

SECTION 4: PROFESSIONAL CHAPTERS

4.1 Overview:

Professionals offer the skills and expertise to design, build and implement sustainable projects in communities that need them. It is not only engineers that we hope will join Professional Partners Chapters, but also health and administrative personnel, professionals with international experience, and any professional who brings a passion to help make a difference. While the Professional Partners Chapters have only recently been created, professionals have always been the backbone of our projects.

Engineers Without Borders- USA is the national umbrella organization that supports the chapters. EWB-USA provides leadership, project reviews, technical support, and screens projects so that only ones that are appropriate for EWB are available to chapters. EWB-USA also provides the ability to apply for non-profit grants and scholarships. EWB-USA also works side by side with student and professional chapters, and establishes the platform for quality control of the final design through the Technical Advisory Committee (TAC).

It is our experience that successful EWB Professional Partners Chapters show basic characteristics: strong leadership, dedicated individuals, a mixture of professional expertise, access to some funding and good projects, a willingness to work with others for the benefit of a community, and some members willing to work with students. This is not easy, and it takes a lot of time and dedication from everyone.

EWB has always worked to create engineering students that will be internationally responsible. Since this is one of our core values, we ask that professional chapters work with student chapters to help that chapter with technical resources and guidance. We recognize that not everyone has a teacher inside them, but the skills & knowledge that professionals possess is invaluable for the student learning experience.

4.1.1) Roles for Professional Partners Members:

There are several roles that can be filled by professionals in a Professional Partners chapter:

1. Mentor:
 - a. A mentor is the technical resource that works on a student project. This person can also be the project lead (project manager).
 - b. He or she has many responsibilities including:
 - i. The design of the project and completing all design reviews.
 - ii. The training of the students and keeping the students on task.
 - iii. Taking 1-2 weeks to go on the assessment trip and 2-3 weeks to go on the implementation trip.
 - c. This role has a lot of responsibilities and a lot of time required, however, it is one of the most rewarding roles since not only are you helping a community, you are also helping to develop the next generation of engineering students.
 - d. If this role interests you, read then you should read *Mentor Qualifications (#405)*, fill out a *Mentor Application (#404)* for a specific project, and send it to EWB-USA.
2. Professional Partners Projects:
 - a. This year, EWB-USA is opening projects to Professional Partners Chapters. We are always looking for new, viable projects for these chapters. Please read through the projects section of this sourcebook for more information on how projects are started.
3. Project Lead:
 - a. This person is the project manager or the project, and not necessarily the technical expert. He or she is responsible for submitting all project related information to the TAC, and is the point of contact for the project for EWB-USA with the project. This person takes responsibility for the keeping the project on schedule and communicating with EWB.

4. Project Participant:
 - a. This person agrees to work on the project to the best of his or her ability. The person will be assigned work on the project, and is expected to try to complete that work by the given date.
5. Principal Reviewer:
 - a. The design of each project for both student and professional chapters must be reviewed by EWB-USA prior to the group traveling (or making travel plans) to implement the project.
 - b. The Principal Reviewer examines the design for any possible flaws in the design. The Reviewer then communicates his or her suggestions to the project's group, keeping in mind that there are often many ways for projects to be designed. He or she is not responsible for re-designing the project, only for informing the group of any necessary changes.
6. Training Programs:
 - a. Professional Partners members may be called upon to provide training for other Professionals or for student chapters. This is a great way to help others learn and to show off some of the skills that you have learned throughout your experience as a professional. Training programs can be for any subject related to projects, which includes technical subjects, cultural awareness, language, or health.
7. Knowledge Resource:
 - a. This is similar to the training programs, however it is less formal. Professional Partners can volunteer their time being a technical resource to students or other Professional Partners.
8. TAC Liaison:
 - a. The Liaison helps with the administrative part of a project for the TAC. The objective is to help keep the project on time and make sure all the project's EWB-USA administrative milestones are met. These include project reviews, health forms, finding technical assistance for the project, and working with the project's mentor as a guide to EWB-USA.
 - b. This role is a part of TAC. Please refer to the TAC section in this sourcebook so that you can learn more about this position.
9. TAC Representative:
 - a. TAC representatives serve on the TAC and participate in such activities as reviewing projects, making administrative decisions for EWB, and tracking projects.
 - b. This role is a part of TAC. Please refer to the TAC section in this sourcebook so that you can learn more about this position.
10. Health Metrics Group Member and Health Point Person. Individuals who are not engineers are also welcome to assist with EWB projects.
 - a. *Health Metrics Groups Member:* As a subcommittee of the TAC, public health professionals with experience in epidemiology, community development, medicine and nursing act as Health Metrics Reviewers and assist with community health assessments and developing health metrics to measure project success.
 - b. *"Health Point Person" (HPP):* will be an individual on the project team who is responsible for planning for overseas healthcare for the project team and working on the *project specific health assessment for the host community*. Ideally they will be a licensed health professional or someone with public health experience. See *Health Point Person (#406)*

Once a month after the TAC meeting, EWB-USA will e-mail a request to all professional members for mentors, liaisons, professional reviewers and other related volunteer positions. It will only be sent to professionals that have their memberships current.

4.1.2) The Goals of EWB for Professional Partners Chapters:

1. To have the Professional Partners members be a technical resource for students, and provide training for a new kind of internationally responsible engineering student
2. Increase awareness of development issues among professionals and to offer those interested professionals an opportunity to help solve some of the technical challenges of the developing world.
3. Help disadvantaged communities meet their basic needs through Professional Partners projects.

4.1.3) Benefits of Founding an EWB Chapter:

1. Develop leadership skills that are necessary to thrive in this world. Founding a chapter brings the unique opportunity to develop inspirational leadership, above and beyond the organizational and results-oriented leadership that are required to run an organization.
2. Polish your resume. In an increasingly tight job market, companies look for people who are highly motivated.
3. Help guide students to be worldlier and give them practical experience.
4. Most importantly, you will be able to “make a difference”.

4.1.4) What does a chapter do?

1. Provide technical and mentoring assistance to student chapters
2. Attract new members
 - a. The chapter provides a means for new professionals of all disciplines to help make a difference.
 - b. EWB is open to engineering professionals and non-engineering professionals alike.
3. Work on Professional Partners Projects
4. Develop a website with links to EWB projects / news
5. Research local organizations: Rotary clubs, lions club, YMCA, YWCA for projects and funding
6. Hold Meetings once a month or as necessary
7. Provide training for students and other professionals
8. Be a technical resource for students
9. Find and apply for projects.
10. Form sub-committees to work on projects
11. Fundraise and manage funds for projects

4.2 Getting Started: A Procedure for Starting a New Professional Partners Chapter

4.2.1) Initial Setup of the Chapter

1. Before starting a chapter, it is necessary to have in place:
 - a. A driven leader.
 - b. Some motivated professionals. Preferably it is best to have 2-3 people who are already very interested in being a part of EWB-USA already.
 - c. A region that your Professional Partners chapter will encompass (i.e. Philadelphia Area or North East Oregon etc). This way we can refer people in that region to your chapter if they are interested in being involved.

2. Contact EWB-USA: Call or e-mail the main office about becoming a member and to order the DVD. The DVD can also be ordered from our website or by contacting our Membership Services Manager, Bill Farr, at: chapters@EWB-USA.org.
3. A Regular Meeting Place: This can be at someone's house or at a company. Often companies are interested in getting involved in organizations such as EWB.
4. Creating a Following: Once you have a few interested individuals, it is best to publicize to find other interested individuals. This can be done at one's company or through dinner parties, professional organizations etc. It is best for chapters to have members with diverse skills.
 - a. It may be best to call a well publicized *initial meeting* (see the next section for more information). Your goal is to find between 10 and 20 people interested in participating in the initial meeting (or however many people you can find). We have a PDF poster available at: <http://EWB-USA.org/news-downloads> .
 - b. *Please note*: The first DVD and CD are available free to new members or chapters. Additional copies are available for the cost of materials, plus shipping, and handling.
 - c. We also suggest scheduling an initial meeting with a couple of high profile speakers. One can be from EWB-USA, and the other can be an individual active in development work. (*Due to our limited funding, EWB-USA requests that you help to cover travel costs if possible*).
5. Chapter Agreement: Go to the "downloads" section of the EWB-USA website and download the *Professional Partners Chapter Agreement (#403)*. Fill out the agreement and then send it to the EWB-USA office. This must be done within 45 days of establishing an EWB Chapter.
6. Elect a board for the chapter (usually done at one of the first meetings, see more information in section 4.2.3)
7. Set up your chapter website
 - a. There are sample website formats available on the EWB-USA website.
 - b. Send your website information to EWB-USA at chapters@EWB-USA.org, so that we can post it on our website.
8. Setup your Chapter's Bylaws

4.2.2) The initial meeting generally consists of three parts:

1. Introduction to the idea of Engineers Without Borders– EWB-USA and show the six minute EWB-USA DVD.
2. Talk about a specific element of development (i.e. sanitation)
 - a. A keynote speaker may be helpful
3. Provide an overview of the chapter organization. The designated president should encourage participants to join the chapter and EWB-USA.
 - a. Explain the general structure of EWB and its mission
 - b. Explain about the membership fee for EWB-USA (\$50 for professionals)
 - c. Let members know that they are being asked to participate in informational meetings; that some may conduct research, and that all are eligible to participate in projects, when available.
 - d. Inform the meeting of any projects that you are applying for
 - e. Mention that there is the opportunity to serve on the chapter's executive board.

4.2.3) The Executive Board:

1. Create an executive board with President, Vice President, Secretary, Treasurer, Fundraising coordinator(s), TAC representative (if desired)
2. Ask that each executive board member be a current and active member of EWB-USA

3. Create a constitution, or bylaws, and create an official chapter
 - a. EWB-USA can provide you with a constitution and bylaws
4. Each chapter must submit, to the EWB-USA national organization, a signed *Professional Partners Chapter Agreement (#403)* found on the website. This must be completed within 45 days of forming the chapter.
5. Prepare for chapter executive board turnover:
 - a. Prepare for making a smooth transition from leadership to leadership
 - b. Make plans for how to turn over all records, accounts, contacts and projects

4.3 Operation of the Professional Partners Chapter:

4.3.1) Holding Effective Meetings: Board Meetings and Chapter Meetings

1. Plan meetings in advance and give adequate notice: post on your chapter website or set up an e-mail list. (Yahoo offers e-mail lists)
2. Appoint or ask for a volunteer to take accurate minutes. Then have them typed and posted on your website (password protected)
3. Always have an agenda and stick to it
4. Try to make the meetings as short as possible.
5. Demand an orderly meeting to make effective use of time.
6. Start and end on time.
7. Schedule and develop agenda for the next meeting before you adjourn

4.3.2) Funding your Chapter

1. EWB-USA is the umbrella organization under which other companies or organizations can donate to your chapter or project. Funding is not provided by EWB-USA.
2. Fundraising should be an on-going process, and should be started as soon as a chapter has a project.
3. Some ideas on how to raise funds for your chapter include:
 - a. Lectures and local projects
 - b. Corporate Funding: Many companies are interested in funding organizations and small projects.
 - i. Make sure to include their information on your website or on any publicity you send out for your project.
 - c. You may want to ask members for a small membership fee. However, keep in mind that everyone has already paid the EWB-USA membership fee.
 - d. You can sponsor fundraising events for your chapter.
 - i. Some ideas for this are charging at a local club for people to hear a local band, sports tournaments, contests, or maybe a raffle.
4. You will need to set up an account through EWB. This is for tax reasons.
 - a. All checks must be to EWB-USA
 - b. To obtain reimbursements for EWB related items, an Admin Expense Report (#202) or a Project expense report (#506) must be filled out and submitted to EWB. EWB will then issue a reimbursement check. Please keep in mind that many people at EWB are volunteers.
 - c. You should still have a treasurer keeping detailed records
 - i. Each receipt should be labeled as to whether it is for one of the following three categories:

1. Supplies (i.e. building materials, piping, cement etc.)
2. Travel (i.e. Airfare, Hotels, Meals, other transportation etc.)
3. Meeting/Phone/Misc

4.3.3) Before your chapter has a project (or even while there is a project):

There are things members can do before there is an official project to work on:

1. Research projects: Members can research topics and then give presentations to the chapter
 - a. We encourage chapters to undertake larger scale research projects and become “experts” in a particular area. This research will help to create an informational database. Members can create prototypes and test theories
 - i. Some topics include Researching renewable energy sources, installing power sources, water sanitation and testing, filtration, water purification, chemical treatment, concrete mixing, different cultures, and many others that will be useful once your chapter has a project.
2. Help with student projects:
 - a. Professionals can help with the student chapter’s project until the Professional Partners chapter has its own project.
3. Find projects through clubs and NGO’s (e.g. rotary club, lions club, etc.) and then submit *Project Application Form (#501)* to the TAC.

4.3.4) Projects:

1. New Projects:
 - a. In general projects can originate from various sources such as individuals, groups, or NGOs contacting EWB-USA. They can also originate from a recognized chapter, or through personal contacts.
 - b. In all cases, all project requests go through a thorough review before a project can be labeled as a EWB-USA project. The group or individual requesting the help of EWB-USA must complete a detailed *Project Application Form (#501)*, which is available from the “Downloads” section of the EWB-USA web site. The application form is then reviewed, discussed, and comments are made to the Technical Advisory Committee (TAC), by the EWB-USA Application Review Committee (ARC), during a monthly meeting.
2. Your chapter should thoroughly read “Projects Section” of this sourcebook.
3. There must be a lead for each project.
4. Projects are expected to be long term projects, i.e. the chapter will continue to return to the region for continuing projects year after year.
5. It is encouraged that students participate in Professional Partners projects. Multiple Professional Partners members can participate in student projects as well.
6. If a project does not meet EWB-USA’s safety design standards, it is possible that the project will not be approved, and you will need to move your implementation date (i.e. you will not be able to travel to the country to create your design at that time). Please pay close attention to all EWB-USA deadlines.

4.3.5) Other Chapter Considerations:

1. You will want to keep detailed financial records. To do this you will need to:
 - a. Set up a bank account
 - b. Have a treasurer plus the president & faculty member responsible for funds.
 - c. Provide a means of reimbursement for chapter expenses

- d. Keep and file receipts
- e. Provide receipts for charitable donations over \$250
- f. Annual Reports of expenditures.
2. Determine Budgets:
 - a. How much will you need to operate and spend on projects?
 - b. Decide on possible places to obtain funds
 - c. You should be prepared to submit financial reports to EWB, etc.
3. Communications with EWB-USA and external parties:
 - a. How to communicate with the media
 - b. Authorized logo, trademark, publications
4. Internal communications:
 - a. Determine how you will communicate with members inside your chapter
 - b. Determine how you will communicate with other chapters
 - c. Develop a website:
 - i. Send the website information to EWB-USA so that we can post a link on our website.
5. Projects:
 - a. How will you find additional projects?
 - b. How will you manage projects and the team?
6. Members going overseas:
 - a. How will the three main issues, Safety, Security & Health, be addressed?
 - i. EWB-USA must be notified before plans are committed
7. Membership:
 - a. Create a chapter membership list with data on interests, their profession, and all contact information.
8. Conducting research:
 - a. Who will be in charge?
 - b. Where will information be found? Is there a professional in the field that could help
9. Liability, Risk and Trust
 - a. What are the organizational risks?
 - b. How will operational risk be minimized?
 - c. How will you manage the risk of a project?
 - d. Will volunteers be at risk?
 - e. What insurance will be needed?
10. Fall EWB-USA Conference
 - a. Who will attend conferences?

4.4 Creating a Sustainable Chapter

4.4.1 Keep Members Motivated

1. Keep all members involved in activities as much as possible
2. EWB will summarize and publish other chapters' activities, events, or accomplishments
 - a. Send the information to administrator@EWB-USA.org so that it can be posted on the website or in the newsletter.
3. Chapters should try to have long term fundraising goals and not just sporadically raise funds when needed for a specific project
4. Set deadlines, goals, and rewards for degrees of accomplishments
5. Don't have too many members on one project.
 - a. If there are too many volunteers on a project, they may not all be able to go on the implementation trip, or there may not be enough for each member to do.
 - b. Many developing communities do not have the resources to accommodate a lot of visitors
 - i. Projects can be implemented in multiple stages. (E.g. one team goes to install the water system, and then two months later, another team goes to install the energy system etc...)
6. Ensure that research or project opportunities are available
 - a. Get ideas from other professionals, other EWB Chapters, the EWB-USA website, or the national chapter coordinator.
7. Make sure professionals know about the research and project opportunities.
 - a. Post them on the website or send out a mass e-mail occasionally or when new projects come up.
8. Meetings:
 - a. Hold regularly scheduled meetings that are prescheduled throughout the year. Ask for a volunteer to take minutes of each meeting and then publish those minutes on your website.
9. Events:
 - a. Organize two to five educational events (guest speaker or workshops, etc.) per year if possible. Some ideas for speakers are professors, mentors from industry, development officials, EWB-USA Operations Committee, ex-Peace corps volunteers, etc.
10. Create a sustainable board with people that have made a long term commitment
11. Select delegates to attend yearly conferences (EWB-USA conferences and other development conferences).
12. Promote EWB as necessary:
 - a. Several documents are available to you as you advertise your chapter around your campus and run your recruitment campaign among students, faculty, and staff. They include:
 - i. A two-page write-up about EWB-USA (English and Spanish versions)
 - ii. EWB-USA brochures (upon request)
 - iii. A six minute long promotional DVD that talks about our work and many of the projects we have done in the past (upon request).
 - iv. A EWB-USA pdf file (on CD) of a poster you can economically create your own various sized posters. <http://EWB-USA.org/news-downloads.html>
 - v. The two-page write-up is also available from the "Downloads" section of the EWB-USA web site. The DVD and CD set can be sent to you by regular mail (first set free for EWB-USA members or new chapters; \$5 for additional sets and EWB-USA members; \$20 for non-members).

13. The EWB national conference
 - a. Each year, EWB-USA holds a national conference. Conferences are open to current EWB members, prospective members, and non-EWB members. During the conference, participants from existing and prospective EWB-USA chapters and individuals are able to interact, exchange notes, and learn from each other.
 - b. Various field case studies (past and current projects) are presented. Workshops and seminars are held on how to start a chapter, managing a chapter, and how to manage projects (logistics, marketing, fund raising, etc.). These presentations on how to seek and run projects were given by industry representatives and EWB-USA staff and volunteers.

4.5 Documents:

1. *Starting a Professional Chapter of EWB (#401)*: This document gives an overview of how to start a professional chapter of EWB.
2. *Professional Partners - Getting Involved Attachment (#402)*: This gives a quick overview of the different Professional Partners roles and time commitments.
3. *Professional Partners Chapter Agreement (#403)*: When a prospective chapter is ready to become a chapter they must fill out this form and send it into the EWB office for the chapter coordinator and the president of EWB to review. A copy of the agreement will be returned to the chapter.
4. *Mentor Application (#404)*: Prospective mentors should fill out this form and submit it to the TAC. The application will be reviewed and then the applicant will be notified if the TAC thinks that the mentor will be a good match for a project.
5. *Mentor Qualifications (#405)*: This form outlines the qualifications necessary to become an EWB member.
6. *Health Point Person Qualifications (#406)*: This form outlines the qualifications of a health point person for the TAC.