Cisco Networking Academy Program

QUALITY ASSURANCE PLAN and ACADEMY OPERATIONS GUIDE FOR ALL ACADEMY CURRICULUM*

* except for CCNP courses which are covered under a separate QAP document Version 4.0, April 2002

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PURPOSE and SCOPE of the QUALITY ASSURANCE PLAN

The Quality Assurance Plan (QAP) described in this document was developed to hold all Academy sites accountable for high-quality, consistent delivery of the Cisco Networking Academy curriculum (Please note there is another QAP document for CCNP). The QAP provides a framework intended to help all Academy sites achieve the following quality-related goals:

- Comply with Cisco policies for participating in the Networking Academy Program.
- Meet or exceed minimum standards for student success and customer satisfaction.
- Identify factors, strategies, programs, and instructors that enhance student success and provide customer satisfaction leadership.
- Regularly assess and monitor teaching, program operation, and educational outcomes.
- Provide ongoing training and support to instructors in their identified areas of interest and need.
- Use program components and resources to ensure top performance of all academies.

This document is introduced to all instructor trainees during the Cisco Networking Academy Orientation Course. The most recent version of the QAP is posted on the CNAMS Web site under the Academy Start Guide. It is the responsibility of Academy main contacts and instructors to access the most recent version of the QAP on the CNAMS Web site and to remain in compliance with current program policies. Further, main contacts and instructors are required to access the CNAMS Web site no less than once per week to obtain new Program news and update announcements.

The Program currently provides instructional training as described in the QAP to individuals interested in preparing for the industry credentials listed under "Cisco Certified Academic Instructor (CCAI) Requirements" in the Training Instructors section below.

ACADEMY PROGRAM STRUCTURE and ROLES

The Cisco Networking Academy Program has a tiered structure designed to accommodate growth, remain self-sustaining and ensure quality. (See Figure 1).

Cisco Academy Training Centers

Each Cisco Academy Training Center (CATC) trains, supports, and monitors the instructors at approximately 30 Regional Academies. A CATC is responsible for the quality of training conducted at its center and the subsequent instructional qualities of the Regional Academy instructors, who train Local Academy instructors and ultimately the learning success of the students within its tree. Along with Cisco, CATCs set the standard of quality for the entire Cisco Networking Academy Program system.

Regional Academies

Each Regional Academy functions as a training and support center for Local Academies and flows down the instructional and Program quality standards set by Cisco and the CATCs. A Regional Academy is required to recruit and maintain the minimum number of Local Academies for each Curriculum they offer ensuring that each of its Local Academies remain in compliance with the Program requirements as set forth in the Quality Assurance Plan. (The number of locals required varies depending upon each theatre. *) Please refer to your contract for specific details. Each Regional Academy will train instructors from Local Academies on a given curriculum and supports their Local Academies—on a timely and ongoing basis—by providing continuing education for local instructors a minimum of two sessions per year, orienting instructors to the program, helping local instructors set up their classrooms, answering technical and curriculum questions, fulfilling equipment needs, and so on.

* The Worldwide Education team of Cisco Systems, Inc. organizes its business globally into six different geographic areas known as Theaters:

Asia Pacific (AsiaPac- also includes Australia and New Zealand)
Canada
Europe, Middle East, and Africa (EMEA)
Japan
Latin America
United States of America (U.S.)

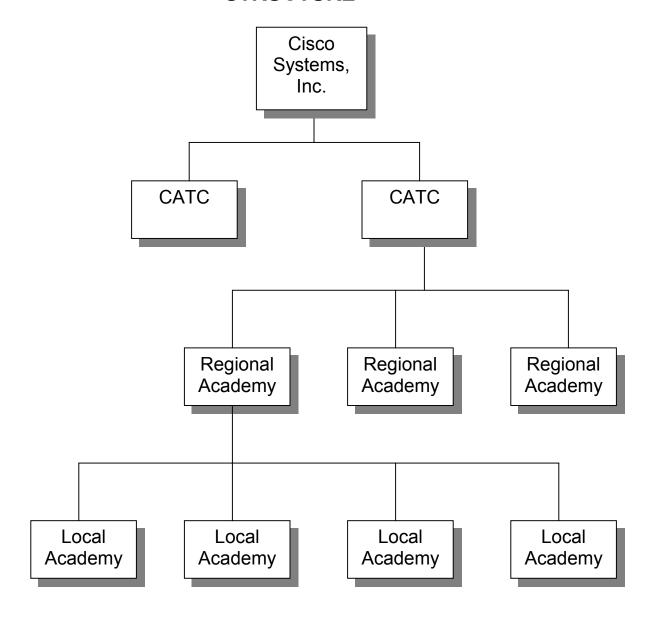
Local Academies

Local Academies are educational institutions (K-12 schools, Community Colleges, Colleges, Accredited Career Colleges, and Universities), the military and community-based organizations that teach individuals the knowledge, problem-solving abilities, and critical thinking skills they need to pursue a career in networking and succeed in the 21st-century workplace. Each Local Academy is responsible for providing an appropriate environment for conducting classes, selecting competent instructors trainees, and

ensuring that its' instructors receive the training that enables them to teach the Curriculum while maintaining the Program quality standards set forth in the QAP.

FIGURE 1.

CISCO NETWORKING ACADEMY PROGRAM STRUCTURE



USING THIS DOCUMENT

The remainder of this guide is divided into three major sections of text, plus a section containing appendices and another section containing forms used for various QAP activities. Instructors and main contacts at all levels will want to be familiar with the information in all three sections, even though there are differences in the specific responsibilities associated with each level in the Networking Academy Program.

The first text section, Training Instructors, discusses the requirements and guidelines that have been established to insure that Local Academy instructors are fully qualified to teach the Networking Program curriculum. These requirements apply not only to individuals seeking to be trained as Local Academy Instructors, but also to the Regional Academy instructors and CATC instructors responsible for the quality of instructor training.

The second text section, Assuring Instructional Quality, outlines basic policies regarding instruction at the Local Academies and then lists the responsibilities involved in operating academies and maintaining high standards of quality at all levels of the Academy Networking Program. It then discusses how instructional quality is monitored and measured. For CATCs and Regional Academies, this section pertains to ensuring the instructional quality at both their own institutions and the academies for which they are responsible.

The final text section, Improving Performance, describes the process that is used to raise the instructional quality at a Networking Academy site that has been determined (by the processes described in the Assuring Instructional Quality section) to be performing below the minimum standards.

Throughout the Assuring Instructional Quality and Improving Performance sections of this document, there are references to specific appendices and forms, and to other sections of the document. When this document is read on a computer, these references function as hyperlinks: a click on the link takes the reader to the appendix, form, or section being referenced (to return to the text, the reader can then click the Back arrow on Word's Web Toolbar). The forms in the Forms Section are intended to be printed out and used as a guide while conducting onsite support visits.

TRAINING INSTRUCTORS

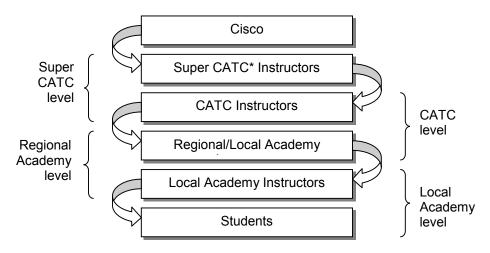
The Cisco Networking Academy Program provides professional development, training, and certification for Academy instructors through the Cisco Certified Academy Instructor (CCAI) program. The CCAI program is designed to ensure that all Cisco Networking Academy instructors are proficient in the Academy curriculum they will be teaching and skilled in delivering it to trainees and students.

TRAINING MODEL

The Cisco Certified Academy Instructor (CCAI) program employs a "train the trainer" model. There are four levels to this training model, corresponding to the tiered structure of the Networking Academy Program (see Figure 2). The components of the training model remain the same at every level of the training process, whether instructors are being trained to teach students at Local Academies or to train other instructors at Regional Academies or CATCs.

Initial training at every level includes a registration process, training sessions (online and classroom learning), online exams, skills-based assessments, and follow-up activities including course satisfaction feedback forms and continuing education. After initial training, instructors are provided with continuing education through their training Academy. Continuing education can occur in person or via distance learning opportunities through video conferencing, virtual classroom sessions, update meetings, or conferences.

FIGURE 2.
FLOW OF TRAINING EXPERTISE



^{*}Super CATC instructors alone are authorized to train new CATC instructors **Please note the AAFP academies may only receive their training from approved CATCs and Regionals who have agreed to participate in the AAFP program. Please send an email to netacad-acc@cisco.com for additional details.

REQUIREMENTS FOR INSTRUCTORS AND TRAINEES

Academy Orientation Course Requirements

All instructors who will teach a course in the Cisco Networking Academy program are required to complete the twenty-four hour Academy Orientation Course. This orientation course covers the key components of the Networking Academy program and the tools that have been developed to help you train instructors and students. This orientation also describes the training models and the Quality Assurance Plan used in the Networking Academy Program.

Beginning Curriculum Training

To be fully prepared for training you must download and study the curriculum at least two weeks prior to attending the training session. There is a dual focus of instructor training: technical content knowledge development and teaching methods. Instructor trainees will find the training time very tight if no effort has been spent on prior studying of the curriculum. To begin the training program, register online for a Course 1 training session at your training Academy.

Training Sequence

All instructors trainees must complete the orientation course and all course(s) related to a particular Curriculum prior to teaching at the Local/Regional/CATC. Instructor training sessions for a given Curriculum must be completed in sequence. For example, you must successfully complete (i.e., pass) training for Course 1 before beginning training for Course 2 within a given curriculum and so on. All courses within a given curriculum must be taken in order for an instructor to maintain certification.

Instructor Certification and Course Completion Requirements

During the training for each course, instructor trainees must pass the final online exams at 80% or higher. If that level is not reached on the first attempt, trainees may retake the test, but will need to pass at an 85% level or higher. If the 85% goal is not achieved, the trainee may take the test a third time and pass at a 90% level or higher. Instructor trainees may take online semester final exams a maximum of three times and the skills based final assessments a maximum of two times. If an instructor trainee does not pass the semester final and skills based assessments after repeated attempts, the training instructor will determine the best course of action, such as repeating the session or taking additional online tutorials or attending additional seminars.

Requirements During Training

During their training period, all instructor trainees are required to do the following:

- Complete all orientation requirements, including: reviewing the CNAMS Website and completing the Academy Orientation course.
- Attend all classroom instruction.
- Actively participate in the trainer's presentation and all activities (online and classroom learning, online tests, and skills tests).
- Demonstrate "best practices" for teaching, referenced in the Instructor's Guide (a link to the Instructors Guide is located in Resource section on the Academy Connection; the URL is http://cisco.netacad.net/prot-doc/tg/en/index.html).
- Understand roles and responsibilities of the onsite support visit process.
- Pass the course online final exam and skills based assessments as outlined in the preceding subsection.

At the discretion of the trainer, the above listed tasks can be used to evaluate whether a trainee will pass the course training.

Cisco Certified Academy Instructor (CCAI) Requirements

CCAI status denotes the trainee's proficiency in delivering the instruction required to support the diverse needs of a Cisco Networking Academy. All CCAI requirements must be met within 24 months from the start of initial instructor training.

To meet the CCAI requirements you must do the following:

- Successfully complete the Cisco Networking Academy Instructor Orientation Course.
- Successfully complete all curriculum course training (including final exams, skills tests, and demonstration of pedagogical skills).
- Meet the requirements for recognized industry certification.
- Successfully teach one semester of the curriculum as verified through the online Assessment System.

To maintain a valid CCAI certificate, an instructor must keep his or her certification current. Please find the required certification information below:

Table 1 Certification Requirements and Information

Curriculum	Certification Requirements	Additional Certification Information
CCNA	CCNA Certification	http://www.cisco.com/warp/public/10/wwtraining/certprog/index.html
IT Essentials	Course One: Comptia A+ Course Two:	http://www.comptia.org/certification/

	Comptia Server +	
Java	Sun Certified Java 2 Programmer	http://suned.sun.com/US/certification/java/index.html
Unix	Sun System Administrator Level one	http://suned.sun.com/US/certification/register/index.html
Web Design	Webmasters (WOW) Certified Web Design Apprentice (CWDSA)	http://www.joinwow.org/educationalliance/wow_certifications.asp
Voice and Data Cabling	BICSI Installer Level I	http://bicsi.org/install.htm

Becoming a Regional Instructor

A local instructor may become eligible to teach a regional instructor in the following ways:

 Participate and successfully complete instructor training, Regular Training or Fast Track Training, at a designated CATC. Attending class at a CATC will allow the Regional instructor to observe different training techniques and ways to run an Academy.

Instructor Fast Track Training

Fast Track is an abbreviated form of instructor training available to prospective instructors who are CCNA or CCNP certified and who are already very familiar with the Networking Academy Curriculum. Fast Track training is currently only offered within the CCNA and CCNP Curriculum. This training involves testing and demonstrating the ability to teach the curriculum through a series of skills-based tests and observations.

For CCNA or CCNP certified individuals the steps for Instructor Fast Track training are as follows:

- 1. Apply to attend the Fast Track training with the Academy Help Desk. (The Help Desk will verify your CCNA or CCNP certification.)
- 2. Enroll online for the Academy Orientation Course conducted at your assigned CATC or Regional Academy.
- 3. Successfully complete the Orientation course. Please note that the Orientation course is a separate course from the Instructor Fast Track course.
- 4. Schedule to take the skills-based tests for the CCNA or CCNP Curriculum at an authorized CATC or Regional Academy.

- 5. Successfully complete the skills-based tests for the CCNA or CCNP curriculum.
- 4. Complete the Threaded Case Study (TCS) and submit it to your training academy in order to be graduated from the Fast Track training.

Note: If Instructor performance is unsatisfactory at any point during the Fast Track training, or should an Instructor fail a skills-based test, the Instructor will be disqualified from the Fast Track training and will be required to enroll in the regular curriculum Training.

There may be additional Fast Track Training opportunities for instructors as additional curriculum is released. Please refer to the training guidelines posted on CNAMS for details.

Instructor Support and Training

Before an Academy can send instructors to training the Academy itself must be authorized to offer that particular Curriculum. CATCs and Regional Academies receive this authorization directly from Cisco. Local Academies receive this authorization from Regional Academies. Regionals will add Curriculum to Local Academies once they have established themselves as the Local Academy's Support Center. As a Support Center the Regional Academy will provide mentoring and support operationally, on the curriculum content, equipment requirements, best teaching practices and other support requirements as outlined in the Appendix: Components of Effective Teaching of this document. There is typically a contract between the Regional and the Local Academy for support and/or training.

Where an instructor trainee receives training will vary depending upon the support and training model approved for each Academy's geographic Theatre by Curriculum. Based upon the foregoing, an Open Support and Open Training Model; an Open Support and Closed Training Model; Closed Support and Open Training Model; or a Closed Support and Closed Training Model will be available to instructor trainees. The constant factor is that you must establish a Support Center for every curriculum. How flexible the model is in allowing you to choose where you will receive support and training has been set by the geographic Theater and was based upon available resources in that area.

Instructor Regular Training

Where an instructor trainee receives training will vary depending upon the training model approved for each Academy's theatre and Curriculum. Academies can identify what training model they have been assigned by reviewing their Academy Profile on the instructor or administrator home page. Based upon the foregoing, either an Open Training Model or Closed Training Model will be available to instructor trainees.

Open Support and Open Training Model

In an open support and open training model, a support relationship may be established between any Regional offering that particular curriculum and a Local Academy who are located within the

same geographic Theatre. Instructor training can be provided by any Regional Academy or CATC offering the required course in that Theatre.

Open Support and Closed Training Model

In an open support and closed training model, a support relationship may be established between any Regional offering that particular curriculum and a Local Academy who are located within the same geographic Theatre. Instructor training is to be provided by an Academy's Support Center. To attend instructor training outside your support Academy, instructors must obtain pre-approval from the following: (1) the main contact at assigned training Academy, (2) the main contact at the Academy where instructor trainee wants to attend training, and (3) Area Academy Manager (AAM), Technical Manager (TM), or Market Development Manager (MDM) as applicable. The instructors Academy should initiate these approvals by contacting the Academy Help Desk. The Help Desk will confirm your registration for the class at the non-assigned training academy.

Closed Support and Open Training Model

In a closed support and open training model, a support relationship may only be maintained within the backbone hierarchy, which in most cases is the CCNA Academy Hierarchy. This means that Local Academies wanting to add a new curriculum must contact their CCNA Parent. If the CCNA Parent is not offering this curriculum, then the Local Academy must go through an exception process by obtaining permission from the following: (1) the main contact at assigned training Academy, (2) the main contact at the Academy where instructor trainee wants to attend training, and (3) Area Academy Manager (AAM), Technical Manager (TM), or Market Development Manager (MDM) as applicable. The instructors Academy should initiate these approvals by contacting the Academy Help Desk. The Help Desk will confirm your registration for the class at the non-assigned training academy.

Once a support relationship has been established for a given curriculum, instructor training can be provided by any Regional Academy or CATC offering the required course in that Theatre.

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After a support relationship has been approved and confirmed between a Regional and a Local Academy, instructors may only go to that Academy for training. Going outside of this relationship for training would require the Local Academy to go through an exception process by obtaining permission from the following: (1) the main contact at assigned training Academy, (2) the main contact at the Academy where instructor trainee wants to attend training, and (3) Area Academy Manager (AAM), Technical Manager (TM), or Market Development Manager (MDM) as applicable. The instructors Academy should initiate these approvals by contacting the Academy Help Desk. The Help Desk will confirm your registration for the class at the non-assigned training academy.

For Regional Academies offering CCNA courses 1-4 only, please note the following:

Regional Academy instructor trainees may opt to attend training at the worldwide CATC in Wilmington, North Carolina (New Hanover Public Schools) if their assigned CATC is not offering a training class at the time they need to be trained. Cisco will fund up to two (2) Regional Instructor training fees, in accordance with the parameters in the then current "Cisco Learning Institute Domestic Policy Handbook" document, only if the training is taken at the Regional Academy's assigned CATC or the worldwide CATC in North Carolina. All other CATCs are permitted to charge the normal cost recovery fees to Regional Instructor trainees from outside of their region. They may also choose to waive their fees. Regional Academies that send more than two instructor trainees to training are responsible for paying the CATC's cost recovery fees for those additional trainees. Cisco is not responsible for any costs associated with any travel, per diem or salaries, compensations or benefits of the Regional instructors participating in training.

Training for Accredited Career Colleges

Accredited Career Colleges, formerly known as AAFP Academies, are assigned a CATC or training Academy by their AAM. Cisco does not fund any ACC instructor training fees. ACC Academies are subject to the cost recovery fees of the CATC or training Academy to which they are assigned.

Training Costs

Other than noted in the preceding section, Local Academy and Regional Academy instructor trainees are subject to the training Academy's cost recovery fees for instructor training. All applicable instructor trainee fees should be agreed upon by the parties prior to the instructor trainee attending training. In no event shall Cisco be responsible for funding instructor trainee fees.

Training Interventions

Training interventions may be required by an Academy Performance Action Plan (APAP), and are designed to help an instructor reach his or her goals. These interventions may be specified at any level of the process and may be prescribed for an instructor by anyone who has observed, monitored, or trained that person. Interventions may include on-site visits, workshops, re-training, or other professional development and may be included as part of the annual continuing education requirement. Interventions may also

be provided in person, via online training and/or through means of video or telecommunication.

Continuing Education Training Requirement

Continuing education is expected of all Networking Academy instructors. At least 4 hours of additional training is required each year for each course an instructor has completed. This additional training requirement begins within the first 12 months of completing initial training. This continuing education requirement can be achieved by taking training classes offered by Cisco, your CATC, and/or your Regional Academy, or by attending national conferences. Virtual classroom continuing education events may also be used to satisfy the continuing education requirement. Best efforts to attend all continuing education events should be made by all instructors and main contacts, even if they have already satisfied the continuing education requirement. All continuing education hours should be logged and kept up to date by the individual instructor and be available for review if requested.

Instructors and main contacts at all CATCs and Regional Academies are required to send at least one (1) instructor or main contact to the annual Cisco Networking Academy conference. At this time, this conference is held in conjunction with the Networkers conference, http://www.cisco.com/networkers/. This requirement is independent of the requirement for continuing education, but conference attendance may be counted toward the required hours.

Trainee Cheating

Cheating by an instructor in any form is unacceptable and will not be tolerated. Any instructor who is observed cheating while at instructor training will be asked to leave the class immediately. The training Academy will contact the main contact at the instructor's Academy informing them of why the instructor was unable to complete the class. Instructors who are caught cheating will be required to wait thirty days (30) before they are eligible to register for training.

Future Training Plans

Additional training and support will be delivered via Internet, video, telecommunications, and customized on-site opportunities in the future. These training options will make it easier for instructors to fulfill their continuing education requirements.

REQUIREMENTS FOR ACADEMY SITES

Becoming a Local Academy

An educational institution or community-based organization must be a Local Academy offering a particular Curriculum before it can send instructors to a Regional Academy to be trained. To become a Local Academy, an institution or organization is assigned or contacts a Regional Academy, offering the training in its area; contacts that academy, and arranges to become seeded in the Cisco Networking Academy Management System (CNAMS). This may require a formal agreement between the Local Academy and the Regional Academy.

Educational institutions designated as "Accredited Career Colleges" (ACC) or "For Profit Institutions" who are interested in pursuing Local or Regional Academies status should direct inquiries to the ACC Academy Manager, send e-mail to: netacad-acc@cisco.com. ACC, or For-profit educational institutions, outside the United States who want to become Local or Regional Academies should contact their Market Development Manager or Area Academy Manager.

Adding Curriculum to a Local Academy

Before a Local Academy can offer a new curriculum they must establish a support relationship for that curriculum with a Regional Academy. Only a Regional Academy may add curriculum to a Local Academy. Based upon the Academy infrastructure in a given geographic Theatre, your Academy will adhere to one of the following support and training models: an Open Support and Open Training Model; an Open Support and Closed Training Model; Closed Support and Open Training Model; or a Closed Support and Closed Training Model. The constant factor in all of these models is that an Academy must establish a Support Center for every curriculum. How flexible the model is in allowing you to choose where you will receive support and training has been set by the geographic Theater and was based upon available resources in that area. For a complete description of these models see the Support and Training.

Length of Instructor Course Sessions

The *minimum* number of 8-hour days required for each session is as follows:

Table 2

Course Name	Approximate Course Length	Environments
	*Course length does not include any time spend for preparing for course.	
Orientation Course	3 days	Remote, In-Person,

		Hybrid
CCNA 1: Networking Basics	5 days	In Person
CCNA 2: Routers and Routing Basics	6 days	In Person
CCNA 3: Switching Basics and Intermediate Routing	4 days	In Person
CCNA 4: WAN Technologies	4 days	In Person
CCNA Instructor Fast Track	3 days	In Person
Fundamentals of UNIX I	5 days	In Person
Fundamentals of Web Design	6 days	In Person
IT Essentials I	5 days	In Person
IT Essentials II	5 days	In Person
Java	8 days	In Person
Voice and Data Cabling	5 days	In Person

Note: at Cisco's sole discretion the minimum lengths of each training session may change at any time if required by Curriculum enhancements. Cisco will communicate changes via the CNAMS Website. Additionally, training academies may choose to extend the length of the course based on instructor need.

Class Size Recommendations and Cancellation Policy

In order to maximize learning opportunities, a minimum of four to ten instructor trainees per class is recommended, but the student-to-instructor ratio should never exceed 25 to 1.

Training Centers must give two weeks notification if they intend to cancel an instructor class. Student Class cancellation policies are determined at a local academy level.

Curriculum Version

Academy sites are responsible for delivering training using the latest version of the Curriculum. Cisco recommends that Academies migrate to the latest versions of the Curriculum at the start of a semester or school term. This will prepare schools as older versions of the curriculum will be retired and will be made unavailable to academies. Please refer to the Academy Connection for details on when curriculum will be retired.

Continuing Education

CATCs and Regional Academies are expected to facilitate instructors' fulfillment of the continuing education requirements by conducting regular continuing education or update sessions. CATCs are required to hold continuing education events at least of four times per year; Regional Academies should hold continuing education sessions at least twice a year. These continuing education updates can be provided either in person or virtually.

Please note that if you are offering more than one Curriculum as a CATC or Regional, continuing education events are required for each curriculum offering.

Program Materials

Academy main contacts and instructors are required to access the most recent version of the QAP on the CNAMS Web site in order to remain in compliance with current program policies. Further, main contacts and instructors are required to access the Academy Connection Web site no less than once per week to obtain updated Program information.

Number of Academy Instructors

Cisco recommends that each <u>Regional Academy</u> have at least two trained Instructors, one acting as the primary Instructor and the other as the secondary Instructor. These two Instructors should be trained at a CATC. Regional Academies may share Instructors with Local Academies, within their Academy tree, provided the Instructors have successfully passed each course they plan to teach. Academies will, however, maintain one instructor per Curriculum at all times.

ASSURING INSTRUCTIONAL QUALITY

BASIC PROGRAM PARAMETERS FOR LOCALS

The sections below describe the policies that guide implementation of the Cisco Networking Academy Program at Local Academies.

Course and Program Length

Instructional quality may suffer if the coursework is accelerated beyond its intended pace or diluted with more time then is necessary. For this reason, an Academy course may require no more than 12 hours per week of in-class time. No course may be completed in less than six weeks. *Non-required* lab or lecture hours are not included in the 12-hours-per-week maximum, and so Academies may add them, as they deem necessary.

Cisco also requires that each course have a minimum amount of instructor-led student seat time. At secondary institutions, this minimum is seventy (70) hours total per semester; at post-secondary institutions, instructor-led time must total forty-five (45) hours, with an additional twenty-five (25) hours of required proctored lab time.

Minimum Age of Students

Participation in the Cisco Networking Academy Program is open to qualified students at any Local Academy site. Cisco recommends that students enter the program no earlier than grade 9 in the US education system or its equivalent in other countries (age 14), but does not restrict younger students from participation.

Testing Environment

To ensure that exam results are accurate reflections of students' knowledge and achievement, *instructors should proctor all exams and not allow students to refer to any external resources while testing*. To discourage exam fraud, instructors may want to point out that passing an exam without actually knowing the material leaves a student ill-prepared for subsequent courses and certification exams.

Successful Completion of a Course

Grades and passing determination should be made using multiple information sources in addition to online assessments. Such activities may include class participation or presentations, competencies in skills-based assessments, (ex. web page creation, router configuration) and Threaded Case Studies.

The exact configuration and grading decision will be determined by the policies of the Local Academy and Instructor. Local Academies should establish course evaluation criteria, which will then be provided to students at the beginning of the course.

When using the online assessment, Cisco recommends that a student has successfully completed (that is, passed) a course only when he or she has passed the online final exam with a 70% or greater* and has demonstrated proficiency completing the skills-based

assessment. (*Please note the minimum passing score is different for instructor trainees. Refer to Instructor Course completion and Certification for information.)

Transferring Students between Academies

Students may transfer from one academy to another and continue their work in the Academy program without interruption. In order to initiate the necessary changes in the Academy Connection Web site, a transfer student's new instructor should notify the Academy Help Desk via email, providing the student's user name and number, the name of the previous Academy and instructor, the name of the new Academy, the class to which the student is being added, and the dates of the class. Once the Help Desk receives this information, the student's records will be changed appropriately.

Security of Course Materials

To maintain the security of course materials (including the Curriculum and the Assessments), Academies must download all course material and curricula to a local server, and password-protect all the material. User passwords should be changed periodically to ensure ongoing security. Only authorized users (registered students and instructors) can have access to the –Cisco Networking Academy Program Curriculum. Since the Threaded Case Studies are part of the Curriculum, they too cannot be given to unauthorized Academy personnel or third parties.

Student Services Site

Students currently enrolled in the Networking Academy program may be granted access to the Student Services Web site, student access will be provided by the Local Academy Instructor. Students may logon to the Students Services Site for after class study, either remotely or via the Local Academy. However, students should not access the course material or Curriculum via the Student Services Site during classroom instruction. All classroom instruction should be provided to the student via the Local Academy server on which the Curriculum has been downloaded (described in the preceding section). Upon login, students will be presented with Cisco's user agreement, students must read and click their acceptance to the terms and conditions before they can access the Student Services Site.

Alumni Site

As an extension of the Cisco Networking Academy Program, students and instructors who have completed at least one course (CCNA, CCNP, Sponsored Curriculum) are eligible to register as Alumni. As alumni, they will receive four months free access to the "Alumni Connection" web site, a community-building tool used to support students and graduates in achieving their career development goals and objectives. After their four months of free access to the site, Alumni will be asked to pay a nominal subscription fee on an annual basis.

Alumni will have access to both global content and theater-specific content on the "Alumni Connection," including language-specific content if it is provided by the theater or country.

The key feature of the "Alumni Connection" will be continued access to curricula that the Alumni has already completed, even after they exit the Academy Program and no longer have curricula access through CNAMS. Other features of the "Alumni Connection" include Community Features such as Chat, Message Boards, Calendars, List Serve, Membership Directories, Newsletters and Polls. The "Alumni Connection" also provides career development and job placement.

ROLES and RESPONSIBILITIES

Networking Academy sites, main contacts, and instructors are responsible for a wide variety of tasks, procedures, and behaviors designed to ensure the quality of instruction at every Academy. These responsibilities are listed below.

Not all of the responsibilities are required at each level of the Networking Academy program, as indicated by the labels in parentheses after each italicized statement. Tables 1 and 2, at the end of this section, summarize the responsibilities associated with the CATC level, the Regional level, and the Local level.

Responsibilities of Academy Sites

Administrative Responsibilities

Each CATC, Regional and Local Academy must select a main contact for his or her Academy. The Academy main contact will be responsible for the administrative functions of the Academy. This role can be filled by one full-time person who also conducts training or by one person who fulfills the administrative role along with other duties of the agency or institution. The main contact is the point of contact for

1. Select a main contact to manage the Networking Academy Program. (CATC, RA, LA)

conducts training or by one person who fulfills the administrative role along with other duties of the agency or institution. The main contact is the point of contact for all academy related issues and concerns; will work with instructors to provide quality information, recruiting, program updates; and training academy relationship issues. It is the responsibility of the Academy to keep main contact information current on the CNAMs Web site.

CATC main contacts will be selected upon mutual agreement by Cisco and the CATC. The CATC main contact is a pivotal person in the Networking Academy program; he or she will be involved in selecting CATC instructors and ensuring the quality of the training program, and will be the resource for Regional and Local Academies regarding Networking Academy Program issues. For these reasons, Cisco reserves the right to be part of the selection process and retains final approval rights for CATC main contact nominees.

2. Select qualified instructors to deliver the training or instruction. (CATC, RA, LA) The following qualities should be considered when selecting Instructors:

A basic understanding of computer hardware and software.
 Candidates who are selected to be main contacts or instructors will face a very steep learning curve during the networking training. Basic understanding of computers will facilitate the learning.

- A strong motivation to provide a quality technology education program. Research on teaching, as well as field observations of the Networking Academy Program during the first year of implementation, indicate that instructor enthusiasm and motivation about the subject matter produce higher student achievement. Given that instructors are key to the success of the entire Networking Academy program, enthusiasm and motivation are especially important in personnel at this level.
- Good teaching skills and appropriate professional credentials.
 In order to be effective, instructors at all levels must be able to demonstrate good teaching skills as defined in Appendix B, <u>Components of Effective Teaching</u>. They must also have a professional credential for the present position they hold, or one of the levels of networking certification (CCNA or CCNP).
- 3. Maintain accurate training records via the online assessment system. (CATC, RA, LA)

To ensure quality, records must be maintained regarding who is trained, where they are trained, by whom they are trained, and the results are of the training, including feedback and final assessment scores. These records will be maintained through the online assessment system (http://cisco-aas.netacad.net/) and should be current at all times. All Academies are required to use the online assessment tools.

If there are two instructors co-teaching a class, they both must be listed in the management system as instructors. Instructors who are not recorded in the Academy Connection Web site as having taught a class will not be able to use that teaching experience toward satisfaction of their CCAI requirements.

4. Analyze results from course instruction to determine the quality of the training. (CATC, RA, LA)

There are several sources of data to assess the results of training. For CATCs and Regional Academies these data sources are as follows:

- Instructor trainee results as shown by written and skills test data
- Instructor trainee satisfaction collated from the results of the feedback forms
- Feedback (both favorable and unfavorable) received during and after training
- Local instructor trainee satisfaction summaries compiled after the regional instructors conduct their training
- Student results as shown by written and skills test data
- Student satisfaction collated from the results of the feedback forms

Ultimately, the most important indicator of instructor quality is the achievement of students, as reflected in the student results data.

For Local Academies the data sources are as follows:

- Student results as shown by written and skills test data
- Student satisfaction collated from the results of the feedback forms
- 5. Observe and assess Academy operations and classroom instruction. (CATC, RA, LA)

CATCs and Regionals will conduct onsite support visits at least once every three years. Support visits occur so that teaching skills, as defined in Components of Effective Teaching (Appendix B), can be observed along with the content knowledge that is taught. These visits are to assist the Instructor and the Academy provides the highest level of education to their students.

All individuals observing the classroom will use the online <u>Observation Form</u> (and the Academy Performance Action Plan when indicated). Observation activities will focus on program quality and follow the laws and policies of the state and institution as well as the contract guidelines.

Additional visits may occur as needed or requested by the Regional or Local. Appropriate staff must be provided to conduct the observation.

6. Provide separate email accounts and 56Kb dedicated bandwidth for the classroom. (CATC, RA, LA)

Obtain and maintain active, separate, electronic mail accounts for all instructors and key support persons with a minimum 56 Kb dedicated Internet connection to the classroom (not just the school). A fractional T1 at greater than 512K is recommended. Each person fulfilling a special role needs to have a separate e-mail account. This includes the main contact, instructors, billing personnel, shipping contacts, etc.

7. Maintain up-to-date SMARTnet agreements or an equivalent support agreement with an authorized Cisco partner on all CCNA lab equipment bundles. (CATC, RA, LA)

Each CATC, Regional, and Local Academy will maintain yearly, up-to-date, SMARTnet agreements, or an equivalent support agreement with an authorized Cisco partner, that includes the serial numbers of all CCNA lab equipment bundles.

In addition, CATCs are responsible for ensuring that their Regional Academies have current SMARTnet agreements or an equivalent support agreement with an authorized Cisco partner; likewise, Regional Academies are responsible for ensuring that their Local Academies maintain current SMARTnet agreements with Cisco or an equivalent support agreement with an authorized Cisco Partner.

8. Enroll new Academies and training participants. (RA, LA)

Regional Academies must endeavor to identify, enroll, and manage at least five to ten Local Academies within 18 months of becoming an academy for each curriculum they are offering. Please refer to your contract or contact the AAM for the specific

number. A Regional Academy agrees to provide a list of potential Local Academy candidates prior to receiving final agreement approval from its area Academy manager. (If any Local Academies on the list are duplicated on another Regional Academy's list, Cisco will require a modification to the submitted list or approval from the affected Regional Academy to realign named Local Academies. All parties must agree to any Local Academy changes. Academy realignment may occur due to quality issues or geographic changes.)

ACC Regional Academies may only recruit locals within their corporate family. Please refer any questions regarding this policy to the ACC AAM, <u>netacadacc@cisco.com</u>

Local Academies are responsible for student enrollment. Strategies are developed locally and may include: courses added to the counselors' list of classes, information provided to the counselors so that they understand the program and can advise students regarding participation, brochures and information included in other strategies used by the school, such as vocational education fairs, junior high school presentations, and open houses for parents. Sample materials to be shared can be found at http://www.cisco.netacad.net/

9. Replace Main Contacts and Instructors who leave. (CATC, RA, LA)

If a main contact or Instructor leaves an Academy, that individual must be replaced within ninety (90) days. Academies may not conduct training events or classes until an Instructor replacement is selected and trained in the course to be taught by the Academy. A Local Academy may *temporarily* share an instructor from another nearby Academy. Failure to replace the instructor of a class in progress will result in Program suspension and access to the Curriculum as well as other Academy resources made available by Cisco.

10. Review and make changes to Academy Information as needed and at a minimum of four times per year.

Legal Responsibilities

Academies have a variety of legal responsibilities. CATCs and Regional Academies should refer to their respective agreements with Cisco for an enumeration of these responsibilities; Local Academies should refer to their agreements with their Regional Academies

Responsibilities Related to the Teaching Environment

1. Provide a room of sufficient size for the number of academy instructor trainees or students being taught. (CATC, RA, LA)

For the most efficient and effective classroom, adequate space should be available for the largest number of students that will be taught in any class. For example for a class with 20 students the space should include at minimum of 900 square feet or 90 square meters for lab activities so that individuals can participate in labs while others work online

2. Provide sufficient and appropriate computers. (CATC, RA, LA)

Provide an adequate supply of computers powerful enough for instructors or students to study the online curriculum and to conduct hands-on lab exercises. Please note these requirements vary by course offering. Please refer to Appendix C for details regarding a particular course. A 1:1 ratio of students to computers is strongly recommended, and the maximum is a 3:1 ratio of students to computers. Because of the length and intensity of the training, each Instructor must have a computer as well. In all cases, the computers should have the capacity to run all aspects of the Program. (Minimum System Requirements for Classrooms). Please refer to the Appendix for specific equipment requirement for each curriculum. It is strongly recommended that these computers not be connected to the production network.

3. Provide appropriate and adequate lab equipment. (CATC, RA, LA)

The key to obtaining high levels of student achievement is participation in the lab or hands-on activities. Instructor trainees and students must not just memorize the concepts; they must learn to apply them in real-life situations, and this can be done only with a hands-on approach. Accordingly, the lab equipment must allow each Instructor trainee or student to manipulate the materials and to complete the lab activities in a timely manner. In the CCNA course offerings the recommended maximum number of students per lab bundle is fifteen (15), and the optimal number is ten (10). Please refer to Appendix for details on all course offerings.

(Minimum System Requirements for Classrooms.)

4. Develop safety policies and procedures for the academy training room. (CATC, RA, LA)

Each Academy lab must have policies and procedures to ensure the safety of the participants. Most schools have policies that can be adapted for use in a networking classroom. (See Appendix J, Example of Appropriate Lab Safety Procedures.) All Academies are responsible to comply with all Federal, State and local health and safety laws applicable to the lab and classroom implementation of the Program.

5. Plan for individuals who need disability access and accommodations in facilities and program elements. (CATC, RA, LA)

US section 504 and IDEA require that qualified individuals with disabilities shall not be excluded from, denied access to, or be subjected to discrimination under any program or activity that either receives Federal financial assistance or is conducted by any executive agency. Although these standards are written for the United States, Academies worldwide are encouraged to meet or exceed these guidelines. For more information, see http://www.usdoj.gov/crt/ada/adahom1.htm. In general, all

Academies are responsible to comply with all Federal, State and local equal opportunity and disability laws.

Academy Responsibilities for Supporting Main Contacts and Instructors

1. Provide funds for travel expenses during initial training (CATC, RA, LA)

It is the responsibility of the CATC to support the initial training of their main contact and instructors by providing funds for travel. Cisco Systems will not provide reimbursement for travel costs or costs associated with travel.

Regional and Local academies are required to provide funds to support the initial training of instructors. This may include training fees, travel costs, and per diem expenses.

2. Provide ongoing training support to main contacts and instructors. (CATC, RA, LA)

CATCs, Regional Academies, and Local Academies must provide main contacts and Instructors release time and travel funds for continuing education hours of annual training, some or all of which may be online or at the annual conference. Cisco will sponsor an annual conference for the staff of all Academies. Specific workshops will be offered for the participants. Instructors may select these workshops and online resources to complete their continuing education requirement.

CATCs must also provide release time for main contacts/instructors to attend the two-day workshop conducted bi-annually by Cisco representatives. The CATC is responsible for funding associated travel costs. Additionally, CATCs must also attend periodic program continuing education and communication sessions via distance learning resources.

CATCs will provide continuing education opportunities to their Regional Academies no less than four times a year.

Regional Academies will provide continuing education opportunities to their Local Academies at least twice a year or more frequently as determined by the needs of the Local Academies. These opportunities can be provided online or in person.

In addition for Local Academies, the required instructor hours of annual continuing education should be in line with the policies and procedures regarding professional development within their institution.

Responsibilities of Main Contacts and Instructors

General Responsibilities

1. Understand and implement the Networking Academy Program and its instructional components. (CATC, RA, LA)

CATC, Regional, and Local Academy main contacts/instructors will demonstrate their understanding of the content of the Curriculum through written tests and handson skills tests. Understanding will be further demonstrated through observation of their training instruction, and classroom discussions. Student results, however, will be the best indicator of instructional skills at all levels.

2. Meet CCAI qualifications within 12-24 months as outlined in the agreement/contract, and maintain a valid CCAI certificate. (CATC, RA, LA)

Academy Instructors have twenty-four (24) months to complete all requirements for CCAI certification. (See <u>CCAI Requirements</u>.) During that time, Instructors receiving training should discuss any concerns they have about curriculum content as follows:

- CATC main contacts/instructors should discuss their concerns with appropriate Cisco representatives and other CATC main contacts/instructors
- RA main contacts/instructors should discuss concerns with the CATC main contact or instructors and other Regional Academy personnel.
- Local Academy instructors should discuss concerns with the Regional Academy main contact and instructors.

Instructors should also use the online resources to make certain that they understand all aspects of the curriculum content. Some instructors may require a waiver because their teaching schedules do not allow completion of the training within the twenty-four (24) month time frame.

To maintain a valid CCAI certificate, an Instructor must keep his or her industry certification current, and complete all-ongoing required Program continuing education requirements.

3. Effectively implement the training model. (CATC, RA)

The training model is designed to provide strategies that enhance achievement. Instructor self-assessment, and observation and monitoring by others, will indicate how well the training model is implemented.

4. Complete annual self-assessment and goal setting activities. (CATC, RA, LA)

All instructors will develop annual goals as part of their continuing education. Each instructor will analyze results from student and program data collected each course, and use this data for the goal-setting process.

Goal setting begins with completion of the <u>Instructor Self-assessment Form</u>, which is available in this QAP. This self-assessment form has three sections that the individual instructor uses to assess the implementation of his/her roles and responsibilities. This assessment is then used to set goals and select strategies to meet the desired goals. Instructor's goals are recorded with the Instructor's supervisor and made available to Cisco representatives, CATCs, and the Regional Academy main contact during times of observations or support visits. The <u>Instructor Reflection Questionnaire</u> is used to record the goals. Cisco will use the data collected from Instructors to develop additional training modules and online learning events.

Based on the results of observations and support visits, goals will be assessed each year.

Note: The Academy Performance Action Plan (APAP) form or an institution/school form may be used for goal setting as long as each goal plan contains the following components:

- Goal: a statement that specifies the area, topic, skill, or behavior to be learned or accomplished.
- Plan: a schedule of how, when, and where the activities to meet the goal will be accomplished.
- Assessment: a description of the evidence that will show whether the goal was met or not.
- 5. Partner with organizations, businesses, schools, and other academies. (CATC, RA, LA)

Partnering with other groups and individuals has been shown to strengthen programs. All Academies will conduct outreach to local businesses, chambers of commerce, high-technology councils or roundtables, and community-based organizations.

Partnering may be in the form of cooperating in the design and building of networking systems for campus buildings or other schools, inviting networking technicians to class to discuss career opportunities, and receiving replaced computers from local businesses. There are many other variations on partnering that can strengthen the Academy's participation in the Networking Academy Program.

To help facilitate work-based learning partnerships in the United States, Cisco has launched a Web site for the Academy community at URL: http://wbl.netacad.net/WBL/cisco_edu/Home.html. Similar resources for other countries will be provided as they become available.

6. For each course completed, instructors are required to complete 4 hours of continuing education annually. (CATC, RA, LA)

The <u>continuing education requirement</u> is described in the Training Instructors section of this document

7. Attend Cisco Continuing Education and Communication workshops. (CATC)

Cisco will hold continuing education and communication workshops focusing on information and skill updates and including discussions on issues pertinent to the Academies. The CATC will provide travel and per diem costs.

8. Share lesson plans, teaching tools, and other materials via Academy Connection Web site during the academic year. (CATC, RA, LA)

The Networking Academy Program believes in building a "learning community" where all Instructors share their successes with the Academy community. Examples of Academy successes may include: an especially effective lesson plan, a strategy to organize the classroom, a reference that provides insight, or a teaching strategy that increases student achievement. The Academy website will function as a clearinghouse for these ideas.

10. Communicate effectively with Cisco and other academies. (CATC, RA, LA)

A quality program requires a strong communication system that is effective and easy to use. Teaching new content requires support by others who have taught or are teaching the course. Open, two-way communication keeps everyone aware of challenges and solutions at other Academies so that all Academies can learn from one another and each Academy does not have to experiment in every area.

In their support role for their trainee Academies, CATC and Regional Academies have the responsibility of communicating in a timely manner. An important component of timely communication is regular (daily) checking of email. Instructors at CATCs and RAs should respond to all support inquiries within 48 hours (two business days).

Instructional Responsibilities

1. Provide quality-training programs. (CATC, RA)

There are four components in providing a quality "train-the-trainer" program that each Instructor should provide during training:

- Provide a thorough knowledge of the content portion of the training.
- Model excellent pedagogical practices.
- Discuss and demonstrate the strategies used in the training so each instructor will be able to replicate the training.
- Allow opportunities for instructor trainees to practice what they learn.
- 2. Analyze the Quality Assessment Reports. (CATC, RA, LA)

Each Quality Assessment Report is based on the data from a specific course to include online final exams and course feedback results. Main Contact and/or Instructor should use these reports to analyze the success of his/her academy or class and make changes accordingly.

- For CATCs, reports assessing the Regional Academies will include information from support visits, observations, complaints, Academy report cards, Regional Instructor course satisfaction, regional instructor assessment results, and local student results. CATCs should be aware of other possible factors affecting quality, including poor preparation at the training academy, loss of a trained instructor, facility challenges, and lack of school administrative funding for the program. CATCs are expected to review the data on Regionals a minimum of four times per year.
- For Regional Academies, reports assessing the Local Academies will include support visits, observations, complaints, Academy report cards, student satisfaction, and online assessment results. Regional Academies are expected to review the reports a minimum of twice a year.
- In order to monitor their own success in teaching, Local Academy Instructors will analyze the online reports for each class. Student satisfaction data and student assessment results will allow Local Academy Instructors to diagnose areas of difficulty and identify needs for additional instruction. Instructor self-assessment also includes completion of, and subsequent reference to, the Instructor Reflection Questionnaire.

3. Provide mentoring and technical support. (CATC, RA)

Regional Academy main contacts/instructors will provide Local Academies with mentoring and technical support onsite, by e-mail, and by telephone. The Regional Academy will establish and maintain a communication link with each Local Academy so that Local Academy Instructors can receive guidance when they need it. It is critical that communication between Regional and Local academies be timely and ongoing.

4. Monitor trainee Academies. (CATC, RA)

The Onsite Support Visit (see Quality Assessment Methods) will be used to collect data that will provide insight into the functioning of an Academy. Academy Performance Action Plans (APAPs) will be prepared if the support visit indicates that an Academy requires strong assistance.

- Each Regional Academy has an onsite support visit by its CATC once every three years. A Regional Academy is also visited if it requests a visit or if observations indicate that a support visit is necessary. If a Quality Assessment Report indicates that a problem exists at a Local Academy, the CATC main contact may decide to visit that Academy. (Is this the Regional or Local?)
- Each Local Academy has a support visit conducted by its Regional Academy once every three years. Support Visits also occurs if observations or other data indicate that it is necessary. The monitoring of local instructors is carried out in conjunction with the school principal or dean and must utilize established procedures and forms. A Regional

Academy may request that the CATC main contact participate in their Local Academies visits to assist them in providing quality instruction.

5. Conduct update/retooling workshops as needed. (CATC, RA)

CATCs are responsible for communicating all program updates to their Regional Academies. Accordingly, CATCs will provide update sessions for regional instructors on a regular basis (no less than four times per year). These update sessions can be offered in conjunction with other training so that at a single workshop, regional instructors receive both technical and programmatic updates.

Each Regional Academy will provide workshops for Local Academy Instructors to maintain communication, provide program and technical updates, and to assist the Local Academy Instructors in completing the required hours of annual continuing education. Regional Academies may choose to hold these sessions in conjunction with CATC continuing education events. Regionals should host a minimum of two continuing education events per year.

6. Encourage participation in Cisco training programs. (CATC, RA)

Main contacts and Instructors at Regionals and CATCs will provide guidance to the their Local Academies and to others regarding the benefits of participating in the Cisco Networking Academy program. Flyers and phone conversations may be used to encourage participation.

7. Explain to instructor trainees how the QAP works. (CATC, RA)

During all semesters of training, instructor trainees must be informed of the quality assurance responsibilities described in this document. Each Regional Academy should ensure that its Local Academies are familiar with these responsibilities, with the quality assessment methods, and with the <u>APAP process</u> before an institution agrees to become an Academy and ongoing as the QAP is updated with Program changes. Academies can access the most current version of the QAP on the CNMS Web site under the "Academy Start Guides"

8. Participate in the Academy Performance Action Plan (APAP) process if necessary. (CATC, RA, LA)

If a support visits indicates that an Academy needs to improve in specific areas, an <u>APAP</u> will be written in consultation with the appropriate supervisors. In the case of Local Academy, this would include the Instructors, main contact, principal or dean and the Regional Academy Instructor. For Regional Academy Instructors, CATC Instructors will be involved. The APAP will provide the Academy with a plan of action for the next 60 days to develop a plan for continued Improvement. If after 60 days, no progress has been observed, plans to deactivate the academy should occur.

Table 1.
Summary of Responsibilities of Networking Academy Sites

		<u>CCNA</u>	<u>Unix</u>	Web Design	IT Essentials	Cabling
Adminis	strative Responsibilities					
1.	Select main contact	X	Х	Χ	X	X
2.	Select and maintain qualified instructors.	X	Х	Χ	X	Х
3.	Maintain accurate training records	X	Х	Χ	X	Х
4.	Analyze course results at a minimum of Quarterly.	X	Х	Χ	X	Х
5.	Observe academy operations and instruction	X	Х	Χ	X	Х
6.	Provide email accounts/56Kb access to all MC and Instructors	X				
7.	Maintain SMARTnet or equivalent service contract	X				
8.	Enroll new academies and training participants	X	Χ	Χ	X	Х
9.	Quickly replace instructors who leave.	X	Х	Χ	X	Х
10.	Actively Market the Cisco Networking Academy Program	X	Х	Χ	X	Х
11.	Maintain security of course materials	Х	Х	Х	Х	Х
Legal R	esponsibilities					
(Re	fer to agreement with Cisco or training academy)	X	Х	X	X	Х
Responsi	ibilities Related to the Teaching Environment					
1.	Provide a classroom of sufficient size	X	Χ	Χ	X	Х
2.	Provide sufficient & appropriate computers	X	Х	Χ	Х	Х
3.	Provide appropriate & adequate lab equipment	X	Χ	Χ	X	Х
4.	Develop safety policies & procedures	X	Х	Χ	X	Х
5.	Plan for persons who need disability access	X	Х	Χ	X	Х
Responsi	ibilities for Supporting Main Contacts and Instructors	X	Х	Χ	X	Х
1.	Provide travel and per diem support	X	Х	Χ	X	Х
2.	Provide ongoing training support. This includes a minimum of quartering continuing education events.	X	Х	X	X	Х

Table 2. Summary of Responsibilities of Main Contacts & Instructors

		<u>CCNA</u>	CCNP	<u>Unix</u>	Web Design	IT Essentials	
General .	Responsibilities						
1.	Understand & implement the Academy program	Х					
2.	Meet CCAI qualifications in 24 months.	CCNA Certification	CCNP certification		WOW certification	A+	
3.	Effectively	CATC,	CATC,	CATC, Regional,	CATC, Regional, Local	CATC, Regional, Local	(
	implement the training model. * Please note this may vary by country/theatre.	Regional, Local	Local	Local			
4.	Complete self- assessment & goal- setting activities	Annually	Annually	Annually	Annually	Annually	
5.	Participate in curriculum content review	Please send any feedback to the webmaster@c isco.com	Please send any feedback to the webmaster@ci sco.com	Please send any feedback to the webmaster@cisco .com	Please send any feedback to the webmaster@cisco.com	Please send any feedback to the webmaster@cisco.com	W
6.	Partner with organizations, businesses, etc.	See the Workplace learning website for ideas.	See the Workplace learning website for ideas.	See the Workplace learning website for ideas.	See the Workplace learning website for ideas.	See the Workplace learning website for ideas.	S le
7.	Complete 4 hours of continuing education annually for each semester you are certified	All hours are required to be logged in instructor profile.	All hours are required to be logged in instructor profile.	All hours are required to be logged in instructor profile.	All hours are required to be logged in instructor profile.	All hours are required to be logged in instructor profile.	lo
8.	Attend Cisco Sponsored Continuing Education workshops	Representatives from CATC and Regional are required to participate in Annual Academy Conference.					
9.	Share lesson plans and other materials via CNAMS.	The goal is for all academies to upload using the FTP site one lesson per quarter.	The goal is for all academies to upload using the FTP site one lesson per quarter.	The goal is for all academies to upload using the FTP site one lesson per quarter.	The goal is for all academies to upload using the FTP site one lesson per quarter.	The goal is for all academies to upload using the FTP site one lesson per quarter.	le
10.	Communicate effectively with other academies	This applies to all	This applies to all	This applies to all	This applies to all	This applies to all	7
11.	Establish, maintain, and support 10 academies	All CATCs and Regionals are required to adhere to this.	All CATCs and Regionals are required to adhere to this	All CATCs and Regionals are required to adhere to this	All CATCs and Regionals are required to adhere to this	All CATCs and Regionals are required to adhere to this	n
12.	Limit any cost recovery fees it	All CATCS and Regionals	All CATCs will charge no more	All CATCs and Regionals will	All CATCs and Regionals will charge	All CATCs and Regionals will charge	

	charges to an amount sufficient to recover only those costs incurred by the Academy that are directly associated with that type of support provided under the Program.	may charge their training academies a support and training fee that will cover their costs.	than \$115 dollars per instructor per day for training. *(Please note that the Training may ask to be reimbursed for any travel expenses they incur. Support fees will only be cost recovery in nature	charge no more than \$150 dollars per instructor per day for training. *(Please note that the Training may ask to be reimbursed for any travel expenses they incur. Support fees will only be cost recovery in nature	no more than \$150 dollars per instructor per day for training. *(Please note that the Training may ask to be reimbursed for any travel expenses they incur. Support fees will only be cost recovery in nature	no more than \$150 dollars per instructor per day for training. *(Please note that the Training may ask to be reimbursed for any travel expenses they incur. Support fees will only be cost recovery in nature	ttl pp *((tl
13	3. Meet all program and quality requirements and perform Academies duties stated in	This applies to all Academies	This applies to all Academies	This applies to all Academies	This applies to all Academies	This applies to all Academies	Т
14	the QAP Password protect Curriculum downloads. Provide view only access to Curriculum	This applies to all Academies	This applies to all Academies	This applies to all Academies	This applies to all Academies	This applies to all Academies	Т
Instruct Respon	tional nsibilities						
1.	Provide quality training programs	Х	X	Х	X	Х	
2.	Analyze the Quality Assessment Reports for every class offering.	This includes but is not limited to: the Course Feedback, Skills Based Exams, Certifications, and Assessment Results.	This includes but is not limited to: the Course Feedback, Skills Based Exams, Certifications, and Assessment Results.	This includes but is not limited to: the Course Feedback, Skills Based Exams, Certifications, and Assessment Results.	This includes but is not limited to: the Course Feedback, Skills Based Exams, Certifications, and Assessment Results.	This includes but is not limited to: the Course Feedback, Skills Based Exams, Certifications, and Assessment Results.	Th n C
			r toodito.				
3.	Provide mentoring and technical support for all instructors.	This applies to all academy instructors. Additional Support will be provided by Cisco Systems Inc. on the Cisco.netacad .net website.	This applies to all academy instructors. Additional Support will be provided by Cisco Systems Inc. on the Cisco netacad. net website.	This applies to all academy instructors. Additional Support will be provided by Cisco Systems Inc. on the Cisco.netacad.net website.	This applies to all academy instructors. Additional Support will be provided by Cisco Systems Inc. on the Cisco.netacad.net website.	This applies to all academy instructors. Additional Support will be provided by Cisco Systems Inc. on the Cisco.netacad.net website.	A w
4.	and technical support for all	This applies to all academy instructors. Additional Support will be provided by Cisco Systems Inc. on the Cisco.netacad	This applies to all academy instructors. Additional Support will be provided by Cisco Systems Inc. on the Cisco.netacad.	academy instructors. Additional Support will be provided by Cisco Systems Inc. on the Cisco.netacad.net	academy instructors. Additional Support will be provided by Cisco Systems Inc. on the Cisco.netacad.net	academy instructors. Additional Support will be provided by Cisco Systems Inc. on the Cisco.netacad.net	T A w Ci C

	continuing education workshops as needed	Regionals are asked to provide workshops to their locals regularly. Local Academies are requested to participate.		Regionals are asked to provide workshops to their locals regularly. Local Academies are requested to participate.	are asked to provide workshops to their locals regularly. Local Academies are requested to participate.	are asked to provide workshops to their locals regularly. Local Academies are requested to participate.	V
6.	Encourage participation in Cisco training programs						
7.	Explain to instructor trainees how the QAP works	This is the responsibility of CATC and Regional Academies.		This is the responsibility of CATC and Regional Academies.	This is the responsibility of CATC and Regional Academies.	This is the responsibility of CATC and Regional Academies.	
8.	Participate in the APAP process if necessary	*	*	*	*	*	

QUALITY ASSESSMENT METHODS

Ongoing assessment of the quality of instruction is important not only for ensuring a minimum standard of quality, but also for providing a framework within which instructors can improve their teaching skills and methods and develop professionally. Accordingly, the quality assessment process is designed to support instructors and help them reach their goals.

The quality of the Networking Academy Program is assessed in a variety of ways. For each method of assessment, standards of quality are established, and data or observations are analyzed to determine if a particular academy or instructor meets the standards. The seven assessment methods, and the levels of the program to which they each apply, are listed in the table below

Figures 3, 4, and 5 at the end of this section show—in the form of a flowchart for each level of the Networking Academy Program—the way in which these assessment methods are used and combined in the overall quality assurance process. In addition, Table 3 details the two quality assessment methods—Observation and Onsite Support Visits—that involve visits to academies or classrooms by persons at the next higher level of the Academy Program.

	<u>CATC</u>	RA	<u>LA</u>
Analysis of Student Results Data	X	X	X
Analysis of Student Satisfaction Data	X	X	X
Analysis of Instructor Results Data	X	X	
Analysis of Instructor Satisfaction Data	X	X	
Observation	X	X	
Review of Complaints	X	X	X
Onsite Support Visits	X	X	

Student Results data are the major indicator of quality. If the Student Results in a particular region meet the standards, it may be assumed that the Regional Academy is functioning well. Similarly, if the Student Results from all the regions for which a CATC is responsible meet the standards, the CATC is likely to be doing an adequate job.

Using all the assessment methods concurrently will be useful in determining what areas in a particular academy, if any, require support. Support may be provided in an informal way, or, if necessary, goals will be established for these areas and included in an Academy Performance Action Plan (APAP). Each of the assessment methods is discussed briefly below.

Analysis of Student Results Data

The most important data collected are the student results, as provided by the chapter and semester Course Tests and the Skills Tests. This online testing measures student knowledge and communicates results. The student results data will be an important indicator of the quality of training at all levels.

Student results data are collected at the Local Academy level and "rolled up" to each ascending level via CNAMs. Each local instructor will have access to summaries of results (item analysis and percent of students achieving passing scores) to use when making decisions regarding instruction. Similarly, each regional instructor will have access to summaries for the Local Academies for which he or she is responsible; each CATC main contact will have access to summaries for his or her entire region; and Cisco will have summaries for all academies. The appropriate summaries will be included on the Onsite Support Visit Summary Report (see the Support Visit Summary Report Form and Outline.)

ANALYSIS OF STUDENT SATISFACTION DATA

Each student will complete a <u>Course Feedback Form</u> at the end of each semester course. The individual forms will be confidential, with the local instructor accessing only the summary data. The forms will be recorded online and collated for each class to provide a summary of student satisfaction. An average of 4.2 or greater on a five-point scale is the standard for the Local Academy level. As instructors teach additional classes information will become available to illustrate changes in satisfaction over time. This summary data will be included in the *View Report* section on Academy Connection.

For local instructors whose average rating level on Student Satisfaction is lower than the standard, a fact-finding process that is similar to the one used for complaints may be implemented. Support in the forms of additional training, or equipment requirements will be given accordingly.

Analysis of Instructor Results Data

Instructor Results data comprise the scores that regional and local instructor trainees achieve on their semester course final exams and skills tests. For information on passing requirements as they apply to individual trainees, see Passing Level Requirements for Certification.

Instructor trainees' test results are entered online and collated for each training event. The summaries of the scores for each training will be used as an indicator of CATC or Regional Academy success in conducting the training. The instructional quality standard is at least 90% of instructor trainees reach the 80% cut score (or eventually reach the higher cut scores established for re-testing).

The summary data for instructor results also becomes part of the *Support Visits Summary Report*.

Analysis of Instructor Satisfaction Data

Regional and local instructors receive training on content and pedagogy (how to teach the content). During the training, and immediately upon completion of it, they complete the Course Feedback Form to evaluate the training. This feedback forms will be a measure of instructors' satisfaction with the CATC or Regional Academy training.

All individual feedback forms will be confidential. CATC main contacts/instructors and regional instructors will have access only to the summary data.

The forms will be recorded online and collated for each training event to provide a summary of regional/local instructor satisfaction. As instructors conduct more training for a semester course, information will become available to illustrate changes in satisfaction over time. This summary data will be included in the *Support Visits Summary Report*.

Past experience suggests that an instructor satisfaction rating below 4.0 indicates the need for additional review. Accordingly, when an instructor has a rating level below 4.0, a fact-finding process (similar to the one used for complaints) may be initiated.

Observations

Observations are conducted by one or more authorized persons who visit a classroom or site during an instructional period and complete an observation form. Classroom observations provide an impression of the teaching/learning environment and give observers a real-time snapshot of instructor performance and skills.

Cisco employees or consultants will perform observations of CATC training. Observations of Regional Academy training will be performed by a CATC main contact, CATC Instructor, Cisco employee, or Cisco consultant.

At the regional and local levels, trained regional instructors, CATC main contacts/instructors, or Cisco representatives may conduct observations. At the local level, principals or department chairs at the Local Academy may also conduct them.

Each CATC main contact/instructor, each Regional Academy classroom, and each Local Academy classroom is observed (or monitored) at least once per year. See Table 3 at the end of this section for more detailed information on the frequency of observation visits at the various academy levels.

The observer/evaluator uses the <u>Observation Form</u> to structure the observation and record data. This form is aligned with the <u>Components of Effective Teaching</u> (Appendix B). The process for conducting the observation is described stepwise below:

- 1. Observe in the classroom for at least 20 minutes.
- 2. Complete the observation form.
- 3. Provide a hard copy of the completed form to the person observed.
- 4. Conduct a conference with the person observed.
- 5. All attempts should be made to submit the form to your training academy within ten days of the observation.

Review of Complaints

Complaints may be received at any level and may range from a concern about a physical arrangement to a claim asserting that a course did not deliver the content and skills training as advertised. All complaints must be investigated to ensure the quality of the total program. It is expected that any complaint will be handled at the lowest level. If unresolved within 15 days, the appropriate person at the next level will enter the fact-finding process. At the CATC level, Cisco representatives will investigate complaints. At the regional level, the CATC and/or Cisco representatives will conduct the fact-finding. At the Local Academy level, the regional main contact/instructor will conduct the fact-finding.

The nature of the complaint will dictate the fact-finding process to be used. Fact-finding can be as simple as examining all the feedback forms from a specific class to determining if the complaints are pervasive or specific to certain individuals.

The instructor related to the complaint will be interviewed to determine his or her perspective. If a complaint is about an event, the person conducting the event must be contacted and interviewed.

The fact-finding process includes contacting individuals who have supplied their names so that they can be interviewed regarding the complaints, reviewing previous observation forms, analyzing student results, reviewing feedback forms, and contacting other persons who may have been involved. Further observations and/or visits may be required if the complaints are pervasive and unresolved. After all the information is gathered, it will be recorded on a complaint summary.

Support Visits

Support visits provide an opportunity to work with an academy to assess its effectiveness of course and program implementation, identify areas of strength, compliance with the expected roles and responsibilities and to provide support in the academies areas of weakness. The support visit is conducted by a support team; preferably made up of two or more authorized persons. The support visit is a one- or two-day process and may involve interviews with students, instructors, administrators, and so on.

Support visits are more formal than Observation. Unlike an Observation visit, a support visit results in a summary report and requires various types of data collection. Moreover, a support visit can lead to a decision to prepare an Academy Performance Action Plan (APAP), whereas an Observation visit by itself cannot.

A support visit is recommended once every three years thereafter. However, a support visit will occur if the assessment results or satisfaction data, complaints, or assessment data indicate it is needed. Although onsite support visits are not required annually CATCs and Regionals are required to review data from their trainee academies at least four times a year.

The members of a support visit team are determined by the main contact of the CATC or Regional (or Cisco when a CATC is being monitored). The main contact confirms the selection of the team members with a letter outlining their responsibilities and the related expenses/costs.

The monitoring team is responsible for the following tasks:

- 1. Contact the academy to be visited and arrange dates for the visit; the dates should be confirmed within three working days.
- 2. Send a letter confirming dates to the site, along with the visit packet and all instructions for completing any forms need throughout the visit.
- 3. Complete Part A of the <u>Support Visit Confirmation Form</u> and e-mail it to the main contact/instructor of the site at least ten days prior to the visit, so that the main contact/instructor can fill out Part B of the form.
- 4. Communicate with the site to arrange for interviews during the visit.
- 5. Work with the Academy to determine the agenda for the visit.
- 6. Conduct the support visit and gather the appropriate data using the Support Visit Checklist Form.
- 7. Write the *Support Visit Summary Report*. The report will include recommendations for follow-up, such as training needed, personnel recommendations, policy recommendations, etc. (see the <u>Support Visit Summary Report Form and Outline</u> and the <u>Sample Support Visit Summary Report</u>).
- 8. Place the completed report on file and submit it within ten days of the monitoring visit. When a Local Academy is being visited, the Regional Academy submits the report to its CATC. When a Regional Academy is being visited, the CATC submits the report via email to Cisco QAP manager Jackie Barker (mailto:jabarker@cisco.com). Reports should be shared with main contact/instructor of the visited site.
- 9. If the evidence gathered during the monitoring visit indicates that improvement in the level of quality is required, write an Academy Performance Action Plan, or APAP (see the <u>Academy Performance Action Plan Form</u>).

Any data of record that will aid the team, such as information related to quality factors, will be compiled prior to the visit. The observers, prior to the visit, will communicate with the site to clarify data, answer questions, explain the process, arrange for interviews, set the agenda, etc.

The support visit will proceed according to the planned agenda. Interviews and classroom visits will be documented on the appropriate monitoring forms. The <u>Support Visit</u> <u>Confirmation Form</u> and the <u>Instructor Self-assessment Forms</u> completed by the instructors at the site will be discussed and reviewed during the monitoring visit.

Should the team need to change the date or time of the visit, or change the original agenda, the team will communicate with the Cisco representatives or academy staffs and document the changes made. A mutually agreed-upon date and time for another site visit will be made.

Pending the report of the visit, Cisco and/or the training academy will be responsible for taking any necessary follow-up actions.

A support visit will be conducted at all levels by qualified evaluators. Quality Assurance Workshops will be conducted to provide these evaluators with the skills to interview, observe, conference with personnel, and develop Academy Performance Action Plans (APAPs) as needed. Knowledge and skill in the areas of "best practices" in education, learning styles, assessment, and special needs students will be addressed in this workshop. Follow-up training will be offered on specific subjects.

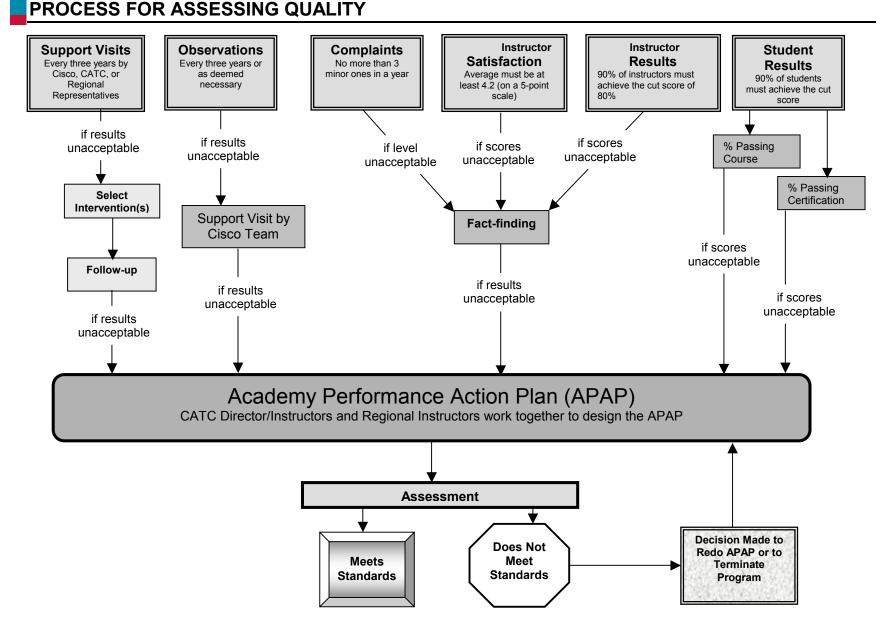
During the Quality Assurance Workshops, the evaluators will be trained to use the <u>Support Visit Checklist Form</u>. This form addresses the responsibilities of main contacts and instructors at each level, as summarized in Table 2.

TABLE 3.
ACADEMY VISITS: TARGETS AND REASONS

	Visiting Entity			
	Cisco	CATC	Regional Academy	Local Academy
Onsite Support Visit	Each CATC every three years.	• Each Regional Academy every three years.	Each Local every three years thereafter	N/A
(One- to two-day visit to the academy)	Any CATC as indicated by its QAP data	Any Regional Academy as indicated by its QAP data	Any Local Academy as indicated by its QAP data	
	Any Regional or Local Academy as indicated by its QAP data or upon invitation	• Any Local Academy as indicated by its QAP data or upon invitation		
Observation Visit (Two- to four-hour visit to the academy)	 Any CATC, Regional Academy, or Local Academy as indicated or requested Any CATC as a follow-up to an APAP or Onsite Support Visit 	 Each Regional Academy as prioritized by QAP data Any Regional or Local Academy as indicated or requested Any Regional Academy as a follow-up to an APAP or Onsite Support Visit 	 Each Local Academy prioritized by QAP data Any Local Academy as a follow-up to an APAP or Onsite Support Visit 	Each classroom and/or lab setting (as part of the administrative responsibilities of the Local Academy) on an annual basis
Classroom Observation (Minimum of 20 minutes in the classroom)	 Each CATC during the Onsite Support Visit Any CATC as a follow-up to an APAP or Onsite Support Visit 	 Each Regional Academy during the Onsite Support Visit Any Regional or Local Academy as indicated by an APAP or by QAP data 	 Each Local Academy during the Onsite Support Visit Any Local Academy as a follow-up to an APAP or a Onsite Support Visit 	Each classroom during the annual Observation Visit

^{*}Cisco recognizes that each situation may be unique and require special consideration based on available staff and needs of academies. Waivers To the scheduled expectations of monitoring and observation visits may be considered.

FIGURE 3.



The ACADEMY PERFORMANCE ACTION PLAN

The Academy Performance Action Plan (APAP) will be used when data summaries indicate that students are not receiving quality instruction. The key indicator of a need to initiate the APAP process is an unacceptable proportion of students passing each semester course (Student Results data). Nevertheless, monitoring activities, review of complaints, and analysis of instructor satisfaction feedback and instructor results can also lead to a decision to initiate an APAP, as shown in figures 3. In practice, multiple methods of assessment are used to support the decision to conduct the APAP and to diagnose the source of the unacceptable performance.

IMPLEMENTING THE APAP

When an APAP is indicated, a team is called together and charged with developing and implementing it. This team includes the individual who will be the focus of the APAP and the person who is the main contact at the next highest level. If the person requiring an APAP is a local instructor, the principal and the Regional Instructor will work together to support him or her.

The APAP is based on a set of Goals for Improvement identified by the team. For each goal, the team determines (1) the criteria that will be used to assess whether the person has met the goal, (2) the interventions that will be used to facilitate the required improvement, (3) the resources that will be used or needed to carry out the interventions, and (4) the time line for meeting goals and completing activities. Each of these APAP elements is put in writing on a copy of the <u>Academy Performance Action Plan Form</u> (see also the <u>Academy Performance Action Plan Example</u>).

Each of the elements of the APAP is described in greater detail below.

Goals for Improvement

Using the summaries of quality assessment data, the team determines clear goals that will improve the learning of students. Goals should be clearly distinguished from each other and listed by priority. The team should clarify all terms so that everyone has the same understanding of the desired outcomes.

Assessment Criteria

The team decides on the criteria by which they will know that the person has attained the goals. These criteria should include elements from the data summaries. For example, if the data summary on Regional Instructor Satisfaction indicates that instructor trainees have difficulty understanding the concepts as taught by the CATC representative, a criterion for the CATC representative's improvement should be a specific and measurable increase in instructor trainees' understanding of the concepts.

Interventions

Interventions are selected that are aligned with the goals and assessment criteria that are established. Interventions may be as simple as reading the content, discussing it with a partner and taking a test, or may include retraining through study of online resources or taking specific workshops or scheduled classes. Intervention suggestions will be found online in the Teachers Guide.

Resources

The team identifies resources that will serve as support mechanisms for the interventions. Resources may include an assigned mentor for questioning and discussion, books, Web sites, teacher guide materials, videos, and other team members.

Time-line

A schedule of activities and benchmarks should be included to allow for easy monitoring of the APAP. The schedule should include the dates of any visits, data collection points, or assessments, as well as the date by which the goals should be met.

Appendices

Appendix A. Definitions of Terms

AAM: means Area Academy Manager.

Academy or Academies: means a school or schools that teach the Curriculum to instructors or students as part of the Program under the guidelines of the QAP.

Academy Help Desk: means the 24 hour support available to academies via telephone U.S. Phone: 888-327-1116; International: 480-558-2379 (Use Appropriate Prefix) or AOL Instant Messenger

ACC: means Accredited Career College or "For Profit" academy

Alumni Web site: refers to the Networking Academy website available to students and instructors who have completed one course within the Academy Program.

APAP: means the Academy Performance Action Plan; the process of planning and implementing actions that will increase student learning.

Assessment: means the measure of progress and/or result of teaching/learning efforts; an array of instruments used to determine how well something has been taught or learned; assessment instruments include student tests, skill tests, surveys, pre and post tests; interviews, and general program monitoring.

Best Practices: means instructional strategies that are research based and known to assist learners; ways to enhance the learning of skills and provide a positive learning environment.

CATC: means a Cisco Academy Training Center.

CCAI: means a Cisco Certified Academic Instructor.

CCNA: means a Cisco Certified Networking Associate.

CCNP: means a Cisco Certified Networking Professional.

Cisco: means Cisco Systems, Inc®.

Closed Training Model: means ann academy must attend training at an assigned Academy.

CNAMS Web site: refers to the Cisco Networking Academy Management System; a website used for activities such as creating classes, activating exams, viewing student's grades etc.

Course Material: means all educational material, including curriculum, lab exercises, teacher's guides, and similar material made available to Academy by Cisco for use in the Program.

Curriculum: means the web-based courses of study provided by Cisco as part of the Program for the purpose of classroom instruction.

Empower: means giving students the responsibility for learning and demonstrating their learning; enabling student construction of meaning and/or discovery of knowledge.

Engineering Journal: means an individual student notebook or electronic journal that records notes, graphs, diagrams, and/or other pertinent information that will foster learning of specific content:

Goal: means the desired outcome; what the end product will be.

Graphic Organizers: means charts or forms that assist the student in organizing information, content, plans, or steps in completing a project; graphic organizers may be used to sequence objectives to build upon skills already learned.

Instructional Responsibilities: means the responsibilities each instructor has in implementing the Networking Academy Program at all levels of instruction; specific behaviors that are expected in the areas of planning, implementing, and assessing while serving as an instructor any/all semester courses.

Instructor: means an individual responsible for the instruction of a Networking Academy course at a CATC, Regional, or Local Academy.

Lab Equipment: means the required equipment needed by an Academy to participate in the Academy courses for conducting lab activities.

Onsite Support Visit: means a visit for the purpose of collecting Program data that will provide insight into the functioning of an Academy.

Observation: means a site/classroom visit during an instructional period by one or more authorized persons who complete an observation form. The purpose of an observation is to record an impression of the teaching/learning environment.

Open Training Model: means ann academy may attend training anywhere that is currently offering needed course.

Outcome Objective: means the expected results to be demonstrated

Pedagogy: means knowledge of teaching strategies; the body of information related to education and teaching.

Performance Standards: means skills and/or content to be demonstrated; descriptions of actions or behaviors that will meet standards.

Performance Tasks/Activities: means activities that provide a vehicle for demonstrating knowledge, understanding, and higher level thinking on content, standards, and skills; performance tasks and activities are often done in small groups where each student is responsible for performing or demonstrating evidence of their expertise and learning.

Portfolio: means a collection of work that demonstrates the learning of required skills; a series of products that serve as evidence that the instructor has facilitated learning in all of the required areas. (See Student Portfolio).

Proficient: means meeting standards or levels of achievement that enable a student to perform required tasks or skills; able to demonstrate a skill consistently with a minimum of errors.

Program: means the Cisco Systems Networking Academy program.

QAP: means the Quality Assurance Plan; the documents and forms that define and clarify roles and responsibilities, assess the effectiveness of program components, and determine the quality of the Cisco Networking Academy Program.

Skills Test: means a hands-on or other demonstration of learned skills; generally a laboratory or other appropriate setting is used so that a student is able to demonstrate their performance of knowledge and understanding of specific content.

Special Needs: means individuals diagnosed with learning difficulties or needs that require individualized attention; arranging facilities and/or adapting teaching strategies so that all have an equal opportunity to learn content and skills.

Standards: means definitions of skills and/or content to be learned.

Student Portfolio: means a collection of work that demonstrates the technical capabilities of the student and demonstrates the skill levels to potential employers (also see Portfolio).

Student Service Site: refers to the Networking Academy Student Services web site

Study Guide: means a compilation of activities, notes, etc. to help focus learning and to provide both the Instructor and student with clarification of learning; the study guide includes the reflection section, lab notes, and other pertinent information to assist the student; the study guide is an online electronic tool that contains both Instructor and student generated items.

Threaded Case Study: means

TM: means Technical Manager.

Appendix *B.*Components of Effective Teaching

Planning

De	monstrates content knowledge
	Connects content to prior knowledge to build on existing student skills
	Selects appropriate analogies
	Shows connections to previous lessons
	Plans appropriate activities related to lesson goals and objectives
Sel	ects content and outcome learning objectives
	Uses student pre-test information to plan for daily/weekly lessons
	Follows a logical sequence in building on prior knowledge
	Connects learning objectives to labs and performance activities
Ali	gns with standards
	Reads and acknowledges the content standards in lesson planning
	Follows inquiry and other process skills as specified in Science and Math Standards
	Coordinates and integrates the demonstration of standards into content, labs, performance activities and Study Guide activities
Or,	ganizes content for instruction
	Plans for the use of graphic organizers and/or mapping activities
	Plans study guide activities
	Sequences objectives to build upon skills already learned
De	termines student needs
	Uses pre-test information to diagnose student learning and achievement status
	Observes work habits, skills and performances of individual students
	Selects appropriate student reflection questions
Sel	ects strategies from "Best Practices"
	Prepares for appropriate grouping
	Plans for motivational strategies to create curiosity and interest
	Plans for a variety of instructional delivery practices

Uti	lizes appropriate resources
	Selects web sites and other resources that will reinforce learning objectives
	Organizes appropriate outside speakers or fieldtrips
	Uses a variety of visual aides
Pla	ans for the use of the Engineering Journal (EJ) and Study Guide
	Includes the use of the EJ and Study Guide in each lesson
	Reviews previous assignments to connect to current learning
	Plans for performance tasks that synthesize notes and learnings from the EJ and Study Guide
Pla	ans for labs or performance activities
	Selects labs or performance activities that demonstrate learning objectives
	Plans for rubrics or assessment criteria of labs or performance activities
	Selects labs or performance activities that clarify learning and develop understanding
Im	plementing
De	monstrates content knowledge
	Uses correct terminology
	Makes correct and frequent analogies and uses correct examples
	Helps students clarify understanding
	Answers questions correctly
	Connects facts and individual skills to build large concepts
Ma	uintains a quality classroom environment
	Demonstrates respect to all students
	Empowers a student to discover, explore, and direct his or her own learning
	Provides a pleasant and pleasing work space for students
Fo	cuses learning through questions
	Demonstrates the value of inquiry and student questions
	Redirects student inquiry with probing questions
	Asks question that call for higher level thinking
	Asks questions that relate specifically to concepts and learning objectives
Ad_{j}	justs strategies to meet student needs
	Provides partners, mentors, or small group teams to assist learning
П	Provides a variety of visual aides and kinesthetic learning aides

	Creates a flexible schedule that allows "extra" time for learning
	Clarifies learning objectives and instructions orally and visually
	Asks probing and leading questions to help bridge conceptual thinking
	Provides extra Study Guide activities for practice
Uti	lizes the EJ and Study Guide appropriately and monitors student use
	Uses the Study Guide to record lesson notes
	Asks student's to review reflection questions for assessing progress
	Presents rubrics and criteria to assess student learning via the study guide
De	velops and uses rubrics appropriately
	Defines specific criteria to all lab and performance activities
	Develops rubrics with students prior to performance activities
	Ask students to apply rubrics to own work
	Ask students to apply rubrics to other students' work
	Applies rubrics to lab activities
En	gages students in learning
	Uses "real life" learning experiences that connect to current learning objectives
	Uses problem solving tasks that require planning, thinking, and decision making
	Provides "hands on" experiences to learn and practice skills
Cla	arifies learning with students
	Asks a student to restate their understanding or learnings
	Asks a student to reflect on concepts
	Has students develop analogies related to concepts
	Uses questioning strategies that require students to explain their understanding
Gi	ves clear directions and procedures
	Provides written and oral direction and procedures
	Ensures that students are able to clarify and restate directions and procedures
	Ensures that students are able to proceed without further questions
Us	es grouping strategies appropriately
	Uses heterogeneous grouping
	Assigns group roles when appropriate
	Uses participation and grouping rubrics to assess effectiveness of group

П	Changes groups and teams when appropriate
Uti	ilizes ongoing monitoring and observation
	Moves among work stations to observe and assess the learning process and learning environment
	Ask questions to determine extent of understanding
	Records and notes students' progress and involvement for future lesson planning
Gi	ves appropriate feedback to students
	Gives specific encouragement and praise when appropriate
	Clarifies and corrects errors and misunderstandings promptly
	Redirects students when necessary
Pro	ovides opportunities for students to use knowledge meaningfully
	Designs authentic trouble shooting activities
	Provides opportunities for practicing skills through performance activities
	Selects appropriate products to demonstrate understanding of concepts
As	sessing
De	monstrates use of standards, outcomes, and objectives
	Uses rubrics that define specific standard's criteria
	Provides assessment options that demonstrate standards
	Asks a student to explain and demonstrate the connection of objectives
Us	es rubrics appropriately
	Uses a variety of rubrics throughout the semester
	Asks a student to apply rubrics to their own and others' products
	Uses rubrics to diagnose student's needs and progress
	Uses rubrics to determine grades, scores and/or record progress
Us	es multiple assessments
	Uses both online and performance assessments in most lessons
	Uses observation notes to determine student progress
	Uses performance tests to assess conceptual knowledge
	Uses multiple choice and true-false tests to assess factual knowledge
	Uses student reflection notes to determine the depth of understanding

Gi	ves feedback to students
	Provides prompt and accurate feedback on labs and performance activities
	Specifies areas of strengths and weaknesses for each student
	Gives on-going feedback to students about progress and planning
Sol	icits help and support if students are not successful
	Contacts CATC, Regional Academy personnel, and/or Community Web resources for assistance or ideas
	Registers for continuing education courses in areas of need
Us	es the Student reflection section of the Study Guide
	Uses reflection on a daily or regular basis
	Asks a student to assess their own growth by reviewing and synthesizing their own reflections over time
	Assigns appropriate questions for reflection
Rej	lects on lesson success
	Uses student results and other data to determine success
	Records reflections in a paper or electronic journal on a regular basis
	Uses reflections to write annual goals
Us	es assessment information for planning or lesson changes
	Analyzes student engagement to adjust lesson pace, direction, or content
	Uses student progress data to adjust instruction for individual students
	Reviews student success on tests, labs or performance activities to determine what to do next

Appendix C. MINIMUM SYSTEM REQUIREMENTS FOR CLASSROOMS

	PC	MACINTOSH
Operating system	Windows 95 or Windows NT 4.0	Mac OS 7.5
Internet browser	Netscape 4.6.1 or Internet Explorer 5.1*, with Java, JavaScript, and Style Sheets enabled	Netscape 4.6.1 or Internet Explorer 5.1*, with Java, JavaScript, and Style Sheets enabled
Plug-ins	MacroMedia Shockwave ‡	MacroMedia Shockwave ‡
	RealPlayer G2 ‡	RealPlayer G2 ‡
Processor	Pentium running at 166 MHz	PowerPC running at 150 MHz
RAM	64 MB RAM	64 MB RAM
Free disk space	10 MB	10 MB
Display	800x600, 256 colors	800x600, 256 colors
Ethernet	10Base T Ethernet card	10Base T Ethernet card
Other hardware	Mouse, Speakers or headphones, Sound card	Mouse, Speakers or headphones, Sound Card

^{*} MS Internet Explorer 5.0 can be used, but it requires installation of the Java virtual-machine patch msjavx86.exe. This can be downloaded at http://www.microsoft.com/java/vm/dl vm40htm

[‡] Available on the Web

Appendix D. Minimum Equipment Requirements for SKILLS-BASED Labs within the CCNA Curriculum

EQUIPMENT	AMOUNT REQUIRED
Computer systems with the following components:	5
 Windows 95 or Mac OS 7.5 	
Terminal emulation software	
10Base T Ethernet Network Interface card	
 Netscape Navigator 4.6.1 or Internet Explorer 5.1 	
 Available COM port/serial port Available COM port/serial port 	
** LAN hubs (no SNMP managementdumb)	4
*** Category 5 twisted pair Ethernet UTP cables	Approximately 150 feet per student
*** Category 5 twisted pair Ethernet connectors	12 per student (Semester 1 class)
Category 5 crimping tools, wire cutters, and punch-down tools	6 sets per class (based on 30 students per class)
Cable tester (can range from simple continuity tester to a tester that can check total throughput of the cable)	1 per class
568B Standard patch panels	6
19-inch Communication racks, inter-connected by cable tray	2
AUI to RJ45 Transceivers	6

^{**} Institutions receiving donated equipment will need to purchase this item. Academies purchasing or leasing Cisco equipment will receive the hubs in their Academy lab bundle.

^{***} Recurring cost for Semester I class.

Appendix E.

Minimum Equipment Requirements for SKILLS-BASED Labs within the Fundamentals of UNIX® Curriculum

Although the experience of the UNIX Operating System will be simulated within the curriculum, it is the instructional intent that all classrooms have ample "live" Sun OS available also. These two equipment options would minimally achieve this:

Economy Equipment Option:

- Instructor to have workstation running Sun OS and access to another workstation running Windows 9X to view the curriculum
- All students to have individual access to a workstation running Windows 9X to view the curriculum with a Student to Computer ratio of 1:1.
- In addition, there would be separate access to a lab of workstations running Sun OS with a Student to Computer ratio of 2:1. Or, these Sun OS machines could be ½ of your workstations configured as dual boot machines running both Windows 9X and Sun OS (see compatibility 3.2).
- Workstations need to be 64 MB Intel machines with Pentium processor; and need to be networked.
- This option could be at no cost to the Academy if Solaris 8 Intel is compatible to your current workstations. We suggest that you check out the compatibility site. http://soldc.sun.com/support/drivers/hcl/. If it looks like your workstation will be compatible with Solaris 8 (Intel Platform), then download the free software. Install and make sure that there are no compatibility issues. We have seen some problems with video drivers and network interface cards.
- Sun will have a site link within the next 60 days with equipment bundle pricing.

Basic Equipment Option: Standard Equipment Option:

- Instructor to have workstation running Sun OS and access to another workstation running Windows 9X to view the curriculum
- All students to have individual access to a workstation running Windows 9X to view the curriculum with a Student to Computer ratio of 1:1.
- In addition, there would be separate access to a lab of Sun workstations running live Sun OS with a Student to Computer ratio of 2:1.
- Workstations need to be 64 MB Intel machines with Pentium processor; and need to be networked.

The software needed is INTEL/Solaris 8 (Intel Platform). The U.S. education pricing for the complete media pack is currently \$29.95 per school (reduced from \$75) and is available off the Academy Store link to Sun.

Appendix F. Minimum Equipment Requirements for SKILLS-BASED Labs within the Fundamentals of Web Design curriculum

Hardware for PC	Hardware for Macs	Software
 Windows 98, NT 4.0 (SP6), or Windows 2000 300Mhz processor or higher 64 MB of RAM to run one application at a time, 128MB of RAM to run at most two applications concurrently 500MB of available hard-disk space for all applications Color Monitor with 256-color (8-bit) or greater video card 800x600 or greater monitor resolution CD-ROM drive 	PowerPC®-based Macintosh® computer Mac OS software version 9.0.4 64 MB of RAM to run one application at a time, 128MB of RAM to run at most two applications concurrently (with virtual memory on) 500MB of available hard- disk space 500MB of available hard- disk space for all applications Color monitor with 256- color (8-bit) or greater video card Monitor resolution of 800x600 or greater CD-ROM drive	Requirement: Academy must continue to purchase software upgrades as deemed necessary by Cisco to keep up with the latest version of the curriculum. Adobe Photoshop 6® Adobe Premiere 6® Adobe Illustrator 9® Adobe Go Live 5® Adobe Live Motion 1®

Appendix G. Minimum Equipment Requirements for SKILLS-BASED Labs within the IT Essentials I & II Curriculum

EQUIPMENT	AMOUNT REQUIRED
There are two sets of computers required for this course. One for viewing the curriculum one for lab activities	One per student
Computer System to include the following: Motherboard, ATX 300W Mini Tower, Newer Intel or AMD Processor, Ball Bearing Fan & Heat Sink, Thermal Grease, 128Mb, SDRAM, Floppy Drive, Hard Drive, CD-ROM, Modem, NIC, 10/100 PCI, Video Card, Sound Card, Ribbon Cables, Mouse, Keyboard, Monitor	2:1 student to computer ratio
Microsoft® Windows® 98 Second Edition	2:1 student to computer ratio
Microsoft® Windows® 2000	2:1 student to computer ratio
Linux Operating System (Red Hat 7.0 or higher)	2:1 student to computer ratio
Computer Repair Tool Kit to include: # 2 Phillips Screw Driver, 1/8" Flat Head Screw Driver, 1/4" Hex Socket Driver, Needle nose Pliers, 3/16 Hex Socket Driver	2:1 student to computer ratio
Volt Meter	2:1 student to computer ratio
ESD Mat w/ ground cord	2:1 student to computer ratio
Miscellaneous: ESD wristband, safety glasses & lab supplies	1:1 student to computer ratio
Printer (networked)	5:1 student to printer ratio
HP Openview - Node Manager	2:1 student to computer ratio
Microsoft® Windows® 2000 Server	2:1 student to computer ratio
Server	1

Minimum Computer Requirements

Workstations - Viewing Curriculum			
Hardware	Intel	Apple	
Processor	166 Mbz Pentium	150 Mbz Power PC	
Memory	64 MB RAM	64 MB RAM	
Operating System	Windows 95	Mac OS 8.0	
Montior and Video Card	800X600 resolution	800X600 resolution	

Appendix H. Minimum Equipment Requirements for SKILLS-BASED Labs within the Java Curriculum

EQUIPMENT	AMOUNT REQUIRED
Instructor needs a workstation running Windows 9X to view the curriculum.	1 per instructor
JavaTM 2 Platform, Standard Edition	Installed on each computer
JavaTM 2 Platform, Standard Edition Documentation	Installed on each computer
BlueJ java development tool	Installed on each computer

Please note that many of the software listed above is available for download free at Sun - http://java.sun.com/j2se/).

Appendix I. Minimum Equipment Requirements for SKILLS-BASED Labs within the Voice and Data Cabling Curriculum

EQUIPMENT	AMOUNT REQUIRED
**Core Kit	1 per 16 students
***Fiber Kit (up to 16 students)	1 per 16 students
Local Kit- This kit includes general hand tools, lab-building materials or other common equipment	1 per 16 students

^{**} If your Academy plans to offer this course you will at minimum need to buy this Core kit.

^{***} Lab bundle provides optional fiber optics equipment and consumables that are necessary for students to complete the optional fiber optics labs. This kit is optional.

Appendix J. Example of Appropriate Lab Safety Procedures

NOTE: These lab safety procedures apply to electronic, engineering, computer, and networking technology labs. Please check with your school, district, and/or organization to make sure that all of the suggested policies support and align with those required in your city and organization and that fire drill information is posted and reviewed.

General Lab Safety Rules for Instructors and Students

- Familiarize yourself with your lab and the people that share it.
- Familiarize yourself with the exits and the routes to them.
- Know where fire extinguishers are in your work area.
- Read the safety labels on all equipment in the lab, including the fire extinguisher.
- Review the differences between extinguishing electrical fires and those used for paper or wood or other substances.
- ◆ Check all plugs and cords for wear damage prior to use. (If there is evidence of wear, notify instructor.)
- ♦ Identify person(s) who have had CPR training in your class. (*Note: The instructor may want to consider taking a CPR course.*)

Student Safety Responsibilities

- Inform your instructor and other students of any special medical or health conditions or needs you may have and if you have a doctor that must be informed in the event of a medical emergency.
- You are responsible for the proper use of all equipment that you use.
- Ask questions and request clarification to ensure understanding about the proper use of all equipment.
- Report equipment malfunction immediately to the instructor.
- ♦ Use proper lifting techniques for heavy objects lift with legs and arms, keeping the back straight. Do not attempt to lift anything weighing more than 40 lbs. without assistance.
- Pick up pencils, pens and other objects on the floor that may cause someone to trip.
- ♦ Close drawers.
- Wipe up spills.
- Stay alert and on the lookout for any condition that might pose a health and/or safety threat. Report any such condition to the instructor.

Other Network and Technical Lab Safety Reminders

- Keep food and liquids away from your lab station.
- Unless under direct instructor supervision, never place an instrument lead into direct contact with the power line.
- Report any worn, frayed, broken, or missing equipment to the instructor.
- Untangle the test leads of your bench instruments before leaving.

Forms

OBSERVATION FORM

Using this form: An *observation* is a 20-minute or longer visit to a classroom during a class instructional period by one or more authorized persons. An observation may be performed by the principal, a Regional Instructor, a CATC Instructor, or a Cisco employee/consultant and will be done at least one time per year for each Instructor. The purpose of an observation is to record an impression of the teaching/learning environment. This *Observation Form* is used to record each observation and is submitted to the regional office within 10 days of the observation. See *Guide to Completing the Observation Form* on the next page of this document.

Date			Time in					Time out		
Namo	e(s) of O	bserver(s)							
Schoo	ol		Instructor	Instructor						
Purp	ose of O	bservatio	vation: Annual Complaint Follow-up Other					ow-up Other		
<u>Instructional Checklist</u> <u>Technical Checklist</u>					<u>klist</u>					
yes	unsure	did not observe		5 = excellent 1 = poor						
			Evidence of lesson planning	5	4	3	2	1	Lab equipment is adequate and appropriately set up	
			Uses a variety of best practices	5	4	3	2	1	Safety practices are observed	
			Uses labs and/or performance activities				2	1	Uses proper technical terms and definitions	
			Engages students in learning	5	4	3	2	1	Explains technical terms and answers technical questions	
			Plans for special needs students	5	4	3	2	1	Gives correct analogies and examples	
			Maintains a quality environment	5	4	3	2	1	Demonstrates evidence of strong technical knowledge	
			Grouping is appropriate	rouping is appropriate 5 4 3 2			2	1	Uses the trainer-of-trainers model	
			Uses student reflection frequently and appropriately							
			Gives appropriate feedback							
	Focuses learning with questions									
Comn	nents (Not	te any nros	gram, instructional, and logistical strer	igths or	· we	akr	ness	es).		
Comm	101105 (1 101	o uni prog	,	.8				•5).		
		_								
Next	observat	ion recon	nmended in: 30 days	90	day	ys			next year	
			Submit							

GUIDE TO COMPLETING THE OBSERVATION FORM

The table below describes the evidence that indicates the presence or use of each of the components of effective teaching listed in the Instructional Checklist on the Observation Form. If the appropriate evidence is observed, the "yes" box for that component can be checked.

	Component	Evidence				
1.	Evidence of lesson planning	Instructor engages in at least 4 of the items under the Planning Section of Components of Effective Teaching (Appendix B)				
2.	Uses a variety of best practices	Instructor demonstrates at least 4 of the items under the Implementing Section of Components of Effective Teaching (Appendix B)				
3.	Uses labs and/or performance	Students work on a project or activity that demonstrates skills				
4.	Engages students in learning	Students are actively involved in "real life" or "hands- on" experiences that connect to learning objectives; students are interested and engaged in their class learning as evidenced in thinking, planning, and problem solving tasks				
5.	Plans for special-needs students	Instructor adjusts strategies, grouping, or scheduling, or demonstrates other adaptations				
6.	Maintains a quality environment	Mutual respect exists between the teacher and all students; favoritism is not evidenced; instructor empowers students; the classroom is a pleasant work space				
7.	Grouping is appropriate	Instructor uses grouping to facilitate learning and teamwork; assigns group roles when appropriate; uses grouping and participation rubrics to assess effectiveness; changes groups when needed				
8.	Gives appropriate feedback	Instructor uses specific encouragement and praise; clarifies and corrects errors and misunderstandings promptly; re-directs students when necessary				
9.	Focuses learning with questions	Instructor demonstrates the value of student inquiry; asks probing questions that require higher level thinking; asks questions related to specific learning objectives				
10.	Uses Student Reflection frequently	Instructor uses the Student Reflection section of the Lesson Plans; assists students in thinking about their work and learning; asks appropriate questions to help students build meaning and remember important content				

SUPPORT VISIT CONFIRMATION FORM

Part A (to be completed by the support team lead and sent to the monitored site 10 days prior to support visit) Name of CATC/Region/School Date of visit Arrival time Departure time Address City Zip code State E-mail **Phone** Fax **Support Team Members** Representing Phone E-mail **Part B** (to be completed by the monitored site, prior to support visit, and given to support team upon its arrival) **CATC Regional Academy** # of Locations/Sites Phone Persons to be interviewed/observed Title(s) E-mail **Target population/Student characteristics:**

General descripti	on of program:			
Dates	Courses taught in the l	ast 12 months	# Students enrolled	# Completed
	_			
				
	_			
	_			
Number of days o	of instruction for each cour	rse:		
Semester 1	Semester 2	Semester 3	Semester 4	
Other Pertinent I considered during	information: (please attach the support visit)	additional explanations of	or any other information yo	u wish to have
Completed by		Title		Date

ONSITE SUPPORT VISIT CHECKLIST FORM

Using this form: The CATC, Regional Academy, or Local Academy scheduled for a support visit can refer to this form prior to the visit to help them gather information and "evidence" in advance of the visit. The monitors use another copy of this form to record and discuss the evidence during the visit. The questions on this form apply to all academies.

	Check one		one	
	<u>Yes</u>	<u>No</u>	<u>√ot eviden</u>	Describe Current Status and/or Improvement Plans
Training				
1. Have all Instructors completed all training for Semesters 1 through 4?				
2. Has appropriate certification been obtained for all Instructors?				
3. If Regional Academy or CATC, has training been provided as scheduled?				
4. Does the Instructor(s) portfolio(s) contain appropriate elements?				
5. Is the portfolio(s) indicative of professional growth?				
6. Is there a plan for continuing education and/or professional development available?				
Student Enrollment				
1. Does school/course have an admissions policy?				
2. Does the course have a waiting list?				
3. Is there pre-enrollment testing other than what is given online prior to the course?				
4. If so, are pre-testing results used in placement?				
Special Needs Students				
1. Are special needs students enrolled?				
2. What 504/Special Education adaptations are made in instruction for these students?				
3. What adaptations have been made in facilities/equipment?				

SUPPORT CHECKLIST FORM, page 2 of 3

	Check one		one	
	<u>Yes</u>	<u>No</u>	<u>√ot eviden</u>	Describe Current Status and/or Improvement Plans
Logistics				
1. Is the classroom adequate in size for the number of students enrolled?				
2. Are there adequate numbers of computers for the number of students?				
3. Are the equipment and materials easily accessible and plentiful?				
4. Are safety procedures evident?				
Instruction				
1. Is there evidence of instructor planning and preparation?				
2. Is there evidence that individual trainee/student needs are being met?				
3. Are trainees/students actively engaged in their learning?				
4. Is evidence provided that indicates the use of a variety of "best practices" and strategies?				
Assessment				
1. Is there evidence provided that indicates student success?				
2. Are students given a variety of ways to demonstrate success in addition to the online tests?				
3. Are journals and student reflection comments indicative of student progress?				
Personnel				
1. Are instructional staff fully trained, certified and qualified?				
2. Is there evidence of networking, support or joint planning with other Instructors?				
3. Is there evidence o f continued training and development of Academy staff?				
4. Is there evidence of effective communication? (from the CATC to Regional to Local in both directions)				

SUPPORT CHECKLIST FORM, page 3 of 3

		Check	one	
	<u>Yes</u>	<u>No</u>	<u>√ot eviden</u>	Describe Current Status and/or Improvement Plans
Satisfaction				
1. Is there evidence of instructor satisfaction?				
2. Is there evidence of student satisfaction?				
Operational Structure				
Are contractual agreements being followed? (with Cisco or Regional Academy)				
2. Have problem areas received attention from the appropriate sources?				
3. Has training been offered to support the program?				
4. Is program support from Cisco Systems evident?				
5. Are finances a major area of concern in the quality of program?				
6. Are methods of handling concerns from all levels satisfactory?				
7. Are results from satisfaction feedback forms utilized in program planning?				
8. Are necessary reports filed in a timely manner?				
Goals				
1. Have program goals been identified?				
2. Is there evidence of progress on current goals?				
3. Are goals for next year identified based on feedback, reflection, and results?				
Follow-up Required? No Yes	If ye	es, within	30 days	within 90 days within 1 year
Name(s) of monitor(s)				Date

INSTRUCTOR SELF-ASSESSMENT FORM

Planning	Never	Sol	metimes		Always
Demonstrates content knowledge	1	2	3	4	5
Selects content and outcome learning objectives	1	2	3	4	5
Aligns with standards	1	2	3	4	5
Organizes content for instruction	1	2	3	4	5
Determines student needs	1	2	3	4	5
Selects strategies from "best practices"	1	2	3	4	5
Utilizes appropriate resources	1	2	3	4	5
Plans for the use of the EJ and Study Guide	1	2	3	4	5
Plans for labs or performance activities	1	2	3	4	5
Implementing	Never	So	metimes		Always
Demonstrates content knowledge	1	2	3	4	5
Maintains a quality classroom environment.	1	2	3	4	5
Focuses learning through questions	1	2	3	4	5
Adjusts strategies to meet student needs	1	2	3	4	5
Utilizes the EJ and Study Guide appropriately and monitors student use	1	2	3	4	5
Develops and uses rubrics appropriately	1	2	3	4	5
Engages students in learning	1	2	3	4	5
Clarifies learning with students	1	2	3	4	5
Gives clear directions and procedures	1	2	3	4	5
Uses grouping strategies appropriately	1	2	3	4	5
Utilizes ongoing monitoring and observation	1	2	3	4	5
Gives appropriate feedback to students	1	2	3	4	5
Provides opportunities for students to use knowledge meaningfully	1	2	3	4	5
Assessing	Never	So	metimes		Always
Standards, outcomes and objectives are demonstrated	1	2	3	4	5
Rubrics are used appropriately	1	2	3	4	5
Multiple assessments are used	1	2	3	4	5
Gives feedback to students	1	2	3	4	5
Solicits help and support if students are not successful	1	2	3	4	5
Uses the Student Reflection section of the Study Guide	1	2	3	4	5
Reflects on lesson success	1	2	3	4	5
Uses assessment information for planning and/or lesson changes	1	2	3	4	5

INSTRUCTOR REFLECTION QUESTIONNAIRE

Using this form: An instructor uses this form to reflect on the achievements and challenges of the past year and to consider plans for the future. The form is to be completed annually and/or prior to an observation or a visit of the support team. During years when no onsite visits occurs, this form will be completed and will become part of the Quality Assurance annual report.

Name of Program/School:			Date
Your Name and Title:			
Phone	E-mail	Fax	
General program comments and	d Status Report:		
Goals for this year:			
What were the greatest successe	es this year?		
What were the greatest challeng	ges this year?		
Which goals will you modify or	r add far nevt vear?		
which goals will you mounty of	add for flext year?		
What assistance, training, or su	pport would you like from Cisco	Systems to ensure your program succ	ess?
What advice, if any, do you have	e for other programs?		
What advice, if any, do you have	ve for CATCs, Regional Academi	ies, or Local Academies?	
What recommendations if any	do you have for Cisco Systems?		
	,		

DESCRIPTION OF INTERVIEW PROTOCOLS

Interviews will be conducted during the support and observation visits. The process may include both formal and informal formats. Interviewers may be representatives from Cisco, CATCs, Regional Academies, or Local Academies. The interviewees range from CATC main contacts to students, and may also include administrators, employers, parents, and/or school personnel.

To standardize data collection during support and observation visits, the interview protocols included on the following pages provide guidelines for interviewing CATC main contacts/instructors, regional main contacts/instructors, local main contacts and instructors, and students/trainees. An interview protocol is also provided for interviewing administrative staff or other academy personnel.

Following each interview, the interviewer will record responses from each interviewee on the applicable electronic interview form, with pertinent comments being written for each question and an N/A entered for questions not addressed.

Remember: These interview forms are meant to serve as guidelines only. Interviewers are not required to read the questions verbatim.

MAIN CONTACT/INSTRUCTOR INTERVIEW PROTOCOL

Using this form: This interview will give a general impression of training, support, and roles and responsibilities of persons responsible for implementing the CISCO NETWORKING ACADEMY PROGRAM activities. The suggested questions under each topic are to be used so that a rating score (1= troublesome to 5=excellent) can be applied to each area (the boxed question). On the electronic report form, the Interviewer will enter pertinent comments for each question and N/A for those questions not addressed. Results from interviews will be incorporated into the *Support Visit Summary Report*.

Training Received

- 1. Reflect on your own training for each semester what were the strong points in terms of curriculum, logistics, instruction, etc. for each semester? (note locations of training and level of certification)
- 2. What areas in your training were not as thorough or strong as you would have liked?
- 3. What were some of the Best Practices modeled during the training?
- 4. What specific factors in the training environment (facility, equipment, etc.) assisted or detracted from your learning?
- 5. Are there areas in which you feel your knowledge of the curriculum is not as strong as needed?

		_			
ĺ	In general, how would you rate the training you received ?	1	2 3	4	

Training Conducted

- 6. Which instructional strategies and Best Practices do you utilize most and why?
- 7. What grouping strategies have you found successful and when do you use them?
- 8. As a trainer how do you help your trainees practice the teaching strategies that you model?
- 9. In what ways do you have students utilize the Study Guide, Portfolio, and Engineering Journal?

In general, how would you rate the training you conduct ?	1 2 3 4 5
--	-----------

Support Received

- 10. Describe the equipment, services, and communication contacts from Cisco in terms of quality and helpfulness.
- 11. In what ways do you utilize the Community Server's Academy Zone, Assessment Server, and Curriculum Guide?
- 12. Are there areas in which you would like training or support?

In general, how would you rate the support you receive ?	1	2	3	4	5	
in Seneral, new would you have the support you receive.	•	_	•	•	•	

Support Rendered (for CATCs and Regional Academies only)

- 13. How often do you have contact with the Regional and/or Local Academies for which you are responsible?
- 14. What kinds of support do you offer Regional Academies and/or Local Academies?
- 15. What are the most frequent types of concerns you hear expressed from Regional and/or Local Academies?
- 16. Reflect on the handling of equipment in terms of storage, condition, deliveries, etc. Do you have any suggestions or recommendations?

cc						
In general, how would you rate the support you render ?	1	2	3	4	5	

Roles and Responsibilities

- 17. What barriers, if any, do you face in implementing the program?
- 18. Do you have any questions regarding your role as a main contact/instructor, Cisco policies, etc.?
- 19. In your role, of what are you most proud? What innovations, ideas, or suggestions would you like to share with other academies?

TRAINEE/STUDENT INTERVIEW PROTOCOL

Using this form: This interview will give a general impression of training and support received of persons currently enrolled in a CISCO NETWORKING ACADEMY PROGRAM course. The suggested questions under each topic are to be used so that a rating score (1= troublesome to 5=excellent) can be applied to each area (the boxed question). On the electronic report form, the Interviewer will enter pertinent comments for each question and N/A for those questions not addressed. Results from interviews will be incorporated into the *Support Visit Summary Report*.

Training Received

- 1. Reflect on your training what were the strong points in terms of curriculum, logistics, instruction, etc. for each semester?
- 2. What areas in your training are not as thorough or strong as you needed?
- 3. Are there factors in the training environment (facility, equipment, etc.) that assisted or detracted from your learning?
- 4. Are there areas in which you feel your knowledge of the curriculum is not as strong as needed?
- 5. How prepared and confident do you feel, at this point, in your ability to seek a job in the field of networking? (student only)
- 6. Are you planning to take the certification test? When?
- 7. In what specific ways does the instructor assist you in your learning?
- 8. Which instructional strategies do you feel help you the most and why?
- 9. What grouping strategies do you find successful in class?
- 10. In what ways do you utilize the Study Guide, Portfolio, and Engineering Journal?

In general, how would you rate the training you received ?	1 2 3 4 5
---	-----------

Support Received

- 11. Describe the equipment, services and communication at this Academy in terms of quality and/or helpfulness.
- 12. Are there areas in which you would like training or support from Cisco and/or your Academy?
- 13. Do you have any concerns or questions regarding the courses?
- 14. What innovations, ideas, or suggestions would you like to share?

In general, how would you rate the support you received						
in the Networking Academy program?	1	2	3	4	5	

ACADEMY PERSONNEL INTERVIEW PROTOCOL

Using this form: This interview will give a general impression of contact and satisfaction with various aspects of the Networking Academy program. The suggested questions under each topic are to be used so that a rating score (1=troublsome to 5=excellent) can be applied to each general area (the boxed question). On the electronic report form, the Interviewer will enter pertinent comments for each question and N/A for those questions not addressed.

Training

- 1. Please tell us about your knowledge and understanding of the purpose of the Network Academy Training.
- 2. In what ways do you think this training will contribute to the work force demands?
- 3. Are there areas in which you feel the training program or curriculum needs to be strengthened?
- 4. What impression do you have regarding the effectiveness of the Academy training?

In general, how would you rate the training aspect of the					
Network Academy program?	1	2	3	4	5

Support

- 5. If your school/organization is involved in the training, describe the equipment, services and communication contacts from Cisco in terms of quality and helpfulness.
- 6. Describe the support from your State or Local administration regarding the implementation of the Academies.
- 7. Are there other areas in which you would like more training or support from Cisco?
- 8. What, if any, are the types of concerns you have heard regarding the semester courses?

In general, how would you rate the support aspect of the					
Network Academy program?	1	2	3	4	5

Roles and Responsibilities

- 9. Do you perceive any barriers in implementing the program?
- 10. Do you feel clear on the contractual responsibilities of your school/organization?
- 11. Do you have any policy questions or recommendations?
- 12. What innovations, ideas, or suggestions would you like to share?

In general, how would you rate your understanding of your roles and responsib	iliti	es				
related to the Network Academy program?	1	2	3	4	5	

ACADEMY PERFORMANCE ACTION PLAN FORM

Goals	Assessment Criteria	Interventions	Resources	Time-line
Goal 1				
Goal 2				
Goal 3				

Goals: From one to three goals will be written in the plan; the goals can be short-term or long-term as designated with the time-line; a goal states the desired behavior, change, and/or result.

Assessment Criteria: These will specify the expectations for meeting the goal and the degree to which the learning or accomplishment will be met. These criteria will be the rubric by which the outcome will be assessed.

Interventions: The method(s) by which the learning and/or change can be facilitated; the vehicle by which the criteria can be met; there will be at least one intervention for each goal and more than one if the criteria specifies.

Resources: The materials, people, workshops, seminars, activities, etc. that will assist in meeting the goal; list resources for each of the criteria or interventions, as appropriate.

Time-line: The beginning and ending dates or benchmark times for specific activities or accomplishments to occur; the timeline will specify each goal and each specific criteria or intervention relating to the goal.

ACADEMY PERFORMANCE ACTION PLAN EXAMPLE

Goals	Assessment Criteria	Interventions	Resources	Time-line
Goal 1 More Instructors will pass the skills test on first try	Will be able to demonstrate effective labs/hands-on lessons; number of students passing skills test will increase by 10%	Obtain 8 hours of training in planning and implementing labs/hands-on activities	Instructor online training; videos of successful classroom labs	Before July 1, 2001
Goal 2 Student satisfaction index will increase to 4.2	Will be able to demonstrate skills on Sem. 2 skills test at an 85% level; student satisfaction index will be 4.2 after teaching the course	Observe other instructors; obtain 8 hours of training in Semester 2 and re-take skills test for semester 2	Recommended instructors; CATC training modules	Before teaching Sem. 2 again
Goal 3 Maintain more frequent contact with Local Academy instructors in order to handle concerns in a timely manner	Satisfaction index of Local Academies will improve to a 4.2 or higher; complaints, problems or concerns will be handled in a timely manner	Visit and/or converse with other regional instructors to learn how to utilize the AAS and give support	CATC; other Regional Academies; AAS training and information	Before August 1, 2001

Goals: From one to three goals will be written in the plan; the goals can be short-term or long-term as designated with the time-line; a goal states the desired behavior, change, and/or result.

Assessment Criteria: These will specify the expectations for meeting the goal and the degree to which the learning or accomplishment will be met. These criteria will be the rubric by which the outcome will be assessed.

Interventions: The method(s) by which the learning and/or change can be facilitated; the vehicle by which the criteria can be met; there will be at least one intervention for each goal and more than one if the criteria specifies.

Resources: The materials, people, workshops, seminars, activities, etc. that will assist in meeting the goal; list resources for each of the criteria or interventions, as appropriate.

Time-line: The beginning and ending dates or benchmark times for specific activities or accomplishments to occur; the timeline will specify each goal and each specific criteria or intervention relating to the goal.

SUPPORT VISIT SUMMARY REPORT FORM AND OUTLINE

Using this form: The information to be provided on the first page of this form may come directly from the <u>Support Visit Confirmation Form</u>, or that form may simply be attached, if no changes were made or observed. The second page of this form provides a suggested outline for the narrative part of the *Support Visit Summary Report*. See the *Sample Support Visit Summary Report* at the end of this document.

Name of CATC/Region/School	Date of visit	Arrival time	Departure time
Address	City	State	Zip code
Phone	Fax	E-mail	
Support Team Members	Representing	Phone	E-mail
CATC Office	Regional Academy	# o	f Locations/Sites
Persons interviewed/observed	Title(s)	Phone	e-mail

Report Outline

A. Description of Site
1. Background
2. Facilities
3. Administrative Support
4. Staff
B. Report of Findings, Commendations, and Recommendations
1. Results Findings
2. Satisfaction Findings
3. Complaints Findings
4. Observations Findings
5. Commendations
6. Recommendations
Follow-up Needed: Yes No (If Yes, provide specifics in Recommendation section.) Within 30 days Next Year
This program appears to:
Exceed Program requirements Meet Program requirements Be performing below expectations Not meet Program requirements
be performing below expectations Not meet Program requirements
An Academy Performance Action Plan has been initiated. Yes No
Cisco Systems Monitor(s)
CATC/Regional Representative
Please return this form with the <u>Support Visit Confirmation Form</u> and <u>Support Visit Checklist</u> and any other monitoring Information or forms attached.

COURSE FEEDBACK FORM

Note: This form is provisional. The actual form you complete online may vary.

To the Instructor: This form is to be completed by all students prior to taking the final exam for each semester course. Results are compiled in a Satisfaction Index Report.

To the student: Your name will remain confidential UNLESS you indicate that you wish to be contacted regarding your comments. Use a separate form for each instructor.

Stu	ident Name : I wish to be contact	I wish to be contacted: Yes N			
Ins	structor Name: Semester Course:	Location	:		
Co	urse Version: Course Language				
	r each of the following statements, please indicate if you Strongly ree (A) , or Strongly Agree (SA) .	Disagree (SD),	Disag	gree (D),
IN	STRUCTION				
1.	The instructor was prepared for each class.	SD	D	A	SA
2.	The instructor understood the material being presented.	SD	D	A	SA
3.	The instructor related the course material to real-life experiences.	SD	D	A	SA
4.	Presentations were clear and easy to understand.	SD	D	A	SA
5.	Answers to questions were provided in a timely manner.	SD	D	A	SA
6.	Class participation was enhanced through effective use of questions.	SD	D	A	SA
7.	The instructor made connections across the lessons and activities.	SD	D	A	SA
8.	The class was interesting and enjoyable.	SD	D	A	SA
9.	Students felt comfortable asking questions and sharing ideas.	SD	D	A	SA
10.	Most of the class time was spent reading the curriculum on-line.	SD	D	A	SA
11.	Hands-on work with cabling or networking hardware was an important part of this course	nt SD	D	A	SA
12.	The instructor had a good idea about what I knew and didn't know a the semester went on		D	A	SA
13.	The instructor provided prompt and clear feedback on homework, la activities, and tests or quizzes.		D	A	SA
CC	OURSE DESIGN AND MATERIALS				
14.	I understood the objectives (desired outcomes) of the course.	SD	D	A	SA
15.	The activities and labs helped me achieve the course objectives.	SD	D	A	SA
16.	The chapter quizzes helped me evaluate my knowledge.	SD	D	A	SA
17.	On-line chapter and final exams helped me evaluate my knowledge.	SD	D	A	SA
18.	Overall, the on-line course materials were of high quality.	SD	D	A	SA

FACILITY AND EQUIPMENT

19. The classroom and the laboratory provided a comfortable learning				
environment.	SI	D D	A	SA
20. The classroom and lab equipment functioned properly and				
satisfactorily.	SI	D D	Α	SA
21. The lab was sufficiently stocked with equipment for all projects.	SI	D D	A	SA

SEMESTER-SPECIFIC QUESTIONS

(only appropriate semester appears on the on-line form)

Semester 1

- 1. How many hands-on lab activities did you complete?
 - a) fewer than 5
 - b) 6–15
 - c) more than 15
- 2. Did you use the Fluke Network and Protocol Inspector?
 - a) neither
 - b) only Network Inspector
 - c) only Protocol Inspector
 - d) both Network Inspector and Protocol Inspector
- 3. Did you complete a cabling project?
 - a) yes
 - b) no
- 4. Did you complete a skills-based exam?
 - a) completed the exam
 - b) took the exam but did not complete
 - c) did not take the exam

Semester 2

- 1. How many lab activities did you complete?
 - a) fewer than 5
 - b) 6-15
 - c) more than 15
- 2. Did you build a network by configuring all 5 routers?
 - a) yes
 - b) no
- 3. Did you troubleshoot a network with problems using all 5 routers?
 - a) yes
 - b) no
- 4. Did you complete a skills-based exam?
 - a) completed the exam
 - b) took the exam but did not complete
 - c) did not take the exam

Semester 3

- 1. Did you complete the labs using switches?
 - a) yes
 - b) no
- 2. Did you begin a Threaded Case Study?
 - a) yes
 - b) no
- 3. Did you complete the Novell IPX lab?
 - a) yes
 - b) no

Semester 4

- 1. Did you complete a Threaded Case Study?
 - a) yes
 - b) no
- 2. Did you complete a skills based exam?
 - a) completed the exam
 - b) took the exam but did not complete
 - c) did not take the exam

OTHER COMMENTS:

Submit _____

INSTRUCTOR TRAINING FEEDBACK FORM

Using this form: All trainees should complete this form after teaching the semester course for which training was received. Results are compiled in a Satisfaction Index Report. This summary data will help answer the following questions: (1) Did the training prepare the instructors to teach the course curriculum? (2) Based on the training received, are instructors able to use the materials, curriculum, strategies, and assessment tools? Trainee names will remain confidential.

Stı	ident Name: I wish to be contacted	to be contacted: YesNo				
Ins	structor Name: Semester Course:	Loc	ation	•		
On	a scale of 1(strongly disagree) to 5 (strongly agree) please respond to	eaci	h state	ement.		
IN	STRUCTION					
1.	The training I received prepared me to teach this course.	1	2	3	4	5
2.	Training helped me to use analogies and real-life experiences to add value to the course.	1	2	3	4	5
3.	Training helped me learn how to use questioning strategies to enhance class participation.	1	2	3	4	5
4.	I feel confident in using most of the "best practices" and strategies in my teaching.	1	2	3	4	5
5.	I am able to use grouping strategies effectively.	1	2	3	4	5
6.	I feel that my knowledge of the curriculum is strong in every area.	1	2	3	4	5
CC	OURSE DESIGN, CURRICULUM, AND MATERIALS					
1.	I am able to use the Community Server Academy Zone to assist me in keeping up to date with curriculum changes and information.	1	2	3	4	5
2.	The Teacher Guide assists me in using "best practices" and effective strategies.	1	2	3	4	5
3.	The Lesson Plan activities and labs help me achieve the stated course objectives with students.	1	2	3	4	5
4.	The Assessment Server and other assessment tools are assisting me in diagnosing and planning instruction.	1	2	3	4	5
O	VERALL VALUE OF TRAINING					
1.	I am able to use the Teacher Guide to support my teaching.	1	2	3	4	5
2.	I am able to use the Assessment Server effectively.	1	2	3	4	5
3.	I understand the instructional responsibilities.	1	2	3	4	5
4.	I will not need more training to feel comfortable teaching this curriculum.	1	2	3	4	5
5.	I would recommend this course training to others.	1	2	3	4	5
6.	I am continuing to network and communicate with other Instructors I met during training.	1	2	3	4	5
				Subn	nit	

EXAMPLES OF SUMMARY REPORTS

Examples of summary reports will be added to this document as the authentic ones become available. There are four types of summary reports: (1) results reports, which summarize results from final tests, (2) satisfaction reports, which summarize the data from the feedback forms, (3) the Observation Summary Report, which covers multiple observations, and (4) the Complaint Summary Report, which categorizes the complaints received regarding various aspects of the implementation of the networking program at any one site.

The following Summary Report examples will be in the future:

- Student Results Summary Report
- Regional Instructor Results Summary Report
- Local Instructor Results Summary Report
- Student Satisfaction Summary Report
- Regional Instructor Satisfaction Report
- Local Instructor Satisfaction Report
- Complaint Summary Report
- Observation Summary Report

SAMPLE SUPPORT VISIT SUMMARY REPORT

Name of CATC/Region/SchoolDate of visitTime of arrival/departureESC 23March 10–118:30 AM5:00 PM

AddressCityState/Zip code145 South 12th AveBisbeeTX 76281

Phone Fax E-mail

602.555.1212 602.555.1213 Cisco@Cisco.com

Support Team MembersRepresentingPhone/E-mailIrving Snyder, ChairEduc. Consultantisnyd@primenet.comGeorge MillerCiscogeo@primenet.comClara SinghCiscoclaraS@Cisco.com

CATC Regional Academy # of Locations/Sites

ESC Region 23 30 RA sites 20 LA sites

Persons interviewed/observed Title(s) Phone/E-mail Clint Wayne Center Director Cwayne@esc23.net John Eastwood Director of Educational Tech. JohnE@esc23.net Cindy Crayfish Telecom. Coordinator CRC@esc23.net Pamela Lee CATC Main Contact Plee@esc23.net Harrison Dodge Hdod@esc23.net Instructor 8 trainees Regional Instructor trainees

Description of Site

Background

The Educational Service Center (ESC 23) is located in Bisbee, Texas. There are 23 Education Service Centers in Texas and each has specific responsibility for providing training, materials, and support to the school districts in their area. ESC 51, centered in Bisbee, extends over 10 counties with approximately 80 K-12 School Districts, 380,000 students and 22,000 educators. The ESC provides networking services to the districts at a cost of more than \$250,000 with a portion of the total provided by each district.

ESC 23 serves as the Cisco Academy Training Center for the other 22 ESCs that serve as Regional Academies. Each ESC Regional Academy trains and supports the Local Academies in its ESC area. The ESC 23 site also serves as a Regional Academy to support over 20 Local Academies located in its service area.

The ESC 23 facility itself is very well equipped with Distance Learning Labs, Conference and Workshop rooms, and administrative offices. Computer labs and facilities are also equipped to serve as a hub network for all of the Cisco Networking Academy programs.

This monitoring visit was the 2nd visit and the first since the change of the CATC Instructional staff. Seven Regional instructors and one local instructor attended the training. Regular and frequent training sessions have been conducted for Regional and Local Academy Instructors previous to this training.

Facilities

The classroom facility and lab room consists of one small interior classroom. Space is limited but adequate to train up to 12 students per session. The labs are conducted in the classroom with adjacent small office facilities available for individual and pairs to work on projects. Equipment includes 12 computers, routers and other wiring equipment located on a table along the wall in the room.

A new facility is being constructed on adjacent property. The CATC classroom and lab space to be included in the new facility consists of a much larger training and lab area.

Administrative Support

The administrators at ESC 23 are extremely supportive of the Cisco Networking Academy program (CISCO NETWORKING ACADEMY PROGRAM). This strong administrative support is one of the factors contributing to the success of the program. The Center Director, Dr. Clint Wayne, the Director of Educ. Technology, Dr. John Eastwood, and the Coordinator for Telecommunications, Ms. Cindy Crayfish, have a thorough understanding of the program and are strong advocates of the opportunities afforded by the CISCO NETWORKING ACADEMY PROGRAM. They all believe that the provision of this training will greatly enhance the opportunities for students in the state of Texas. They expressed intentions to continue to support the CATC with competent staff and resources. The new staff assignments reflect the intention to maintain a quality program and provide the administrative tasks required by the program. The administrators all expressed the desire to be a model CATC program.

The use of the facility's Distance Learning Labs for Regional training has enhanced the program communication throughout the region and will continue to provide a vehicle for training, support and troubleshooting.

The only administrative concern continues to be related to the payment/invoicing procedure followed by Cisco.

Staff

The CATC operates with two full-time Instructors and has a third certified instructor available on site. Mrs. Pamela Lee serves as the Main Contact and Instructor, with Mr. Harrison Dodge serving as the second Instructor. Ms. Pamela Lee is also a certified Instructor on staff and is available to provide support to the training sessions.

The Instructor Self-Assessment forms indicate that the two primary instructors feel very qualified and competent in their instructional skills. Their averages were 4.5 on the 5-point instrument. The areas rated the lowest were the following: Use of the Engineering Journal and Study Guide; Developing and using rubrics; and Uses the Student Reflection of the Study Guide. On the Instructor Reflection Questionnaire, both instructors felt pleased with the support they have built with the regional academies and had set goals to continue providing such support. Other goals included scheduling planning time so that joint instructional planning could continue.

In reference to the training the CATC Director/Instructors received in other locations, the Denver CATC and Seattle CATC received a rating of 5 while the Florida CATC and the Minnesota CATC received a rating of 3. Instructor pedagogy and practices were mentioned as reasons for the lower ratings. No specific strengths or weaknesses to the curriculum or training environment were mentioned. Both instructors felt that the training adequately prepared them for instruction.

The Instructors have conducted 12 Regional visitations thus far this year and have selected 2 or 3 academies to monitor based on those observation visitations. After surveying regional academy staff, the CATC conducted Regional training in the areas of electronics utilizing the teleconferencing facilities. All of the staff has demonstrated enthusiasm in planning for and providing opportunities for communication and feedback.

Report of Findings, Commendations and Recommendations

Results

Student Results: No data were available on student results.

Regional and Local Instructor Results: No data were available on trainee results. This is due to the inability to access roll-up data. The interviews indicated that all trainees were highly satisfied with their learning progress and were expecting to successfully complete the course.

Findings: The Instructors appear to be successful based on interview comments but there are no test data to support the finding as yet.

Satisfaction

Student Satisfaction: There were no data on local students.

Regional and Local Instructors Satisfaction: There were no roll-up data available. Interviews with the trainees indicated that they were highly satisfied with the curriculum, the facility, equipment and the instructors. Interview ratings averaged above 4.5 for the instruction and support received. Some trainees remarked at the initial stress level of not being familiar with materials prior to the course but how much they had learned in such a brief time.

Findings: Trainees were extremely pleased with the Instructors' skills, enthusiasm, knowledge, accessibility, support, and professionalism.

Complaints

Findings: No official or written complaints or concerns have been registered against the CATC, Regional or Local Academies at this time.

Observations

All members of the monitoring team conducted two observations of about 60 minutes each during two instructional time periods. Each instructor was observed in a class setting. The first observation was an instructor directed lecture session with group participation. A Power Point presentation and projected graphs were used. The 8 trainees were seated in front of their computers and participated by finding and/or completing assigned projects as the instructor demonstrated. Most of the trainees participated and contributed by asking and/or answering questions. The instructor directed the trainees through the exercises and clarified concepts. Many of the best practices were observed.

During the second observation, the trainees were actively engaged and participated in discussions with frequent questions and answers. Most of the instructional strategies found in the best practices were observed with particularly effective use of focus questions and Power Point presentation.

The classroom, while quite small, warm and crowded, was still a pleasant learning environment and all trainees seemed comfortable discussing the concepts and asking questions. There were no special needs trainees observed, but the instructors mentioned in the interview that special needs accommodations have been made.

Findings: The CATC Instructors effectively demonstrated most of the instructional responsibilities identified for the Cisco Networking Academy Program.

Commendations

- The administration's high level of support is evident throughout the organization and operation of the CATC academy program. The assignment of qualified staff in fulltime roles provides the necessary support to serve the high number of regional and local academies. The knowledge and interest of the administration is a prime factor in the success of this CATC.
- 2. The staff's enthusiasm and commitment to the program combined with their high level of skills in instructional practices is outstanding.
- 3. The instructors demonstrate excellent instructional and technical skills. Instructional strengths include instructor partnering, providing a comfortable learning environment, establishing excellent rapport with students, and the effective use of the Power Point presentation. Technical strengths included knowledge-based expertise along with the ability to utilize "expert" trainee experiences to teach others. This inquiry and peer teaching skill allows for all to be learners. Both instructors demonstrated resourcefulness when assisting trainees in learning content.
- 4. Effective organization of the CATC and support to the academies were seen through the following: Setting the target time of 24 hours to address issues which arise; providing a workshop on electronics to support regional academies; planning and implementing monitoring and observation visits; planning for a partnership day in an effort to meet workforce demands; and accommodating a 504 trainee to meet individual needs by rebuilding a classroom door.

Recommendations

- 1. The Instructors should continue the joint planning and partnering to further strengthen the instructional and technical skills needed for training.
- 2. The elements of training as per the Trainer of Trainers' Model need to be made more obvious for the regional and local instructor trainees. Many of the trainees have not been trained as teachers and need assistance in understanding the strategies that have been used to help the class learn the curriculum. Discussing the Best Practices and how they can be used will build confidence for these trainees as well as help other trainees know how to adjust their teaching to better teach the networking curriculum. Specifically, using the journal, rubrics, study guide, reflection, analysis, and modeling could benefit the trainees.
- 3. The classroom space continues to be a noisy, hot, and small room with little lab space. Perhaps limiting the number of trainees in each class session until the larger facility is available should be considered.

Follow-up Needed: Yes No _X (If Yes, provide specifics in Recommendation section.
Within 30 days Next YearX
This program appears to:
Exceed Program requirements Meet Program requirements <u>X</u> _
Be performing below expectations Not meet Program requirements
An Academy Performance Action Plan has been initiated. Yes No _X
Monitor Team Chairperson <u>Irving Snyder, Ph.D</u>
CATC/Regional/Local Representative Clifford Bogie