

Strategic Plan Document – 2003-2006

American Society for Engineering Education

Engineering Technology Council

Introduction to Strategic Planning

Strategic plans help provide direction and meaning to everyday activities within organizational environments. The vision, mission, values, goals, and relationships with the external environment guide the strategic plan. Additionally, strategic plans serve as a framework against which physical, fiscal, and human resources are allocated; programs are created and/or modified; organizational structures are changed; decisions are made; opportunities are initiated; support activities are aligned; and overall performance evaluated.

People and Processes Involved in Strategic Planning

For the strategic plan to achieve its true purpose – that is, a framework against which a series of decisions can and should be made – involvement from those who will work under the auspices of the strategic plan is necessary. The following table highlights past, present, and future activities associated with the strategic planning process for the ETC:

Time:	Activity:
<i>September, 2002</i>	<ul style="list-style-type: none">• Mike O’Hair, Pat Fox, and Stephen Hundley met to review previous ETC initiatives and to develop strategic planning process.
<i>October, 2002</i>	<ul style="list-style-type: none">• A group of ETC faculty, administrators, and other stakeholders participated in a situational analysis at the ETLI, which included examining internal strengths and weaknesses of ETC and external opportunities and threats in the broader engineering technology field. Additionally, five broad goals for ETC were articulated.
<i>January, 2003</i>	<ul style="list-style-type: none">• Using the five goals for ETC as a framework, a group of ETC faculty, administrators, and other stakeholders developed specific strategies associated with each goal.
<i>Spring, 2003</i>	<ul style="list-style-type: none">• Additional comments/input from ETC members was sought, and the results were synthesized, summarized, and disseminated.
<i>June, 2003</i>	<ul style="list-style-type: none">• Final adoption of ETC strategic plan at ASEE National Meeting in Nashville, TN, and implementation of strategic plan for ETC.
<i>October, 2003</i>	<ul style="list-style-type: none">• ETC Board members met to update action items, time frames, champions, and status/evidence for strategies.

	<ul style="list-style-type: none"> • ETC Board members met to update action items, time frames, champions, and status/evidence for strategies at the ASEE annual conference June 2004, ETLI Oct 2004, CIEC February 2005, ASEE annual conference June 2005, and ETLI Oct 2005.
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Outcomes of Strategic Planning

Situational Analysis: Summary of Challenges and Opportunities Facing ETC

Challenges

- There is no widely accepted definition of engineering technology outside the ET community.
- The title of engineering technologist has no general acceptance in industry.
- Some engineering education has moved in the direction of “more applied” and toward engineering technology.
- Reduced financial resources are a threat to higher education particularly in the current economic climate.
- Vocational education is moving toward engineering technology.
- There is a need to create a more diversified pool of students who seek engineering technology education.
- There are insufficient working capital and unidentified resources for ETC to adequately promote engineering technology education.

Opportunities

- More and more companies desire our product (engineering technology graduates) that our institutions are producing; hence, there will be an increased demand for engineering technology programs.
- Secondary education movements such as Project Lead the Way are enhancing the pool of potential engineering technology students with better academic preparation.
- Engineering technology programs have an opportunity to attract more minorities and females. Currently the percent of both are very low compared to engineering and science.
- Soft skills like communications and teamwork are desired by industry. The ETC recognizes these skills as a definite strength of engineering technology education. The ETC should encourage enhancement of these skills and encourage different learning processes such as process.

- Engineering technology should encourage various instructional delivery methods. The ETC should encourage use of various methods among its members.
- Many international opportunities for engineering technology programs exist including two-way exchanges of faculty and students. Programs will benefit because of an enhanced global viewpoint, an increased ability to serve the needs of industries having an international presence, and increased student enrollment. Engineering technology programs typically turn out the type of graduates that many international companies are looking for.
- There are opportunities to strengthen the ETC by attracting more institutional members, and by raising funds to support activities that promote engineering technology education.
- ET can provide new educational opportunities in new emerging technologies.
- There is an increasing need for applied research.
- There is an increasing desire in some institutions to move into ET graduate programs.
- ET should get involved in the National Academy of Engineering.

Mission Statement

The Engineering Technology Council of ASEE is the national organization that speaks for engineering technology education and is committed to promoting quality education and creative endeavors in engineering technology.

Overview of Goals

- Goal #1:* The ETC will strengthen its position as the national organization that speaks for engineering technology education.
- Goal #2:* The ETC will promulgate the definition of engineering technology.
- Goal #3:* The ETC will promote quality engineering technology education.
- Goal #4:* The ETC will develop leaders for engineering technology education.
- Goal #5:* The ETC will develop appropriate guidelines and promote scholarship for engineering technology educators.

Strategies for Implementing Goals

The tables that follow summarize each goal and the various *strategies* associated with each goal (Specific individuals or groups were identified to serve as *champions* in implementing the action items associated with each strategy. *Timeframes* have also been established for each strategy, and the *status* and/or *evidence* of each strategy is noted.)

Goal # 1	The ETC will strengthen its position as the national organization that speaks for engineering technology education.	
Strategy 1.A	<ul style="list-style-type: none"> Increase ETC memberships and develop alternative approaches to attract new members to ETC, particularly 2-year schools. 	
	Champion(s):	Tom Hall*, Mike O’Hair, Jim Otter* and Walt Buchanan
	Action Item(s):	Define at least five reasons why a four year ET institutions and a two year ET institutions would want to join ASEE/ETC. Develop a list of at least three effective methodologies to distribute information to prospective new ETC members. Feb 2005 Send Board Brief to Institutional Members. Develop ET Dean’s Roundtable for major issue discussion and policy making.
	Timeframe:	October2003 – June 2004
	Status/Evidence:	The Engineering Technology Dean's Roundtable met on October 4 and the agenda was refined with input from ETC reps and the steering committee.
Strategy 1.B	<ul style="list-style-type: none"> Develop a working definition of Engineering Technology at both 2- and 4-year levels. 	
	Champion(s):	Walt Buchanan*, Warren Hill, Jack Waintraub, Virgil Cox, Al McHenry, and Bob English
	Action Item(s):	Solicit input from ETD/ETC members on current definition of ET. Come up with three options to be discussed at the national meeting.
	Timeframe:	January 2003 – June 2004
	Status/Evidence:	Walt collected feedback on the current definition of engineering technology from members of the ETD list serve. An Ad Hoc Committee finalized a definition in August 2004. This was approved at the June 2005 meeting.
Strategy 1.C	<ul style="list-style-type: none"> Clarify the role and mission of ETC. 	
	Champion(s):	Mike O’Hair*, Pat Fox, Walt Buchanan
	Action Item(s):	Meet with leaders of ASEE, EDC, CMC, EDC, NAE, TAC of ABET, and others to discuss role of ETC.
	Timeframe:	October 2003 – ongoing

	Status/Evidence:	(1) Leaders of ETC met with leaders of ASEE January 2003 to discuss the role of ETC within ASEE, ETC leaders will continue dialog with current President of ASEE and Frank Huband. From this effort, ETC was asked to participate in the Go For It Magazine for Middle and High School Students. Several articles in the magazine were specifically written with engineering technology in mind. Oct 2004 Mike and Pat met with President of NAE, Wm. Wulf to introduce him to ETC. Also discussed joint project with EDC –Warren Hill was appointed to Data Committee and Dennis was appointed on International Committee. ETC is working more closely with CMC and hosted joint meeting at Fall 2005 ETLI. Representatives from CMC were invited to the Engineering Technology Dean's Roundtable. Eric Iverson and Dwight Wardell attended from ASEE headquarters.
Strategy 1.D	• Increase the visibility of ETC within ASEE and externally with groups like ABET.	
	Champion(s):	Walt Buchanan* and Tim Ziegler
	Action Item(s):	Establish ETC and TAC of ABET interface standing committee to address issues related to strengthening engineering technology education in the United States and discuss how both organizations can work together to support colleges and universities with TAC of ABET programs. ETC should be more involved with ABET.
	Timeframe:	June 2003 – June 2006
	Status/Evidence:	ongoing
Strategy 1.E	• Improve and coordinate ET communication, ETC website and publications, ET education website.	
	Champion(s):	Abi Aghayere *, Ken Rennels, Carol Richardson and Frank Gourley
	Action Item(s):	Publicize the ETE website as Image and Marketing Tool for engineering technology education for ASEE members. Look for other ways to improve publication and communication efforts for ET including updating and improving website for ETC. Get ASEE to mirror ETC web site on ASEE web site. Work with Eric to update ETC information on ASEE web site.
	Timeframe:	June 2003 – June 2004
	Status/Evidence:	The website is now up at IUPUI.

Goal # 2	The ETC will promulgate the definition of engineering technology.	
Strategy 2.A	<ul style="list-style-type: none"> Partner with industry and government stakeholders to make them aware of ET. 	
	Champion(s):	Mike O’Hair, Pat Fox*, and Lakshmi Munukutla
	Action Item(s):	Meet with members of Corporate Members Council (CMC), find out how ETC can work with the CMC.
	Timeframe:	June 2003 – June 2004
	Status/Evidence:	ETC invited CMC to have their fall meeting with ETC at RIT during ETLI and invited them to our ET Dean’s Round Table Oct 1-4, 2005. A visit to NSF was planned for Fall 2005. (?) Pat is a non-voting member of CMC Executive Group and participates in their monthly meetings. Likewise, we invited the CMC Chair to be a non-voting member of our ETC Executive Group.
Strategy 2.B	<ul style="list-style-type: none"> Work to get government job classification(s) for ET graduates. 	
	Champion(s):	Bob English*, Jack Waintraub and Warren Hill
	Action Item(s):	Define job classification.
	Timeframe:	June 2003- June 2004
	Status/Evidence:	Feb 2005 Warren has worked with some people at his University/State on this issue. This is an ongoing issue.
Strategy 2.C	<ul style="list-style-type: none"> Increase contacts with K-12 specifically related to ET. 	
	Champion(s):	Warren Hill, Mike O’Hair, Carol Richardson, Bob English*
	Action Item(s):	Get ETC representative on K-12 task force for ETC. Promote Project Lead The Way to other ETD/ETC members. ETC needs a rep on the K-12 division.
	Timeframe:	June 2003 - ongoing
	Status/Evidence:	<p>(1) Letter and DVD was sent about Project Lead The Way to ETC to ETD members on August 22, 2003 from David Wormly, chair of EDC and Mike O’Hair, chair of ETC.</p> <p>(2) Note: ASEE will establish K-12 division in June 2004. Mike O’Hair and Warren Hill may be a part of the first board. (?)</p>

Goal # 3	The ETC will promote quality engineering technology education.	
Strategy 3.A	<ul style="list-style-type: none"> Promote the accreditation of 2- and 4-year ET programs, using the appropriate median. 	
	Champion(s):	Walt Buchanan* and Tim Ziegler
	Action Item(s):	Continue to endorse and value ET 2 and 4-year ABET accreditation programs. Establish ETC and TAC of ABET interface standing committee to address issues related to strengthening engineering technology education in the United States and discuss how both organizations can work together to support colleges and universities with TAC of ABET programs.
	Timeframe:	June 2003 – June 2006
	Status/Evidence:	Ongoing.
Strategy 3.B	<ul style="list-style-type: none"> Promote professionalism in ET via professional society memberships and activities. 	
	Champion(s):	Mark Pagano and Carol Richardson*
	Action Item(s):	First Priority is to increase the membership and involvement in ETC/ETD/ASEE. Chair of ETC will send note to leaders of ETC on list serve to support the ASEE dean's program for new membership and to support new members joining ETD.
	Timeframe:	June 2003 – June 2006
	Status/Evidence:	Ongoing
Strategy 3.C	<ul style="list-style-type: none"> Increase the sharing of ET-related best practices among and between K-16 stakeholders. 	
	Champion(s):	Dave Dvorak, Jack Waintraub*, and Robert Mott
	Action Item(s):	(1) Investigate how to help TAC of ABET with Best Practices thru external funding opportunities. (2) Promote recently funded NFS engineering technology and engineering education resource centers to promote best practices.
	Timeframe:	June 2003 – June 2004
	Status/Evidence:	There are now four NSF funded resources centers, i.e., MATEC (AZ), NJCATE, SCATE, and NCME (OH).

Goal # 4	The ETC will develop leaders for engineering technology education.	
Strategy 4.A	<ul style="list-style-type: none"> Partner with ETLI to increase leadership development opportunities for ETC members. 	
	Champion(s):	Tom Hall and Ken Rennels*
	Action Item(s):	Encourage ETLI to provide leadership development type opportunities for ETC, ETD members. Assist ETLI with promoting leadership institute.
	Timeframe:	June 2003 – June 2004
	Status/Evidence:	Feb 2005 ETLI invited CMC to have a joint meeting Fall 2005. Accomplished.
Strategy 4.B	<ul style="list-style-type: none"> Expand leadership development and other programmatic efforts to online contexts. 	
	Champion(s):	John Stratton*, and Ken Rennels
	Action Item(s):	Survey ETC/ETD members to see what types of programs would be of interest.
	Timeframe:	June 2003 – June 2004
	Status/Evidence:	Feb 2005 Develop and conduct a survey to find out what the interest is for these types of programs. This was done by John Stratton and 226 responses were received.
Goal # 5	The ETC will develop appropriate guidelines and promote scholarship for engineering technology educators.	
Strategy 5.A	<ul style="list-style-type: none"> In collaboration with ETD, develop guidelines for scholarship in engineering technology. 	
	Champion(s):	Warren Hill, Tony Brizendine, Wiley McKinsey, Virgil Cox, Abi Aghayere, and Dale Palmgren, Walt Buchanan*
	Action Item(s):	(1) Survey and report to ET deans/directors/chairs to find out what are the current requirements for scholarship in various types of institutions. (2) Next step make sure that ET administrative community has access to the paper. Get feedback from ET administrators on the paper. Decide what the next steps are.
	Timeframe:	October 2002 - Ongoing
	Status/Evidence:	(1) A group of ET faculty and administrators surveyed the ET community and reported the results in a paper at the ASEE 2003 annual conference entitled “The Scholarship Horizons in Engineering Technology: Choosing the Best Path”. The paper also addressed issues in scholarship for ET faculty. (2) The results of the survey in 5.C and the analysis of the paper clearly lay a firm base for addressing this.

Strategy 5.B	<ul style="list-style-type: none"> Provide resources and opportunities for faculty development initiatives in ET.
	Champion(s):
	Action Item(s): Put on hold. Wait for information from ETD.
	Timeframe:
	Status/Evidence:
Strategy 5.C	<ul style="list-style-type: none"> Benchmark activities related to scholarship within the ET community.
	Champion(s): Abi Aghayere * and Walt Buchanan
	Action Item(s): Categorize current ETC institution members
	Timeframe: October 2002 – June 2004
	Status/Evidence: A paper was written and submitted by Abi Aghayere and Walt Buchanan for publication in JET based on the survey they conducted with ET faculty and ETD heads regarding ET faculty scholarship.
Strategy 5.D	<ul style="list-style-type: none"> Promote and monitor the growth of scholarship within the ET community.
	Champion(s):
	Action Item(s): Put on hold. Wait for information from ETD.
	Timeframe:
	Status/Evidence: