EXECUTIVE SUMMARY

Northern Virginia Community College (NVCC) continued to assess student learning and satisfaction in multiple ways. Faculty and administrators use assessment results to improve the curriculum, instruction, and support services.

General Education

General education discipline evaluation, the annual Graduate Survey, and studies of program and discipline goals provided detailed assessments of general education at NVCC. This report includes results of the completed Math, English, English as a Second Language, Speech and Drama, History, Psychology, Sociology, Foreign Language, and Physical Education discipline evaluations, and actions planned or taken in response to them. Preliminary results of the Biology, Chemistry, Geology, Natural and Applied Science, and Physics discipline evaluations are also included.

Responses to several Graduate Survey items—using computers, understanding math, writing effectively, speaking effectively, cooperating with others, leadership skills, appreciating other points of view, international awareness, and awareness of many cultures—indicate that graduates generally believe their NVCC education helped them progress in these areas of general education.

Program and discipline goals were searched to locate support for two general education areas: communication skills and critical thinking skills. Most programs and disciplines included goals or objectives related to communication. Although few programs or disciplines specifically used the term "critical thinking," most did list "thinking," "problem-solving," "analysis," "evaluation," and/or "apply knowledge" as goals or objectives.
Most graduates did achieve their goal; most graduates of occupational programs were employed and most graduates of transfer programs were continuing their education six months after graduation and believed that NVCC had prepared them academically for their bachelor's program. Graduate Survey responses were analyzed to assess graduates’ attainment of their primary goal for attending NVCC.

This report includes previously unreported program evaluation findings and actions taken or planned in response for the Administration of Justice/Security Administration, Air Conditioning and Refrigeration, Business Management, Horticulture Technology, Human Services, Information Systems Technology, Interior Design, Nursing, and Recreation and Parks programs. Certification exam pass rates, included for Accounting, Air Conditioning and Refrigeration, Fire Science, Emergency Medical Services Technology, Health Information Technology, Medical Laboratory Technology, Nursing, Physical Therapist Assistant, Radiography, Respiratory Therapy, and Veterinary Technology, indicated that NVCC students were well prepared for these exams.

**Off-Campus Instruction**

Off-campus instruction was reviewed as part of program and discipline evaluations. Although some problems with audio-visual services or with the facilities themselves have been reported, there have been no major difficulties with instruction at these sites.

**Distance Learning**

Students' achievements using distance learning and students' satisfaction with this method of delivery were assessed college-wide and as part of program and discipline evaluations. Graduates who used the Extended Learning Institute (ELI) were very satisfied with their experience. Results of Spring 1997 student surveys in Music and Physics were mixed. Assessments of students taking courses for the Engineering A.S. degree offered through ELI indicated that students performed at levels similar to those of on-campus students. Faculty have made several changes in instruction in response to student surveys and focus groups and Chemistry and Physics course evaluations by outside evaluators.

**Dual-Credit Instruction**

NVCC has no dual-credit agreements with local school districts. High school students may take NVCC courses as long as they have permission, but these are courses for college credit only and are taught by NVCC faculty.

**Transfer Information**

Results of the Graduate Survey indicate that graduates felt well prepared for their continuing studies. A study of minority students' success upon transfer showed that NVCC students of all races have been successful at the four-year institutions. Faculty continued to use Graduate Survey and transfer data specific to their students to improve their programs. In addition, counselors began to use transfer data summaries to assist with student advising. The Articulation Committee considered ways to use transfer information to assist with the articulation process.

**Relation of Assessment to Planning, Evaluation and Resource Allocation**

Faculty and administrators considered assessment information as they made planning, evaluation and resource allocation decisions. Results were used for productivity reviews by NVCC and SCHEV, Planning Committee activities, and retention studies. Every program and discipline evaluation included assessment results and recommendations for improvements based on those results. Especially at the division level, resource allocation was influenced by assessment data.

**Assessment Schedule for 1997 - 1999**

NVCC has plans for each facet of assessment during the next biennium.

**Relation of Assessment to VCCS Restructuring Plan**
NVCC assessment data supports each of the goals listed in the VCCS’s draft Strategic Planning for 1998-2000. Assessment information is especially supportive of the goals related to retention and revitalizing the curriculum.

Five Most Important Changes

According to the 1996-97 and 1997-98 Academic Assessment Committees, the five most important assessment-related changes made at NVCC were: improved curriculum and discipline management, increased faculty investment in program and discipline concepts, improved placement and basic skills assessment policies and procedures, increased effectiveness in addressing articulation issues, and improved resource allocation.

TABLE OF CONTENTS

EXECUTIVE SUMMARY... i

ASSESSMENT OF GENERAL EDUCATION. 1

Goal: Students will understand the impact of science and technology and will develop skills needed to use modern technology. 1

Goal: Students will understand and be able to interpret and manipulate numerical data. 2

Goal: Students will demonstrate college-level communication skills. 2

Goal: Students will demonstrate critical thinking skills. 6

Goal: Students will display general knowledge and historical consciousness. 6

Goal: Students will develop skills to enhance life-long learning. 11

Goal: Students will enhance their social and educational values. 12

Goal: Students will recognize wellness as being a dynamic process in developing a healthy lifestyle. 13

ASSESSMENT OF THE MAJORS. . 14

Goal: Graduates will meet their goals for attending NVCC. 14

Goal: Students will be prepared for transfer or employment and/or will upgrade their work skills 15

Administration of Justice and Security Administration 15

Air Conditioning & Refrigeration 15

Business Management 15

Horticulture Technology 16

Human Services 17

Information Systems Technology 18
Interior Design 18
Nursing 19
Recreation & Parks 19
Goal: Students will pass certification/licensure exams 20
Accounting 20
Air Conditioning & Refrigeration 20
Fire Science 20
Emergency Medical Services Technology 20
Health Information Technology 21
Medical Laboratory Technology 21
Nursing 21
Physical Therapist Assistant 21
Radiography 21
Real Estate 21
Respiratory Therapy 21
Veterinary Technology 22

ASSESSMENT OF OFF-CAMPUS INSTRUCTION.... 23
Goal: Off-campus instruction will be of quality similar to on-campus instruction 23

ASSESSMENT OF DISTANCE LEARNING.. 23
Goal: Graduates and students will be satisfied with their ELI experiences 24
Goal: Students will be able to complete an Engineering A.S. using distance education 24

ASSESSMENT OF DUAL-CREDIT INSTRUCTION.... 25

USE OF TRANSFER INFORMATION TO IMPROVE PROGRAMS....... 26
Goal: NVCC graduates will be well prepared for transfer to four-year institutions 26
Goal: Students with at least twelve NVCC credits will be successful in subsequent courses upon transfer 26
RELATION OF ASSESSMENT TO PLANNING, EVALUATION AND RESOURCE ALLOCATION...... 28

Planning 28

Evaluation 28

Resource allocation 28

ASSESSMENT SCHEDULE FOR 97/98 - 98/99...... 29

1997-98 29

1998-99 29

RELATION OF ASSESSMENT TO VCCS RESTRUCTURING PLAN...... 30

Goal: To increase student recruitment and retention. 30

Goal: To improve financial support for the instructional mission of the VCCS. 30

Goal: To revitalize the curriculum to better meet the changing and emerging needs of the workplace. 30

Goal: To facilitate recognition in state policy of the role of the VCCS in workforce development. 30

Goal: To continually update and make progress on the long-range plan for technology implementation. 31

Goal: To continue the professional revitalization of faculty and staff. 31

Goal: To increase the diversity of our faculty, staff and students. 31

Goal: To improve the physical facilities of the VCCS. 31

FIVE MOST IMPORTANT CHANGES.. 32

APPENDICES....... 33

APPENDIX A: Graduate Ratings of General Education Preparation 34

APPENDIX B: English Discipline Evaluation Action Plan 35

APPENDIX C: Programs and Disciplines Including Communication Skills in Their Goals & Objectives 45

APPENDIX D: Programs and Disciplines Including Critical Thinking in Their Goals & Objectives 46

APPENDIX E: Common Themes in Social Science Evaluation Reports and Action Plans 47

APPENDIX F: Graduates - Primary Goals and Goal Attainment 57

APPENDIX G: Graduates - Employment and Preparation for Employment 58
ASSESSMENT OF GENERAL EDUCATION

General education discipline evaluation and the annual Graduate Survey are the mainstays of general education assessment at NVCC. The general education discipline evaluation process parallels the college’s program evaluation process. Discipline evaluation reports typically are over 100 pages long when appendices are included, so only the most important highlights are included here; one evaluation action plan is included in the appendix as a sample. The Graduate Survey is mailed to all graduates approximately six months after graduation; usually two follow-up mailings are done to improve the response rate. In addition to these two assessments, program and discipline goals were reviewed to determine support for two general education areas: communication skills and critical thinking skills.

In 1996-97, NVCC’s general education assessment focused on assessment of student outcomes in the sciences and in math.

Goal: Students will understand the impact of science and technology and will develop skills needed to use modern technology.

Evaluation of the science disciplines and of the Information Systems Technology program are major parts of the assessment of student outcomes related to science and technology. One Graduate Survey item assesses student satisfaction with their education in using computers, but there are no items related to science education.

<table>
<thead>
<tr>
<th>Evaluation Method</th>
<th>Science and Technology Findings</th>
<th>Actions Taken or Planned</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evaluation of the Biology, Chemistry, Geology, NAS, and Physics disciplines, 1996-98, and the Science program, 1997-98</td>
<td>These are just beginning, so performance data are preliminary or have not been collected yet.</td>
<td>None indicated yet.</td>
</tr>
<tr>
<td>1. Surveys show that students were impressed with their instructors, often stating that because of their NVCC instructors they enjoyed science for the first time, or even were considering a career in science.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Many students commented that the laboratory facilities and equipment were in poor condition, detrimental to student learning.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Evaluation of the IST program, 1994-96</td>
<td>See Assessment of the Majors for results of this second evaluation of the program (first was 1988)</td>
<td>See Assessment of the Majors</td>
</tr>
<tr>
<td>Analysis of 1989-93 Graduate Survey responses to &quot;Using computers&quot;</td>
<td>The percentage of graduates choosing &quot;no basis to judge [their education in computer use]&quot; declined considerably—from 25% in 1989 to 13% in 1993. Still, the percentage of students reporting &quot;below average&quot; or &quot;poor&quot; preparation in computer use was higher than for most other general education areas.</td>
<td>The VCCS Technology Initiative is promoting the incorporation of computer use into all programs and disciplines.</td>
</tr>
<tr>
<td></td>
<td>See Appendix A for details.</td>
<td>In 1996-97, the college awarded curriculum development grants to faculty who revised courses to incorporate instructional technology.</td>
</tr>
</tbody>
</table>

In 1996-97, the college awarded curriculum development grants to faculty who revised courses to incorporate instructional technology.
Goal: Students will understand and be able to interpret and manipulate numerical data.

Math faculty conducted a thorough evaluation of their discipline and of the Mathematics specialization of the Science A.S. degree. The Graduate Survey provides additional evidence that NVCC students are satisfied with their math education.

<table>
<thead>
<tr>
<th>Evaluation Method</th>
<th>Numerical Data Findings</th>
<th>Actions Taken or Planned</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evaluation of the Math discipline and the Mathematics specialization of the Science A.S.</td>
<td>1. Math goals support the college Mission, the NVCC General Education Goals, needs of non-math faculty, and needs of math students.</td>
<td>1. No action indicated.</td>
</tr>
<tr>
<td>1995-97</td>
<td>2. Performance assessments conducted in several math courses indicated that students were achieving the objectives of those courses; a few areas of weakness were observed, most notably in estimation, reasoning through applied problems, and communicating mathematical processes.</td>
<td>2. Weaknesses illustrated by the performance assessments and by the non-math faculty survey will be addressed by changing course content and changing the emphasis given to some topics.</td>
</tr>
<tr>
<td></td>
<td>3. Survey respondents were very satisfied with their math instruction.</td>
<td>3. No action indicated.</td>
</tr>
<tr>
<td></td>
<td>4. Placement continues to require fine-tuning.</td>
<td>4. Faculty working groups continue to wrestle with placement issues.</td>
</tr>
<tr>
<td></td>
<td>5. The use of technology in math courses was widely debated among math faculty and among non-math faculty.</td>
<td>5. As faculty attend professional development activities, they continue to learn about ways in which technology is useful and ways in which it can be detrimental to students learning math.</td>
</tr>
</tbody>
</table>

Analysis of 1989-93 Graduate Survey responses to “Understanding math”

The percentage of graduates reporting “no basis to judge” their preparation in math declined from 19% in 1989 to 12% in 1993. There has been a corresponding increase in the percentage reporting “average” preparation. Ratings of this general education subject vary widely from program to program. Faculty in individual programs evaluate the acceptability of the graduates’ satisfaction with their math preparation. When faculty decide that ratings are too low, they incorporate more math applications into their courses or change the math course required for their program.

Goal: Students will demonstrate college-level communication skills.

Three general education disciplines related to communication—English, English as a Second Language, and Speech and Drama—were evaluated during the same period. Two items on the Graduate Survey pertain to communication.

<table>
<thead>
<tr>
<th>Evaluation Method</th>
<th>Communication Skills Findings</th>
<th>Actions Taken or Planned</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evaluation of the English discipline,</td>
<td>1. Using a grid to assess overall attainment of 12 criteria, faculty found that most literature students’ portfolios contained evidence that students met most of the criteria; the subcommittee judged all portfolios as evidence that students had at least minimally met the goals for literature.</td>
<td>1. Literature faculty will continue to assess student portfolios. One literature goal is being revised to improve clarity.</td>
</tr>
<tr>
<td>1993 - 95</td>
<td>2. The Administrative Council voted to reduce the time during which students may add classes from two</td>
<td>2. The Administrative Council voted to reduce the time during which students may add classes from two</td>
</tr>
</tbody>
</table>
2. Comparison of the ENG 111 and 112 grades of students who registered on time with those of students who registered late indicated that on-time registrants performed significantly better than late registrants.

3. Comparison of the ENG 111 grades of students who took developmental ENG courses in non-traditional formats with those who took developmental ENG courses in traditional formats yielded no discernable differences.

4. Students responding to a survey of students in ENG courses at all levels from developmental English through literature surveys rated all survey items pertaining to reading, writing and critical thinking very highly.

5. A review of all NVCC curricula indicated that some programs did not appear to include the most appropriate ENG course.

6. English placement worked fairly well, although faculty were still adjusting the cutoff scores on the COMPASS placement test.

7. Students do not always take ENG 111 before 112, but should.


1. Results of the Personal Report of Communication Apprehension showed that 21% of NVCC students entered SPD 110 with a significant fear of speaking, but by semester's end only 13% experienced fear, usually at a decreased level. Student survey responses confirmed this.

2. Results of the Communication Competency Self Assessment showed that SPD students believe they attain levels of communication competence comparable to a national norm on a similar instrument. Further, results sorted to show on-campus versus ELI students showed that ELI students evaluated their competence in 19 areas at levels similar to (and sometimes higher than) competence levels reported by on-campus students.

3. No action needed but faculty will study again to increase the data base.

4. No action indicated.

5. English faculty will review the ENG 131 course content summary, then offer to work with technical faculty to select the most appropriate ENG course for each program’s needs.

6. Each semester faculty review success data to decide whether cutoff scores are optimal. If not, cutoff scores are adjusted.

7. Course descriptions will be revised to indicate that ENG 111 is a prerequisite for ENG 112.


1-4. No action indicated.

5. SPD faculty updated all SPD course content summaries and are incorporating instructional technology into many courses. A new course, Multimedia Presentations, was developed. Faculty were satisfied with the graduates’ evaluation of their math skills.

6. Some SPD courses transfer to most Virginia public institutions. NVCC’s Articulation Committee monitors the transferability of SPD courses. Counselors help students select those courses which will transfer to their institution of choice.
3. In a self-assessment of skills gained from SPD 110, 41% of the students reported increased self confidence, 25% reported they learned to "adapt ideas to people and people to ideas," 14% gained verbal fluency, and 14% reported improved listening competence. These data were supported by results of the student survey.

4. Speech Communication Graduate Survey respondents evaluated their preparation in writing, speaking, cooperating with others, leadership skills, and awareness of many cultures far above the college mean.

5. Speech Communication Graduate Survey respondents evaluated their preparation in understanding math and in using computers below the college mean.

6. Students expressed a need to have speech courses easily transferred to senior institutions.

---

Evaluation of the English as a Second Language (ESL) discipline, 1993 - 96

1. Asked to rate their ability to read and understand newspapers and magazines, 52% of the student survey respondents chose "good" or "excellent." Over 62% of the students rated their ability to understand people on TV and radio as "good" or "excellent." 87% said their ability to understand their teachers and class assignments was "good" or "excellent."

2. 88% of the faculty from other disciplines who responded to a survey said they understood and communicated with non-native English speakers "very well" or "well with occasional difficulty." 19% said their non-native students had "frequent difficulty" understanding their lectures and 24% indicated these students frequently had difficulty understanding oral instructions.

3. A tracking study showed that of those students who successfully completed their first ESL course, 41-48% took ENG 111 within two years; of that cohort, 74-92% completed ENG 111 with an A, B, or C. The mean GPA of successful ESL students two years after taking their first ESL course was above 2.8 for each semester's cohort.

---

Analysis of 1989-93 Graduate Survey responses to "Writing effectively"

As the percentage of graduates choosing "excellent" declined from 20% to 17%, the percentage choosing "above average" increased from 35% to 39%. Very few chose "good" or "below average." NVCC has increased the amount of writing required in College Composition.

1. No action indicated.

2. Beginning Fall 97, ESL faculty are offering several new courses which include increased emphasis on pronunciation, grammar, and understanding oral instructions.

3. Faculty are pleased with these results, but are beginning to study the success of students who enter the ESL program at each of the different levels.
"below average," "poor," or "no basis to judge."

The percentage of graduates choosing "no basis to judge" declined from 12% to 7% and the percentage choosing "above average" rose from 31% to 39%; the percentage choosing other responses remained approximately the same.

As faculty reviewed their program or discipline goals, they added oral communication requirements to courses in many fields.

Most programs and disciplines included goals or objectives related to communication. The terms "communication" and/or "writing" appeared commonly in lists of objectives. For details, see Appendix C.

As they review their goals and objectives, faculty in all programs and disciplines are strongly encouraged to include objectives related to communication.

Goal: Students will demonstrate critical thinking skills.

Soon after making its commitment to assessment, NVCC assessed critical thinking skills college-wide using the Watson-Glaser Critical Thinking Appraisal. Since that time, faculty in many disciplines have argued that the Watson-Glaser did not adequately measure critical thinking in their field. Thus, thinking skills are assessed in individual programs and disciplines; no college-wide measure is used at this time.

Goal: Students will display general knowledge and historical consciousness.

Evaluation of the social sciences at NVCC--economics, geography, history, political science, psychology and sociology--is a large part of the college's assessment of this general education goal. A summary of the findings of all social science evaluations and of recommended changes is reported in Appendix E.

The foreign languages also provide much of the general knowledge offered to NVCC students. Their evaluation is a second important part of the college's assessment of this goal.
satisfied with their courses.

3. Students' scores on the NVCC Test of General Education's history questions showed that students are learning these aspects of history at a satisfactory level. However, several faculty did not feel that these questions were good indicators of student success in history.

4. A need for updated maps and LRC materials was documented.

5. Faculty indicated that many students in HIS survey courses lack the English skills needed for success in these courses.

6. A need to clarify some articulation issues was demonstrated.

Evaluation of the Psychology discipline, 1992 - 95

1. Over 38% of the on-campus students reported excellent progress in recognizing ethnic, cultural, social and sexual diversity as well as being able to use psychology in their interactions with others. Over 90% of the campus respondents reported average or above average progress in distinguishing facts from inferences, distinguishing causation from correlation, recognizing sample requirements from generalizability, identifying the various careers in psychology, and in several other psychology goal areas.

2. Student achievement in PSY 201/202 still must be measured.

3. Faculty noted a need to improve communication with occupational-technical program heads to assure that programs include the PSY courses most appropriate for their needs.

4. Faculty expressed a need to improve articulation of PSY courses. 43% of the on-campus student survey respondents indicated they wanted to transfer their PSY courses to a 4-year institution.

5. LRC collections in psychology were

faculty are interested in studying the effect of class size on student outcomes.

3. Faculty are comparing student outcomes in HIS 277 with 4-year students' outcomes in a similar course and are investigating the use of AP exams for assessment.

4. Maps and LRC materials for HIS have been updated considerably.

5. The majority of HIS faculty include a note in their syllabi recommending that students be able to pass ENG 111 before taking a HIS survey course.

6. Articulation issues were resolved.

1. No action indicated except to compare on-campus with ELI student outcomes.

2. PSY faculty developed an evaluation instrument for PSY 201 and 202 which they plan to pilot in Fall 97.

3. The chair of the Psychology Faculty Cluster sent letters to all OT program heads suggesting coordination with PSY faculty and offering assistance in course selection.

4. Two Psychology specializations, one of General Studies and one of Liberal Arts, were developed which will transfer to GMU.

5. At least one campus conducted a detailed evaluation of its LRC collection and summarized the age, use and quality of psychology materials. Together, librarian and psychology faculty decided how to improve the collection. The LRC made psychology materials a priority in the 96-97 materials budget.

For details, see Appendix E.
Evaluation of the Sociology discipline, 1992 - 94

1. At least 92% of student survey respondents rated their progress as average to excellent in all objectives listed, including developing skills in self-expression, learning fundamental principles, generalizations or theories, developing self-reliance and self-discipline, and understanding the social forces and institutions that influence my life. However, faculty still need to assess student achievement in SOC courses.

2. SOC 201 grade distributions were similar to but slightly higher than those for HIS 121 and PSY 201.

3. 77% of on-campus SOC 201 students earned grades of A-C while over 55% of ELI= s SOC 201 students were similarly successful.

4. Faculty described the need to monitor curricular changes espoused by the ASA and transfer institutions in order to promote transfer of SOC courses.

5. Faculty felt that SOC courses should include more topics which support the general education goal for science and technology.

6. The SOC 201-202 sequence transfers to some Virginia four-year institutions as one semester of required SOC and one semester of SOC elective.

Review of the goals and objectives of the six social sciences to determine support for the NVCC General Education Goals, 1995

All six disciplines at least mention communication skills, critical thinking skills, use of numerical data, and social and educational values. Naturally, all give much attention to general knowledge and historical consciousness. Only three listed objectives that clearly supported life-long learning. Five briefly mentioned science and technology. Only two objectives, both in PSY, supported the Wellness general education goal.

The social sciences are disciplines, not programs, so any given social science cannot be expected to support all general education goals. This study of their goals and objectives indicates that the social sciences do provide support for a wide range of general education goals.

Evaluation of the foreign languages (FL): CHI, FRE, GER, GRE, ITA, JPN, RUS, SPA; 1994 - 96

1. Students who took FL courses at NVCC, then subsequent FL courses at transfer institutions performed well at the four-year colleges.

1. A comprehensive discipline exam for SOC 201 was developed. No plans for assessing achievements in other SOC courses have been forwarded to the Curriculum Committee.

2. No action indicated.

3. ELI faculty in all disciplines are working to improve student success.

4. Faculty periodically compare ASA recommendations with NVCC practice.

5. Faculty plan to incorporate science and technology into SOC courses.

6. The Sociology Faculty Cluster appointed an articulation representative.

For details, see Appendix E.
2. Faculty determined that the most promising way to assess students' oral skills in FL courses was by using the Simulated Oral Proficiency Interview (SOPI).

3. Student survey respondents evaluated their FL achievements very highly: 93% thought they had made great or moderate progress in their ability to understand the spoken language and the written language; 83% rated their progress in speaking and 91% rated their progress in writing the language as great or moderate; 88% evaluated their progress in knowledge of the culture as great or moderate.

4. FL grade distributions generally mirrored college-wide distributions.

Analysis of 1989-93 Graduate Survey responses to "Awareness of many cultures" More graduates (18-23%) rated their preparation in this area as excellent than in most other general education areas. In 1989, 17% chose "no basis to judge;" by 1993 this figure had decreased to 11%.

Analysis of 1989-93 Graduate Survey responses to "International awareness" Of all general education areas, graduates gave the lowest overall ratings to "international awareness;" less than a third of the graduates evaluated their education in this area as "excellent" or "above average."

Goal: Students will develop skills to enhance life-long learning.

Students' commitment to life-long learning and their skills in pursuing it are assessed via student surveys given as part of program and discipline evaluations and via the Graduate Survey.

<table>
<thead>
<tr>
<th>Evaluation Method</th>
<th>Findings</th>
<th>Actions Taken or Planned</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student surveys conducted as part of program and discipline evaluations ask about &quot;understanding the need to continue to update your education in this field&quot; and/or about joining professional organizations.</td>
<td>Results vary, of course, but generally students responded very positively that this is important.</td>
<td>Usually none are needed.</td>
</tr>
<tr>
<td>Analysis of 1989-93 Graduate Survey responses to &quot;What was your primary goal?&quot; and to &quot;What is your current educational status?&quot;</td>
<td>1. The percentage of A.S. and A.A. graduates responding whose primary goal was to transfer increased from 80% in 1989 to 88% in 1993 (Appendix F). The percentage of</td>
<td>1-3. For the past three or four years, the college has put a tremendous amount of effort into developing articulation agreements and program-</td>
</tr>
</tbody>
</table>
A.A.S. and certificate graduates whose primary goal was to transfer rose from 26% in 1989 to 34% in 1993.

2. The percentage of graduates of A.A. and A.S. programs enrolled in higher education within six months of graduating from NVCC hovered around 70%.

3. The percentage of graduates of occupational/technical programs enrolled in higher education rose from 31% in 1989 to 39% in 1992 and 1993.

Goal: Students will enhance their social and educational values.

Initially, NVCC assessed enhancement of students social and educational values by administering a semantic differential inventory to students in different stages of their education. Next, focus groups were conducted to assess other aspects of this goal. More recently, counselors, who teach STD courses, evaluated student outcomes in STD courses. The Graduate Survey has included items in this area for several years.

<table>
<thead>
<tr>
<th>Evaluation Method</th>
<th>Social and Educational Values</th>
<th>Actions Taken or Planned</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evaluation of Student Development courses, 1993 - 96</td>
<td>Findings</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1. Student survey responses indicated the majority of students clearly understood course objectives, thought they obtained all STD objectives, and had more positive feelings about NVCC as a result of taking an STD course.</td>
<td>1. No action needed.</td>
</tr>
<tr>
<td></td>
<td>2. Asked if STD 100 should remain a required course for our associate degree programs, 44% of counselors responding to a survey disagreed or had no opinion. 36% said it was difficult to recommend STD 100 to students and 56% felt the STD 100 objectives could be reached through non-credit means.</td>
<td>2 &amp; 3. The evaluation committee recommended asking the VCCS to work toward getting transfer credit for STD courses, assuming we must continue to require STD courses. Counselors will communicate more clearly the purposes of STD courses to teaching faculty.</td>
</tr>
<tr>
<td></td>
<td>3. Asked if STD 100 is fulfilling its purpose, most teaching faculty responding to a survey disagreed (25%), strongly disagreed (9%) or had no basis to judge (34%). Asked if it should be required for associate degrees, 45% said no and 18% had no opinion.</td>
<td>4. The Deans Working Group will coordinate a study of NVCC graduates to determine the importance of STD to their academic success.</td>
</tr>
<tr>
<td></td>
<td>4. In an informal study at one campus, students consistently said they had greater confidence in their ability to make career and life decisions after taking an STD course in career and life planning. Graduates rated this highly: 21-26% evaluated their preparation as &quot;excellent&quot; and another 35-37% said their preparation was &quot;above average&quot; in this area. Very few students (5-8%) indicated &quot;no basis to judge.&quot;</td>
<td>No action indicated.</td>
</tr>
<tr>
<td>Analysis of 1989-93 Graduate Survey responses to &quot;Cooperating with others&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Analysis of 1989-93 Graduate Survey responses to &quot;Appreciating&quot;</td>
<td></td>
<td>No action indicated.</td>
</tr>
</tbody>
</table>
Goal: Students will recognize wellness as being a dynamic process in developing a healthy lifestyle.

Of all the NVCC General Education Goals, this is the least assessed.

<table>
<thead>
<tr>
<th>Evaluation Method</th>
<th>Wellness Findings</th>
<th>Actions Taken or Planned</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evaluation of the Physical Education (PED) discipline and the Fitness Instructor Career Studies Certificate, 1993 - 96</td>
<td>1. Student outcomes had not been assessed for the PED discipline, although they had been assessed in individual courses.</td>
<td>1. A PED faculty member obtained an assessment mini-grant and developed an assessment instrument that PED faculty have agreed to use.</td>
</tr>
<tr>
<td></td>
<td>2. Student outcomes had not been assessed for the Fitness Instructor program.</td>
<td>2. Another PED faculty member obtained an assessment mini-grant and developed instruments to assess the skills and knowledge that Fitness Instructor graduates should demonstrate. The written exam was piloted in Spring 1997.</td>
</tr>
<tr>
<td></td>
<td>3. 55% of students responding to the student survey reported they had no basis to judge computer exercises.</td>
<td>3. Faculty will incorporate more computer exercises into PED courses and are receiving professional development in using instructional technology.</td>
</tr>
<tr>
<td></td>
<td>4. The PED grade distribution differed noticeably from the college-wide grade distribution, with generally higher grades.</td>
<td>4. Faculty will continue to monitor grade distributions and review grading practices.</td>
</tr>
<tr>
<td></td>
<td>5. Students did not always take PED 116 before taking activity courses or at the beginning of the Fitness Instructor program.</td>
<td>5. PED faculty work with counselors to encourage students to take PED 116 before activity courses, and, if they are placed in the Fitness Program, to take PED 116 at the beginning of the program.</td>
</tr>
<tr>
<td></td>
<td>6. PED courses did not transfer as well as faculty would like.</td>
<td>6. Faculty are working with faculty at other colleges to improve the transfer of PED courses.</td>
</tr>
</tbody>
</table>

**ASSESSMENT OF THE MAJORS**

At NVCC, the majors are assessed individually and as a group. Results of the Graduate Survey are examined for transfer and for occupational/technical programs. Program evaluation provides detailed information on each program's strengths and weaknesses, and the actions needed to improve them. A few programs also have access to the results of certification or

Analysis of 1989-93 Graduate Survey responses to "Leadership skills"

Graduates evaluated their development of leadership skills highly, but not as highly as they rated "cooperating with others" or "appreciating other points of view." Still, at least 45% of the graduates indicated their preparation in leadership skills was "excellent" or "above average." 

No action indicated.

other points of view" this general education area. Very few students (5-6%) indicated they had "no basis to judge" preparation in this area.

55% of students responding to the student survey reported they had no basis to judge computer exercises.

The written exam was piloted in Spring 1997.

Faculty will incorporate more computer exercises into PED courses and are receiving professional development in using instructional technology.

Faculty will continue to monitor grade distributions and review grading practices.

Faculty are working with faculty at other colleges to improve the transfer of PED courses.
licensure exams.

Goal: Graduates will meet their goals for attending NVCC.

The college assesses students' attainment of their primary goal for attending NVCC.

<table>
<thead>
<tr>
<th>Evaluation Method</th>
<th>Finding</th>
<th>Actions Taken or Planned</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Analysis of 1989-93 Graduate Survey responses to &quot;Was your [primary] goal achieved?&quot;</strong></td>
<td>Except for 1991 graduates of occupational programs, over the five-year period, 90% or more of the responding graduates indicated that they attained their primary goal.</td>
<td>We are pleased with this high degree of satisfaction. However, responses by graduates of individual programs are monitored. No action indicated.</td>
</tr>
<tr>
<td><strong>Analysis of 1989-93 Graduate Survey responses to &quot;What was your primary goal?&quot;</strong></td>
<td>37% - 44% of graduates of A.A.S., A.A.A., and certificate programs stated that occupational training was their primary goal; this percentage varied from year to year with a slight downward trend from 1991 to 1993. The percentage choosing &quot;occupational training&quot; and &quot;improve job skills&quot; together varied from 62% in 1991 to 58% in 1993. As the percentage of occupational program graduates hoping to transfer increased, the percentage of graduates attending for personal enrichment decreased.</td>
<td>No action indicated.</td>
</tr>
<tr>
<td><strong>Analysis of 1989-93 Graduate Survey responses to employment questions</strong></td>
<td>The percentage of graduates of occupational programs employed full-time decreased, but the percentage employed part-time increased (Appendix G). The percentage of graduates of occupational programs employed in positions directly related to their NVCC program rose slightly from 1990 through 1993. Each year, approximately 70% of the graduates of transfer programs were enrolled in higher education six months after graduation.</td>
<td>As noted earlier, much effort has been expended on improving articulation and transfer opportunities for NVCC students.</td>
</tr>
<tr>
<td><strong>Analysis of 1996 SCHEV-mandated questions on the Graduate Survey</strong></td>
<td>1. 82% of the respondents were employed; only 4% were actively seeking employment. 61% of those employed said their job was at least somewhat related to their NVCC degree program. 2. 59.5% of the respondents were currently pursuing a bachelors degree or had completed one. 87% said their bachelors program was related to their NVCC program at least somewhat. 97% of the respondents said they were at least somewhat academically prepared for their bachelor's program.</td>
<td>1. No action indicated. 2. No action indicated.</td>
</tr>
</tbody>
</table>

Goal: Students will be prepared for transfer or employment and/or will upgrade their work skills

Faculty include an action plan at the end of each evaluation report. Implementation is reported to and critiqued by the Curriculum Committee at least twice, beginning approximately one year after the Curriculum Committee approves the evaluation report. All occupational-technical program evaluations include student, graduate, and employer survey results. Over the past few years, programs have improved their use of direct assessments of student achievement. Only findings and
actions not reported previously are included here due to space limitations.

<table>
<thead>
<tr>
<th>Evaluation Method</th>
<th>Findings</th>
<th>Actions Taken or Planned</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Goal/objective:</strong> Graduates will be prepared to transfer into advanced degree programs of four-year colleges and universities.</td>
<td>Many students wanted to transfer to a four-year institution.</td>
<td>An ADJ faculty member is active on the Articulation Committee and works for GMU's related program. Faculty are considering a request by Univ of Baltimore to develop an articulation agreement with their Criminology program.</td>
</tr>
<tr>
<td>Student and graduate surveys</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Goal/objective:</strong> Graduates will have the entry level knowledge, skills, and attitudes to enter any of the many varied fields in the administration of justice.</td>
<td>91% of ADJ A.A.S. graduates and 94% of Security Administration A.A.S. graduates were employed.</td>
<td>No action indicated.</td>
</tr>
<tr>
<td>Graduate Survey</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Goal/objective:</strong> Graduates of the A.A.S. degree will be prepared for employment in entry-level positions in the HVAC industry.</td>
<td>Students needed to be able to successfully repair high efficiency furnaces.</td>
<td>The curriculum was revised to do increase content in this area. The program has more furnaces now for the labs.</td>
</tr>
<tr>
<td>Employer survey</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Goal/objective:</strong> Students will demonstrate conceptual, interpersonal, and technical skills expected of managers.</td>
<td>Graduates and current students did not rate their preparation in A using computers very highly.</td>
<td>Satisfaction with using computers is now comparable to the college average. Faculty are continuing to incorporate new computer applications into BUS courses. New textbooks provide increased coverage of international topics.</td>
</tr>
<tr>
<td>Graduate Survey and survey of current students</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Goal/objective:</strong> The Small Business Management Certificate should meet NVCC productivity standards for numbers of graduates.</td>
<td>The certificate produced very few graduates, but faculty believed it could yield at least the minimum number of graduates recommended by NVCC standards for certificates.</td>
<td>The curriculum was changed in an effort to attract more students and to facilitate graduation. As of 1995-96, the number of graduates per year remained below the target of 5. Faculty will re-evaluate the need for this certificate in 1998.</td>
</tr>
<tr>
<td>Review of numbers of graduates and students placed in the Small Business Management Certificate</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Goal/objective:</strong> Because Business Management is an A.A.S. program with a sister program which is intended for transfer (Business Administration), there is no official Management goal for facilitating transfer.</td>
<td>44% of students placed in the Business Management A.A.S. intended to transfer.</td>
<td>NVCC and ODU's Teletechnet have reached an articulation agreement. A member of the Business faculty co-chairs the Articulation Committee and is helping negotiate agreements with several local institutions.</td>
</tr>
<tr>
<td>Student survey</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Goal/objective:</strong> Develop a Horticultural Master Plan to support the curriculum and expand facilities, equipment, staff, and funding sources for the program.</td>
<td>The campus has been declared an arboretum. Several plants have been donated. Further development will be</td>
<td></td>
</tr>
<tr>
<td>Advisory Committee input Faculty should develop a master plan which involves community-program partnerships to expand the variety of plants available for students to</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Horticulture Technology , 1994 - 95
Goal/objective: Graduates should reach College goals in general education.
Student survey: Students did not rate computer usage highly.
HRT courses now routinely incorporate the use of computers to access information from CD-ROM and from the Internet.

Goal/objective: Graduates should be able to describe a general history of horticulture and gardens.
Student survey: Students did not rate computer usage highly.
A new course, History of Gardens, was added to the curriculum. It addresses the influence of cultures all over the world for thousands of years.

Goal/objective: Graduates should be able to use standard measures and perform basic computations.
Instructor discussions: Students' math skills were not satisfactory.
Math problems and calculations are now included in all required courses.

Goal/objective: Graduates should be able to describe the diversity of horticulture and the career opportunities it provides.
Employer and student surveys: Students needed to learn more about career opportunities.
Several professionals have donated their time to speak to HRT classes.

Goal/objective: Graduates should be able to perform manual skills in the following technical areas: propagation, growing, installation and maintenance, floral design, landscape design.
Employer and student surveys, focus groups of non-returning students: Students need more hands-on experience.
Faculty revised all course content summaries to incorporate more hands-on experience. Courses include more field trips. Faculty wrote a new lab manual.

Goal/objective: Student outcomes in the Turf & Grounds Management career studies certificate must be assessed.
None: These courses are taught by adjuncts, so could not be assessed during the program evaluation due to time constraints.
Full-time horticulturists are meeting with the assessment coordinator to develop assessment instruments.

Goal/objective: Maintain occupational technology as primary focus; work to improve articulation and transferability of courses.
Student survey: A few students want to transfer to four-year institutions. More commonly, students at local four-year universities are encouraged to take certain NVCC courses (especially Soils).
No action is required, but faculty hope to improve transfer opportunities to Va Tech. Articulation with four-year business programs designed to accommodate graduates of AAS programs (such as through Teletechnet) may prove more useful than articulation with four-year horticulture programs because so many NVCC students intend to operate their own businesses.

Goal/objective: Graduates should be able to perform satisfactorily in entry-level or higher positions in the Horticulture industry.
Review of numbers of graduates: Many students were not aware that courses in the program should be taken in a specific sequence. Also, many students had trouble completing the degree because required courses are not offered every year.
Faculty and staff worked with a counselor to develop a program information packet and to conduct orientation sessions each semester, both day and evening. Classes are scheduled two years in advance, and students can see the two-year schedule to help them plan.

Human Services, (includes Gerontology, Human Services Associate, and Substance Abuse Rehabilitation) 1994 - 95
Goal/objective: Students will acquire broad knowledge of health concerns of older people, through course work, work in situations involving the elderly, and through study of current research. This knowledge will amplify, extend, or replace their currently held theories with the knowledge now coming forth in the profession of health care for the elderly.
Advisory Committee input: The Gerontology curriculum did not accommodate...
the training necessary to graduate paraprofessionals in the elder care industry.

revised considerably and renamed Gerontology: Care Management to reflect changes in industry. New HMS courses were developed as part of the new curriculum. In addition, a new career studies certificate on Care of the Aging was developed.

Goal/objective: Graduates will have acquired the essential job skills and knowledge to perform satisfactorily in entry level or higher positions in their respective disciplines.

**Graduate Survey**
Graduates of Substance Abuse Rehabilitation, Gerontology, and Human Services all rated their preparation in math and in using computers well below the college average.

**Employer Survey**
Students needed more work in the area of A dual diagnosis; because this is becoming more important in the field.

**Employer Survey**
In order to work in the field, it is necessary for graduates to obtain a bachelor's degree.

**Student survey comments**
Some students were registering for part two of a sequence course without having the first part. Also, faculty felt HMS 121-122 helped students with HMS 266.

---

<table>
<thead>
<tr>
<th>Information Systems Technology</th>
<th>1994 - 96</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Goal/objective:</strong> Students will achieve the NVCC General Education Goals and Objectives.</td>
<td></td>
</tr>
<tr>
<td><strong>Graduate Survey</strong></td>
<td>Graduate Survey respondents gave relatively low ratings to their preparation in communication and math skills. IST course content summaries need to include more emphasis on the general education skills.</td>
</tr>
<tr>
<td><strong>Employer survey</strong></td>
<td>Employers did not rate graduates and current students' ability to read and write programs as highly as faculty desired.</td>
</tr>
<tr>
<td><strong>Goal/objective:</strong> Graduates will be able to perform satisfactorily as programmers in entry-level or higher positions in the field of business computer information systems technology.</td>
<td></td>
</tr>
<tr>
<td><strong>Comparison of outcomes in 16-week and compressed sections of the same courses</strong></td>
<td>Not all courses lend themselves to being offered in compressed formats.</td>
</tr>
<tr>
<td><strong>Faculty discussions</strong></td>
<td>Faculty agreed upon minimum compression standards for 1-, 3- and 4-credit courses.</td>
</tr>
<tr>
<td><strong>Advising of students in the IST field can be difficult in the summer when, especially at the smaller campuses, few or no IST faculty are on campus.</strong></td>
<td>Two campuses have prepared handouts of frequently asked questions and their answers for use at such times. Each program head is urged to follow suit.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Interior Design</th>
<th>1992 - 93</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Goal/objective:</strong> Graduates of the Interior Design Program should be able to enter the interior design profession as design assistants.</td>
<td></td>
</tr>
<tr>
<td><strong>Grade distribution</strong></td>
<td>There was an unusually high percentage of W grades in IDS courses.</td>
</tr>
<tr>
<td><strong>A sample of students who withdrew from IDS courses was surveyed to determine why they withdrew. Most students had personal reasons for withdrawing; only one out of 12...</strong></td>
<td></td>
</tr>
</tbody>
</table>
Student survey | Students did not evaluate instruction as highly as in most programs.
---|---

**Nursing, 1994**

**Goal:** Meet or exceed NLN recertification standards.

**Recertification review**

<table>
<thead>
<tr>
<th></th>
<th>1. Need to integrate management throughout the curriculum.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.</td>
<td>Need to expand observational experience in the community to include direct care experiences.</td>
</tr>
<tr>
<td>3.</td>
<td>Need to continue to use critical thinking strategies.</td>
</tr>
<tr>
<td>4.</td>
<td>Need to help students develop caring behaviors.</td>
</tr>
<tr>
<td>5.</td>
<td>Need to broaden clinical experiences to include care of healthy elderly clients.</td>
</tr>
<tr>
<td>6.</td>
<td>Need to increase exposure to diversity.</td>
</tr>
</tbody>
</table>

- 1. The new curriculum includes two courses on management in the second year of the program.
- 2. The curriculum was revised to include community based components.
- 3. In Fall 1996 the program piloted Collaborative Testing. Also, patient care scenarios have been given to students in the campus lab prior to hospital and agency care experiences.
- 4. Watson's Theory of Caring was incorporated into the curriculum. Faculty facilitate caring groups of students.
- 5. Course content and clinical experiences in gerontology were increased.
- 6. A new course, Health Care Systems in a Multi-Cultural Environment, is required in the first semester of the program.

**Recreation & Parks, 1992 - 94**

**Goal/objective:** To guide students who wish to transfer to a four-year institution in Recreation and Parks.

**Student and graduate surveys**

<table>
<thead>
<tr>
<th></th>
<th>The program head developed articulation agreements with GMU, UNC, WVU, State U of California at Chico and Eastern Kentucky U.</th>
</tr>
</thead>
</table>

**Goal/objective:** Each student will demonstrate knowledge of the impact of science and technology, including computers, on the field of recreation and parks.

**Advisory Committee input**

<table>
<thead>
<tr>
<th></th>
<th>Students were not sufficiently computer literate to meet future needs.</th>
</tr>
</thead>
</table>

**Goal/objective:** Each student will attain basic skill and specific learning in the field of Recreation and Parks.

**Student survey**

<table>
<thead>
<tr>
<th></th>
<th>Students found it helpful to have hands-on experiences. A larger room with access to a sink was needed.</th>
</tr>
</thead>
</table>

**Goal:** Students will pass certification/licensure exams
Several program heads, especially those in the health technologies, obtain certification or licensure exam information annually and use it to determine whether their programs need to be improved, and if so, how. Most of the exams are for program graduates. However, accounting, air conditioning, fire science, and EMT exams are taken by students who complete selected courses but who may not have graduated from the program.

<table>
<thead>
<tr>
<th>Test</th>
<th>Pass Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accreditation Council for Accounting and</td>
<td>Accounting</td>
</tr>
<tr>
<td>Taxation Exam</td>
<td>1996 - 58% (the largest percentage to pass that year’s exam of any college or university in the country)</td>
</tr>
<tr>
<td>Residential Air Conditioning and Heating Competency</td>
<td>1990 - 60%</td>
</tr>
<tr>
<td>Light Commercial Air Conditioning and Heating Competency</td>
<td>1995 - 100% (state average 70%, national average 63%)</td>
</tr>
<tr>
<td></td>
<td>1996 - 100% (state average 66%, national average 68%)</td>
</tr>
<tr>
<td></td>
<td>1992 - 100% (1 person)(state average 64%, national average 53%)</td>
</tr>
<tr>
<td></td>
<td>1993 - 0% (1 person)(state average 47%, national average 53%)</td>
</tr>
<tr>
<td></td>
<td>1994 - 100% (state average 100%, national average 77%)</td>
</tr>
<tr>
<td></td>
<td>1995 - 75% (state average 60%, national average 64%)</td>
</tr>
<tr>
<td></td>
<td>1996 - 100% (1 person) (state average-same person 100%, national average 58%)</td>
</tr>
<tr>
<td>Fire Science</td>
<td></td>
</tr>
<tr>
<td>Fire Officer I Certification</td>
<td>1992-95 - 86%</td>
</tr>
<tr>
<td>Fire Officer II Certification</td>
<td>1992-95 - 91%</td>
</tr>
<tr>
<td>Emergency Medical Services Technology</td>
<td></td>
</tr>
<tr>
<td>Virginia EMT/B</td>
<td></td>
</tr>
<tr>
<td>Spring 93 - 99%</td>
<td></td>
</tr>
<tr>
<td>Fall 93 - 92%</td>
<td></td>
</tr>
<tr>
<td>Spring 94 - 96%</td>
<td></td>
</tr>
<tr>
<td>Fall 94 - 97%</td>
<td></td>
</tr>
<tr>
<td>Virginia CCT</td>
<td></td>
</tr>
<tr>
<td>Spring 95 - 95%</td>
<td></td>
</tr>
<tr>
<td>Spring 93 - 93%</td>
<td></td>
</tr>
<tr>
<td>Fall 93 - 100%</td>
<td></td>
</tr>
<tr>
<td>Spring 94 - 100%</td>
<td></td>
</tr>
<tr>
<td>Fall 94 - 92%</td>
<td></td>
</tr>
<tr>
<td>NREMT/Paramedic</td>
<td></td>
</tr>
<tr>
<td>Spring 95 - 91%</td>
<td></td>
</tr>
<tr>
<td>Fall 93 - 80%</td>
<td></td>
</tr>
<tr>
<td>(national average 60-70%)</td>
<td></td>
</tr>
<tr>
<td>Spring 94 - 87%</td>
<td></td>
</tr>
<tr>
<td>Fall 94 - 77%</td>
<td></td>
</tr>
<tr>
<td>Course</td>
<td>Test Description</td>
</tr>
<tr>
<td>---------------------------------------------</td>
<td>----------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Health Information Technology</td>
<td>American Health Information Management Association Accreditation Examination for Medical Record Technicians</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Medical Laboratory Technology</td>
<td>ASCP Board of Registry Exam at the ML level</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Nursing</td>
<td>NCLEX</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical Therapist Assistant licensure exam</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Radiography</td>
<td>American Registry of Radiologic Technologists: Radiography test</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Real Estate</td>
<td>Real Estate licensing exam for Sales</td>
</tr>
<tr>
<td>Respiratory Therapy</td>
<td>National Board for Respiratory Care (NRBC) Exam</td>
</tr>
<tr>
<td></td>
<td>Entry Level Examination: certificate graduates</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>----------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>Entry Level Examination: AAS graduates</td>
<td>100%</td>
</tr>
<tr>
<td>Advanced Practitioner Written Registry</td>
<td>100%</td>
</tr>
<tr>
<td>Clinical Simulation Examination</td>
<td>75%</td>
</tr>
<tr>
<td>Veterinary Technology</td>
<td>69%</td>
</tr>
<tr>
<td>Virginia Boards</td>
<td>100%</td>
</tr>
<tr>
<td>North Carolina Boards</td>
<td>100%</td>
</tr>
</tbody>
</table>

**ASSESSMENT OF OFF-CAMPUS INSTRUCTION**

Many classes in diverse disciplines are held off-campus due to space limitations on campus, especially at night. In addition, all courses required for the Business Information Technology career studies certificate are offered at the U. S. Patent and Trademark Office; over 100 students from this site have graduated since 1994.

Both full-time and adjunct faculty teach off campus; these instructors are supervised by the same administrators who supervise on-campus faculty. Off-campus instruction is reviewed as part of program and discipline evaluations. Because numbers are so small in relation to on-campus numbers, it is difficult to obtain statistically meaningful data; most information is anecdotal. The English and Speech and Drama disciplines did produce useful results. Anecdotal information is also available on the quality of instruction in the Business Information Technology program, which is monitored by Patent Office managers as well as NVCC administrators.

**Goal:** Off-campus instruction will be of quality similar to on-campus instruction
Classes scheduled in local high schools and middle schools face some minor problems. Schools' holidays often differ from Manassas campus has the college's, so the buildings may be closed when NVCC has reduced the number of classes. The same problem occurs with inclement weather, courses offered off when schools close more often than does the college. Sometimes there are problems with facilities: furniture in middle schools may be too small for adult students, and the teachers who own the rooms often prepare the blackboard for the next day's lessons in advance, leaving little space for the visiting NVCC instructor. Audio-visual support tends to be poor at some off-campus locations.

Off-campus sites used by Manassas Campus faculty did not afford the necessary requirements for SPD courses. Loudoun campus SPD courses taught off-site at a local high school could not videotape student speeches as was done on campus.

Students reported that the courses they took as part of the career studies certificate program prepared them to apply for higher level positions with the Patent Office.

### ASSESSMENT OF DISTANCE LEARNING

Students' achievements using distance learning and students' satisfaction with this method of delivery were assessed college-wide and as part of program and discipline evaluations. They were also assessed as part of program and discipline evaluations.

**Goal:** Graduates and students will be satisfied with their ELI experiences

**Graduate Survey** respondents were asked to evaluate the Extended Learning Institute (ELI) services they received. Students who used ELI consistently rated the services very positively. The percentage of students who said they did not use ELI increased slightly each year.

As part of two current program and discipline evaluations, students who had taken classes via ELI were asked if those courses were as good as those on campus. Some students believe that ELI courses are as good as on-campus courses, while roughly an equal number of students disagree.

<table>
<thead>
<tr>
<th>Evaluation Method</th>
<th>Year</th>
<th>Excellent</th>
<th>Good</th>
<th>Avg.</th>
<th>Below Avg.</th>
<th>Poor</th>
<th>Not Used</th>
<th>Action Taken or Planned</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graduate Survey</td>
<td>1991</td>
<td>18.9%</td>
<td>15.5%</td>
<td>6.7%</td>
<td>1.9%</td>
<td>0.7%</td>
<td>56.3%</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td>1992</td>
<td>18.5%</td>
<td>15.6%</td>
<td>6.3%</td>
<td>1.6%</td>
<td>0.9%</td>
<td>57.1%</td>
<td>Indicated</td>
</tr>
<tr>
<td></td>
<td>1993</td>
<td>17.4%</td>
<td>14.3%</td>
<td>6.2%</td>
<td>1.6%</td>
<td>0.7%</td>
<td>59.8%</td>
<td></td>
</tr>
</tbody>
</table>

**Evaluation Method**

**Music student survey, Spring 97**

Less than 19% of the respondents reported having taken MUS courses via ELI. Of those, 11 said it was as good and 17 said it was not as good as on-campus MUS courses.

**Physics student survey, Spring 97**

Of 260 respondents, only 20 took a math course via ELI. Twelve said this was the right choice, 4 preferred the classroom, and 4 thought they shouldn't have taken physics at all.

**Goal:** Students will be able to complete an Engineering A.S. using distance education

Thanks to a grant from the Sloan Foundation, students can complete an Engineering A.S. degree through the Extended Learning Institute.
Evaluation Method
Comparison of A starters@ success rates (A, B or C) in same course on campus and at ELI, Spring 95 through Fall 96. A starters@ are students who submit at least one assignment.

Findings
For some courses--EGR 115, EGR 126, MTH 173, MTH 174, and MTH 291--ELI starters@ had a higher success rate than did their counterparts who took the same courses on campus. In two cases, CHM 111 and MTH 277, success rates for the two groups were almost identical. On-campus students had higher success rates in EGR 120, EGR 140, and PHY 241. The overall success rates for all courses combined is nearly identical for the two groups. It must be remembered that the numbers of students taking these courses via ELI are usually much smaller than the numbers taking them on campus, so percentages may give an exaggerated picture of success or failure. See Appendix K for details.

Action Taken or Planned
No action indicated. However, new math, chemistry, and engineering tutors were hired to increase student success.

Tracking of enrollments in courses required for the Engineering degree

Enrollments in EGR 120 increased from 15 in Spring 95 to 18 in Spring 96, while enrollments in CHM 111 and MTH 173 decreased from 31 to 21 and from 34 to 22, respectively. These decreases may be due to January snowstorms interfering with Spring 96 registration and to the suspension of ELI's continuous enrollment policy. Through Summer 97, nearly 725 students had been served via the Sloan project. Enrollment in individual courses ranged from 13 to 200 over this period. Overall, enrollment increased in courses required for the project.

No action indicated.

Spring 95 and Spring 96 CHM lab questionnaires and focus groups

Students rated on-campus labs and some off-campus labs positively. Results were mixed for other off-campus labs.

No action indicated.

Evaluation of CHM course by chair of Sinclair Community College's Chemistry Department, Summer 96

The evaluator's comments were very positive, stating that the course contained suitable content, required an appropriate student work load, and included impressive support materials. However, he felt that some videos should contain more demonstrations.

Faculty added two new off-campus labs and revised chemistry lab activities. More visual materials were incorporated in the second CHM course.

Evaluation of PHY course by chair of Va Tech's Physics Department and by physics professor at Montgomery College

Evaluators suggested increasing the calculus content and improving the video.

Faculty revised the course substantially and eliminated the video.

Evaluation of interaction between students and faculty by focus groups, student on-line survey

Students were generally satisfied with the level of interaction.

No action required, but faculty increased the level of interaction via computer.

Surveys of student satisfaction

Over 90% of the respondents said they would take another ELI course.

No action indicated.

Evaluation of math tutor by tutor interview, focus groups, survey

Students were very satisfied with the math tutor.

No action indicated.

ASSESSMENT OF DUAL-CREDIT INSTRUCTION

NVCC has no dual-credit agreements with local school districts. High school students may take NVCC courses as long as they have the appropriate permission, but these are courses for college credit only, taught by NVCC faculty.

USE OF TRANSFER INFORMATION TO IMPROVE PROGRAMS
Perhaps the greatest change in the use of transfer data during the 1996-97 academic year has been the Articulation Committee's use of existing data and guidance in developing further transfer studies. Some of the data may be useful in determining where to focus attention on negotiating articulation agreements.

**Goal:** NVCC graduates will be well prepared for transfer to four-year institutions

<table>
<thead>
<tr>
<th>Evaluation Method</th>
<th>Graduate Preparation for Transfer</th>
<th>Actions Planned or Taken</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCHEV-mandated questions attached to the 1996 Graduate Survey</td>
<td>Nearly 60% of the graduates were pursuing or had completed a bachelor's degree approximately six months after graduating from NVCC. Of those graduates, 87% said their bachelor's program was very much or somewhat related to their NVCC program. 97% said their NVCC education prepared them very much or somewhat for their bachelor's program.</td>
<td>No action indicated. As mentioned earlier, articulation is a major focus.</td>
</tr>
<tr>
<td>Analysis of 1989-93 Graduate Survey responses to &quot;Preparation for transfer&quot;</td>
<td>Of those enrolled in higher education institutions six months after graduating from NVCC, almost all of the graduates of transfer and occupational programs rated their NVCC preparation for their present studies as &quot;excellent&quot; or &quot;adequate&quot; throughout the five year period (Appendix I).</td>
<td>In addition to the college-wide efforts to improve articulation and transfer, many program heads have worked with colleagues at four-year institutions to improve their students' chances to transfer and their performance upon transfer.</td>
</tr>
</tbody>
</table>

**Goal:** Students with at least twelve NVCC credits will be successful in subsequent courses upon transfer

<table>
<thead>
<tr>
<th>Evaluation Method</th>
<th>Student Preparation for Transfer</th>
<th>Actions Planned or Taken</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analysis of transfer data</td>
<td>The most recent complete analysis of these data was included in the 1996 Assessment Report. The data indicate our students are quite successful; they are accepted at 4-year institutions across Virginia and they perform well their first year. Due to staffing shortages in institutional research and because we still have not received 1993-94 transfer data from GMU, no additional analysis was performed this year. We have recently begun to receive data from Randolph-Macon Woman's College, which we will add to the data from public institutions. The transfer data discussed earlier showed that for any given institution for any of the academic years 1993-94 through 1995-96, all races tended to be successful and all tended to cluster around similar GPA ranges. However, it is difficult to compare the percentages because there were so few non-white students at most institutions. No Black students earned less than a 1.0 at any of the reporting institutions in any of the three years. See Appendix J for details.</td>
<td>No action indicated.</td>
</tr>
<tr>
<td>Study of success of minority transfer students</td>
<td>Graduates of all NVCC transfer programs transfer successfully to 4-year institutions. Graduates of many occupational programs transfer as well, although many cannot</td>
<td>See Assessment of the Majors for actions taken or planned by the programs.</td>
</tr>
<tr>
<td>Analysis of transfer data sorted by NVCC program</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
State-wide study of preparation for subsequent courses showing which NVCC and GMU courses are equivalent and what courses are often taken subsequently. Data are not available yet, but should be ready by the end of the Fall 1997 semester.

RELATION OF ASSESSMENT TO PLANNING, EVALUATION AND RESOURCE ALLOCATION

At NVCC, faculty and administrators consider assessment information as they make their planning, evaluation and resource allocation decisions.

Planning

The assessment office provided productivity data from a variety of sources to faculty in each program beginning the evaluation cycle in 1996-97 in an effort to help faculty anticipate and prevent potential productivity problems. Real Estate faculty, for example, decided to eliminate their A.A.S. and its specialization and to concentrate on the certificates. The two programs on probation with SCHEV for low numbers of graduates are working with the assessment coordinator to try to improve the number of graduates and to collect data needed for the 1998 productivity review. Numbers of graduates improved in both programs.

Every program and discipline evaluation results in an action plan designed to address specific concerns raised by the study. As demonstrated in the General Education and Majors chapters, faculty work with administrators to implement those action plans. On a larger scale, the assessment coordinator summarizes trends observed in program and discipline evaluations and forwards the summary to the College Planning Committee.

Prior to planning special retention efforts, the Administrative Council studied retention of students who took developmental English and/or developmental math from Spring 1992 through Fall 1996 and of students who took neither developmental English nor developmental math in those semesters. The study revealed that successful and initially unsuccessful developmental math students are retained at a rate significantly higher than that of students not taking developmental courses the same semester.

Assessment has highlighted the need for increased inter-campus cooperation in the scheduling of low-enrollment courses.

Evaluation

At NVCC, assessment is part of every program and discipline evaluation. Faculty are becoming more adept at assessing student achievement in addition to student satisfaction.

Resource allocation

At several different levels, resource allocation is influenced by assessment results. This is particularly true at the division level where funds for supplies and equipment and for professional development are distributed among the programs and disciplines. It is also quite common for LRC purchases to be made in response to evaluation action plan suggestions. Further, several librarians have conducted assessment mini-grant projects to help them decide how to allocate time and resources. Across the college, assessment results support the need for funding of professional development, increased Cooperative Education, and improved facilities for some fields.

ASSESSMENT SCHEDULE FOR 97/98 - 98/99
### 1997-98

<table>
<thead>
<tr>
<th>Assessment Activity</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Continue evaluating science disciplines</td>
<td>BIO, CHM, GOL, NAS, and PHY faculty</td>
</tr>
<tr>
<td>Evaluate Science program</td>
<td>Science faculty</td>
</tr>
<tr>
<td>Continue evaluating Acquisition &amp; Procurement, Administrative</td>
<td>Program faculty</td>
</tr>
<tr>
<td>Support Technology, Aviation, Hotel, Restaurant &amp; Hospitality Management, Physical Therapist Assistant, Real Estate and Veterinary Technology programs</td>
<td></td>
</tr>
<tr>
<td>Analyze transfer data for most recent five years to repeat study done in 1995-96, adding special analysis of minority success as initiated this year; distribute in format useful to Articulation Committee and division chairs as well as to college staff administrators</td>
<td>Assessment coordinator, Institutional Research, Articulation Committee</td>
</tr>
<tr>
<td>If transfer data from course-by-course study becomes available, distribute to faculty</td>
<td>Assessment coordinator</td>
</tr>
<tr>
<td>Continue Developmental Studies tracking studies, separating lower-level from exit-level developmental courses and separating English from English as a Second Language studies</td>
<td>Developmental Studies Assessment Subcommittee, English faculty, ESL faculty</td>
</tr>
<tr>
<td>Next year's State assessment topic: what students learn using the new teaching technologies or new kinds of facilities such as multimedia classrooms, compared to what they learn in more traditional formats or settings</td>
<td>Faculty with assessment mini-grants</td>
</tr>
</tbody>
</table>

### 1998-99

<table>
<thead>
<tr>
<th>Assessment Activity</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analyze data needed to support the productivity review reports due for Emergency Medical Services Technology and Horticulture Technology</td>
<td>Program faculty and administrators with assessment coordinator</td>
</tr>
<tr>
<td>Summarize common themes from science discipline evaluations</td>
<td>Assessment coordinator</td>
</tr>
<tr>
<td>Initiate evaluations of the Accounting, Automotive Technology, Communication Design, Construction Management, Electronics, Engineering, General Studies, Liberal Arts, and Marketing programs</td>
<td>Program faculty</td>
</tr>
<tr>
<td>Continue Developmental Studies tracking studies</td>
<td>Developmental Studies Assessment Subcommittee</td>
</tr>
<tr>
<td>Continue to examine transfer data</td>
<td>Assessment coordinator, Articulation Committee</td>
</tr>
</tbody>
</table>

**RELATION OF ASSESSMENT TO VCCS RESTRUCTURING PLAN**

The following goals are those listed in the draft A Strategic Planning for 1998-2000” circulated in Spring 1997.

**Goal**: To increase student recruitment and retention.

As noted earlier, a thorough study of the retention of at-risk students—those in developmental English and/or math courses—indicated that developmental math students and successful developmental English students are retained very well. In addition, ELI conducts semestery studies of the retention of distance learning students, and administrators, faculty, and instructional technologists continually search for ways to improve retention.

Degree length reductions were implemented in Fall 1995 although the catalog did not reflect the changes until 1996-97. Graduates of the Class of 1996, therefore, are the first group to begin to be affected by the changes. It is too early to tell whether the revisions had any adverse effects on student learning (see certification exam pass rates, pp. 20-22). A review of the numbers of graduates in 1996 (the most recent figures available) showed that of the seven transfer programs with reduced credits, four had more graduates in 1996 than in 1995 and three had fewer graduates. Also, the average number of years to graduate decreased for two programs, stayed the same for four programs and increased for one program; due to the low
numbers of graduates in some programs, the change in number of years to graduate may not be significant. Of the 26 occupational programs that implemented credit reductions in Fall 1995, half had more graduates in 1996 than in 1995, but the reverse was true for the other half. The average number of years to graduate decreased for 15 of these programs, increased for five, and stayed the same for four.

Goal: To improve financial support for the instructional mission of the VCCS.

As indicated in the Planning, Evaluation, and Resource Allocation chapter, NVCC uses results of program and discipline evaluations to guide the expenditure of existing funds.

Goal: To revitalize the curriculum to better meet the changing and emerging needs of the workplace.

Every program and discipline evaluation results in recommendations for revisions to course content and/or curricula, including discontinuing low enrollment programs and rarely-offered courses. Faculty discuss future trends in their fields and sometimes recommend new curricula. All occupational program evaluations include employer surveys, focus groups or interviews. Transfer data are also useful in updating the curriculum.

Goal: To facilitate recognition in state policy of the role of the VCCS in workforce development.

Assessment data are helpful in ascertaining program areas in which students are interested in transferring. Knowing this helps administrators and program faculty decide where to concentrate their efforts in establishing transfer and articulation agreements.

Program evaluation helps identify areas for increased attention to partnerships with local businesses.

Goal: To continually update and make progress on the long-range plan for technology implementation.

Assessment data help faculty and administrators judge when technology helps students learn or gain access to the college, and when it does not.

Goal: To continue the professional revitalization of faculty and staff.

Program and discipline evaluation pinpoint areas in which faculty need professional development.

Goal: To increase the diversity of our faculty, staff and students.

Demographic data examined during program and discipline evaluation occasionally indicate areas in which the student population could be diversified.

Goal: To improve the physical facilities of the VCCS.

Every program and discipline evaluation discusses needs for improvement of facilities, and often of supplies and equipment. By relating these needs to their effect on student learning, administrators can judge the relative importance of recommended improvements.

FIVE MOST IMPORTANT CHANGES
Members of the 1996-97 and 1997-98 Academic Assessment Committees were asked to help the assessment coordinator develop a list of the five most important changes made at NVCC as a result of assessment over the past ten years. Although many other changes were nominated for this list, here in priority order is NVCC’s list.

1. Improved curriculum and discipline management

   Changes to curricula
   Changes to programs and disciplines course offerings

   Program discontinuations
   Increased writing requirements in ENG 111 and many other courses
   Increased incorporation of computer applications across the curriculum
   Increased attention to other general education areas
   Increased attention to accountability for productivity

   Improved scheduling
   Improved intercampus scheduling
   Improved use of long-term planning (i.e., developing a two-year schedule)

2. Increased faculty investment in program and discipline concepts

   Increased faculty dialog with discipline colleagues at Cross Campus Day
   Increased attention to goals of curricula and disciplines
   Increased attention to student achievement

   Increased attention to students’ goals
   Increased emphasis on transfer preparation even in occupational programs in response to surveys showing students’ reasons for taking our courses

   Increased attention to employers’ expectations
   Increased Advisory Committee review of program goals and curricula

   Improved communication with faculty in other disciplines and with counselors and librarians

3. Improved placement and basic skills assessment policies and procedures

   Increased consistency among the campuses in the tests used and in test administration
   Increased awareness of the importance of developmental and ESL courses, and increased awareness of the large percentage
of students who need such courses

Computerized placement and basic skills testing through investment in COMPASS

4. Increased effectiveness in addressing articulation issues

Analyzed data on NVCC students= success upon transfer in more useful ways

Increased use of transfer data by program faculty, discipline faculty, and counselors

Increased attention to transfer students from all programs, including occupational programs

5. Improved resource allocation

Increased communication among teaching and library faculty has helped librarians focus the collections

Increased support for faculty as they incorporate more computer applications into their courses

Increased support for professional development

Increased use of assessment data to support grant proposals

APPENDICES

A: Graduate Ratings of General Education Preparation
B: English Discipline Evaluation Action Plan
C: Programs and Disciplines Including Communication Skills in Their Goals and Objectives
D: Programs and Disciplines Including Critical Thinking Skills in Their Goals and Objectives
E: Common Themes in Social Science Evaluation Reports and Action Plans
F: Graduates= Primary Goals and Goal Attainment
G: Graduates= Employment and Preparation for Employment
H: SCHEV-Mandated Questions Attached to the Graduate Survey
I: Graduates= Educational Status, Preparation for Transfer, and Transfer Institution Attended
J: Transfer Success of NVCC Students, by Race
K: ELI A Starter@ v On-Campus Success Rates, Cumulative, by Course

APPENDIX A: Graduate Ratings of General Education Preparation

1989-1993
<table>
<thead>
<tr>
<th>Source: Graduate Survey</th>
</tr>
</thead>
<tbody>
<tr>
<td>Of note: &quot;International Awareness&quot; continues to have the lowest percentage of &quot;Excellent&quot; ratings and higher &quot;Below Average&quot; and &quot;No Basis to Judge&quot; percentages than other general education areas.</td>
</tr>
</tbody>
</table>

**APPENDIX B: English Discipline Evaluation Action Plan**

**January 1996**

(with Curriculum Committee Recommendations [so numbering may be off])

**NOTE:** Page numbers refer to pages in the evaluation report where topic is discussed.

**Goals**

**RECOMMENDATION 1:** English faculty must clarify the goals and objectives listed on the Course Content Summary Sheets for ENG 001, 003, 004, 005, 107, 111-112, and literature courses. (p. 16)

**RATIONALE:** Some of the developmental courses' goals and objectives are not quite clear. The goals and objectives for ENG 111-112 and literature courses need to be developed further to improve clarity and uniformity.

**SPECIFIC ACTION:** Appoint English faculty who teach each course to groups charged to clarify the goals and objectives on the above-listed courses. The groups should address concerns raised in this report and any others they deem necessary.

**RESPONSIBILITY:** English Cluster Chair

**DEADLINE:** August 1996

**Assessment**

**SUGGESTION 1:** Continue to explore reasons why so few students who need developmental reading courses register for them within a semester of taking the placement test. (p. 19)

**RATIONALE:** Many students identified by the placement test as needing developmental reading courses do not register for...
them within a semester of taking the placement test.

**SPECIFIC ACTION:** See whether students identified as needing developmental reading courses are taking other developmental courses first.

**RESPONSIBILITY:** Developmental Reading Assessment Working Group

**DEADLINE:** Fall 1997

**SUGGESTION 2:** All five campuses should use the same placement test. (p. 19, 26)

**RATIONALE:** Until a single placement test was put into place in Fall 1991, the college had no way of tracking students based on scores on placement tests or of making comparisons between groups of students based on a common measure of reading or writing ability. The VCCS has asked for reports of such studies in the past and will continue asking for similar studies.

**SPECIFIC ACTION:** Resolve the problems with COMPASS, the new computerized placement test, and ensure that all campuses are using the test or make a decision that all students will be tested with the old ETS test.

**RESPONSIBILITY:** Ad hoc committee appointed by the Dean of Academic and Student Services to advise the Associate Dean for Curriculum Services

**DEADLINE:** December 1996

**RECOMMENDATION:** Correlate the COMPASS results with those of the ETS Test to assure accurate placement. (p. 19, 26)

**RATIONALE:** Tracking studies of developmental English students indicate that the program has had a high rate of success. Preliminary reports concerning the cut off scores used with COMPASS suggest that the two sets of cutoff scores are not comparable. The new cut off scores for COMPASS should be made comparable to those now in place to ensure the continued success of the developmental English program.

**SPECIFIC ACTION:** Request that OIR conduct studies correlating scores on the COMPASS Reading and Writing Tests with scores on the ETS Tests. Analyze and distribute the results.

**RESPONSIBILITY:** The Associate Dean for Curriculum Services at the advice of an ad hoc committee appointed by the Dean of Academic and Student Services

**DEADLINE:** Spring 1997

**SUGGESTION 4:** Continue to collect and analyze data on the effectiveness of reading portfolios in developmental reading courses. (p. 21)

**RATIONALE:** Reading portfolios have been piloted but faculty are still learning how to use them and what they should include.

**SPECIFIC ACTION:** Conduct studies comparing the rate of success of Fall 1994 and Spring 1995 students in developmental reading classes using portfolios with that of students in non-portfolio classes.

**RESPONSIBILITY:** Developmental Reading Assessment Working Group

**DEADLINE:** Fall 1997

**SUGGESTION 5:** Examine the results of the LASSI given to developmental reading students. (p. 22)
RATIONALE: Faculty want to know whether the LASSI is a good substitute for the study skills survey and they want to compare NVCC students’ responses with those of other students.

SPECIFIC ACTION: Compare the LASSI results with those from other colleges and universities. Decide whether the LASSI provides information useful to the Working Group and/or the students, and whether the LASSI is a good substitute for the study skills survey. Determine whether the LASSI is worth continuing and make a recommendation to the English cluster.

RESPONSIBILITY: Developmental Reading Assessment Working Group

DEADLINE: Spring 1997

SUGGESTION 6: Continue to collect and analyze data on the effectiveness of writing portfolios in developmental English classes. (p. 29)

RATIONALE: Studies are needed to determine the effect of portfolios on the success rate in developmental writing courses and in subsequent credit courses.

SPECIFIC ACTION: Conduct studies comparing the rate of success of Fall 1994 and Spring 1995 students in developmental English classes using portfolios with that of students in non-portfolio classes.

RESPONSIBILITY: Developmental Writing Assessment Working Group with the assistance of OIR.

DEADLINE: Spring 1997

RECOMMENDATION 2: Conduct continued assessments of ENG 111 at each campus. (p. 35)

RATIONALE: Faculty were dissatisfied with the results of the college-wide assessment of ENG 111.

SPECIFIC ACTION: Faculty who teach ENG 111 at each campus must develop further assessments of ENG 111 and devise plans for using the assessment information to improve student outcomes in ENG 111.

RESPONSIBILITY: English Cluster Chair

DEADLINE: Fall 1996

RECOMMENDATION 3: Determine how late students can register and still have a good chance of performing well in ENG 111, 112 and in literature survey courses. (p. 35)

RATIONALE: To follow up on late registration data which indicate that a higher percentage of on-time registrants than late registrants earned an A, B, or C in ENG 111 or 112. Determine whether registering after classes begin affects student success in literature survey courses.

SPECIFIC ACTION: Request that OIR provide data for students who registered 1-5, 6-10, and 11-14 days after classes began. Ask OIR to include D, F and W grades.

RESPONSIBILITY: English Cluster Chair

DEADLINE: Fall 1996

RECOMMENDATION 4: Complete the Literature Survey Assessment project as recommended by the Literature Survey Assessment Subcommittee of the English Cluster. (p. 37)
RATIONALE: To assess attainment of each general goal for literature survey courses.

SPECIFIC ACTION: Form three college committees, each with faculty representing each campus and ELI. Each committee will assess and discuss the same portfolios using the assessment instrument located in Appendix H. Forward the completed forms to one English faculty member who will consolidate the statistics on one form and forward that form to the coordinator of Academic Assessment.

RESPONSIBILITY: English Cluster Chair

DEADLINE: Fall 1997

SUGGESTION 7: Compare individual students' Spring 1993 ENG 112 grades with their ENG 111 or ENG 111/009 grades from Fall 1992. (p. 37)

RATIONALE: To see if grades in ENG 111 are good predictors of success in ENG 112.

SPECIFIC ACTION: Request that OIR list Fall 1992 ENG 111 (including ENG 111/009) and Spring 1993 ENG 112 grades by student. Perform a statistical analysis to determine whether ENG 111 grades correlate with ENG 112 grades.

RESPONSIBILITY: English Cluster Chair

DEADLINE: Fall 1996

SUGGESTION 8: Compare grades of ENG 111 students who take ENG 112 in the subsequent semester with grades of students who take ENG 112 later. (p. 38)

RATIONALE: Faculty suspect that students are more likely to perform well in ENG 112 if they take it immediately after completing ENG 111 (or ENG 111/009). If data confirm this, faculty would advise students to take the two courses in subsequent semesters.

SPECIFIC ACTION: Request that OIR provide ENG 112 grades for students who successfully completed ENG 111 in Fall 1994. Perform a statistical analysis to determine whether students' chances for success in ENG 112 are greater if they take ENG 112 in the semester immediately following the semester in which they take ENG 111.

RESPONSIBILITY: English Cluster Chair

DEADLINE: Fall 1996

SUGGESTION 9: Continue to monitor the effect of changes in ELI courses and make changes as necessary to improve success rates in ENG courses taught through ELI. (p. 38)

RATIONALE: ELI courses in general, and ENG courses taught via ELI in particular, have high withdrawal rates. ELI personnel have taken actions that appear to be improving the student success rate, but it is too soon to know if these actions are sufficient.

SPECIFIC ACTION: Monitor grade distributions.

RESPONSIBILITY: English faculty who teach via ELI

DEADLINE: Spring 1997

Curriculum
SUGGESTION 10: Examine ENG 131 Technical Report Writing I for its potential in serving technical certificate programs and, if doing so is warranted, market the course to those programs. (p. 46, 55)

RATIONALE: Skills taught in a technical report writing class are more relevant to the goals of many technical certificate programs than are skills taught in a traditional college composition class. At present, the college does not regularly offer an entry-level technical report writing class.

SPECIFIC ACTION: A committee of English faculty should review the course content summary for ENG 131 and talk with faculty in technical certificate programs to see whether ENG 131 might suit their students’ needs better than ENG 111 or the infrequently-taught ENG 100. In particular, English faculty should work with faculty who teach in the ASSET and ASEP programs.

RESPONSIBILITY: English Cluster Chair

DEADLINE: May 1996

RECOMMENDATION: Continue to study the COMPASS placement test to determine how, or whether, the test can be modified to serve placement needs. (p. 48)

RATIONALE: English faculty have noted problems with cutoff scores and with the content of the test. It does not appear to be placing students into the correct ENG courses.

SPECIFIC ACTION: Reinstate the Computerized Placement Testing Task Force for English. Continue to ask faculty whether students are correctly placed.

RESPONSIBILITY: English Cluster Chair

DEADLINE: Fall 1996

SUGGESTION 12: Clarify the difference between developmental and college level "credits" in the NVCC Catalog. (p. 48)

RATIONALE: Students responding to the survey expressed confusion about this.

SPECIFIC ACTION: Revise the catalog descriptions to make the differences between developmental and college level courses easy to understand.

RESPONSIBILITY: Division Chair with responsibility for the English Cluster

DEADLINE: August 1996

SUGGESTION 13: Examine the advisability of using computer holds to control access to second-semester composition and/or second-year literature classes. (p. 49)

RATIONALE: When students enter classes for which they lack prerequisite skills, it is demoralizing for both them and their teachers. The student survey suggests that a sizable number of students either are ignorant of or choose to ignore placement requirements or prerequisites for the courses in which they enroll.

SPECIFIC ACTION: A subcommittee of the English Cluster should determine whether computer-enforced prerequisites would be useful enough to justify asking CIS to do the requisite planning. If the problem warrants it, the cluster should ask the
Associate Dean for Curriculum Services to request that CIS program computer holds to control access to ENG 112, 115, 116 and literature courses.

RESPONSIBILITY: English Cluster Chair

DEADLINE: Fall 1996

SUGGESTION 14: English faculty should include course prerequisites on their syllabi. (p. 49)

RATIONALE: Because many students consult neither a counselor nor a catalog prior to registering for most classes, they may not be aware of prerequisites. Including them on the syllabus is an easy way to protect the student who would be otherwise unaware of the prerequisites and to put on notice the student who has simply chosen to ignore them.

SPECIFIC ACTION: Division chairs or ADC’s with responsibility for English should remind English faculty to include prerequisites on their syllabi.

RESPONSIBILITY: Division Chairs

DEADLINE: Each August

SUGGESTION 15: Issue one free catalog to each NVCC student. (p. 49)

RATIONALE: Providing each student one catalog would help the student to choose his courses intelligently, with some understanding of course content and with a clear awareness of prerequisites. At present, many students do not own a catalog.

SPECIFIC ACTION: Ask the College Senate to study this issue again.

RESPONSIBILITY: English Cluster Chair

DEADLINE: December 1996

SUGGESTION 16: Study the possibility of holding some ENG 111 and ENG 111/009 seats available for students completing developmental English and ESL courses. (p. 50)

RATIONALE: Under the present system, by the time students successfully completing developmental or ESL classes are authorized to enroll in ENG 111, many ENG 111 classes are full. These students must sometimes wait a semester before they are able to enroll in ENG 111, and for the student who has needed developmental or ESL course work, that semester away from English often means a backsliding of skills.

RESPONSIBILITY: English Cluster Chair

DEADLINE: December 1996

SUGGESTION 17: Continue the current common practice of encouraging students who wish to be granted advanced standing in composition or literature to demonstrate their competency through a CLEP examination rather than by using the PLACE process. (p. 51)

RATIONALE: For most students seeking advanced standing in composition or literature, the CLEP test is a simpler, less time-consuming, and, perhaps, more accurate means of demonstrating competency than is a PLACE project.
SPECIFIC ACTION: Division chairs or ADC’s for English should ask counselors to recommend that students take a CLEP exam in order to get advanced standing in composition or literature. Also, a Cluster subcommittee should examine the CLEP tests closely to see if they support English goals in critical thinking.

RESPONSIBILITY: Division Chairs and Counselors

DEADLINE: Fall 1996

SUGGESTION 18: Require students pursuing English course credit through PLACE to demonstrate ENG 111-level proficiency on the English Placement Test. (p. 51)

RATIONALE: Although a PLACE portfolio may reasonably substitute for the work which a student would otherwise produce during course enrollment, it is not an objective measure of entry-level competency. Any student being awarded credit for a course ENG 111 or above should be able to objectively demonstrate a minimum of ENG 111 entry-level proficiency.

SPECIFIC ACTION: Ask the Curriculum Committee to approve this as college policy.

RESPONSIBILITY: English Cluster Chair

DEADLINE: December 1996

SUGGESTION 19: Clarify catalog descriptions to indicate that ENG 111 is a prerequisite for ENG 112 and that literature survey courses need not be taken in a particular sequence. (p. 52)

RATIONALE: Students do not always take ENG 111 before 112. It is not clear to students that they may take literature survey courses out of sequence.

SPECIFIC ACTION: A committee of English faculty should revise the catalog descriptions and send them to the Dean for Academic and Student Services.

RESPONSIBILITY: English Cluster Chair

DEADLINE: May 1996

RECOMMENDATION 5: Form English Cluster committees of faculty who teach each course to review and, if necessary, revise ENG Course Content Summaries. (p. 53)

RATIONALE: Many are out of date, unclear, or do not include sufficient information.

SPECIFIC ACTION: The groups established to accomplish Recommendation 1 should refer also to the many suggestions in the Curriculum section of this report, as well as Appendix H, which lists many specific suggestions for improvement. Form additional groups of faculty to do the same for courses not specifically mentioned by Recommendation 1.

RESPONSIBILITY: English Cluster Chair

DEADLINE: December 1996

SUGGESTION 20: Revise course content summaries for literature courses to encourage new approaches to teaching. (p. 53)

RATIONALE: Survey of literature courses at NVCC are based on an outdated "major writers" approach. Most new texts for these courses include a wide range of topics and authors; emphasis is now being placed on multiculturalism and cross-disciplinary approaches. In order to remain current, NVCC literature courses need to reflect these changes.
SPECIFIC ACTION: When the cluster subcommittees revise literature course content summaries, they should find common ground without dictating specific authors to be covered.

RESPONSIBILITY: English Cluster Chair

DEADLINE: December 1996

ACTION TAKEN: The committee requested that the Associate Dean for Curriculum Services assist with streamlining the guidelines for course syllabi. The associate dean worked with a subcommittee of the Curriculum Committee to do so. (p. 55)

SUGGESTION 21: Explore the possibility of using team teaching or cross-disciplinary links in honors and other ENG courses. (p. 55)

RATIONALE: To enrich the English curriculum and to show the connections among English and other disciplines.

SPECIFIC ACTION: English faculty should suggest team teaching opportunities to their division chairs.

RESPONSIBILITY: Division chairs with responsibility for English

DEADLINE: Fall 1996

SUGGESTION 22: Enhance dialogue with the business community. (p. 56)

RATIONALE: To increase faculty knowledge of skills demanded by the work place, affirm our standards, and improve our ability to give our students a realistic and authoritative picture of the world of work.

SPECIFIC ACTION: The English department on each campus should look into what it can offer to or gain from working with its campus's Tech-Prep consortium. The English Cluster chair should ask the college to consider instituting curriculum advisory committees for general education disciplines. English faculty can also ask faculty in occupational programs for input. Faculty should share their findings with other English faculty.

RESPONSIBILITY: English Cluster

DEADLINE: Begin by May 1996

SUGGESTION 23: Enhance dialogue with special interest groups. (p. 56)

RATIONALE: English faculty need to enhance dialogue with special communities in our region--e.g., business community, retirement communities--in order to identify these groups' instructional needs and interests and to develop and market courses appropriate to these interests.

SPECIFIC ACTION: Work with the College Planning Committee to identify special interest groups. Contact representatives of these groups to see if they are interested in working more closely with NVCC English faculty. If so, meet with them. Seek institutional support, perhaps in terms of released time, to do this.

RESPONSIBILITY: Division Chair with responsibility for the English Cluster

DEADLINE: Begin by December 1996
SUGGESTION 24: Enhance dialogue with other disciplines and programs at NVCC. (p. 56)

RATIONALE: To determine what types of writing the disciplines and programs require and to help program faculty choose ENG courses most appropriate for their students.

SPECIFIC ACTION: Meet with faculty at each campus in each discipline and program at that campus.

RESPONSIBILITY: ADC’s or division chairs for English at each campus

DEADLINE: December 1996

RECOMMENDATION: Improve communication among English faculty and with ESL faculty. (p. 56)

RATIONALE: Especially on those campuses on which college level English is in a different department from developmental English or English as a second language, efforts must be made to ensure articulation within the discipline. It is also important to maintain intercampus consistency.

SPECIFIC ACTION: Talk in depth with colleagues about issues relating to course expectations.

RESPONSIBILITY: English Cluster

DEADLINE: Begin by May 1996

Faculty and Instruction

SUGGESTION 26: Continue to attract and hire excellent, innovative faculty to replace retirees. (p. 59)

RATIONALE: Because large numbers of faculty may retire at the same time, it is especially important to consider the discipline’s future as new faculty are recruited.

SPECIFIC ACTION: Think about the qualities desired in new English faculty—the knowledge, the teaching skills, and the technological expertise.

RESPONSIBILITY: Division Chairs

DEADLINE: Continuous

SUGGESTION 27: Develop programs to integrate adjunct faculty more fully with full-time faculty. Include adjunct faculty, when possible, in faculty meetings and professional development sessions. (p. 61)

RATIONALE: Integration would help adjunct faculty give students correct information, understand course content, follow English department guidelines, and direct students to appropriate support services. The faculty survey reveals that these are of concern to both full-time and adjunct faculty.

SPECIFIC ACTION: Include adjunct faculty in Orientation week in-service activities and in cluster meetings.

RESPONSIBILITY: Division Chairs (for campus activities) and HRD (for Cross-Campus Day)
DEADLINE: January 1996

SUGGESTION 28: Hold maximum class size to 18 for developmental English courses, to 22 for composition courses, and to 29 for literature courses. (p. 63)

RATIONALE: Faculty need to spend more time per student in developmental English courses because of the amount of writing students must do to improve their skills. The maximum number of students for literature courses can be higher than for composition courses due to the fewer number of writing assignments required. Also, a higher number of students in literature classes can help English faculty come close to the SCHEV guidelines for student/faculty ratio, 22:1. (The NCTE guideline is 20:1.) According to the Curriculum section of this report, current research on writing has demonstrated "that writing can be taught most effectively by using a `process' approach requiring frequent writing, revision, editing of drafts, writing groups, and individual conferences."

SPECIFIC ACTION: When making class size decisions, division chairs should make every effort to limit the size of ENG classes as noted above. English faculty should explain to all faculty and administrators why others should support these class size decisions.

RESPONSIBILITY: Division Chairs

DEADLINE: January 1997

SUGGESTION 29: Increase the amount and variety of professional development opportunities available to English faculty. (p. 64)

RATIONALE: Busy faculty need a convenient forum to share new ideas on teaching and different approaches to material they teach year after year, and to receive training in up-to-date technology. Further, as faculty retire and new faculty replace them, communication and dialogue will be especially important. Comments on the faculty survey suggest that faculty members see value in focusing on the practical issues.

SPECIFIC ACTION: Request that Human Resources provide faculty more workshops and other in-service activities on the practical issues of teaching (i.e. grading workshops, classroom problems, new teaching methods). Request that the college provide adequate college-wide professional development support for continuing higher education courses.

RESPONSIBILITY: Division Chairs

DEADLINE: In-service meetings in January or August, 1996.

Resources

RECOMMENDATION: Faculty and librarians should work together to improve the campus collections and to insure that they support the instructional needs of students. (p. 66)

RATIONALE: Fifty-one percent of faculty responding to the survey did not agree that the AV collections were adequate and 38% disagreed or strongly disagreed that print materials in the library are sufficient.

SPECIFIC ACTION: Faculty on each campus should let librarians know what print and AV materials would enhance their ENG classes. After agreeing among themselves, faculty on each campus should tell librarians which items, if any, may be weeded from the collection.

RESPONSIBILITY: ADC’s or division chairs for English on each campus

DEADLINE: December 1996 and at least annually thereafter
SUGGESTION 31: Provide students, faculty and staff with access to online information systems such as INTERNET as well as other emerging telecommunication and multimedia technologies. (p. 66)

RATIONALE: New technologies are drastically changing the way that information is researched and retrieved. The ability to use these new technologies is an essential part of a successful education. In addition, more and more students are exposed to online information systems at both the high school and college level and assume that these technologies will be available to them at the NVCC campus libraries.

SPECIFIC ACTION: Determine what kinds of information technologies ENG students, faculty and staff require. Consider these needs during budget allocating sessions. Where the college staff (CIS) must be involved, be sure to let them know of ENG needs.

RESPONSIBILITY: Division Chairs

DEADLINE: May 1996 and annually thereafter

SUGGESTION 32: Provide paid staff or tutors for Reading and Writing Centers. (p. 68)

RATIONALE: Of faculty responding to the survey, 31% did not feel that writing center services were adequate and 19% did not feel that reading center services were sufficient.

SPECIFIC ACTION: Consider the need to staff reading and writing centers when making budget decisions. Advertise for tutors to help in the centers.

RESPONSIBILITY: Division Chairs

DEADLINE: December 1997

SUGGESTION 33: Install networks in computer classrooms for applications in the teaching of reading and writing. (p. 68)

RATIONALE: Several faculty reported a need for networks within computer labs so students could call up one another's work or practice editing.

SPECIFIC ACTION: At each campus, inform the provost's staff of this need.

RESPONSIBILITY: Division Chairs

DEADLINE: December 1996

SUGGESTION 34: Improve communication between counselors and English discipline on placement, course offerings, requirements, and any changes from semester to semester. (p. 68)

RATIONALE: Thirty-four percent of faculty responding to the survey disagreed or strongly disagreed that there is good communication between counseling and English faculty. A similar percentage did not think counselors were well informed about English offerings and provided students with appropriate guidance. Eleven percent of the students responding to the survey did not think their counselor's advice was correct.

SPECIFIC ACTION: At each campus, ADC's or division chairs for English should ask to meet with counselors each semester to discuss the English discipline, especially any changes or problems of which counselors need to be made aware.
RESPONSIBILITY: ADC’s for English

DEADLINE: May 1996

SUGGESTION 35: Require students to consult with a counselor or faculty advisor before they register for ENG courses. (p. 69)

RATIONALE: Many students report they do not consult a counselor before enrolling in an ENG course. This may account for much of the confusion surrounding transferability and about the difference between developmental and college level courses.

SPECIFIC ACTION: Put a note in the Schedule of Classes.

RESPONSIBILITY: Division Chairs

DEADLINE: May 1997

SUGGESTION 36: Inform deans of Student Development of ENG faculty ratings of services for students with special needs. (p. 69)

RATIONALE: Thirty percent of ENG faculty responding to the Faculty Survey disagreed or strongly disagreed that support for students with special needs is sufficient.

SPECIFIC ACTION: The coordinator of Academic Assessment should inform the deans of Student Development of the ENG faculty’s 30% dissatisfaction with or lack of knowledge of services for students with special needs. The deans may want to consider offering campus workshops to raise faculty awareness about accommodations for special needs students.

RESPONSIBILITY: Assessment Coordinator and Deans of Student Development

DEADLINE: Summer 1996

SUGGESTION 37: Improve classroom conditions: modernize, replace, and repair antiquated heating / cooling systems. Clean air ducts. (p. 70)

RATIONALE: Sixty percent of Faculty Survey respondents disagreed or strongly disagreed that “the classrooms in which English courses are offered are conducive to effective teaching.” Comments described the classrooms as “too hot or too cold,” “stuffy, airless, poorly lit, and dirty,” “too crowded and noisy.” As class size increased, many classrooms have become cramped.

SPECIFIC ACTION: List specific problems on each campus. Work with campus business managers to fix the problems.

RESPONSIBILITY: Division Chairs

DEADLINE: List specific problems by December 1996

SUGGESTION 38: Provide English faculty on all five campuses with access to fast, reliable duplicating. (p. 71)

RATIONALE: Duplicating is the most important cost for the English discipline. For instructional purposes, faculty often need to be able to copy an article or student paper for next-day class discussion, so it is not always practical to send duplicating requests to the college duplicating service.
SPECIFIC ACTION: Meet with campus business managers to devise affordable campus-based duplicating.

RESPONSIBILITY: Division Chairs

DEADLINE: December 1996

SUGGESTION 39: Increase secretarial support so offices can be covered whenever there are classes. (p. 71)

RATIONALE: Forty-eight percent of Faculty Survey respondents reported that secretarial support was inadequate. The problem seems to be worse at night.

SPECIFIC ACTION: Schedule secretaries’ hours and work loads to accommodate instructors who teach day and evening classes. Consider using student work-study positions or trained volunteers to supplement classified staff.

RESPONSIBILITY: Division Chairs

DEADLINE: December 1996

SUGGESTION 40: Provide faculty with voice mail or better answering machines and telephones. (p. 71)

RATIONALE: Faculty do not always get their messages in a timely manner.

SPECIFIC ACTION: Supply faculty with equipment that they can access from home so they can check for messages even when not on campus.

RESPONSIBILITY: Division Chairs

DEADLINE: When funds permit

Administration

SUGGESTION 41: Request that VCCS support the revision of SCHEV productivity guidelines. (p. 74)

RATIONALE: ENG classes do not meet SCHEV productivity guidelines for NVCC if class enrollments are limited to educationally sound sizes.

SPECIFIC ACTION: Request that the VCCS support a study of productivity guidelines with community colleges in mind.

RESPONSIBILITY: Division Chairs

DEADLINE: Fall 1997

RECOMMENDATION: Explore creative ways to provide individual attention to students even in classes of more than 20 students and determine whether relatively large initial class sizes adversely affect student retention through a semester. (p. 74)

RATIONALE: Most ENG sections are larger than the 20 students recommended by NCTE. This makes it difficult for faculty to give individual attention to most students which may in turn result in some students withdrawing from the courses.

SPECIFIC ACTION: Administrators could work with the English Cluster to develop creative ways to allow faculty to provide individual attention to students in classes of more than 20 students. In particular, ways in which technology can be used to
help faculty provide individual attention should be investigated. Also, faculty and administrators should ask withdrawing students the reason(s) for their withdrawal to learn whether large class size adversely affects retention.

RESPONSIBILITY: Division Chairs with the English Cluster

DEADLINE: Fall 1997

APPENDIX C: Programs and Disciplines Including Communication Skills in Their Goals & Objectives

As of August 1997, the following programs and disciplines included objectives related to communication. I searched for "communication" and "writ" (for write, writing, written) and found them in the following programs.

<table>
<thead>
<tr>
<th>Program/Discipline</th>
<th>Communication</th>
<th>Writing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Administration of Justice</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Administrative Support Technology</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Air Conditioning &amp; Refrigeration</td>
<td>N</td>
<td>Y</td>
</tr>
<tr>
<td>Architecture</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Automotive</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Aviation</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Biology/NAS</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Business</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Civil Engineering</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>Construction Management</td>
<td>N</td>
<td>Y</td>
</tr>
<tr>
<td>Early Childhood Development</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Economics</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Electronics</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>English (all 4 areas)</td>
<td>N!</td>
<td>Y</td>
</tr>
<tr>
<td>Fire Science</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>General Studies</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Health Information Technology</td>
<td>N</td>
<td>Y</td>
</tr>
<tr>
<td>Program/ Discipline</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>-------------------------------------------</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>History</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Horticulture</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Interior Design</td>
<td>N</td>
<td>Y</td>
</tr>
<tr>
<td>Liberal Arts (general)</td>
<td>N</td>
<td>Y</td>
</tr>
<tr>
<td>Marketing</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Math</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Mechanical Engineering</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Phlebotomy/Histology</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>Physical Therapist Assistant</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Real Estate</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Recreation &amp; Parks</td>
<td>N</td>
<td>Y</td>
</tr>
<tr>
<td>Respiratory Therapy</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>Speech &amp; Drama/Speech Communic.</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>Travel &amp; Tourism</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Veterinary Technology</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Welding</td>
<td>Y</td>
<td>N</td>
</tr>
</tbody>
</table>

Any programs/disciplines not listed here didn't use either term. However, they may have used other words to indicate they require written communication. Ex-Communication Design said students will "articulate" concepts. Science disciplines focused on reading rather than writing.

APPENDIX D: Programs and Disciplines Including Critical Thinking in Their Goals & Objectives

As of August 1997, the following programs and disciplines included objectives related to critical thinking.

- **Accounting** - analyze, apply knowledge
- **Acquisitions & Procurement** - analyze, differentiate
- **Administration of Justice** - apply knowledge
- **Physical Security Certificate** - solve problems
- **Gerontology** - solve problems
- **Health Info Technology** - apply knowledge
- **History** - think
- **Horticulture AAS/ Turf & Grounds Management**
- **Career Studies Certificate** - solve problems, diagnose
- **Administrative Support Technology** - think, solve
problems

Air Conditioning - transfer knowledge

Architecture - solve problems

Art Education - solve problems

Automotive Technology - think, solve problems

Aviation - solve problems

Biology/NAS - evaluate, perform problem solving, enhance critical thinking

Business Administration - think, solve problems

Business Management - support Gen Ed Goals

Small Business Management Certificate - solve problems

Chemistry - applying principles

Civil Engineering - support Gen Ed Goals

Communication Design - solve problems

Computer Science - support Gen Ed Goals

Convention & Exposition Mgmt - analyze

Early Childhood Development - think, solve problems

Economics - think, several other terms

Electronics Tech Certificate/ Microcomputer Repair Career Studies Certificate - think, solve problems

EMT - apply, analyze and evaluate

English-- Developmental Writing, ENG 111-112, literature sequences used "think" and Developmental Reading said "draw conclusions, make inferences"

Fine Art - solve problems

Hotel, Restaurant & Inst Mgmt - solve problems

Interior Design - solve problems

Liberal Arts - form a hypothesis and evaluate evidence

Marketing - analysis

Math/Math specialization of Science - problem solving

Mechanical Engineering (all awards) - think, solve problems

Med Lab - solve problems

Music - analyze, listen critically

Photography - solve problems

Physical Therapist Assistant - solve problems

Physics - thinking critically and independently, distinguishing between opinion and fact, apply principles, solve problems, evaluate

Political Science - think

Psychology - think

Radiography - determine which to use

Real Estate - support Gen Ed Goals

Recreation & Parks - think, solve problems

Respiratory Therapy - decision making

Science - solve problems

Sociology - think, solve problems

Speech & Drama - think

Speech Communication specialization of Liberal Arts - think

STD - solve problems

Substance Abuse - more or less discusses
APPENDIX E: Common Themes in Social Science Evaluation Reports and Action Plans

FINDINGS

At NVCC, the social sciences include economics (ECO), geography (GEO), history (HIS), political science (PLS), psychology (PSY), and sociology (SOC). This summary includes initial findings presented in a joint report for ECO, GEO, and PLS which was not accepted by the Curriculum Committee; division chairs are preparing new, individual reports at this time.

Campuses and Faculty Offering Social Sciences:

Economics, HIS, PLS, PSY and SOC are offered at all five campuses and through the Extended Learning Institute (ELI). Geography is available primarily at the Alexandria (AL), Annandale (AN), and Manassas (MA) campuses and through ELI.

Full-time and adjunct faculty teach ECO, HIS, and PSY at all campuses. Political science is taught by adjuncts at the Loudoun (LO) and Woodbridge (WO) campuses, by adjuncts or one full-time faculty (who also teaches history) at MA, and by adjuncts and full-time faculty at AL and AN. Sociology is taught by full-time faculty at AL, AN, and WO; at the time of the report MA also had one full-time faculty member but she retired and has not been replaced. There are no full-time GEO faculty at NVCC.

Student Profile and Reasons for Attending:

The student profiles of the social sciences mirror the college’s overall student profile.

As part of each discipline evaluation, students were asked why they were taking courses in the discipline. Most ECO students (75%) were enrolled to prepare to transfer; 25% were there to meet degree requirements. According to the student survey, 45% of GEO students planned to transfer, 29% wanted personal enrichment, 17% enrolled to meet NVCC degree requirements, and 17% attended for teacher certification/recertification. Of the HIS student survey respondents, 72% planned to transfer, 34% took HIS as an NVCC degree requirement, 21% enrolled for personal enrichment, and 3% needed it for teacher certification (students could choose more than one reason). An unusually high proportion of PLS students (28%) planned to pursue careers in the discipline; 51% planned to transfer, 27% sought personal enrichment, 18% enrolled to meet an NVCC degree requirement, 3% needed teacher certification, and 18% reported “other” reasons for taking PLS. Of the students surveyed in PSY 201-202 classes, 43% planned to transfer, 29% were enrolled because it was a degree requirement, and 25% attended for personal enrichment. However, of the PSY students taking 201-202 at ELI, 55% enrolled because it was a degree requirement and 23% planned to transfer. Of the SOC 201 students surveyed, 62% reported they intended to transfer the credit and 26% attended to satisfy NVCC degree requirements.

Discipline Goals and Objectives:

All social sciences have discipline goals and objectives. All reflect the college mission and support several General Education Goals.

Assessment:

Each discipline was asked to assess student satisfaction and student achievement. All assessed satisfaction, but few assessed achievement. All social science action plans address the need for further student assessment.

Satisfaction
Students in most social science disciplines expressed satisfaction with learning. Seventy percent of the ECO students said they made above average progress in mastering the principles of economics. Ninety-four percent of GEO students reported that they made adequate, good or excellent progress in gaining factual knowledge. History students were usually satisfied, regardless of class size; 72% of the HIS 101-102 and 79% of HIS 121-122 students rated their progress as "excellent" or "above average" in learning factual content. Over 80% of the PSY students rated their progress toward all twelve psychology objectives as average to excellent. Over half of the SOC students rated their development of skills incorporated in discipline goals and objectives as above average to excellent. Most (79%) of the PLS respondents reported making excellent or good progress in gaining factual knowledge.

**Achievement**

Economics faculty assessed student performance in their two basic transfer courses. Responses to standard questions on final exams in ECO 201 and 202 showed that students learned what faculty felt should be emphasized in each course. History faculty examined the limited transfer data available, studied results of selected questions from NVCC's Test of General Education (gains from HIS 101 to 102 and 121 to 122), and responses to the Semantic Differential Test of Attitudes and Values. All three measures indicated that HIS students are learning; however, the faculty decided that the results of the Test of General Education were not especially good indicators of success in history. Sociology faculty compared ELI with traditionally-delivered courses, finding similar outcomes. Student achievement was not assessed in GEO, PLS, or PSY, and to a very limited extent in SOC.

**Curriculum:**

Most disciplines showed that syllabi generally conformed to course content summaries, although that was not the case in PLS. Psychology and SOC faculty recommended continuing to offer two-course sequences rather than or in addition to one-semester survey courses. The social sciences generally reported that their courses transferred satisfactorily. Most action plans address similar concerns: articulation/transfer, a general need to update the curriculum, and a potential need for prerequisites.

**Satisfaction with Instruction:**

Most social science students were satisfied with the instruction they received. According to the student survey, 76% of the ECO students reported they received above average or excellent instruction. A majority of GEO students (56%) agreed or strongly agreed that they were pleased with the quality of instruction they received; however, 20% disagreed or strongly disagreed and 24% said they had no basis to judge the quality of instruction. Most HIS respondents (93%), including all 16 ELI respondents, agreed or strongly agreed that they were pleased with the quality of instruction they received. Although 75% of the PLS respondents agreed or strongly agreed that they were pleased with the quality of instruction, 21% of the PLS students disagreed or strongly disagreed. Over 80% of the on-campus PSY students were pleased with the quality of instruction. A majority of SOC students agreed or strongly agreed that eight of the nine instructional methods listed helped them learn; 53% of the respondents said they had no basis to judge computer lab exercises.

**Productivity:**

Productivity varied from discipline to discipline, with HIS and PSY tending to exceed their funded ratios by the greatest margin. From Fall 1990 through Fall 1992, HIS consistently exceeded the funded ratios at most campuses. In Fall 1990 and Fall 1991, PSY exceeded the funded ratio at each campus, especially at LO. Economics exceeded the funded ratio two campuses in Fall 1990 and at four campuses in Fall 1991. Geography exceeded its funded ratio at two of the three campuses offering it in Fall 1990 and at one of the four campuses offering it in Fall 1991. Political science exceeded its funded ratio at three campuses in Fall 1990 and at two campuses in Fall 1991. Sociology FTES:FTEF tended to exceed the funded ration in Fall 1990 and Fall 1991, although it fell below the funded ratio at two campuses in Fall 1991. Where social science FTEF:FTES fell below the funded ratio for a campus, the actual ratio usually was close to the funded ratio.
LRC and Counseling:

Social science students and faculty reported that they were very satisfied with library services. As seen in the action plans, social scientists were less satisfied with the collections.

Most disciplines reported that counselors were doing an adequate job of counseling students in their discipline. However, historians recommended making an effort to improve their communication with counselors.

Professional Development / Faculty Qualifications:

All disciplines showed appropriate qualifications and that faculty try to get professional development even without college support.

Resources:

The social science disciplines do not require extensive supplies or equipment. However, faculty expressed an interest in incorporating more technology into their instruction. In addition, history faculty reported a desperate need for maps.

Scheduling:

Most students reported that course scheduling is appropriate. Geography faculty, however, determined a need for additional day-time classes.

RECOMMENDATIONS AND SUGGESTIONS FOR IMPROVING SOCIAL SCIENCE INSTRUCTION AT NVCC, BY CATEGORY OF ACTION

Examine Student Profile

GEO

RECOMMENDATION 1: Division chairs with responsibility for geography must determine whether the GEO student profile continues to differ markedly from the college-wide student profile, and if so, why.

PLS

RECOMMENDATION 2: Political science faculty must examine the reasons for the student profile differing noticeably from that of the college as a whole.

NOTE: Since these evaluations were initiated, both disciplines' student populations have diversified appropriately.

Review Goals and Objectives

ECO/GEO/PLS

SUGGESTION 1: The ECO, GEO, and PLS clusters should evaluate their discipline goals and objectives periodically to determine if they can be assessed and to assure that they continue to be consistent with the needs of students, the community, and transfer institutions.
HIS

RECOMMENDATION 1: Review the appropriateness of the History discipline’s Goals and Objectives in light of the new understanding gained during the course of this study.

RECOMMENDATION 4: Courses offered in non-traditional formats must be evaluated to determine that they produce outcomes comparable to traditional formats.

PSY

RECOMMENDATION 1: The Psychology Cluster must review the discipline goals and objectives biannually and modify them as necessary to conform to APA guidelines and the changing needs of our community and students. The cluster must also design objective measures to demonstrate that these goals and objectives have been achieved.

Assess Student Achievement

ECO

RECOMMENDATION 3: Economics faculty must assess student achievement of discipline goals in ECO 120.

GEO

RECOMMENDATION 4: Administrators with responsibility for Geography must work with the coordinator of Academic Assessment to design and administer assessments of student achievement of discipline goals in GEO courses.

HIS

RECOMMENDATION 3: During the next assessment cycle, identify and implement additional direct measures to assess students’ achievement of all History goals and objectives, including those relating to General Education Goals.

RECOMMENDATION 4: Courses offered in non-traditional formats must be evaluated to determine that they produce outcomes comparable to traditional formats.

SUGGESTION 1: During the next assessment cycle, identify appropriate measures of student outcomes in non-survey and specialized courses.

PLS

RECOMMENDATION 5: Political Science faculty must assess student achievement of discipline goals in PLS courses.

PSY

RECOMMENDATION 2: The Psychology Cluster must develop and implement a field test of knowledge and skill in Introduction to Psychology I, II using an achievement measure given to selected classes within a given academic year. The achievement measure must be administered at the following intervals: on entry into PSY I and at completion of PSY II.

SOC

RECOMMENDATION 1: Directly assess student performance in SOC 201.
RECOMMENDATION 2: Conduct assessments of SOC courses other than SOC 201 and review in detail the course descriptions and course content summaries of SOC 202 and all other sociology courses offered at NVCC.

Review/Revise Course Content Summaries or Syllabi

ECO

RECOMMENDATION 6: Review course content summaries and revise any which do not adequately describe the course content or meet college standards for course content summaries.

GEO

RECOMMENDATION 7: Administrators with responsibility for geography must work with geography instructors to review, and if necessary, revise course content summaries and syllabi for GEO courses.

HIS

RECOMMENDATION 2: Examine and revise as necessary all College-wide Course Content Summaries for history courses.

RECOMMENDATION 7: Review course content summaries on a regular basis to determine if revision is required and if course syllabi correspond to course content summaries.

PLS

RECOMMENDATION 9: The PLS cluster must write separate course content summaries for PLS 211 and PLS 212 and address the need for sequential enrollment in these 2 courses.

RECOMMENDATION 10: The PLS cluster must assure that course syllabi contain all elements required in the Faculty Handbook.

SUGGESTION 15: Administrators who evaluate political science faculty should compare the course syllabi to the course content summaries to ensure that they are compatible.

PSY

RECOMMENDATION 5: Full-time and adjunct faculty must include in their course syllabi all mandatory topics contained in the course content summary.

SOC

RECOMMENDATION 2: Conduct assessments of SOC courses other than SOC 201 and review in detail the course descriptions and course content summaries of SOC 202 and all other sociology courses offered at NVCC.

Incorporate General Education Goals

ECO

SUGGESTION 3: All economics faculty should consider giving more written assignments and should include more essay
questions on exams as a means to improve students' communication skills.

ECO/GEO

SUGGESTION 17: Economics and geography faculty should provide students with assignments that would encourage their use of campus library resources.

ECO/GEO/PLS

SUGGESTION 18: Faculty in the economics, geography, and political science disciplines should develop assignments that would encourage the use of the Academic Computing Labs and the Writing Centers at the campus level.

GEO

SUGGESTION 5: Geography faculty should identify ways, including the use of the Writing Center to help students to improve their ability to present ideas effectively.

SUGGESTION 14: Geography faculty should be encouraged to include more writing assignments in their courses.

HIS

SUGGESTION 7: Review periodically the college's general education goals in a conscious effort to incorporate these goals into history courses.

SOC

RECOMMENDATION 7: Establish criteria for sociology faculty concerning the general education science and technology goals, and develop a plan by which these will be incorporated into the curriculum and reflected in the course content summaries.

SUGGESTION 7: Inventory the general education goals and objectives addressed within SOC 201-202 and other sociology offerings, and disseminate to program faculty, counselors and advisors to apprise them of the centrality of sociology course content to individual program areas.

Curriculum - General

ECO

SUGGESTION 9: The Economics Cluster should consider the feasibility of working with History faculty to develop a joint economics/history course, for which students could obtain college credit in either economics or history.

HIS

SUGGESTION 4: Study the reasons that students enroll in the 200-level courses.

SUGGESTION 8: Conduct informal and regular inquiry into the community with the intent to offer those specialized courses that might enhance life-long learning.

SUGGESTION 12: Address the issue of increasing cross-cultural offerings, perhaps in the context of the Western Civilization and the World Civilization courses.

SUGGESTION 13: Investigate the possibility of renewing the discipline's investment in an Honors program.
PLS

SUGGESTION 10: The PLS cluster should determine the appropriateness of having students earn credit in PLS courses which overlap in content.

SUGGESTION 11: The PLS cluster should consider reactivating PLS 100 or contributing to the development of a similar course to be offered by Continuing Education for CEU credit.

SOC

SUGGESTION 1: Create an anthropology discipline category for the State Curriculum Guide and redefine appropriate SOC courses into this category.

SUGGESTION 2: Ensure that SOC 201-202 is taught on a regular basis on all campuses.

SUGGESTION 3: Develop an Associate in Arts degree specialization in social science wherein discipline requirements can be met by courses selected among the social sciences.

Facilitate Articulation/Transfer

ECO

SUGGESTION 2: Economics faculty should monitor and evaluate the progress of those NVCC graduates who become economics majors at the four-year institutions to which most NVCC students transfer.

HIS

RECOMMENDATION 5: Renumber HIS 125, 126, 127, 141, and 142 as 200-level courses in order to make them consistent with the numbering of special-interest courses.

RECOMMENDATION 8: Investigate as to why Mary Washington College is not adhering to the statewide transfer policy.

SUGGESTION 9: Negotiate with JMU concerning the acceptability of NVCC’s HIS 101-102 to satisfy JMU’s world history requirement.

PLS

SUGGESTION 12: The PLS cluster should continue to assess the appropriateness of its course offerings in light of the upper level courses offered by four-year institutions to which NVCC students tend to transfer.

PSY

RECOMMENDATION 3: The college must develop an agreement with surrounding 4-year schools to track and monitor NVCC transfers' performance in advanced psychology courses.

RECOMMENDATION 6: Although there has been significant improvement during the last two years in this area, the Associate Dean for Curriculum Services must continue to support ongoing yearly communication/meeting with 4-year institutions and the Psychology Cluster representative to clarify and enhance articulation concerns and process.
SOC

RECOMMENDATION 3: Closely monitor ASA recommended curricular changes and those of major transfer institutions as they affect transferability of discipline courses.

SUGGESTION 5: Aggressively encourage consistency in transferability among Virginia institutions.

SUGGESTION 6: Involve faculty of all disciplines, both program specific and general education, affected by proposed inter-institutional agreements during the planning stage for such agreements.

Prerequisites

ECO

SUGGESTION 4: Economics faculty should review tracking data to determine whether English or math pre- or co-requisites are needed for *Principles of Economics*.

SUGGESTION 8: The Economics Cluster should consider adding a statement to the catalog description strongly suggesting that students take ECO 201 before 202.

HIS

SUGGESTION 5: Collect data on student performance that focuses on students' reading and writing proficiencies of students enrolled in history courses.

SOC

SUGGESTION 4: Analyze the extent to which underprepared students enroll in SOC 201 and the effects the degree of student preparation has on grade distribution, course content and assignments.

SUGGESTION 8: Include a statement concerning "readiness" in course syllabi.

Improve Communication with Counseling

ECO/GEO/PLS

SUGGESTION 19: Improve communication between faculty in the ECO, GEO, and PLS disciplines and the counseling centers to assist students in understanding the transferability and appropriateness of discipline courses for the student goals.

HIS

SUGGESTION 15: Divisions should promote improved communication about the history discipline with the counseling services on each campus.

PSY

SUGGESTION 3: Counseling services should inform psychology faculty of the scope of services offered to students.

SUGGESTION 4: The Psychology Cluster should develop strategies to ensure and to maintain effective communication links between themselves and counseling offices throughout the college on such topics as program placement, course selection, and student needs assessments.
Improve Communication with Faculty in Other Fields

PSY

RECOMMENDATION 4: The Psychology faculty must facilitate ongoing communication between occupational-technical program heads and the Psychology Cluster to promote the meeting of student educational needs while at the college.

Improve Advising

PSY

SUGGESTION 1: Psychology faculty should inform and promote for those interested students course selections that will satisfy their needs and interests.

SUGGESTION 2: Psychology faculty should inform students while at the college about course offerings in psychology beyond the introductory level.

Enrollment

ECO/GEO/PLS

SUGGESTION 20: Further studies should be conducted regarding productivity in political science at Alexandria and Annandale, economics at Loudoun and geography and political science at Manassas.

GEO

SUGGESTION 21: Schedule more day sections of geography.

HIS

RECOMMENDATION 6: Monitor closely the effect of changes in degree requirements in the Business Administration and Science degree programs to determine their impact on history enrollments and retention rates.

PLS

SUGGESTION 7: Study the percentage of students in PLS 211 who enroll in subsequent PLS courses.

PSY

SUGGESTION 9: The discipline, while maintaining its current level of performance, should diligently search for new ways to make their course offerings more accessible.

Class Size

HIS

SUGGESTION: Further study should be made of class size work-loads and student achievement in relationship to the discipline's stated Goals and Objectives, as well as those of the General Education Goals of the college.

SUGGESTION: Campus academic administrators should assure that the history discipline not be allowed to systematically overrun the discipline funded ratio to compensate for underproductivity in other disciplines.
SUGGESTION 2: Acknowledge the adverse effect class size has on specialized course offerings and seek ways to maintain a variety of specialized courses within the history discipline.

Work with LRC to Buy/Purge Materials

ECO/GEO/PLS

RECOMMENDATION 11: Faculty in the economics, geography, and political science disciplines must review the comprehensiveness and currency of the print and non-print collections at the five LRCs, and request new and updated materials to be added to all campus collections.

HIS

SUGGESTION: Historians, together with their Division Chairs and the LRC Directors at each campus, should establish priorities for the purchase of appropriate resource materials.

SUGGESTION: On the campuses where maps are needed, the History Faculty should establish budget priorities and work with the LRC and Division Chairs to purchase appropriate cartographical materials.

PSY

SUGGESTION: The college should provide adequate funding for up-to-date resources in the field of psychology.

SOC

RECOMMENDATION 5: Review print and nonprint materials for sociology in the LRCs for possible purging from the collections.

SUGGESTION 12: Identify a core set of print and A-V holdings to be recommended for establishment at all campuses.

Hire FT Faculty

GEO

RECOMMENDATION 12: Consider hiring a full-time faculty member in geography.

HIS

SUGGESTION: Campus and college academic administrators should assure work to achieve the 70% proportion of full-time faculty staffing mandated by the VCCS.

SOC

SUGGESTION 9: Allocate a full-time faculty position in sociology to the Loudoun Campus.

SUGGESTION 14: In addition to establishing a full-time faculty position in sociology for Loudoun Campus, establish priorities for additional sociology faculty throughout the College.

Professional Development

ECO/GEO/PLS
SUGGESTION 13: Full-time economics, geography, and political science faculty should demonstrate a variety of instructional strategies for adjunct faculty.

SUGGESTION 16: Administrators should increase the professional development support for economics, geography, and political science faculty.

HIS

RECOMMENDATION 11: Make available to historians, individually and as a group, appropriate and discipline-specific professional development opportunities.

RECOMMENDATION 12: Historians need to be fully informed about computerized bibliographical resources; they need to understand their potential as instructional tools, and faculty need to be trained in their use.

SUGGESTION 3: Become more familiar with INTERCONNECT and, in general, learn more about distance learning.

SUGGESTION 14: History faculty meetings should be used to enhance professional development in the area of instructional methods and techniques.

PSY

SUGGESTION: Psychology faculty should have available sufficient tuition assistance funds to meet needs for upgrading their teaching techniques.

SUGGESTION: Through reimbursement of out-of-pocket expense, the college should encourage psychology faculty attendance in non-credit courses and other professional growth experiences, such as workshops, conferences, and seminars.

SUGGESTION: The campuses should develop a policy of making release time available to psychology faculty in order for them to pursue professional development and to complete quality projects that support college goals.

SOC

SUGGESTION 10: Activities constituting professional development for adjunct faculty should be defined and appropriate opportunities should be extended to adjunct faculty.

Improve Hiring, Training, Evaluation of Full-time and Adjunct Faculty

GEO

SUGGESTION 6: Student perception of the quality of the instruction in their geography course as indicated in the results from the student questionnaire should be brought to the attention of the geography faculty.

HIS

SUGGESTION 10: Reevaluate practices for hiring, training, supervision and evaluation of adjunct faculty.

SUGGESTION 11: The faculty evaluation process should be reconsidered.

SOC

RECOMMENDATION 4: Apply the existing policies for rank placement, promotion, and compensation uniformly for all adjunct sociology faculty across the College.
SUGGESTION 11: Require adjunct sociology faculty, both day and evening, to provide and publish in course syllabi scheduled times for advising and related student activities.

Get Up-to-date Equipment and Provide Storage Space

PSY

SUGGESTION 6: The division chairs should survey psychology faculty to determine what equipment is needed to enhance the delivery of instruction in psychology throughout the college.

SUGGESTION 7: The psychology discipline should order equipment based upon needs through division, equipment trust, and vocational education funds as appropriate.

SUGGESTION 8: Storage space should be allocated for the proper storage of materials and equipment used for psychology instruction.

SOC

RECOMMENDATION 6: Develop a plan for integration of technology into the sociology classroom which:

1. inventories and makes known to all discipline faculty the equipment, facilities and materials presently available on the campuses for use on a regular basis in the classroom;

2. identifies additional equipment, facilities and materials necessary to meet the needs of the discipline;

3. establishes priorities for acquisitions, and

4. addresses training or instruction necessary for faculty to incorporate these into their courses.

SUGGESTION 13: Change resource allocation and accounting procedures to better serve the evaluation of disciplines, including sociology, concerning discipline specific cost effectiveness and to facilitate planning to meet identified discipline needs.

APPENDIX F: Graduates = Primary Goals and Goal Attainment

PRIMARY GOALS AND GOAL ATTAINMENT OF GRADUATES

1989-1993

<table>
<thead>
<tr>
<th>Goal</th>
<th>Graduates of AS and AA (%)</th>
<th>Graduates of AAS and Certificates* (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transfer</td>
<td>80</td>
<td>82</td>
</tr>
<tr>
<td>Occupational training</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Improve job skills</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Personal enrichment</td>
<td>13</td>
<td>11</td>
</tr>
<tr>
<td>Attained Primary Goal</td>
<td>91</td>
<td>92</td>
</tr>
</tbody>
</table>

* Includes certificates and career studies certificates. AAA grads included for 1992-93.

APPENDIX G: Graduates = Employment and Preparation for Employment

Employment of Graduate Survey Respondents
1989 - 1993

Occupational Status Approximately Six Months After Graduation

<table>
<thead>
<tr>
<th>Occupational Status</th>
<th>Graduates of AS and AA (%)</th>
<th>Graduates of AAS and Certificates* (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employed full-time</td>
<td>49.5  50.5  53.0  50.9  47.5</td>
<td>72.1  70.2  70.0  69.7  66.9</td>
</tr>
<tr>
<td>Employed part-time</td>
<td>24.1  25.6  25.5  26.5  29.2</td>
<td>15.7  17.8  17.0  17.0  21.0</td>
</tr>
<tr>
<td>Unemployed (looking)</td>
<td>5.7   3.9   5.0   5.5   5.6</td>
<td>2.5   5.1   4.5   3.9   3.4</td>
</tr>
</tbody>
</table>

* Includes certificates and career studies certificates. AAA grads included for 1992-93.

The other choices (homemaker, retired, unemployed but not looking) make the totals for each year add up to 100%.

Relation of NVCC Program to Job

<table>
<thead>
<tr>
<th>Relation of NVCC Program to Job</th>
<th>Graduates of AS and AA (%)</th>
<th>Graduates of AAS and Certificates* (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Directly related</td>
<td>12.7  13.2  10.0  13.2  10.3</td>
<td>60.6  54.5  55.7  57.0  58.1</td>
</tr>
<tr>
<td>Closely related</td>
<td>30.6  33.5  33.1  23.3  24.6</td>
<td>23.8  25.0  20.3  22.0  20.3</td>
</tr>
<tr>
<td>Not related</td>
<td>56.7  53.5  56.9  63.5  65.1</td>
<td>15.6  20.5  24.0  21.0  21.6</td>
</tr>
</tbody>
</table>

* Includes certificates and career studies certificates. AAA grads included for 1992-93.

APPENDIX H: Responses to SCHEV-Mandated Graduate Survey Questions

The following is a list of SCHEV-mandated questions attached to the NVCC survey mailed to all members of the 1996 graduating class. Of the 2,581 graduates 690 responded, for a response rate of 27%. Data were analyzed by the NVCC Office of Institutional Research.

To what extent were you satisfied with each of these aspects of your community college degree program?

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Very much</th>
<th>Somewhat</th>
<th>Very little</th>
<th>Not at all</th>
<th>Not applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education</td>
<td>82.5%</td>
<td>17.0%</td>
<td>0.4%</td>
<td>0.1%</td>
<td>0.0</td>
</tr>
<tr>
<td>Advising</td>
<td>41.1%</td>
<td>38.4%</td>
<td>11.8%</td>
<td>4.3%</td>
<td>4.4</td>
</tr>
<tr>
<td>Course availability</td>
<td>57.5%</td>
<td>36.2%</td>
<td>4.8%</td>
<td>1.3%</td>
<td>0.1</td>
</tr>
</tbody>
</table>

Are you currently employed?

Yes, full-time 57.8%
Yes, part-time 23.9%
No, actively seeking employment 4.4%
No, not actively seeking employment 13.9%

To what extent is your community college degree program related to your current occupation? To what extent does your community college degree program help you perform in the workplace?

<table>
<thead>
<tr>
<th>Question</th>
<th>Very much</th>
<th>Somewhat</th>
<th>Very little</th>
<th>Not at all</th>
</tr>
</thead>
<tbody>
<tr>
<td>Related to current occupation?</td>
<td>38.8%</td>
<td>21.9%</td>
<td>14.7%</td>
<td>24.6%</td>
</tr>
<tr>
<td>Help you perform in the workplace?</td>
<td>35.3%</td>
<td>36.0%</td>
<td>14.3%</td>
<td>14.3%</td>
</tr>
</tbody>
</table>

Are you currently pursuing a bachelor's degree?
Yes, full-time: 30.5%
Yes, part-time: 24.9%
Yes, completed a baccalaureate program: 4.1%
Yes, but stopped before graduation: 4.3%
No: 36.2%

To what extent is this bachelor's degree program related to your community college degree program? To what extent did your community college degree program prepare you academically for the bachelor's program?

<table>
<thead>
<tr>
<th>Question</th>
<th>Very much</th>
<th>Somewhat</th>
<th>Very little</th>
<th>Not at all</th>
</tr>
</thead>
<tbody>
<tr>
<td>Related to NVCC program?</td>
<td>58.6%</td>
<td>28.5%</td>
<td>6.8%</td>
<td>6.0%</td>
</tr>
<tr>
<td>Prepared for the bachelor's program?</td>
<td>65.4%</td>
<td>31.7%</td>
<td>2.1%</td>
<td>0.8%</td>
</tr>
</tbody>
</table>

To what extent did your community college degree program prepare you for responsible citizenship (e.g. better informed about your community and the political process)?

<table>
<thead>
<tr>
<th>Question</th>
<th>Very much</th>
<th>Somewhat</th>
<th>Very little</th>
<th>Not at all</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>23.0%</td>
<td>40.9%</td>
<td>23.0%</td>
<td>13.0%</td>
</tr>
</tbody>
</table>

How much money did you borrow to pay for tuition, books and other educational expenses before you graduated from this community college?

<table>
<thead>
<tr>
<th>Amount Borrowed</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>76.9%</td>
</tr>
<tr>
<td>$1,000 or less</td>
<td>4.6%</td>
</tr>
<tr>
<td>$1,001 - $4,000</td>
<td>7.8%</td>
</tr>
<tr>
<td>$3,001 - $5,000</td>
<td>6.6%</td>
</tr>
<tr>
<td>More than $5,000</td>
<td>4.1%</td>
</tr>
</tbody>
</table>

APPENDIX I: Graduates = Educational Status, Preparation for Transfer, and Transfer Institution Attended

1989-1993 Graduate Survey Responses

Educational Status and Evaluation of Preparation for Transfer

<table>
<thead>
<tr>
<th>Year</th>
<th>Graduates of AS and AA (%)</th>
<th>Graduates of AAS and Certificates (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Continuing Students</td>
<td>71</td>
<td>67</td>
</tr>
</tbody>
</table>
| Rating of Educational Preparation at NVCC for Present Studies |                |                                      |[
| Excellent   | 61   | 61   | 59   | 58   | 57   | 58   | 55   | 54   | 59   | 61   |
| Adequate    | 38   | 38   | 40   | 42   | 41   | 42   | 42   | 43   | 39   | 38   |
| Inadequate  | >1   | 1    | 1    | 1    | 1    | >1   | 3    | 3    | 1    | 1    |

Colleges and Universities Attended

by 1989 - 1993 Graduate Survey Respondents

<table>
<thead>
<tr>
<th>INSTITUTION</th>
<th>YEAR</th>
</tr>
</thead>
<tbody>
<tr>
<td>VIRGINIA</td>
<td></td>
</tr>
<tr>
<td>GMU</td>
<td>137</td>
</tr>
</tbody>
</table>
### APPENDIX J: Transfer Success of NVCC Students, by Race

Includes Students with 12 or More NVCC Credits

<table>
<thead>
<tr>
<th>Year</th>
<th>Race</th>
<th>GPA</th>
<th>93-94 W</th>
<th>94-95 W</th>
<th>95-96 W</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>#</td>
<td>%</td>
<td>#</td>
<td>%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>&lt;1.0</td>
<td>1.0-2.0</td>
<td>2.0-2.5</td>
<td>2.5-3.0</td>
</tr>
<tr>
<td>93-94</td>
<td>W</td>
<td>27</td>
<td>2.4</td>
<td>141</td>
<td>12.7</td>
<td>241</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>2</td>
<td>3.1</td>
<td>13</td>
<td>20.3</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>A</td>
<td>5</td>
<td>3.1</td>
<td>24</td>
<td>14.9</td>
<td>34</td>
</tr>
<tr>
<td></td>
<td>H</td>
<td>5</td>
<td>8.9</td>
<td>10</td>
<td>17.9</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>N Am</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>100.0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>O</td>
<td>1</td>
<td>2.7</td>
<td>6</td>
<td>16.7</td>
<td>10</td>
</tr>
<tr>
<td>94-95</td>
<td>W</td>
<td>21</td>
<td>5.5</td>
<td>44</td>
<td>11.5</td>
<td>101</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>1</td>
<td>3.8</td>
<td>5</td>
<td>19.2</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>A</td>
<td>1</td>
<td>4.8</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>H</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>7.7</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>O</td>
<td>1</td>
<td>12.5</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>95-96</td>
<td>W</td>
<td>75</td>
<td>7.2</td>
<td>121</td>
<td>11.6</td>
<td>183</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>8</td>
<td>7.6</td>
<td>20</td>
<td>19.0</td>
<td>29</td>
</tr>
<tr>
<td></td>
<td>A</td>
<td>12</td>
<td>5.8</td>
<td>30</td>
<td>14.5</td>
<td>42</td>
</tr>
<tr>
<td></td>
<td>H</td>
<td>9</td>
<td>9.9</td>
<td>18</td>
<td>19.8</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td>N Am</td>
<td>2</td>
<td>20.0</td>
<td>1</td>
<td>10.0</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>O</td>
<td>1</td>
<td>3.0</td>
<td>4</td>
<td>12.1</td>
<td>7</td>
</tr>
</tbody>
</table>

W=White    B=Black    A=Asian    H=Hispanic    N Am=Native American    O=Other

### APPENDIX K: ELI A Starter @ vs On-Campus Success Rates, Cumulative, by Course

Five Semesters: Spring 1995 through Spring 1996
[1] Wording as approved by the Administrative Council; may differ from original actions as written by the evaluation committee. The ECO/GEO/PLS report has not been approved by Curriculum Committee yet (11/96).