordinated with the Fulton School to develop low cost internship opportunities for small businesses. Since August of 2006, 186 Tempe organizations have posted needs for interns on the Sun Devil Career Link. These represent a wide variety of businesses. About 45 of those are marginally tech companies. There is no tracking of this data, however.

Mr. Smith distributed a July 27, 2007, article from *Science* which outlines one of the first quality surveys of the effect that advanced study of sciences and mathematics in high school has on successful college careers. The nature of the study was designed to test the "physics first" theory and nearly 8500 students were sampled. The two pillars survey indicated that students who take high school calculus average better grades in college science than those stop at pre-calculus. Two pillars are study in the same science subject and advanced study of mathematics in high school. The website [www.ficss.org](http://www.ficss.org) has more information.

Councilmember Shekerjian asked how the Committee can make people aware of this information.

Sheri Wakefield-Saenz responded that one of the fundamental drivers of this Committee is to work through STEM partners to increase the number of students going into math and science

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education. This is the foundation of why it is necessary to have the right preparation for a science career in the future.

Councilmember Shekerjian added that one of the sub-items under item #10 on the work plan states: "Explore appropriate opportunities to promote Tempe as the 'Smart Place to Be.'" This kind of information would be applicable to that type of public relations campaign and the information could be banked and put into the promotional campaign.

Councilmember Carter added that this information could be provided to parents at the time the eighth grade students come from middle school for high school pre-orientation in the spring. The counselors then go to the middle schools and sit down with the students to register them for classes. If the parents have the information first, it might be helpful.

**DIRECTION:** Provide this information with a cover letter from the Committee to the school counselors. Note the website in the cover letter.

Ms. Wakefield-Saenz suggested adding the "Smart Place to Be" to the business website, and have a databank of information that relates to that concept.

Mr. Smith added that he would check with *Science* to get approval to post that material on the website.

Mr. Smith further updated activity by the Center for Research in Education, Science, Mathematics, Engineering and Technology (CRESMET) at ASU. The Center's role is to develop ways to figure out how science education works and how to measure it. They support integrated instruction of mathematics, science and engineering.

- Project Pathways, a math & science partnership
  - \$12M NSF grant
  - Teachers from Tempe Union High School District work through training courses with chemistry, biochemistry, and engineering faculty at ASU to develop education modules for the classroom.
  - 44 Tempe teachers have participated, 6 have finished all 4 courses (a 2-year commitment), and 17 are still going, with 2 of those finishing this semester and 15 finishing in the spring.
- Math and Science Teaching Fellows
  - 8 Tempe teachers participated last summer with a 6-week program.
  - 14 research projects to work on
  - Hands-on lab work and training for STEM teachers
  - Learn how to translate their work experience back into the classroom
- Math Workshops
  - Over 30 teachers have participated.
- Informal Science Education is a program
  - Program designed to develop and implement informal learning experiences designed to increase interest, engagement and understanding of STEM.
  - Targets individuals of all ages and backgrounds.
  - To acquire a project, must demonstrate strategic impact, innovation and collaboration.
  - Samples of successful projects include:

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- Fusion Science Theater: A community-based science theater (\$74,981)
  - BioArcade: a suite of online biology games for youth ages 9 to 13 (\$636,502)
  - Future Scientists Initiative: television series with Web and outreach activities for 6 to 10-year-olds (\$1,351,500)

**DIRECTION:** Move forward to explore grant from Informal Science Education.

**Agenda Item #4 –IB Marketing Update**

Sheri Wakefield-Saenz summarized that staff has been working with Tempe High to help International Baccalaureate (IB) get additional sponsorship and funding. They are working to get companies identified from the recent technology event in contact with Tempe High. The companies might want to help promote the program or assist in funding.

**Agenda Item #6 – ASU/AMA Internship Fair Update**

Sheri Wakefield-Saenz summarized that staff met with an ASU student who is the current president of the American Marketing Association (AMA) division of the Business School at ASU. There are currently 30 to 50 active members and 200 to 300 active alumni or others related to AMA at the University. They desire assistance in getting a job fair/internship opportunity listing in the community. One way to help would be in facilitating corporations to exhibit. This would help the AMA get additional memberships because it brings value to the students. It also helps the businesses because they are actively looking for top interns who are self-directed. Additionally, it will help staff get contact with the AMA alumni who may fund a fair through their corporations. They will begin looking for a location and getting the word out to alumni members.

Councilmember Shekerjian added that this would provide an added value for these businesses.

**DIRECTION:** Have an information booth at the career fair.

**Agenda Item #7 – Scope of Work Update**

Sheri Wakefield-Saenz summarized that two items were added to the work plan at the last meeting:

- Item #11, "Development, implementation and assessment of economic development approaches, projects and proposals." Bullet points were added.
- Item #12, "Redevelopment and Development Services policy formation and implementation of council-approved projects." The following bullet points were suggested:
  - Facilitate efficient and effective processing of business entitlements.
  - Use Technology solutions to facilitate communication between development agencies.
  - Pursue integration of development initiatives with city-wide GIS system.
  - Assist in expansion and growth of redevelopment initiatives.

Councilmember Shekerjian asked if the GIS would need to be under the CIP program.

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Ms. Wakefield-Saenz responded that it is a significant investment in the \$90K range. A high-tech project can be spread over the years and is something that other departments could share.

Councilmember Carter suggested adding the words “including sustainability” in the last bullet item as follows: “Assist in expansion and growth of redevelopment initiatives, *including sustainability.*”

Councilmember Shekerjian asked to replace the last bullet point that under Item #9 with: “Explore, create and implement an E-Resource center for best practices in education related to science and technology.”

**DIRECTION:** Move forward to Council at the IRS on November 8<sup>th</sup>.

**Agenda Item #8 – Future Agenda Items**

- AMA Internship Fair Update
- Update on IB
- Update on distribution of material for parents on science education
- Barrett Honors College update

**The Technology Advancement portion of the meeting was adjourned at 2:50 p.m.**

**Chair Shekerjian called the Education portion of the meeting to order at 3:00 p.m.**

**EDUCATION**

**Agenda Item #1 – Public Appearances**

None.

**Agenda Item #2 – Approval of Minutes for September and October Meetings**

These minutes were approved during the Technology portion of the meeting.

**Agenda Item #3 – Introductions**

Everyone introduced themselves.

**Agenda Item #4 – Career/Education Fair Update**

Amanda Burke summarized that ASU, the Community College District, and the City of Tempe discussed hosting a Career/Education Fair at Wells Fargo Arena. Discussions are continuing.

Councilmember Shekerjian added that she met with Karen Poole and representatives from ASU regarding the possibility of using that facility, as well as potential partnering. The fair will be held on the east side, but we would like to have it in Tempe. This is for students who might not normally be exposed to the university and students can see all of their education options. There are great partnership opportunities.

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### **Agenda Item #5 – ABEC – Scholars Program**

Susan Carlson summarized that Arizona Business & Education Coalition (ABEC) was formed in 2002 as a result of Proposition 301 which put additional sales tax money into public schools. It was also the first time that business and education powerhouses worked together on a public issue. This has been very successful.

- ABEC is half business and half education.
- Board of 44 members
- Goal is to find common ground around complex issues of public education, and go forward.
- Received "Leader of the Year in Public Policy" award from the *Arizona Capital Times* this year.
- There is a push toward math and science and a more competitive society in this country.
- Three years ago, ABEC was the recipient of the grant from the US Department of Education for the US Scholars initiative. The goal was to target the middle 50% of students to take more math and science in their coursework. Most often, students are taking the wrong courses.

She continued that ABEC is a statewide membership organization. The Scholars initiative began with four districts. It has now grown to include nine school districts and Pima County is beginning to look at this, as well. As the bar is raised in the school districts, it actually creates a systemic change. It pushes districts to look at how they deliver instructions and how they integrate technical education along with academics. They have urged the State Board of Education to make this a voluntary course of study statewide and it has begun to move forward.

Bobbie Cassano narrated a PowerPoint presentation.

- Arizona Academic Scholars is an interim step toward the increased graduation requirements and rigor which are being reviewed by the State Board of Education (SBE).
- It is a community-wide incentive program and both business community leaders and the education community work together to encourage students to take a more academically-enriched high school course of study.
- The SBE adopted the Academic Scholars program in May.
- Information technology and the internet now account for one-third of America's economic growth.
- Students will have more competition for fewer jobs. By 2015, about 3.3M service sector jobs and 3.3M high-tech jobs are expected to be lost to outsourcing. Outsourcing accounts for approximately 10% of American jobs lost in the last three years.
- Only 1.6% of new jobs in Arizona will not require some postsecondary education in order to be above the median wage. High school graduation requirements do not adequately prepare students for postsecondary study and careers.
- Students must be prepared to maneuver adeptly within and between industries.
- The strongest predictor of college completion is strong high school requirements. The higher the level of math in high school, the stronger the continuing influence on bachelor's degree completion. Completion of two experimental lab science courses is the second most significant factor in determining whether or not students will complete college.
- Of Arizona students, only 28% of 8<sup>th</sup> graders take Algebra I, which is the gateway course for college-bound students. The earlier they get that, the faster they are on track. Only

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67% of high schools offer Advanced Placement. Only 6% of the juniors and seniors are taking the AP exams, only 2% to 3% of minorities.

- 42% of students in 4-year institutions and 63% in two-year institutions require remediation. Only 34% of those who do require remediation complete a two or four-year degree. Only 56% of students who do not require remediation complete a two- or four-year degree.
- In 4-year colleges, 27% of freshmen do not return for their sophomore year, and in w-year colleges, 50% do not return. Only 17% of Arizona's graduates complete a degree on time.
- Basics of the Arizona Academic Scholars program is to send a message, particularly to the middle 50%, that a passing grade in a tough course is more advantageous than an "A" in an easy course.
- Arizona Academic Scholars Course of Study:
  - 4 years of English
  - 3 years of math (4 is encouraged)
  - 3 years of social studies (including geography, world history, U.S. history, U.S. government/civics and economics)
  - 3 years of lab sciences (biology, chemistry and physics)
  - 2 years of language other than English
- A grade of "C" or better is required.

Councilmember Carter stated that some districts offer an alternative to Economics, such as entrepreneurship.

Ms. Cassano responded that the SBE is looking at an Economics requirement. Some combine Economics and U.S. Government and that would be acceptable. An Economics component must be included.

Ms. Carlson added that the University requires four years of math and that would allow a Scholar to enter with one waiver. College means post-secondary study. It doesn't necessarily mean a university.

Ms. Cassano continued that academic rigor is not at the expense of career technology. They are suggesting that students think about the four years of high school. While a well-rounded education is important, academic success and rigor are also important. One is not at the expense of the other. She continued the presentation:

- Three key components to the program:
  - 8<sup>th</sup> grade presentation, "Great Expectations-Great Rewards", given by a business person if possible.
  - 9<sup>th</sup>, 10<sup>th</sup> and 11<sup>th</sup> grades – business partners provide incentives and academic supports to stay on track, such as tutoring, prizes, etc.
  - 12<sup>th</sup> grade – graduation recognition events, including a scholar's medallion.
- The Chamber of Commerce is a good business partner.
- Each district signs a letter of commitment, along with the business partner. In Tempe, both the Tempe Elementary School District and the Tempe Union High School District would sign a letter. This letter provides access to all materials and support.

Ms. Carlson added that it has been successful in other communities. In the pilot districts, a community committee was organized and through that committee, the Chamber of Commerce, the local bank, parent and civic leaders, and City Council were represented. They worked with their local school district and put together a plan. She suggested that Tempe would be a perfect place for an experiment with a non-unified school district. The website, [www.azacademicscholars.org](http://www.azacademicscholars.org) lists components for middle and elementary schools, as well.

Councilmember Shekerjian asked if there was anything that would preclude this Committee from being the community committee.

Ms. Cassano responded that it would be a good group to begin the discussions.

Councilmember Shekerjian stated that this would be a good vehicle for the Committee.

Tom Canasi added that although the district is not unified, they are unified in their commitment to education.

Councilmember Shekerjian added that the Committee can help by getting the university and community colleges together because that would be another piece to the puzzle.

Ms. Carlson added that the top 10% actually gravitate toward this program immediately. Part of the students in the top 10% are many times on a mission toward some career and they may or may not participate because in their minds they have to take a certain set of chemistry courses, for example. This is targeted more for the middle 50%. ABEC has been involved in the advocacy around dual enrollment and believes that is key. The political issues around dual enrollment that legislators take exception to, we advocate. Their federal grant expired, but the Board of Regents is funding their work, so there is no money that comes with this. It is not a scholarship program.

Ms. Cassano stated that they have money through 2008/2009. They are looking at this as an interim step to the higher graduation requirements. Once they know what the graduation requirements look like, then they have something to aim for, but right now, they are trying to get students prepared. This is an introductory phase or transition and it brings community and business support.

Ms. Carlson added that students eligible for PELL (Title I) will qualify for the American Competitiveness Grant which provides an addition to their PELL grant if they have at least a 3.0 GPA their freshman year in college. There is value in looking at the lower income students and putting together some kind of initiative.

**DIRECTION:** Move forward to talk to educators.

**Agenda Item #6 – Tempe 11 Partnership Possibilities**

Continue for the next meeting.

**Agenda Item #7 – Scope of Work Update**

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DIRECTION: Move forward to Council at the IRS on November 8<sup>th</sup>.

**Agenda Item #8 – Bridges Update**

Tom Canasi summarized that this program enriches the Kid Zone after-school program.

- The Kid Zone program operates at nineteen sites after school and enrollment has increased 20%, with a total of 2400 kids participating. These programs run from 6:30 a.m. until school begins.
- The Bridges program focuses on cognitive development, as well as skill-based learning. Staff will be working with Bridges staff to determine how we might pilot it in one of our Kid Zone sites.
- Bridges staff is very interested in pursuing this opportunity with the City.
- Staff would develop performance indicators, initiate it in one school, select students who would benefit the most from the program, monitor it over a period of time, and then return to the committee with an update.

Councilmember Shekerjian added that the Bridges program is very successful with their remediation program in the classroom. This product is for an after-school program and they also have a summer program. It is very important to have good data to support the program. Bridges does not have data on the after school program and if they are willing to pilot this, then it is a wonderful marketing tool.

**Agenda Item #9 – Battery Recycling Update**

Don Hawkes summarized that the Water Utilities Department administers the bulk of the environmental programs for the City, including oversight of the Household Products Collection Center (HPCC) at University between McClintock and Rural. He stated that staff is seeking a partnership with schools, both the Tempe Elementary School District and Tempe Union High School District with the potential opportunity to bring ASU and Maricopa County Community Colleges together as well. This project is an opportunity to make a difference in Tempe and promote sustainability in Tempe by collecting and disposing of batteries properly.

He outlined the proposed program and noted that with support and assistance from the school districts, the program should be a reality in a couple of months.

- The City will provide a simple container.
- The schools will provide a safe location for the container, such as in the administration area.
- The City will work with the districts to develop outreach messages and print materials and the City will provide the print materials.
- The districts/individual schools will work with their service clubs to provide transportation of the collected batteries to the HPCC on a regular basis.
- The City will be responsible for all disposal costs.

Councilmember Shekerjian stated that she had mentioned this project to Mark Duplissis, Assistant Principal at Corona del Sol, and he expressed an interest in the project as a service activity. She suggested reaching out to the activities directors at the high schools. She also suggested speaking to Jerrod Longoria at ASU. There is a recycling group at ASU and this might be a project for them.

Chris Bustamante added that Rio Salado Community College will investigate this, and will also take the proposal to the district, as well.

Councilmember Shekerjian asked Mr. Bustamante to provide an update at the next Committee meeting.

**Agenda Item #10 – Announcements**

Diane Meulemann summarized Tempe High's Strategic Plan, which will be on their website for community input. This plan will be presented to the governing board in December for approval. Their mission is, "Committed to Excellence in Teaching and Learning." Core values are included, and an Over-Arching Vision Statement which is, "Through our goals and objectives, we will transform the structure of our schools to meet the needs of the ever-changing world." Currently there are three goals:

- To annually increase percent of total students who meet or exceed standards required by NCLB as measured by AYP.
- To optimize the use of all resources to accomplish District goals.
- To recruit and retain highly qualified, diverse staff.

**Agenda Item #11 – Future Agenda Items**

None.

**Meeting adjourned at 4:10 p.m.**

Prepared by: Connie Krosschell  
Reviewed by: Shelley Hearn

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Jan Hort  
City Clerk