Chandler-Gilbert Community College
Environmental Technology Center

Dr. Darien Ripple - ETC Coordinator
Shannon Smith – ETC Student Coordinator
Shane Kula – Adobe Brick Project Developer
Environmental Technology Center

Part I
History & Strategic Plan

Part II
ETC Pedagogy & Outreach

Part III
Experiential Learning and Student Projects
The goal of the **Environmental Technology Center (ETC)** is to construct a low-impact and cost efficient living classroom. The intent is to create service learning and experiential learning projects that will allow students and community members the ability work on the evolving structure and surrounding gardens. The ETC will seek out ways of being sustainable while attempting to create a sense of place within the community.
Historical Development

Fall 2006
Darien Ripple presented a paper to administration calling for an environmental technology center

Spring 2007
A proposal to create the ETC was introduced to the Global Learning Committee
Seed money from a Shared Futures Grant was to be used to create the ETC.

A consultant provided suggestions to construct a simple structure next to the library.

An preliminary plan was approved by the CGCC.

Funds were earmarked for the construction.

Spring 2009
The ETC location north of Ironwood Hall was Approved.
Spring 2010
The first gardens began

Summer 2011
A new ramada design with a solar roof sponsored by Salt River Project

Current Projects
5 Clubs have garden plots
Educational collaborations with 11 CGCC instructors
Education projects with 3 public Schools
Daisy troop educational tours
Native Seed Project
Adobe Brick Project
GOAL #2
Provide College Capacity to Meet the Needs of our Evolving Community
Objectives:
2.5 Create formal and informal spaces adaptable to evolving pedagogies and technologies.
Objectives

4.1 Embed Global learning and sustainability into the curriculum.

4.2 Expand and enhance programs and services that increase student and employee awareness and understanding of global issues that sustain life and learning.

4.3 Collaborate with external partners to support programs for a socially, environmentally, and economically sustainable society.

4.4 Examine current practices, as well as opportunities, to move the college toward a highly sustainable, carbon neutral mode of operation and work with stakeholders and vendors aligned with principles of sustainability.
Objectives:

6.1 Strengthen and expand community and corporate partnerships

6.2 Expand outreach and promotional efforts to inform and engage the community.

6.3 Encourage a culture of civic engagement and social responsibility.
Defining a Sense of Place

The ETC has focused on two inter-related directions:

1) the actual construction of a ramada, learning stations and gardens

2) the formulation of a place-based educational pedagogy.
Environmental Technology Center Vision

- The Environmental Technology Center will allow faculty and staff to achieve the following objectives:
  - Embed global learning and sustainability across the curriculum.
  - Expand and enhance programs and services that increase student and employee, and community awareness and understanding of global issues that sustain life and learning.
  - Collaborate with external partners to support programs for a socially, environmentally, and economically sustainable society.
  - Examine current practices, as well as opportunities, to move the college toward a highly sustainable, carbon neutral mode of operation.
  - Work with stakeholders and vendors aligned with principles of sustainability.
Experiential Learning

- Experiential learning is “a process in which the learner works on a learning task or activity and is largely independent of the teacher who acts as manager of the learning programme and as resource person” (Higgs, 1988, pp.40-41).
Place-based education

In regards to the place-based education, faculty and staff performed particular roles to enhance the student learning process.

Coordinator - Darien Ripple
History of the area – Paul Petrequin
Georegion – Roy Schiesser
Service Learning – Alison Whiting
Educational Outreach – Chris Schnick
Educational Materials – Larry Miller
Instructional Technology – Tom Foster
Applied Engineering – Bassam Matar
Student Projects

Rain Harvesting      Compost
Pepsi Grant          Public relations
LED Lighting         Mixed Use Gardens
Green House          Native seeds
Solar Panels         Green Roofs
Soil Testing         Adobe Bricks

“This project to me was not simply a project of researching green roofs but to also research what it means to live greener.”
Faculty Projects

- Outreach to Area Schools
- Soil Temperature Analysis
- Food Bank Garden
- Applied Math & Plant Growth
- Composting & Writing
- Computers & Soil Testing
- Adobe and Art
- Environmental Ethics & Food
- Various Honors Projects
“The days following the development of the mixing pit, people came and went, but not me. I was having a good time. Adobe making gave me a sense of belonging. I was content that somebody appreciated the skill of the common people and realized that in many ways it makes a lot more sense than our so called advanced technology. I was ready to show the world the beauty and magic of adobe bricks.”
Community Gardens

- Sensory gardens
- Edible Schoolyard
Adobe Project
Building Communities
Academic Excellence Through Experiential Learning
A Sustainable Future
Enough Said