

## Chapter 8: Assessment

### *Criterion 3*

*The institution is accomplishing its educational and other purposes.*

### **Introduction**

Strong institutional organization does not necessarily lead to achievement of educational objectives. Evaluation of the success of the educational efforts of Cedarville College is key to determining the accomplishment of the institution's mission and purpose. This chapter seeks to demonstrate that Cedarville College is accomplishing its educational and other purposes through appropriate educational programs, assessment of academic achievement, and assessment of mission-related purposes.

### **Educational Purposes**

The Cedarville College academic program is designed to meet the educational, moral, physical, social, and spiritual needs of young people who desire to honor God with their lives. To that end, the College grants six baccalaureate degrees and one associate degree. Every degree carries with it a mandatory general education requirement designed to broaden the student's knowledge and stimulate the student's thinking processes.

### **Program Design**

As a direct outgrowth of the mission of the institution, all educational programs are designed with three characteristics in mind: breadth, depth, and sequence. Breadth is achieved in two specific ways. First, students are encouraged to pursue an academic minor along with their major field of study, thus allowing them to develop understanding in tangential or diverse areas of interest. Second, the general education requirements of the core curriculum cut across a broad spectrum of academic disciplines including Biblical Education, Communication, Humanities, Social Science and History, Science and Mathematics, Physical Education, and Global Awareness. Refer to Chapter 2 for a complete list of specific General Education requirements.

Depth of education results from the intense study of a major field. Cedarville College currently offers 51 major fields of study. In-depth examination of material is enhanced by class size limits.

The requirements of every degree program at Cedarville College are clearly outlined. Suggested course sequences are provided with every major and are printed in the college catalog. Publication of course prerequisites provides help with sequencing as well.

### **Special Academic Offerings**

Many special programs are offered to students in an effort to provide added educational experiences or to satisfy a broader range of academic interests. These programs work in tandem with regular educational offerings. The following paragraphs describe some of the programs.

Study programs offer students an opportunity to pursue educational objectives while studying in an environment outside the Cedarville campus. Current programs include:

- Au Sable Institute of Environmental Studies
- American Studies Program
- Family Studies Institute
- Latin American Studies Program
- Los Angeles Film Studies Center
- Oxford Summer School
- Philadelphia Study Tour
- Jerusalem University College Study Program

Many students seek specialized training in professions after attending Cedarville College. A number of preprofessional programs are available including the following curricula:

- Preseminary
- Prelaw
- Preprofessional Sciences
  - Dentistry
  - Medical Technology
  - Medicine
  - Optometry
  - Osteopathy
  - Pharmacy
  - Physical Therapy
  - Veterinary Medicine

The Honors Program is focused toward challenging gifted students to reach their academic potential through a specially designed course of study. The educational objectives of this program are:

1. to identify students whose ability and motivation are so high that existing programs would not meet their academic needs adequately.
2. to provide academic opportunities of such caliber that students enrolled in the program are challenged to perform at their highest level of excellence.
3. to establish an environment that will encourage the aspirations and achievements of these students, fostering in them dignity, self-esteem, and a sense of their own potential.
4. to derive benefits for the wider academic community.

The Honors Program is not a major, but rather a specially crafted sequence of courses which enriches existing major fields of study. Refer to the college catalog for a complete description of the program.

The College also makes available to students a number of different curricular patterns. The independent study program was organized in recognition of the need for college students to develop independence in their ability to select and investigate problem areas. The objectives of the program include the provision for explorations of areas not treated in the normal course structure, creating opportunities for students and faculty to work closely together on specialized projects. Senior seminars are offered in most major fields. The objective of the seminars is to enhance the student's preparation by exposing them to special problems and ideas relating to their fields. A credit/no-credit program is available with the objective of encouraging upperclassmen to experiment in areas of study in which they have a definite interest.

### **Academic Rigor**

Perhaps the best evidence of the academic rigor that results from the educational requirements of Cedarville College is the performance of its students. The following paragraphs describe some of the areas where Cedarville's academic strength is apparent.

Students from the Engineering Department routinely participate in national competitions. In 1995, a senior design team received the grand prize in the Padnos Design Competition for environmentally responsible engineering, and the 1996 team received honorable mention behind two grand prize winners. Cedarville is the only school in the country to have won twice at Padnos.

Other notable engineering accomplishments include selection in 1994 and 1996 by the U.S. Department of Energy to participate in competitions to produce fuel efficient automobiles. On another front, a four-man engineering team finished first in design and second in major performance in the national Micro Baja student competition.

The Cedarville College forensics and debate teams are also well-known. The forensics team has been the top team in the state of Ohio five of the past six years, while the debate team won the Novice National title and was a quarterfinalist in the open division of the National Education Debate Association tournament.

Competition is not the only area where Cedarville students excel. The percentage of nursing majors who successfully pass the national standardized NCLEX-RN test for nurses is at or above the national average.

### **Academic Program Review**

The academic program of the College is reviewed on a constant basis by the faculty and administration. Curricular changes having to do with a particular

department are developed within that department and sent to the Department Chair Committee for approval. Some items may continue on to the administration when additional approval is required. In a similar manner, academic recommendations are brought by the Department Chair Committee to the faculty for ratification. Complete guidelines for curricular change are outlined in the Faculty Handbook.

Academic policy matters are handled by the Educational Policies Committee. This committee recommends policy changes to the Department Chair Committee or the Academic Vice President who in turn pass the recommendations on to the faculty for adoption.

The strategic planning process provides a significant avenue for program review at many levels. The planning process is a yearly activity that includes every area of the institution. Refer to Chapter 9 for a complete description of the planning process.

### **Values Education**

The mission of Cedarville College goes beyond academic pursuits. As a Christian college, the goals of the institution include developing students' ability to evaluate knowledge in the light of scriptural truth. To that end, every student is required to complete the equivalent of a minor in Biblical Education. Six courses cover a gamut from introductory material to in-depth biblical study to church history. Students are encouraged through these classes to think biblically and to apply biblical principles to their daily lives and the rest of their academic endeavors.

Daily required campus chapel services and weekend church services also enhance the institutional goals of values education. The broad range of nationally recognized speakers in College chapel services teach on a variety of subjects that are important for the entire College family.

A number of educational extracurricular programs are offered that enhance the academic emphasis on values. One such program is entitled "Thursdays Live." This student-produced program seeks to encourage students to interact with modern issues that they face. Topics are drawn from everyday life and include areas such as purity, diversity, and biblical lifestyles.

"Fit to be Tied" is another very successful educational extracurricular program that helps achieve the goals of values education. The FTBT program matches engaged couples with faculty and staff couples who are role-models of strong marriage relationships. These couples serve as mentors for the engaged couple and work through a series of materials designed to prepare the engaged couple for the struggles and rewards of married life.

The area of values education is extremely important to the mission of Cedarville College. The significance of this area holds such strong importance that it is

included in the assessment efforts of the College. Refer to the next part of this chapter for more details.

### **Other Purposes**

The purposes of Cedarville College involve more than academic achievement. The College also seeks to have a positive effect on constituencies outside the campus. To this end faculty, staff, and students are heavily involved in a diverse range of external functions and organizations. These external opportunities lend balance and breadth of experience to the entire campus family. The following paragraphs describe some of the ways in which students, faculty, and staff are involved outside the campus.

### **Students and Christian Ministries**

The Division of Christian Ministries coordinates all college-sponsored student ministries. Cedarville views individual ministry involvement as a vital and necessary part of each student's education and personal growth. The philosophy and motivation for Christian ministries at Cedarville is reflected in the College's stated purpose and objectives.

The College strives to shatter the mindset of isolating Christianity to a Sunday-church experience. Students are taught that biblical Christianity is demonstrating a servant's heart in all arenas of life. All are challenged to consider how their academic disciplines, athletic interests, or hobbies can be used to demonstrate their faith.

Directed by the Vice President for Christian Ministries and coordinated through 10 additional full-time staff members and several other part-time staff members, the Division of Christian Ministries provides training and assistance to more than 1,000 students who volunteer for any of the more than 150 different ministries each quarter so that over 60% of the student body participate each year.

### **Students and Community Ministries**

Cedarville College is located in a region known as the Miami Valley, an area encompassing the cities of Columbus, Dayton, and Cincinnati as well as the hundreds of smaller communities outside these major metropolitan areas. Community ministries seek to serve individuals and churches of this area by providing assistance in specialized areas by meeting individual needs, and ultimately by demonstrating the love of Christ. Approximately 80 teams serve the community each week. Service opportunities include correctional, crisis pregnancy, hospital, tutoring, visitation, and youth ministries.

### **Students and Cross-cultural Ministries**

The College's own Missions Involvement Services (MIS) provides unique opportunities for students to experience missions first-hand. Each year, particularly in the summer, approximately 250 students minister around the globe. This involvement in missions aids missionaries in their work and helps students discern God's direction in their own lives. Participants raise their own financial support prior to leaving and report on their ministries upon returning.

### **Faculty/Staff External Involvement**

Many faculty and staff members are heavily involved in external opportunities. Most are serving in some capacity in their local churches and many volunteer their time with public service organizations including the Crisis Pregnancy Clinic, Red Cross, etc. A number of faculty and staff members belong to community organizations such as the Rotary and the United Way. A complete list of external involvement is available in the Consultant-Evaluator Resource Room.

### **Effect on Community**

The community benefits from the presence of the College economically, politically, and socially. The College is one of the largest employers in Greene County. Employees pay over \$133,000 annually in local income taxes. Payroll of approximately \$12.4 million per year contributes to the local economy. Volunteer labor is provided by college personnel for management of the village and community improvement projects.

A number of College employees have served in local political offices and on advisory boards, on political party committees with the county and state, and on committees for local congressmen. The voter participation in the College precinct is excellent.

Social services performed by personnel include leadership in county health agencies and hospitals, annual blood donor drives, leadership in local school parent-teacher groups, crisis aid, ambulance services, and contributions to special community projects.

Cedarville High School benefits from sharing use of facilities for special events and a number of staff provide part-time coaching services for area high schools. Throughout the year, various segments of the local community are invited to participate in complimentary meals and other social occasions. Faculty and students volunteer for annual Special Olympics for the handicapped and the College facilities are donated for that day. Several sports camps are offered in the summer for youth.

## Measuring Accomplishments Through Assessment

It is no longer sufficient for colleges and universities to posit expectations about student learning and development. An institution of higher education must know whether it is achieving its goals and demonstrate how those goals are being achieved. In short, an institution must ensure that it educates its students in the manner it promises. Thus, assessment proceeds out of an institution's mission statement.

A mission statement reflects a purpose, and a purpose consists of being called to a task. Cedarville College's mission statement reflects a commitment of belief in God, who has called this institution to a special task. To respond faithfully to that call, the College must self-critically reflect on its educational processes. An outcomes assessment program is an endeavor to evaluate how well the College has remained faithful to its mission and how it might continue to do so in the future. The purpose for assessment at Cedarville College, then, is to work for internal improvement and to maintain the trust of external accountability.

### Uses of Assessment

Assessment is useful:

1. To the entire college community as it assists in more clearly focusing on the mission objectives;
2. To faculty, administrators, and other staff persons as it helps to determine the effect of the Cedarville experience on student learning and development and as it creates an agenda for future direction;
3. To faculty members, as it provides insight regarding the enhancement of pedagogy, student learning, departmental major programs, general education programs, and "value-added" dimensions;
4. To students, as it produces clarity concerning the knowledge, skills, and affective outcomes that an education at Cedarville College is designed to produce;
5. To prospective students and their parents who are interested in the effectiveness of an education at Cedarville College.

Academic assessment focuses on assessing academic effectiveness and does not address the broader aspects of administrative effectiveness, financial management, or strategic operations. Specifically, the College assesses student learning and development outcomes in the following domains: knowledge, performance, and affective/attitudinal.

Cedarville College's educational assessment procedures evaluate institutional and program effectiveness in relation to stated objectives. All assessment procedures should strive to improve the institution. The College does not use assessment

information for tenure or promotion decisions. While there will be times when students who participate in the different forms of assessment may know the results of their participation, the College does not use the assessment results to determine whether a student has fulfilled a course, major, or graduation requirement. The assessment program assesses the learning experience at Cedarville in order to find ways to make it more effective.

### **Assessment and Accountability**

The College has a relationship with several different communities and is accountable to those communities. Cedarville College is an institution of higher education approved by the General Association of Regular Baptist Churches. A relationship exists as well with a broader community of churches which immediately supports the College. There is a scholarly relationship with academic societies. The College has a legal relationship with the state of Ohio for the education and certification of both elementary and secondary teachers. There is an accrediting relationship with the North Central Association of Colleges and Schools, and with professional agencies, among which are the National League of Nursing (Accreditation), the American Board of Engineering and Technology (Accreditation), and the National Council on Social Work Education (Pursuing candidacy). The College also maintains membership in several private and independent associations of higher education. It is Cedarville College's accountability to its students, alumni, and parents, however, that drives its assessment efforts.

## **Assessment Program**

### **Three Assessment Areas**

Cedarville College assesses student academic achievement in three areas:

1. Major programs;
2. General education program;
3. Educational support services.

### **The Outcomes Assessment Committee**

The Outcomes Assessment Committee oversees the assessment program implementation and carries out the following functions:

1. Reviewing and evaluating academic department periodic and annual assessment process reports;
2. Suggesting specific strategies to academic departments where the assessment process needs to be strengthened;
3. Disseminating information on assessment theory, practice, and implementation to academic departments, general faculty, students and college administration;
4. Reviewing and evaluating General Education Assessment Committee annual reports on general education core curriculum and collaborative projects;
5. Preparing an annual assessment progress report summarizing assessment activities in the major programs, the general education core curriculum, and the general education collaborative program with formative recommendations to the Academic Vice-President;
6. Preparing the annual and the summative assessment reports on the collaborative projects in consultation with the Academic Vice-President (reports to be sent to the project director of the collaborative program);
7. Reviewing annual assessment budget requests submitted through the Institutional Research Office budget;
8. Recommending ongoing assessment strategy as assessment phases are completed in the departmental and general education plans;
9. Reviewing and evaluating educational support services assessment procedures and plans.

The Outcomes Assessment Committee oversees the College-wide assessment process for the Academic Vice-President. The assessment committee prepares the annual report on the assessment process, along with formative recommendations to the Academic Vice-President. The Academic Vice-President channels these reports along with his evaluation to the Department Chair Committee, general faculty, Administrative Council, and educational support services.

### **The Institutional Research Office**

The Institutional Research Office has the following responsibilities:

1. Assisting academic departments in data collection;
2. Funding non-budgeted departmental pilot surveys;
3. Administering general education core curricular surveys;
4. Administering collaborative project surveys;
5. Disseminating summative assessment information for the Outcomes Assessment Committee.

### **Academic Department Objectives and Assessment**

During the 1994-1995 Academic Year, each academic department submitted an assessment plan to the Outcomes Assessment Committee. These plans assessed every department's major programs. The plans were developed and refined with faculty input via departmental assessment committees and general department discussions.

The groundwork for these plans began in the 1993-94 Academic Year. Each department selected the intended outcomes/objectives to be assessed and the appropriate assessment instruments and criteria. The selected outcomes and the procedures to assess them were submitted to the Outcomes Assessment Committee for peer review, a process which provided further faculty input. In several instances, the committee recommended changes regarding clarity in stating intended outcomes, or appropriateness of measurement instruments, or identification of assessment criteria. Departments typically adopted these recommended changes.

### **Department Assessment Program**

The Outcomes Assessment Committee adopted a departmental assessment program model that included six major sections. The program model was developed to encompass accepted assessment theory and practice for the first phase of assessment and those to follow. The program ensures that assessment will be an ongoing activity for the College into the next century. As departments developed their plans during the 1993-1994 Academic Year, they focused on the first three sections of the model. The departmental plans were completed and submitted during the 1994-95 Academic Year for review and approval.

The outline of the resulting assessment program, with explanations of the major sections, appears below. The following also describes, compositely, the twelve departmental plans.

### *Departmental Outcomes and Objectives*

A department's intended outcomes/objectives must fit with and extend the College's mission statement and seven objectives. Intended outcomes/objectives describe what the faculty of a department wants its graduates to know, feel, and do. While a particular intended outcome may be only cognitive, another intended outcome may be cognitive, attitudinal/affective, and behavioral. Whatever the intended outcome/objective, the faculty have considered all three outcomes areas in the list of intended outcomes/objectives and in the consideration of the appropriate assessment measures.

Departmental intended outcomes/objectives statements can be characterized in the following ways:

1. Statements which the department clearly understands;
2. Results-oriented statements;
3. Statements of overarching concepts which span several courses;
4. Realistic and measurable statements of intended outcomes;
5. Statements of quantitative and qualitative outcomes;
6. Statements which indicate specifically intended outcomes/objectives of a major or several majors;
7. Statements which indicate program integration with theological perspective;
8. Statements which reflect general education outcomes skills as constituent parts of the program.

The list of departmental intended outcomes/objectives was a “long list” of expected academic outcomes for each departmental major which has at least ten graduates. Academic achievement outcomes which might be expected of all department majors were added.

### *Identifying Outcomes to Be Assessed*

For the “short list” to be used in the first assessment phase, departments selected three to five intended outcomes/objectives for each major. The department chose other intended outcomes from the “long list” to use in later assessment phases.

### *Selecting Multiple Measures of Assessment*

Each department used several assessment measures in order to gain a composite picture of each department major. The measurement instruments measured what the department intends its students to know, feel, and do. The assessment procedures measured the intended outcomes/objectives according to the assessment criteria.

Department faculty, under supervision of the chair, considered a range of assessment measures for use with the departmental program outcomes. These assessment measures were drawn from a variety of measures including grade point averages, standardized tests, senior comprehensives, upper division critical papers, capstone courses, senior theses, prizes, honors, and fellowships gained, applications and acceptances to graduate schools, advance placement in graduate schools, portfolios, oral exams, performances, internships, clinicals, student teaching, licensing exams success, visiting consultants, job placement, and alumni studies. Both internal and external data sources were considered, and departments evaluated existing data sources for appropriateness as assessment information. However, the various stages in students' academic careers—during their course of studies, at graduation, as alumni—remain the benchmarks for assessment measures.

Both quantitative and qualitative measures were considered, and before implementing the program, each department established adequate levels of accomplishment and performance, in accordance with its goals and purposes. Assessment criteria are critical to ascertain effectively a student's academic achievement.

The assessment procedure results included a review of the assessment criteria and the assessment instruments. The department faculty determined if the assessment criteria were realistic and the assessment instruments reliable.

#### *Determining Costs and Resources*

An assessment program seeks information that will help improve department programs, and the program must ensure that a department can obtain that information at a reasonable cost in time and money. In order to accomplish the planned assessment activities, department heads identified resources (personnel, materials, funds) and included them in the annual departmental budget requests.

An assessment coordinator was recommended to the Academic Vice-President by each department head.

#### *Establishing an Assessment Timetable*

Each department chair created a realistic timetable, one that anticipated the time the department needed to carry out the following functions: collecting and analyzing data; reporting results in the departmental planning process; and implementing any changes prompted by the assessment procedure. Timetables varied from department to department due to the number of major programs to be

assessed. With the 1995-1996 Academic Year, each academic department began to implement its assessment program.

### *The Procedure for Implementing Assessment Results*

Departmental programs identified the procedure by which departments collect, analyze, and implement their assessment data. This procedure includes regularly scheduled department meetings, department retreats, or specially arranged meetings to discuss, evaluate, and implement curricular and other changes resulting from the process. The knowledge of assessment results does not automatically guarantee constructive change. A strong link exists between assessing program outcomes/objectives and evaluating and improving student academic achievement.

Each department comprehensively evaluates its own assessment program as well. An evaluation process determines whether the conceptual framework is sound, whether all the components measured are appropriate to the department's goals and objectives, whether the data gathered are being used for the intended purposes, and whether the department is meeting its primary goal: improving student academic achievement. Departments evaluate their plans before they begin another assessment phase.

### **Overseeing Departmental Assessment**

The timetables for the first phase of assessment varied with academic department, and once a department completes the first assessment phase, including the evaluation of its process and accomplishments, it will initiate another assessment phase. The Outcomes Assessment Committee in cooperation with the Academic Vice-President will oversee these assessment phases.

### **Departmental Educational Achievement**

#### *Summative Report*

The twelve academic departments provided an assessment program implementation progress report in May 1996. Departmental assessment programs were on a two-year implementation cycle with the exception of one department which assessed all its major program outcomes. The reports identified the intended outcomes/objectives assessed, the assessment measures and criteria, and summarized the results of the implementation.

Departments assessed selected intended outcomes/objectives for their major programs that were extensions of the College's mission statement and seven objectives. In some instances, global outcomes for all departmental majors were assessed.

A variety of assessment measures were employed. These included grade point averages, standardized national tests, capstone course projects, upper division critical papers, portfolios, acceptance to graduate schools, advance placement in

graduate schools, performances, job placement, internships, clinicals, student teaching, and alumni studies.

Both quantitative and qualitative measures were used. Skills performance measures as patterns of evidence for student academic achievement were used approximately 60 percent of the time in comparison to 30 percent for cognitive and 11 percent for affective measures.

The criteria prescribed set standards of achievement (e.g., GPA, percentages of achievement, etc.), or satisfactory faculty evaluation levels of accomplishment.

The departments reported positive results where the data collected was evaluated. The information was inconclusive in several instances where data had yet to be evaluated, or to be completely collected.

Five of the twelve academic departments reported formative changes to be implemented as the result of their assessment activities.

### *Formative Report*

The Outcomes Assessment Committee has made the following preliminary evaluation of the major programs assessment progress for 1995-96.

The summative results of the assessment implementation initiative show very minimal need for changes. This raises questions as to the validity of the instruments and the criteria employed.

The Committee recommended to the Academic Vice-President the following formative considerations:

1. The academic departments should review their assessment plans with regard to the validity, appropriateness, diagnostic usability, and definition of their measurement instruments. By definition the question raised is whether or not the results indicate good students or a good program.
2. The academic departments should examine their assessment criteria as to their expectations levels. Were the expectation levels employed too low?
3. The academic departments should give attention to a variety of instruments and exercise care not to rely heavily on a single instrument, such as surveys.
4. Departments with professional programs should give more attention to employer evaluations of graduates.

## **General Education Objectives and Assessment**

In 1990, the General Education Task Force, made up of representatives from each academic department, began a review of the College's general education core curriculum.

The Task Force completed its work in 1992 and issued a report to the Academic Vice-President. The report recommended several major revisions to the general education program. A couple recommendations are still under review by the Department Chair Committee, but many recommendations have been approved by the general faculty and implemented.

### **Purpose of General Education Curriculum**

General education at Cedarville College serves as the focus of the undergraduate program through the knowledge, skills, values, and experiences imparted in the core curriculum and developed in greater detail in the academic majors. General education introduces students to the academic disciplines, challenging the thinking of those who have already chosen majors and broadening the alternatives for those who are yet undecided. It provides opportunity for contact with people and ideas outside the students' previous experiences and teaches students to value diversity among people by appreciating their differences and contribution. General education presents basic life skills, including the ability to solve problems and to communicate effectively. It offers students opportunities to appreciate and participate in the arts, as well as to develop an awareness of the historical framework of our society and of the students' responsibilities as stewards in a global village. Above all, general education teaches the basics of the Christian faith and doctrine and integrates those ideas with the broader field of knowledge, providing a model for use throughout life.

### **General Education Desired Outcomes**

As part of its report, the General Education Task Force developed a set of intended outcomes/objectives for the general education core curriculum. These outcomes/objectives, which grew out of the seven College objectives, were adopted by the general faculty in the Fall of 1994. The Outcomes Assessment Committee has been assigned the responsibility of developing and overseeing a program for assessing these outcomes/objectives. The program is outlined in Figure 8.1.

**Figure 8.1**  
**General Education Desired Outcomes**

<p><b>Spiritual Vibrancy</b></p> <p>CC graduates will demonstrate spiritual vibrancy by commitment to the Lordship of Jesus Christ over their personal lives, to the integrity of the Bible as God's inerrant authoritative revelation ordering personal ethics, and to the glory of God as the ultimate purpose of life.</p> <p><b>Bible and Theology</b></p> <p>CC graduates will understand and be able to articulate the key content of the Christian faith. They will be familiar with the content of the Bible and its theological synthesis. They will have a firm biblical-theological base to undergird the process of integrative thinking.</p>	<p><b>Phase I</b></p> <p><b>Integrative Thinking</b></p> <p>CC graduates will demonstrate the ability to think critically, creatively, and integratively. They will be able to evaluate information to arrive at independent conclusions, to formulate concepts into meaningful expressions, and to relate principles of biblical faith to every sphere of learning and life.</p> <p><b>Life Management</b></p> <p>CC graduates will develop habits of wellness and physical activity, skills in time, energy, and resource management, and facility in social interaction. They will have sufficient maturity to function capably and compassionately in a variety of social contexts.</p>
<p><b>Rational Independence</b></p> <p>CC graduates will show a disposition for critical thinking, creative thinking, and problem solving. They will cultivate a love of ideas fostered in a liberal arts education. They will demonstrate personal commitment to life-long learning.</p> <p><b>Problem-Solving</b></p> <p>CC graduates will be able to examine objectively a situation, determine what problem(s) must be solved, and collect relevant information. They will be able to select and apply appropriate tools and methods to formulate a solution.</p>	<p><b>Phase II</b></p> <p><b>Stewardship of God's Creation</b></p> <p>CC graduates will value the earth and its environment as God's creation and accept their responsibility to preserve and enrich them. In particular, they will promote equitable and humane treatment of all human beings as fellow image-bearers of God.</p> <p><b>Natural Sciences</b></p> <p>CC graduates will understand the scientific method, its strengths and limitations, and its use in investigating the creation. They will comprehend basic principles of biology and physical science including theories of origins. They will recognize that all human interaction with the environment has consequences, and they will approach stewardship of the earth from a theistic viewpoint.</p>
<p><b>Cultural Appreciation and Participation</b></p> <p>CC graduates will value creative arts and cultural pursuits. They will enjoy the arts within the context of a Christian world view, and will praise God by cultural and artistic expressions.</p> <p><b>Imaginative Thinking</b></p> <p>CC graduates will practice the skills of imagination which lead to self-expression. They will perceive aesthetic aspects both in everyday life and in formal artistic experiences. They will be able to express themselves by appropriate creative means.</p>	<p><b>Phase III</b></p> <p><b>Humanities</b></p> <p>CC graduates will know significant contributions in history, literature, philosophy and the arts which have influenced the development of human cultures.</p> <p><b>Intercultural Understanding</b></p> <p>CC graduates will have an intercultural awareness and sensitivity, valuing the contributions made by a broad spectrum of concepts, ideologies, cultures, and languages in an increasingly interdependent world.</p>
<p><b>Contribution to Society</b></p> <p>CC graduates will contribute to society by cultivating a spirit of community, by providing ethical leadership, and by modeling a compelling alternative to self-indulgence.</p> <p><b>Communication</b></p> <p>CC graduates will be able to observe, listen to, and read nonverbal, oral, and written communication. They will be able to evaluate the congruence of messages from diverse sources, and to provide interpretations incorporating individual and group differences. They will be able to deliver organized, coherent messages using a variety of media, taking into account the needs, communication skills, and other characteristics of the audience.</p>	<p><b>Phase IV</b></p> <p><b>Social Sciences</b></p> <p>CC graduates will know the historical roots of the social sciences and understand the broad spectrum of concepts and ideologies which influence the perception and behavior of people in various cultures of the world.</p> <p><b>Historical Awareness</b></p> <p>CC graduates will understand the transmission of biblical literacy and will be committed to the preservation of the Christian heritage. They will value the people, events and ideas that have contributed to the making of the modern mind, both in the Western and in the non-Western traditions.</p>

### **The Four Phases**

The general education outcomes/objectives will be assessed in four phases of four years each. Four desired outcomes have been selected by the Outcomes Assessment Committee for each of the four assessment phases. This four-phase assessment process will encompass a seven-year period.

With the first year of each phase, the types of data needed to assess the four general education objectives of that phase will be identified; selecting methods and instruments to assess general education will follow. Instruments and methods to measure cognitive, affective, and performance domains will be selected and pilot tested where necessary. Quantitative and qualitative assessment criteria will also be set.

In the second year of each phase, the assessment data will be collected. Preliminary analysis may be done as the data is collected during the year.

The third year of each phase is designated as the year for evaluation and recommendation. In many cases, the better part of the academic year may be necessary to study the results of the previous year's assessment. Once this stage is complete, a report will be assembled listing recommended changes and modifications based on the assessment process. This formative report will be prepared by the end of that academic year. The assessment instruments, methods, and criteria used in the phase will also be evaluated.

The fourth year of each phase will be dedicated to implementing the recommended changes in the general education program.

### **Overseeing General Education Assessment**

The General Education Assessment Committee is responsible for implementing the assessment program. This committee was in place beginning with the 1995-96 academic year and is comprised of the Outcomes Assessment Committee Chair, one member of the Outcomes Assessment Committee, and five faculty members selected by the Academic Vice President. Biblical education, humanities, social sciences, natural sciences, and the professional programs each have a faculty representative among the five selected. The committee is responsible to the Outcomes Assessment Committee.

The committee is responsible for the following:

1. Identifying desired assessment data;
2. Selecting measurement instruments and methods;
3. Determining assessment criteria;
4. Collecting and analyzing data;
5. Preparing formative assessment reports for each phase.

The General Education Assessment Committee will prepare, concurrent with all four phases, an annual progress report on the assessment process. Once an assessment phase has been completed, the annual report will include a final report on that phase. This report will describe the assessment process, include an analysis of the assessment data, and make formative recommendations. The purpose for the recommendations will be to improve student academic achievement in the general education program.

Once the four assessment phases have been completed, the General Education Committee will assess the seven-year plan and propose a plan for the continued assessment of the general education program.

The General Education Assessment Committee will submit all assessment reports to the Outcomes Assessment Committee for evaluation. A general education assessment summative report, including recommended changes, will then be transmitted to the Academic Vice-President, as part of the committee's annual assessment report.

### **Implementing Assessment Results**

The Academic Vice-President will report on the general education assessment process and recommend changes as part of the assessment report to the Administrative Council, the Department Chair Committee, and the general faculty. The implementation of changes in the general education program will follow normal college procedure.

### **Timetable for Assessing General Education**

The first of the four phases began with the 1995-96 academic year. The second phase began with the 1996-97 academic year. The third phase will begin with the 1997-98 academic year, and the fourth phase with the 1998-99 academic year. Each four-year phase includes one year for each part of the assessment process: selection, collection, evaluation, and implementation. With the start of the second phase, the four assessment phases began to run concurrently. The entire assessment cycle will run over a seven-year period, ending with the 2001-02 academic year (Figure 8.2).

The Outcomes Assessment Committee selected the following outcomes for the first phase of general education assessment:

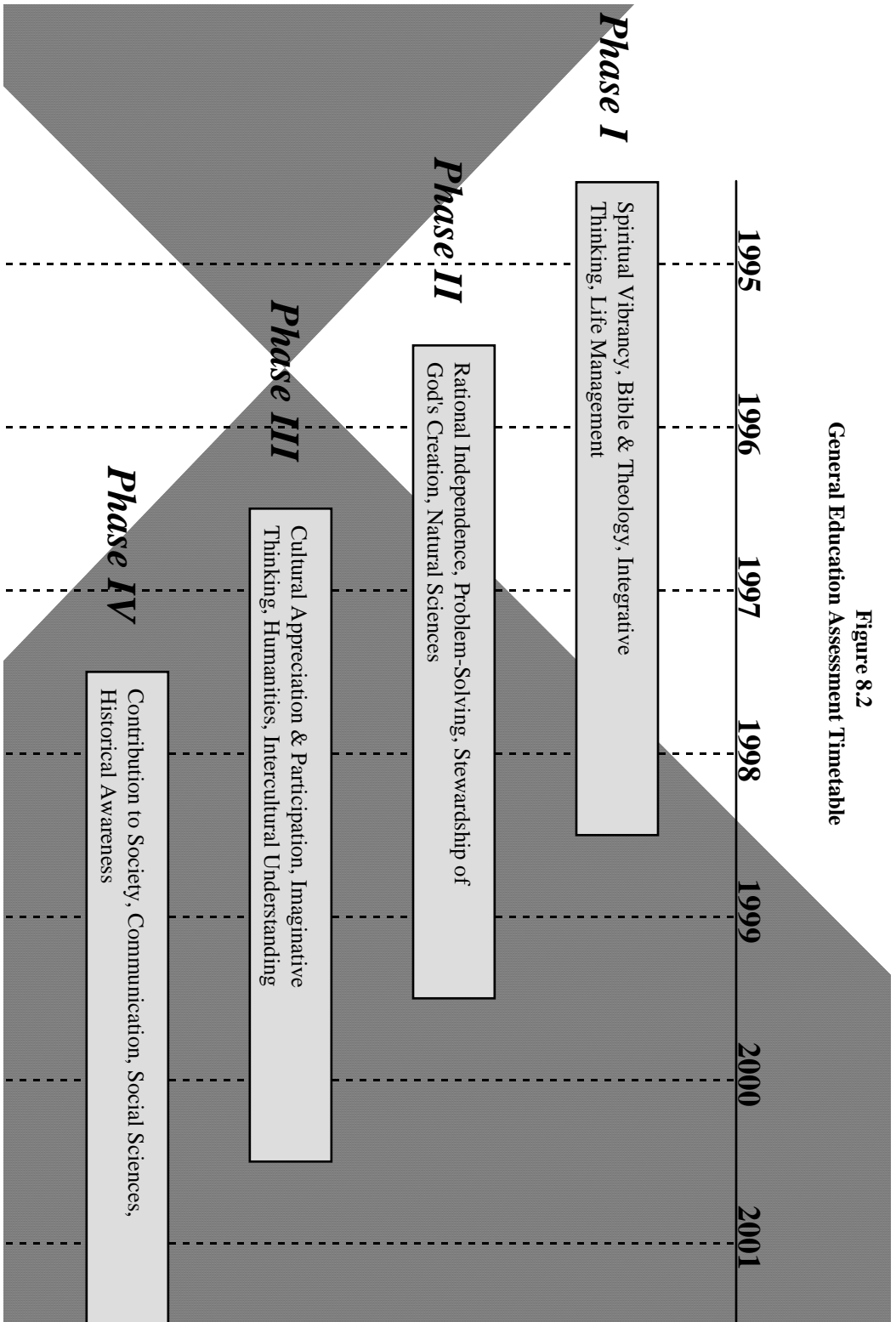
1. Spiritual Vibrancy;
2. Bible and Theology;
3. Integrative Thinking;
4. Life Management.

The General Education Assessment Committee identified the assessment data needed, along with the instruments and methods for collecting and evaluating criteria, during the 1995-96 academic year. Data collection instruments were pilot tested where necessary.

The General Education Assessment Committee reviewed and pilot tested the following instruments during the 1995-96 academic year:

1. Spiritual Well-Being Scale;
2. Social Challenges Essay Test;
3. Life Management Scales.

The Spiritual Well-Being Scale (1982, Craig W. Ellison and Raymond Paloutzian) was pilot tested in three classes (World Literature, New Testament Survey, and God and the Church) during the Spring Quarter. This instrument will be used to assess spiritual vibrancy. It surveys how students feel about their relationship with God. Approximately two hundred students representing all four student classifications were involved. The data from the survey will be used to test its validity and



reliability this summer for possible revision. The Committee will determine the assessment criteria, implementation procedure and time-line, as well as administer the survey in the Fall Quarter 1996.

The Social Challenges Essay Test (Paul Moses and Ken Bussema, Dordt College) was pilot tested by several students enrolled in a psychological measurement course during the Winter Quarter. Approximately one hundred students were randomly selected to participate. The students were asked to identify a contemporary issue facing society today. Then they were to answer the following questions:

1. Why is this issue important?
2. What factors have contributed to the development this problem?
3. How should a Christian respond to the challenge? Discuss concrete ways in which Christians can make a difference.

The General Education Assessment Committee has reviewed and rated samples of these essays. The scoring criteria contained six items to be scored on a seven point Likert scale:

1. Level of Critical Thinking;
2. Level of Moral Reasoning and Judgment;
3. Worldview: Awareness of faith implications of assumptions, issues and decisions;
4. Incorporates Understanding of Biblical themes (creation-fall-redemption);
5. Perception of Responsibility in Response to Challenges;
6. Historical/Structural Basis.

There were two major conclusions drawn from the pilot test. First, the instructions must be expanded to clarify the purpose for the essay and the student's need to develop his/her answers more fully. Second, scoring criteria explanations need to be edited and clarified to enhance rater reliability.

The Health-Promoting Lifestyle Profile II (Walker, Sechrist, and Pender) is another instrument under review by the Committee. It was also pilot tested in a psychological measurement course during the winter quarter of 1996. The instrument deals with sub-scales of health responsibility, physical activity, nutrition, spiritual growth, interpersonal relations, and stress management. Several faculty members were selected to identify assessment criteria in the sub-scales according to their areas of expertise. The Committee also pilot tested this instrument again in the fall quarter of 1997 and determined an implementation process and schedule.

The Department of Biblical Education is preparing an instrument to survey the six Biblical Education General Education courses. This instrument is being designed to determine if the College's graduates are familiar with content of the Bible and its theological implications. The goal of the six courses is to provide a biblical-theological base for integrative thinking.

The preceding was a summative report on the progress made in the first year of assessment implementing.

### **Formative Recommendations**

Formative recommendations will be made by the Committee in the 1996-97 academic year as the survey data is evaluated. The assessment general education plan and implementation will also be assessed and necessary changes recommended in the 1996-97 academic year.

### **General Education Collaborative Project**

Regional accrediting associations increasingly require higher education institutions to prove that the education offered corresponds to the education advertised. In addition to assessing students' academic achievement, church-related colleges must find ways to assess the intangible "value-added" dimension particular to Christian higher education. A collaborative effort among church-related colleges will help to determine, both corporately and individually, how well these schools are achieving their mission.

Among the 700 church-related colleges in the United States, the ninety institutions of the Coalition for Christian Colleges and Universities (CCCU) represent a core of colleges and universities positioned to conduct a collaborative effort. These regionally accredited institutions with a liberal arts emphasis, drawn from more than thirty denominations, share an explicit commitment to Judeo-Christian values and an interest in improving the ways values are taught and learned. Across the member college and university campuses, questions related to this commitment are being asked at the institutional level. The following questions need to be explored:

1. In what ways do CCCU institutions promote the development of shared values?
2. How can these colleges help students develop a greater commitment to shared values?
3. How can these colleges help students develop a greater commitment to service?
4. To what extent do seniors leave with a greater commitment to service?
5. How can these colleges help students mature in their faith?

6. How can spiritual maturity most effectively be measured?

*The Collaborative Project*

Cedarville College is involved in a multi-year cooperative assessment project with nineteen other Coalition for Christian Colleges and Universities institutions. The initial three years of the project are funded by the Fund for the Improvement of Postsecondary Education (FIPSE). The project began with the 1994-95 academic year. This effort will focus on church-related higher education and involves collaborative quantitative/qualitative data gathering as well as an opportunity for participating institutions to share other assessment data. The project includes strategies to disseminate information to the twenty institutions and then to the Coalition and beyond. It also involves strategies for institutional change through the application of the project's results on individual campuses. The involvement of twenty colleges provides a substantial pool of students who attend church-related institutions and will generate a large database of information. The participating colleges have made a financial commitment for the duration of the project that collectively will exceed FIPSE's contribution.

*Quantitative Data*

The first part of the collaborative quantitative assessment portion of the project includes a study format that parallels the data collection of the Higher Education Research Institute (HERI). The twenty participating colleges cooperate on gathering data to better understand the character of entering freshmen, exiting seniors, alumni, and faculties of these institutions. Specifically, these colleges will administer the following three surveys developed by HERI:

Three surveys produced by the HERI were administered during the 1995-96 Academic Year.

1. The 1995 Cooperative Institutional Research Program (CIRP) freshmen survey, a nationally normed freshmen information survey;
2. The 1996 College Student Survey (CSS), a nationally normed senior information survey;
3. The 1995 American College Teacher survey, a nationally normed faculty information survey.

The Coalition produced a survey during the 1995-96 Academic Year for alumni who have been out of college two years.

The use of the HERI standardized instruments will enable the participating institutions to compare themselves not only with the other project institutions, but with the general college population. Additional questions, developed by the Coalition and the College, were added to each of the standardized instruments and the alumni survey to get at more of the religious oriented values. The use of three instruments from HERI is helpful in that many questions are carried over from

one instrument to the next. The alumni survey includes some of the questions from the standardized instruments. From the four instruments, cross-sectional data bases will be developed.

The 1995 CIRP survey was given to 569 first time full-time freshmen at the beginning of the Fall Quarter.

The 1996 CSS survey was given to 465 graduating seniors at the beginning of April. To date there has been a 67% return of the senior survey.

The 1995 American College Teacher survey was given to the College faculty in November with an 87% return.

The Alumni Survey was administered at the end of Winter Quarter to 411 1994 graduates of the College with a 38% return.

The data from these instruments, along with the data from the 1994 CIRP given to 520 1994 first time full-time freshmen at the beginning of the Fall 1994 Quarter, will be used in a number of studies. Year-to-year differences and similarities among freshmen will be studied. The data gathered from the 1996 exiting seniors will be compared to the incoming freshmen of 1994 and 1995. The data gathered from the 1994 alumni will allow comparisons between these groups as well. The faculty data will reflect the values faculty want students to exhibit and that values that faculty believe that they brought to the teaching process.

The 1994 CIRP data and videotaped interviews of those freshmen provide baseline data on that entering class. The development of a longitudinal data base has begun. These same students will be surveyed and interviewed during the Spring Quarter of 1998 when many of them will be graduating. These same individuals as alumni will be surveyed in the Spring 2000.

### *Qualitative Data*

The second part of the assessment project examines the “value-added” dimension of a church-related liberal arts education in a more qualitative way: videotaped interviews of freshmen at each of the twenty participating institutions.

The twenty institutions randomly selected at least twenty incoming freshmen, representative of their 1994 freshmen classes. The videotaped interviews, useful in documenting non-verbal data, was based on a prepared script that incorporated a common set of questions along with institution-specific questions. These freshmen responded to questions and situations which address the following issues:

1. Religious values and commitments;
2. Occupation or career orientations;
3. Political views;

4. Views on gender and gender roles.

The questions focus on areas of cognitive and social development, academic experiences, ethical, moral and spiritual development, and specific local concerns.

These students (approximately 400) interviewed during their freshman and senior years will form the basis of the Coalition-wide study. Each institution will retain one tape of their students' interviews, and one copy will be given to the student after his or her senior interview.

Hard and diskette copies of the interviews were sent to the collaborative project director to be rated. The interviews were based upon the works of Erickson and Marcia that deal with identity formation during which young adults attempt to answer the question, "Who am I?" Marcia identified four identity statuses based on Erickson's theory of "identity crisis." These four are as follows:

1. Identity diffusion: A young adult who is not critically exploring goals and beliefs and does not have commitments;
2. Identity foreclosure: A young adult with firm commitments that are not based on a process of personal, critical exploration, but borrowed beliefs from parents, teachers, pastors, or peers;
3. Identity moratorium: A young adult in the midst of critical exploration of alternative, but with no commitments;
4. Identity achieved: A young adult with commitments to goals and beliefs based upon critical exploration.

The interview data from the FIPSE institutions videotaping were rated by Ron Burwell, Messiah College, and John Van Wicklin, Houghton College. The Cedarville College freshmen were much more foreclosed in their views in comparison to the other Coalition freshmen (100% to 83%), and slightly less in identity moratorium than the Coalition freshmen (13.3% to 15.6%).

Cedarville freshmen were slightly more settled in career directions, though they were less apt to carefully scrutinize their decisions. They seemed to have a clearer sense of future career plans. They also were significantly more committed to defined political values, although not very aware of, or articulate in explaining the reasons for their political convictions. With regard to religions, they were committed to a defined position. They did not, however, evidence careful thought about the reasons behind their convictions.

*Overseeing the Collaborative Project*

The General Education Assessment Committee oversees the administration of Cedarville College's surveys. The Institutional Research Office administered the HERI and Coalition Alumni surveys and conducted the videotaping of the 30

selected freshmen in the first year of the project. The director of the office is the College's contact person with the Coalition.

The General Education Assessment Committee is responsible initially for determining what the quantitative and qualitative data says to Cedarville College. The project surveys fit well with the planned assessment of the College's general education program, and the College has incorporated these projects into the general education assessment phases.

The General Education Assessment Committee will establish assessment criteria for the longitudinal studies as it receives the benchmark data. Evaluating the comparative and the longitudinal studies, along with recommending improvement in student learning, is part of the committee's annual report on general education assessment to the Outcomes Assessment Committee. The committee submits a formative assessment report on the collaborative project, as part of its annual assessment report to the Academic Vice-President. The implementation of changes will be done in conjunction with general education improvements and will follow normal college procedure.

The Outcomes Assessment Committee will consult with the Academic Vice-President as it prepares the annual and the three-year summative reports, which the committee submits to the collaborative project co-directors.

### *Institutional Change*

The third part of the project involves institutional change. Each participating institution completes an annual evaluation report. This report delineates that year's assessment project activities: administering surveys and videotaped interviews; the manner in which results were communicated on campus; any analytical report which was derived, even if only in part, from project activities; and a report on any planning activity which was initiated by or used project data or analyses. The project co-directors, in consultation with the project evaluator, review and respond to these annual reports and suggest improvements for the next year's project.

The project co-directors, in consultation with other Coalition personnel, prepare an annual summary report of activities associated with the project. This report includes a distillation of participating institution reports, as well as information about collaborative activities. In addition to the areas covered in the individual college reports, the project co-directors' report emphasizes internal and external information-sharing or dissemination activities. This report includes an evaluation of the positives and negatives of the project for that year and suggestions for improving the project in the next year.

Each participating institution will also provide an evaluative summary of the project's first three years, funded by FIPSE. In addition to those areas covered in the annual reports, institutions will be asked to answer the following in the report:

1. What did you learn through the project about your institution and your students?
2. Because of what you learned, what actions have you taken or what plans have you made to improve your institution?
3. How will you evaluate how effective those actions will be?

The project co-directors' report on the first three years will provide a summary of the institutional reports, plus a summary of the collaborative effort undertaken during the project. In the report, the co-directors will also address the long-term goals of the project, indicating how these goals could best be achieved. The intent is to continue the project beyond the FIPSE-funded first three years with institutional support and possible additional funding.

The project evaluator will be responsible for evaluating such things as the project's organization and the project director's effectiveness. The evaluator will also rate the proposed research design against the instruments used, including the scripted questions used for the videotape interview and the questions added to the quantitative surveys. He or she will evaluate each institution's research approach and will provide a summative evaluation of the college reports. The project evaluator will review the future recommendation statement concerning the project's lasting impact.

### **General Education Assessment Plan Results**

The results of the CIRP surveys for Cedarville College for both the Fall 1994 and Fall 1995 indicate a similar profile for the entering first-time, full-time freshmen. To summarize: typical Cedarville College students are Caucasian and from traditional families, and desire to have traditional families. They know what college they wanted and why. Finances may be a problem, but the reason for this is not obvious from this data. They are willing and expect to work to help put themselves through college. They are not interested in putting themselves forward. They think of themselves as politically conservative, with strong conservative opinions. They think of themselves as a Christian, but don't always discuss their religion. They have a meaningful relationship with God which contributes to a sense of well-being and affects day to day living.

The assessment focus on all the data will be on the extent to which students have matured intellectually and spiritually as a result of their college experience at Cedarville. What has been the impact of the College on their thinking process and values development?

The “values-added” includes at least the following general categories:

1. biblical;
2. cultural, aesthetic and intellectual;
3. social and political;
4. educational and occupational;
5. gender roles.

### **Formative Recommendations**

Formative recommendations will be made by the General Education Assessment Committee and the Outcomes Assessment Committee in the 1996-97 Academic Year. Some preliminary implications are:

1. Attention must continue to focus on the development of critical thinking skills in order to produce graduates who can articulate and who know why they believe what they do about doctrine, politics and social values, and gender roles:
2. Faculty must be accessible to students not only in the classroom, but also out-of-class for interaction and to mentor students;
3. Learning activities should require more active participation from students where faculty can provide more specific feedback to students;

4. Peer group interaction for learning and values development should be encouraged as part of the student college experience;
4. Students need to be challenged and confronted in their thinking by the world of ideas that includes points of view and values not their own.

## **Support Services Assessment**

Institutional effectiveness means that Cedarville College accomplishes its mission in all its divisions and departments, including its educational support services. Educational support services (or academic support services or student support services) enhance student academic achievement, social development, and personal faith and values development and, along with the academic departments, help to fulfill the College's mission.

### **Educational Support Services**

The following educational support services submitted assessment plans during the 1994-95 academic year to be implemented beginning with the 1995-96 academic year:

1. Academic Assistance Center;
2. Centennial Library;
3. Christian Ministries,
4. Computer Services;
5. Continuing Education;
6. Honors Program;
7. Student Services;
8. Summer School.

### **Assessment Plan Activities**

Each support service developed its assessment program through the following activities:

1. Identifying its mission and objectives and linking them to the College's mission statement and objectives;
2. Selecting one or two intended outcomes/objectives to be measured;

3. Selecting at least one measurement instrument and assessment criteria per intended outcome to be assessed;
4. Determining and requesting any needed resources to implement the plan;
5. Establishing the data collecting analyses and evaluation timetable;
6. Establishing a procedure to improve service according to assessment results and a procedure to assess the assessment plan.

### **Overseeing Support Services Assessment**

Each support service selected at least one of its mission objectives to be assessed during the first year of assessment implementation. The reporting format was the same as that for the academic departments and general education. The assessment measures, criteria, and results were identified and explained.

The Outcomes Assessment Committee reviewed each service report and responded, with recommendations, in the 1996 Fall Quarter. The Committee sent an assessment progress report to the appropriate department head of each educational support service. The Committee also sent a summary report on these areas to the Academic Vice-President.

### **Assessment Data**

Since the outcomes assessment program at Cedarville College was only initiated in the fall of 1995, most of the data analysis is incomplete as of this writing. The previous discussion has provided some of the summative and qualitative data, but the bulk of the results will not be completed until spring of 1997. Copies of this data will be available in the Consultant-Evaluator Resource Room.

### **Strengths and Challenges**

#### **Strengths**

##### *Solid Assessment Model*

The initial assessment plan submitted to the NCA by Cedarville College was praised as a model for other institutions.

##### *Support of Administration*

Administrative support for assessment initiatives has been very favorable in academic, support services, and general education areas. The Academic Vice President continues to stress the importance of assessment.

##### *Participation in the Coalition Study*

The cooperative study undertaken by the CCCU and described in the previous sections provides a significant opportunity for the College to determine the success of many of its assessment objectives.

### **Challenges**

#### *Maintaining Interest*

Perhaps the biggest struggle faced by the institution in the area of assessment is the challenge of keeping the issue in the forefront. Some faculty look at assessment as a one-time job to complete when it should be viewed as an on-going opportunity for improvement of the institution and the instruction the institution offers.

#### *Amount of Paperwork*

There is a significant increase in the amount of paperwork required to maintain an assessment program. The most important concern in this area is timeliness. Keeping the records current is a time-consuming activity.

#### *Achieving Realistic Standards for Objectives*

It is difficult to establish standards for objective outcomes that actually reflect true accomplishment. In some instances, the objective standard may be set too low, resulting in apparent total success in that area. Educating departments in setting valid objective standards will always present a challenge.

#### *Implementing Changes*

The wheels of academe sometimes grind at a slow pace. Implementing the changes indicated by assessment can, potentially, be a challenge. At this point, the administrative support for this initiative has provided significant impetus for change.

### **Summary**

Cedarville College has a well-planned program for assessment of educational outcomes. The program is in place and functioning well. Collection of assessment data is continuing and results should be available in the spring of 1997. The College is also very involved in external functions and is providing benefits to the local community and the Miami Valley region. These evidences support the claim that Cedarville College meets the requirements of the NCA Criterion Three.