

"Education is not about filling a bucket but lighting a fire" William B. Yeats



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Definition of ACE



Community Engagement

"...working to make a difference in communities (local, regional/state, national, global) through individual or collective actions designed to improve the quality of life. Community engagement requires collaborative, reciprocal processes that recognize, respect, and value the knowledge, perspective, and resources shared among partners."

Ehrlich, 2000

Academic Community Engagement (ACE)

"...a teaching method that combines *community engagement* with *academic instruction*."

ACE courses are intended to prepare students for a life-long commitment to community engagement

National Survey of Student Engagement, 2003

History of ACE Courses in General

(Kendall et. al., 1990; Putkus, 2000; Gujarathi et. al. 2002)

- ACE pedagogy **began in the 1960's**
- It was originally called **experiential/service learning**



- Types of experiential/service learning pedagogies included
 - Internships (paid, unpaid, for profit, not-for-profit)
 - Extra credit options (volunteer for extra credit)
 - Class projects/activities
 - Published case studies, field work, simulations, hypothetical problems of established companies in back of chapter exercises, *consulting projects for actual clients*.

Theoretical Reasons for using ACE Pedagogy

Social Interdependency Theory (Johnson et. al. 1989)

Positive interdependency (*cooperation*) leads to positive interaction (*learning*) Negative interdependency (*competition*) leads to negative interaction (*obstruction*)

Fleming's Model

- Visual learners learn best through *seeing*
- Auditory learners best learn through *listening*
- Kinesthetic learners learn best by *experiencing*



• Model of Experiential Learning (Kolb 1981, 1984)

- Learning is the process whereby knowledge is created by the **integrating** of *Concrete experience, Abstract conceptualization, Active experimentation, Reflective observation*. ACE course integrate these.
- Blooms Taxonomy (Madsen et. al. 2006)
 - ACE pedagogy can develop higher order thinking skills rather than lower level memorization skills

All ACE Courses at Sam Houston State University (SHSU) Must Include

- Classroom instruction (teach theory, ideas, concepts, etc.)
- At least Nine (9) documented hours of the community engagement that is tied (*relevant*) to classroom instruction (*what they learnt*) per semester
- Feedback from the community partner(s)



- Three statements in the syllabus about community engagement:
 - The value of community engagement
 - How it is linked to a course objective and part of a grade
 - A written reflection about the experience
- Currently, there are 104 courses at SHSU using ACE Pedagogy
 - Instructors wanted to measure the benefits of community engagement

Benefits of ACE Pedagogy to Students

(Eyler et. al. 2001; Razzouk et. al. 2003; Madsen 2006 ; Tucker 1998; Astin et. al. 2000; Michaelsen 2000; Munter 2002; Gujarathi et. al. 2002; Smith et. al. 2005; Parsons et. al. 2009; Godfrey 1999; Skolnokoff et. al. 2010)

• Academic and Career Development

• Mastery of course material (*content*), ability to translate course material to *real world*, learn *problem solving* and *decision making* skills, *critical thinking* skills, *cognitive development* skills, relevant to career, future job prospects, *learn how to learn, presentation* skills, more motivated, creates active (versus passive) and collaborative *learning*

• Personal Development

• Improved *self efficacy, leadership* skills, *communication* skills, small group *collaboration skills, teamwork, time management* skills, *networking* skills, *synthesis* and *analysis* skills, *conflict resolution* skills, *writing* skills, faculty serve as mentors

• Social Development

• *Social responsibility, citizenship,* understanding *diversity,* personal satisfaction, moral development

Literature Review:

Scale to Measure the Benefits of Community Engagement

SErvice LEarning Benefit (SELEB) scale

Toncar et. al. 2006

- *Twelve item* self assessment scale
- Four factors practical skills, citizenship, personal responsibility, and interpersonal skills
- SELEB was validated using a small sample (42) of students in two business courses.

Challenges (why not SELEB)

- SHSU faculties across multiple disciplines wanted to include specific items
- While the term Service Learning is widely used, SHSU uses the term Academic Community Engagement (ACE)
- SELEB scale had not undergone extensive re-validation and not received widespread scrutiny

Pilot Study One

- Using Churchill's (1979) recommended procedure
- Started with the SELEB scale
- Added additional items
- "Important scale" (from 1-7) was replaced with a "Likert scale" (1-5 point)
- *Face* validity of the scale was assessed by faculties teaching ACE courses.
- A convenient (diverse) sample of nine course with two hundred and twenty one students participated
- *Content* validity of the scale was assessed by asking students (in an open-ended format) to indicate their perception of the benefits they received from their ACE course

Pilot Study Two

- Primary purpose to revalidate and measure reliability of the newly developed scale
- Secondary purpose was to determine if any differences existed across the various demographics variables
- A convenient (diverse) sample of sixteen course with three hundred and fifty students participated
- *Construct* validity was assessed using factor loadings (using the eigenvalue > 1 criteria) on a rotated factor matrix using maximum likelihood extraction method with varimax rotation
- Several ACE faculties were requested to label the factors

BACE Scale

Items	Internal	External
Participating in the community helped enhance my <i>leadership</i> skills.	0.741	
The community service I did in this course helped me to <i>analyze problems</i> and <i>think critically</i> .	0.720	
The community service in this course helped me to develop <i>workplace skills</i> .	0.716	
The community service in this course has made me <i>more employable</i> .	0.712	
The community service in this course assisted me in defining the <i>type of work</i> I want to do in the future.	0.705	
Participation in the community helped enhance my communication skills.	0.701	
The community service in this course helped me to develop organizational skills.	0.684	
The community service in this course helped me to <i>connect theory with practice</i> .	0.612	
Working in the community helped me to define my personal strengths and weaknesses.	0.608	
The community service in this course helped me to apply the subject matter in a " <i>real world</i> " <i>situation</i> .	0.572	
Conbach's alpha	0.936	
This course helped me understand my <i>responsibility</i> to serve the community and develop my <i>citizenship skills</i> .		0.775
This course helped me understand that I can <i>make a difference in my community</i> by being involved.		0.740
The community service aspect of this course showed me how I can become <i>more involved</i> in my community.		0.729
This course helped me understand the <i>differences</i> (i.e., cultural, racial, economic, etc.) that exist		0.668
in our community.		
The community service aspect of this course helped me to become <i>more aware of the needs in my community</i> .		0.667
Conbach's alpha		0.895

Additional Benefit to Students and Community

Items	Mean
At the <i>beginning</i> of the semester I was uneasy about the community service component of the course.	2.82
At the <i>end</i> of the semester I thought that the community service aspect of this course was valuable.	4.37
t-value = 16.919; degrees of freedom = 347; p-value = 0.000	

Items	Mean	St. Dev.
The community service I did through this course <i>benefited the community</i> .	4.23	0.912
I probably will continue to serve the community after this course.	4.22	0.982
I would recommend this course to a friend.	4.22	1.065
On a scale of 1 to 10, where 1 is a bad experience and 10 is an excellent experience, I would rate my community service learning experience in this class/course as a	8.41	1.784

Demographic Analysis

- Female respondents were higher (larger mean) on all responses when compared to male respondents
- Non-commuters tend to rate the items significantly higher (larger mean) than commuters
- Non-whites tend to consistently rate higher (larger mean) on the BACE scale items than whites
- We believe that these difference were primarily dues to a biased sample (more non-whites, noncommuters, females)

Conclusion and Future Research

- SELEB scale has 4 factors BACE scale has 2 factors smaller factor structure
- BACE scale was developed and validated using a larger number of courses across several disciplines and a larger sample of students than SELEB scale
- Pilot study III is necessary for further item refinement
- A representative (probability) sample of courses is necessary to re-validate the scale
- Additional demographic questions (income) to identify group differences
- Development of a self assessment scale to measure benefits to other stake holders

Benefits of ACE Pedagogy to Other Stakeholders

• **Faculty** (Easterling et. al., 1997; Cooke et. al. 2004)

- Develops contacts
 - Research or consulting opportunities
- Faculty development (*keep current*)

• **University** (Astin et. al. 1998, 1999)

- Social commitment (*provide service to constituencies*)
- Image, positive publicity
- Producing socially responsible graduates
- Increases retention, better prepared for graduate school

• **Community Partner** (Jacoby 1994)

• Fresh approach to solving problem



Questions/Discussion

"Students are not just informed but transformed" (Waddock et. al., 2000)

"Tell me I will forget; show me and I remember; involve me and I will understand" (Chinese proverb)