As support staff for ITS at Cal Poly, we want to take an implementational view of what it takes to be a resource provider.

We'll give an overview of the questions you should be asking yourself, as well as your central support staff, about the tools, information, and people you have at your disposal.
Our overview will focus on...

Overview

- What tools are available?
- What are your central server resources?
- When do you need your own Web server?
- What’s the overhead with that?
- What are your delivery side resources?
Authoring tools are often very sophisticated, complex programs. You will need to learn their capabilities...even if you contract the actual implementation to student assistants or support staff. Work with your support staff ahead of time to determine how much implementation they can provide, and how much you are going to have to do yourself.

Many of the “information provider” projects that we have encountered come down to retrieving information, stored in a database, and presenting it in Web format. We are still working on implementing such tools at Cal Poly. Some of the commercial Web server packages offer this facility.

You will need to have adequate hardware and software at your own desktop to accomplish what you want to do. This is often a political problem...make your needs known to your deans and department chairs. We’re working on this at Cal Poly; leasing programs look promising, but they will require investments by colleges and departments.
CGI means Common Gateway Interface. CGIs are programs that run on your Web server site to provide special function. An example is the “mailto” CGI, which can be used to mail the response to a form.

The CGIs included with Web servers offer most of the functions that you will require. However, you may want to develop new CGI’s, which can be written in PERL, C, or other programming languages, to do specialized work.

CGIs, even sometimes those provided with server software, pose a security risk. Because they actually run as the server, they can make sweeping or unpredictable changes on the server system, or can assume powers never intended. Don’t be surprised if your central Web site is loathe to add new CGIs!
So when do you need your own Web server?

- Performance on the central system is poor
- File space requirements exceed your allotment
- The central Web server doesn't have or doesn't allow the functions you require
- You can't add the new CGI's you need
- Web server hardware and software out-of-the-box offers tools, functions, ease-of-use that are worth the investment
Most people underestimate the time and know-how that goes into system administration, leave alone Web site administration. In fact, in some cases, Web site administration may be the easier task. Be especially cognizant of system administration that is required for multi-user servers like NT or UNIX.

Software, hardware requirements, and your own needs will be constantly changing, so upgrades will be required. Expect them to be constant!
We've experienced faculty complaining that they've created great material, but there is no place to present or use it. Make the delivery end of the project an integral part of your proposal or plan.

If you don't have these resources at your campus, then start talking with the people who have control of budgets, so that you can show your need and work with them to get these facilities.

Re browser software, work with your lab managers to make sure that the delivery side software is in place, and/or that the machines are able to run it. Don't make any assumptions about the plug-ins or helper applications...check ahead.

**Delivery (client-side) resources**

- Are there classrooms equipped with presentation systems? Network connections? Can they be reserved for your classes?
- What about classrooms equipped for student work? Computer labs? Reservations taken?
- Does the hardware meet your needs? Fast processors? Good screens? Speakers? Microphones?...
- Is browser software adequate? Plug-ins? Helper applications?
Stay friends with your campus consultants. There aren’t that many of us...

Work with other faculty who have similar interests and needs. Collaboration will be motivating! And together, you can work on the political aspects of garnering resources.

Remember that we’re all in this together...and that the learning curve is steep and slippery. Help us learn what you need, teach us, let us teach you.