

Texas Academy of Science Five Year Strategic Plan

Overarching Strategic Goal: Increase the visibility and effectiveness of the Texas Academy of Science in promoting strong science in Texas.

- 1. Broaden the annual meeting to increase visibility and effectiveness of TAS.**
 - Move to a multi-day annual meeting.
 - Establish an Annual Meeting Planning Committee to increase effectiveness of the annual meeting.

- 2. Increase the value of TAS membership.**
 - Increase the membership and diversity of the academy.
 - Increase educational focus of the academy.

- 3. Reorganize the structure of TAS to increase diversity and effectiveness of the academy.**
 - Reorganize the section structure of TAS and strengthen the role of sections in the academy.
 - Strengthen existing standing committees and add new standing committees.
 - Reorganize the membership of the TAS Board of Directors.
 - Increase diversity within the leadership of TAS.

- 4. Increase visibility and effectiveness of TAS through its publications.**
 - Increase national impact of the *Texas Journal of Science*.
 - Explore the possibility of additional publications that reflect other activities of the academy.

- 5. Increase professional and public engagement with TAS.**
 - Increase the frequency and quality of communication with the membership of TAS and with the public.
 - Sponsor activities and materials that promote professional development of Texas scientists and public engagement with science.
 - Create linkages between TAS and other state science organizations.

- 6. Increase sources of revenue and control expenses of the academy to ensure long-term sustainability of TAS.**
 - Create policies to ensure financial integrity of TAS.
 - Increase efforts toward fund raising.
 - Separate the funding of the annual meeting and other expenses of the academy.

Approved by the Board of Directors at the March 1, 2012 meeting in Alpine.

Detailed Recommendations and Justifications From Strategic Planning Committees

Recommendations for Annual Meetings

1. The meeting should be at least one and a half days long. The meeting should begin on a Friday afternoon at 1:00 PM and end on the following Saturday evening after the banquet. This should accommodate a wide variety of travel schedules.
2. This one and a half day meeting would accommodate our second recommendation: that sections that have many oral presentations not schedule concurrent sessions, and not have to “hang around” a day later after most of the meeting is over. Oral presentations should be fixed at the same time year after year. The subcommittee members agree that four presentations per hour (15 minutes total for each presentation) would be ideal. The meeting should begin with a general address by either the Distinguished Texas Scientist or the Texas Outstanding Educator. The banquet should be reserved for only the awards presentations.
3. The location of the meeting should be cycled in a pattern similar to the one generally in use, in which venues in smaller cities are used as well as those in larger cities. The members believe that it is important to showcase our member institutions at these events. However, the planning and promotion of these meetings should be more formalized and extend farther into the future.
4. The registration costs for the meeting should be no more than \$150 (in 2011 dollars).
5. The meeting should be structured so that it provides support and incentives for the sections that have been traditionally smaller. This MIGHT include moving the meeting to a different weekend than the state’s major physics organization’s meeting.
6. We should investigate the possibility of sponsorships by interested parties whose missions converge with that of the Academy.

Recommendations for Membership

1. Revise membership categories and increase dues
2. Have membership dues cover society expenses (non-meeting = ~21K – check with John)
3. Drive to 1000 members
4. Increase Education Focus
 - a. Target HS students and K-12 educators
 - b. Promote strong student chapters and student liaisons – competition
5. Invest in professional web design and update in multiple forums (i.e. communication)
 - a. Link with other societies
 - b. Increase interaction

#1 Justification:

- a. Categories: Pull-down menus to track
 - Students: High School, Undergraduate, M.S. and Ph.D. – all same rate 1
 - Regular: Academic (K-12), Academic (Collegiate), Non-Academic Professional and Other – all same rate
 - Eliminate Joint; Condense Supporting/Sustaining/Patron to one category
- b. Dues: \$40 for Professionals/\$20 for Students
- c. Membership Recommendations:
 - Add to membership application – how did you hear about TAS?
 - Send out automatic reminders to renew

- Eventually re-evaluate costs with paper vs. on-line journal

Membership fees currently pay about 65% of the operating costs of the society. Revenue from the meeting usually fills in the rest, although we have the potential of a shortfall around 10% with our current meeting costs. The cost of student and professional memberships was debated as it has remained the same for at least 8 years at \$15 & \$30/year, respectively. The journal cost/issue (cost is approx \$3/journal/member). Shipping can average approx \$1000/year which brings the total to \$4/member/ issue. When analyzed, it was determined that it cost more than \$15 per member and that the professional memberships or sustaining memberships supported the low cost to students.

#2 Justification:

The meeting committee wants to limit the cost of the professional registration at the conference to \$150 for professionals to serve this demographic. Membership should be available, but separate. Fifty percent of the conference registration goes to the awards given. Discussion seemed to want to at least cover the cost of the membership and seemed to be recommending an increase to \$20 annual membership for students and \$40 for professionals.

#3 Justification: The Texas Academy of Science offers A LOT for a state society. The benefits of membership were discussed: the journal, presentations at the conferences, research awards available, presentation awards available, networking with other scientists and disciplines, staying current with science, student involvement in the organization, mentorships, visit different Texas University campuses, increased profile of Texas science, and various workshops are offered. Approximately 1000 members represented the height of the society in the 1990s. The committee felt it represented a reasonable and visible goal.

#4 Justification: Those participating in actual research get younger and younger each year. Many high school students would have the opportunity to meet undergraduate and graduate students involved in the sciences. This would go a long way toward raising our visibility in Texas.

BIG PLACES TO RECRUIT:

- a. Austin Science and Engineering Festival (<http://texassciencefestival.org/about/festival2010>)
 - a. CHECK OUT THEIR SPONSORSHIP!!
 - b. Originally organized by MAES (<http://maes-natl.org/index>)
- b. CAST - Conference for the Advancement of Science Teaching, 2011!
 - a. Theme = “The Art of Science”
 - b. November 17-19th in Dallas
- c. Texas Academy for Math and Science (high school) <http://tams.unt.edu/>
- d. 2012 ExxonMobil Texas Science and Engineering Fair
 - a. San Antonio
 - b. March 29 - April 1, 2012*

#5 Justification:

TAS is not the only “science” game in town. We could potentially partner with a number of societies:

- Texas Chapter of
- American Fisheries Society
- CAST – Conference for Advancement of Science Teaching
- Science Teachers Association of Texas (associated with CAST)
- American Association of Physics Teachers
- Texas Aquatic Research
- Group/Great Plains Limnology Group

- Texas Consortium in Behavioral Neuroscience
- American Society of Plant Biologists – Southern Section
- UT Lost Pines Conference
- Texas Society for Biomedical Research
- SAMO/UB Meeting @ MD Anderson
- Texas Ornithological Society
- Texas Master Naturalists
- SWAN – Southwestern Association of Naturalists
- Austin Astronomical Society
- Texas Chapter of Wildlife Society
- Herpetological Society Chapter
- TGS: Texas Genetics Society Texas
- Archeological Society
- American Mathematical Society
- Texas Society of Mammalogy
- Texas Citizens for Science
- Society for Neuroscience (3 chapters in Texas)
- The Society of Mexican American Engineers and Scientists (MAES), Inc.

Organization Structure

1. Reorganize the Section Structure of TAS - The current section structure strongly emphasizes the biological sciences, which currently occupy 8 of the 17 existing sections. Considerable redundancy and overlap exists within the current biological sections, diluting resources and weakening many of these sections. The large number of biological sections also reduces emphasis on other disciplines within the academy.

We recommend that the current 8 largely biological sections (Biomedical, Botany, Cell and Molecular, Conservation Ecology, Systematics and Evolution, Terrestrial Ecology and Management, Freshwater, and Marine) be reduced to 4 sections: Cellular and Molecular, Ecology and Evolution, Organismal Biology, and Freshwater and Marine Science.

We recommend that the Board carefully evaluate future suggestions for new sections, with consideration given to the long-term sustainability of any new sections added.

We recommend that the Academy work to strengthen all sections, particularly those that are currently poorly attended, by appointing a standing committee called the Section Development Committee (see below).

2. New Standing Committees - Currently seven standing committees are specified by the Constitution (Annual Program, Elections, Junior Academy, Collegiate Academy, Science Education, Research Grants, Honors and Awards). Many of these do not currently function or consist of one or two people who carry out committee duties. We recommend that the number of standing committees be increased by adding the following committees and that existing committees strengthened and become more active.

Section Development Committee –This committee would strengthen and improve the work of all sections, with special emphasis on small sections. It would work with the Vice President to provide training and guidance to section chairs and work to recruit new members to small sections.

Meeting Committee – This committee would be distinct from the Local Arrangements committee and Annual Program Committee. The Meetings Committee would focus on the long-term structure, cost, and location of meetings. The committee would proactively develop at least one general symposium at each meeting that would focus on emerging topics in science or on an issue of general interest to scientists (the symposium on the evolution controversy at the Stephenville meeting is an example). The committee would arrange for the location of future meetings at least three years in advance.

Communications Committee – This committee would plan, develop, coordinate, and facilitate all communications and publications of the Academy, including Web site, newsletter, blog, and Texas Journal of Science.

Finance and Development Committee – This committee would focus on long-range financial planning for the Academy, including fund raising and development. It would assist the Treasurer in developing the annual budget and would oversee the annual audit.

3. Reorganize the Membership of the TAS Board of Directors - We feel that the current size of the Board of Directors is about right, but the current membership is not aligned with that specified in our Constitution. For example, the Constitution specifies only one member from the Board of Development, whereas two members are currently listed as Board members. The same is true for representatives of the Collegiate Academy, and Junior Academy.

We recommend that the Board consist of the following members and that, where necessary, the Constitution be altered to reflect this new composition.

Existing Board Members (no change): President, President Elect, Vice President, Immediate Past President, six Elected Directors, two Student Directors, Executive Secretary, Corresponding Secretary, Treasurer, Managing Editor, one Counselor of the Collegiate Academy, one Counselor of the Junior Academy, Chair of the Board of Development, Chair of the Education Committee, representative to AAAS, International Program Coordinator

New Members: Local Host of Annual Meeting (currently listed but not specified by Constitution), Chair of the Communications Committee (replaces WebMaster), Chair of the Section Development Committee (new), Chair of Research Awards (new)

Remove from Current Board: Remove one representative of the Collegiate Academy, one representative of the Junior Academy, one member of the Board of Development, and Manuscript Editor of TJS (requires change to Constitution)

We recommend that all members of the Board be made voting members, eliminating the past practice of having some voting and some nonvoting members.

4. Election of TAS Officers

To increase diversity within the leadership of TAS, we recommend that following:

- Change the By-Laws to specify that the Elections Committee provide a minimum of two nominations for each open position (the By-Laws currently specify a minimum of one nomination per position).
- Change the By-Laws concerning the composition of the Elections Committee. The By-Laws currently say that the committee consists of the Immediate Past President and up to 4 other past presidents. We recommend that this be changed to the Immediate Past President and three current section chairs appointed by the President.

5. Create Linkages Between TAS and Other State Science Organizations

As one of the few multidisciplinary science organizations within the state of Texas, TAS should take a leadership role in promoting strong science in Texas. One way this can be accomplished is to work with other state science organizations to strengthen K-12 science education, state funding for science, increasing public awareness of science, and other issues of concern to all Texas scientists. We suggest the following:

- At appropriate times (for example, during review of science textbooks by the Board of Education) convene a meeting of leaders of all state science organizations to provide information and to plan joint action.
- Appoint members of TAS to work as liaisons between TAS and the other organizations.
- Identify, train, and utilize individuals within the academy who can be effective spokespersons when there are opportunities to make public statements about science.
- At each annual meeting of TAS, have a 30-45 minute session devoted to emerging science issues in Texas, where members of the Academy can become informed about issues that affect Texas science.

Recommendations for Publications

The first priority needs are related to decreasing the cost of producing the journal. In these economic times of hardships, there is a need to decrease the cost of printing the journal so more articles can be printed per issue. Also we need to cut the cost of communications between the editors and those who send us manuscripts. Universities are no longer willing to subsidize our operation.

1. Change journal format to double column to allow more articles per issue with less cost per article.
2. Initiate planning to move toward electronic submission and review of manuscripts.
3. Initiate a page charge system.
Another area of change relates to modernizing the journal. Many of our members view the journal as outdated in format and presentation. There is also a concern about impact factor and receiving the journal with an electronic only option.
4. Explore assignment of an impact value for the journal.
5. Revise Guide to Authors and develop consistency in format of articles.
6. Conduct a survey of members regarding an electronic only option and analysis of the economic impact of a cheaper price for the journal on the cost of journal production

Recommendations for Communications and Engagement

1. An idea that communications may want to look at is a pamphlet for publication that would be small, attractive and advertise our society to other societies @ their own conferences, colleges departments could have them for student registrations. The brochure would have the website, the meeting date, any workshops, contact information etc.
2. Also the group discussed the opportunities for having a table at other conferences. Especially when our board or committee members attend many other science conferences and events. They could take some materials and put on a table or pay to be an exhibitor and man a booth (perhaps share one.)

Suggestions were: Conference for advancement of Science Teaching in November in Dallas, Tx Chapter of the Wildlife Society, Texas Genetic Society, the Archeological society,...and others too numerous to list.

3. Sponsorship of STEM and TAS section related public workshops and engagement. For example, the **Texas Water Symposium**: <http://www.schreiner.edu/water/index.htm> is a unique and innovative approach to educating the public about water in Texas. The Texas Water Symposium series provides perspectives from key stakeholders and illustrates the complexity and challenges in providing water for Texans in this century. The Symposium venue alternates among cities in the Hill Country and San Antonio and Texas Public Radio records and archives each program for subsequent Friday night broadcast over KSTX (San Antonio) and KTXI (Ingram).

http://issuu.com/schreineru/docs/schreiner_university_scene_spring_2009. At present the TWS is a partnership among Llano River Field Station – TTU, Hill country Alliance, Schreiner University and Texas Public Radio.

4. The TAS strategic planning committee on Organizational Structure recommended creating linkages between TAS and other state science organizations and the Membership committee recommended partnering with other societies and possibly recruiting from them. One way this may be accomplished is to hold joint meetings periodically with sister research, STEM, educational and related societies. For example, the Society for Freshwater Science will be holding a joint meeting in 2014 with the American Society of Limnology and Oceanography, Society for Wetland Science and Phycological Society of America. A joint meeting with intersection points between societies at socials, symposia etc. can help achieve many TAS strategic goals.

5. Legislative Visits Day. AIBS and OBFS have an annual Congressional Visits Day http://www.aibs.org/publicpolicy/congressional_district_visits.html where directors of field stations have scheduled visits with House and Senate members from their state to discuss importance of field based science, research, education and engagement. Texas Academy could develop a similar program and training for board members to visit their representatives to discuss our mission and goals. I did this a few years ago and it was a great experience, something like this for Texas and TAS has promise.

Recommendations of Finance and Development Committee

1. Annual dues should cover the non-meeting expenses of the academy. In the 2012 budget the non meeting expenses are \$26K and dues, based on the membership reported at the October 22 Board of Directors meeting, to date are \$17K. This is a \$9,000 gap. There are of course two ways to reduce the gap: reduce expenses, increase revenue. We must be aware that student dues and regular dues can be set at will, the categories of Supporting, Sustaining, and Patron are set in our constitution as multiples of the regular dues. There could be negative and unintended consequences to raising these amounts precipitously. For example, if regular dues went from \$30 to \$45 the Patron level would have to go from \$150 to \$225. In non-meeting expenses the most significant items deal with the TJS. At the October 22, 2011 Board of Directors meeting John Baccus mentioned collecting the page charges that are due. Other members of the Board of Directors present at the meeting thought that was a sound idea. Collected page charges during 2011 amounted to 3% of the Academy budget. An increase in this item would contribute to narrowing the above mentioned \$9,000 income-spending gap.

2. Cover the cost of Collegiate Academy Research Awards (\$13,500) with external funds. There are nine awards in this category: 3 at 2000, 3 at 1500, and 3 at 1000. Corporate sponsors will be asked to sponsor one or more of these awards. The Corporate name will be attached, e.g. The 2012 second place for research at the masters level (\$1500) is the Valero Energy Award.

On October 22, 2011 at the TAS Fall Board Meeting the board voted to sponsor the First Place Undergraduate Research Award (\$2,000). The amount of the award will come from personal funds contributed by the members of the board.

3. We recommend that the members support the top award in the Master's category.

This could be the "TAS Members Award for Research at the Master's Level" It would be the \$2,000 top award in this category. Members will annually be solicited for contributions to the award. I would think that donations would be tax deductible. I don't see how to get the members "on board" with this proposal without taking it to them. I don't think this can be implemented until the 2013 meeting, and then only if they decide to support it. If possible this should be explained at the annual business meeting in March.

4. Start tracking the impact of the research awards on the students who receive these awards.

On October 22, 2011 the TAS Board passed a motion that award winners will be required to submit a written report one year after receiving their award. There is a standing requirement that they return within two years and present at the annual TAS meeting the results of their research. We don't track this and right now don't know how often that happens, but this information will be an important component of an appeal for external sponsorship of these awards.

5. Collect the history of research awards over the previous ten years.

We will try to recover at least the following: Year, award, recipient, school and advisor, made subsequent TAS presentation, contact information, student's statement concerning impact of the award.