



Design, Results, and Analysis of Assessment Components In a Nine-Course CAC Program

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The case for assessment of college writing programs no longer needs to be made. Although none of us would have chosen the words, we all have come to accept the truth of Roger Debreceeny's words: the "free ride" for America's colleges and universities is indeed over (1). All writing programs face difficulties in selecting the means for the most effective evaluations for their individual programs. Key concerns include how appropriately, practically, and cost effectively various assessment tools address this problem.

Like many postsecondary institutions, Robert Morris University (RMU) is now solving its own version of this national concern. Seemingly immune to outside scrutiny for many years because of a highly successful placement record, the University has recently come under increased pressure to show that we are improving student literacy as our promotional literature says we are. In particular, our University's comprehensive and recently launched Communications Skills Program (CSP), a nine-course program across the curriculum, now needs to provide assessment data to its stakehold-

ers, including the business and professional community that helped to fund the program.¹

Combining the interests of the various communities, a number of us at Robert Morris recently faced the question of how we could show our various stakeholders, including a faculty extraordinarily generous with its time, whether our one-of-a-kind Communication Skills Program is effective in improving students' communications skills and worth a continuing investment. In this article, we argue that we have begun to find our answers in a uniquely tailored evaluation process made up of student portfolio reviews; course plan/syllabus evaluation; and a newly developed program evaluation involving pre-, mid-, and post-testing. To do so, we focus on the context surrounding the development of the latter, "locally grown" program evaluation and on what we have learned from our initial study. We believe we can be very helpful in showing what a committed group with limited time and money can do to create effective evaluation for a comprehensive skills program. We also hope our experiences can serve as models for others interested in developing "in-house" program evaluations.

Throughout this article, we delineate the main challenges we faced, and in some cases continue to face, in attempting to show various stakeholders that our program can add value that national standardized testing will not adequately measure. Standardized instruments test skills that, while important, may or may not be of the highest priority to a specific university. For example, in designing questions for our own test, faculty participating in the assessment committees established goals they considered most important for *our* students participating in *our* Robert Morris Communications Skills Program. Those goals were then kept in mind as we developed our test questions. The assessment path we chose, developing our own instruments around our own goals, supplements existing classroom evaluation practices with further measures developed by a committee of interested faculty from across the business and professional curriculum.

Our approach is designed to allow us to maintain the program's integrity, including the conscientious teaching and testing of communications abilities throughout the four-year program. Our path is also designed to achieve the important goal of creating a program and program evaluation that participating faculty across the entire curriculum consider ac-

ceptable: relevant as well as valid, non-disruptive as well as efficient.

We should underscore that ideas for the evaluation of the CSP were included in the planning for the program from the start. From the start, we also understood that we needed to keep all planning as collaborative as possible, including, at first, the most influential and affected parts of the Robert Morris community, particularly faculty who guide and oversee the program on its most operational level. Discussion among University administrators resulted in initial plans for evaluating as well as implementing a broad communications skills program, with five courses housed in the Communications Department and four communications-intensive courses in students' specialized disciplines. Working with the upper-level administration as we did is strongly recommended by Jankovich and Powell, who suggest that support from the top as well as from those who will be expected to maintain the program will be critical for the life of a program. In addition, input from faculty was—and continues to be—solicited at faculty seminars and through the ongoing workshops and committee structure that help sustain the program. More about those structures later.

Background of the Robert Morris Communications Skills Program

The detailed story of the theory-based planning and implementation of the Robert Morris CSP, including the incorporation of detailed, carefully considered, and systematically reviewed course plans, has been told before (Carson, Sipple, Yahr, Marshall, and O'Banion). But a review of that story will be useful in providing a context for the problem, or a field view, to use the language of the tagmemic examination presented in that January 2000 *LLAD* article (3.3 p. 3-35).

Robert Morris is a medium sized university in the Pittsburgh vicinity. The surrounding tri-state area (western Pennsylvania, eastern Ohio, and northern West Virginia) is the location from where most of our students come and also the home of the businesses and organizations that employ many of our graduates. As our location allows and our demographics suggest, RMU's President, Edward Nicholson, keeps in frequent contact with the business community, particularly employers and managers who work closely with our graduates. As a matter of course, he inquires about the perfor-

mance of our former students. For several years, Nicholson reported that he kept hearing the same analysis: Robert Morris graduates, their managers said, knew their subject areas well (a vote of confidence for their subject-area teachers and for the existing “write-to-learn” Writing Across the Business Disciplines program). Our students, President Nicholson was told, could also perform job tasks effectively, but as a whole, their communications skills were weak. Although this feedback was not systematically collected, stored, nor evaluated, the sheer number of concerned remarks from an important constituency indicated to Nicholson that something must be done.

At a series of meetings, the President invited the Academic Vice President, the Dean of the School of Communications and Information Systems, the Head of the Communications Department, and the Director of the Language Across the Curriculum Program and others to help find a remedy for the situation. The upshot of those meetings was the beginning design for the Robert Morris Communications Skills Program (CSP). As we developed it, the program went through a process of modifications, largely through a series of meetings with other administrators and the faculty from the School of Communication and Information Systems.

Our previous article examines in depth how we used a version of the tagmemic discovery procedure to plan a Skills program that helped ensure successful collaboration from all stakeholders. What emerged was an integrated communication skills program emphasizing reading, writing, listening, and presenting, using appropriate presentation software or other technologies. The instruction takes place in a nine-course, 27-hour series, the first five courses being taught in the Communications Department and the last four in the subject-area courses (or related courses) of the students' majors.

The latter courses were targeted by individual departments to evolve into the upper division, communications-intensive component of the CSP. The 45 faculty from across the disciplines who initially volunteered to teach the courses participated in one of two semester-long workshops facilitated by the Director of the Language Across the Curriculum Program. In subsequent semesters, faculty who volunteered to teach in the CSP were mentored by faculty who participated in one of the earlier seminars. By the end of the seminars or mentoring process, faculty members produce highly detailed course plans

integrating communications skills, including language to learn practice techniques, with already existing course material. Faculty were, of course, paid for their work in the seminars and in creating the course plans. To allow for increased attention, especially feedback, to students' practice of their communication skills, each of the nine courses are capped at 22 students, requiring an almost immediate need for an increase in faculty.

Writing program and many other administrators will immediately recognize that funding such an elaborate program presents one of the first and most formidable problems. The group designing the program concluded that since the business community hiring our students was a stakeholder, this community ought to be willing to help fund a program to improve student skills. Approaching the business community with this argument, RMU was successful in funding the program for several years, complete with new, fully equipped, state-of-the-art presentation classrooms. Now these and other interested constituencies, including faculty who have invested substantial amounts of time incorporating new strategies and stronger skills, expect evidence that their investment is working.

Drawing from faculty across the disciplines, training for the CSP began at Robert Morris in Spring 1995 with a series of seminars in the School of Communications and Information Systems. The collaborative seminars created a set of courses constituting the first half of a Communications Skills Program replacing the more traditional series of courses: Composition I and II as well as Speech. The new Program explicitly adopts rhetorical approaches to integrating reading, writing, listening, and presenting.

The Program's initial five courses, housed in the Communications Department, are sequenced according to level of difficulty and rhetorical sophistication. Audience analysis, a unifying concept for the entire CSP, is apparent in the titles of these first five courses. Students begin with Course I, "Audience as Self and Others." In the next four courses, as their titles suggest, students deal with more complex conceptions of audience: "Audience as Fixed and Singular," "Audience as Varied and Multiple," "Audience as Multicultural," and a business communications-related fifth course, "Audience as Organizational and Professional."

The latter course also serves as a bridge between the first five communication courses and the discipline-specific communications-intensive courses taught and housed in students' majors. As one of the first steps toward evaluation, the business communications/bridge course was designed to include a number of assessments on which students must prove satisfactory before they are permitted to move to communications-intensive courses in their majors.

The first iteration of the initial course, "Audience as Self and Others," was taught in Fall 1995. To compare levels of achievement within the program, we began a pre-, mid-, and post-program testing when the first group of students were seniors. In the meantime, we maximized our time in establishing and revising the newly offered CSP courses, making adjustments after lengthy discussion among "breakout groups" of instructors responsible for each specific, newly designed course.

In creating the first five communications courses, the collaborative faculty seminars refined initial ideas from the earlier administrative meetings into four main principles growing out of problem-solving rhetoric (See Young, Becker, and Pike and, for a development of its application to the Robert Morris CSP, Carson et al.):

1. *Communications as an Ability.* We believe that communication skills can be taught and learned. We see communication skills not as gifts but as abilities that can be (a) practiced and rehearsed, (b) coached, and (c) improved. As a result, we have incorporated a substantial requirement of all graduates who move through any undergraduate program at Robert Morris University: All students are required to take a total of nine communications-related courses. Each of the first five courses, taught within the Communications Department, have the particular audience focus discussed above. So that the important processes of practicing, rehearsing, and coaching are possible, each CSP course was capped at 20 (later raised to 22) students.
2. *Communications Across the Curriculum.* We believe that learning communication skills can find application across the curriculum. We do not see communi-

cation skills as a set of abilities that should be housed in or owned by Communication or English Departments. We follow the theories of many classical and neo-classical rhetoricians in arguing that such a separation of invention from the rest of the communication process is counterproductive (see, for example, O'Banion). We see communications skills as playing a crucial and defining role in all disciplines, fostered by faculty in all disciplines. Therefore, in addition to the five CSP courses taught in the Communications Department, we require all Robert Morris University undergraduates to take four more CSP courses in their majors.

These upper-division, disciplinary CSP courses are communications-intensive versions of already-existing courses taught by faculty from across the curriculum who volunteer to participate in the CSP. To teach a communications-intensive course, faculty initially must have taken one of two 45-hour, semester-long seminars that have been offered as training for the program. Subsequently, faculty joining the CSP are mentored by members of their departments who have taken the seminars. Each participating faculty member must create a detailed communications-intensive course plan or be informed by and use a previously created course plan that integrates the CSP goals for students' third and fourth years. Each course plan must be reviewed and approved by a Communications Skills Program Committee comprised of faculty from across the curriculum who themselves have had course plans approved. These courses are also capped at 22 students to allow for more individual attention on communicating in the context of the students' given fields.

To achieve workplace relevance, each CSP course plan taught in the various disciplines is also informed by a Professional Practitioner Report. To prepare this Report, a CSP faculty member interviews a practicing professional who has experience managing and/or hiring entry-level candidates in the given field. Together, the RMU faculty member and the practicing profes-

sional specify the various types of rhetorical processes and related communications (including writing, reading, listening, presenting, as well as genre expectations, document lengths, and so on) that new hires are expected to master to communicate effectively in their jobs and fields. A sample professional practitioner's report can be found in Appendix A of our January 2000 *LLAD* article (p. 23).

3. *Time on Task as Improving Communications Skills.* A third fundamental principle of the CSP is that time on task is needed to develop these skills throughout a student's college education. Any professional knows that communication skills are not a set of abilities that once learned no longer require practice. The combination of the nine required communications courses allows students to improve their abilities within various contexts, classrooms, and disciplines. By focusing on communications each semester throughout their college careers, students should have ample opportunities to practice and learn the types of communication strategies that work in general as well as those that may help them in specific aspects of their fields and future careers, whether they are communicating with experts or laypeople.
4. *Integrated Approach to Teaching Communications Skills.* Finally, we believe that rhetorical approaches to communicating can effectively be taught in integrated ways and in integrated contexts, just as we daily cycle through a myriad of communication skills: talking on the phone, participating in or running meetings, giving presentations, corresponding with others on electronic mail, writing reports, listening and responding to colleagues or clients, as well as communicating with peers and those outside our disciplines.

As the 1995 report from the Conference on College Composition and Communication Committee on Assessment argues, communication comprises integrated, social activity taking place in particular contexts. To succeed in their fields, students will need to

integrate a range of communication skills. They should know how to effectively make sound and ethical arguments in informal and formal written and oral settings (Cooper). They must also learn to listen and negotiate a range of perspectives and points of view. To this end, CSP students are encouraged in each of the nine CSP courses to practice reading, writing, listening, and presenting with appropriate technology for particular audiences in authentic assignments that often call upon them to *integrate* each of these communications skills.

We trust that exposing students—throughout nine courses—to a myriad of communicative contexts will help them understand that learning the basic skills in a one-size-fits-all manner is not enough. We also trust that the many opportunities provided in the nine required CSP-related courses can encourage students to develop more awareness of the diverse audiences with whom they may communicate. We hope students better understand the implications of the range of genres in which they communicate in their daily personal and professional lives. We consider it important for students to begin to understand the impact of integrated skills and genres and how they work together to shape communicative processes and products (Cross). As McEachern reminds us, “Even a genre that is often considered neutral and objective, such as meeting minutes,” can be used as a tool for control (198). CSP students should leave the program understanding that what they say and how they say it can impact people differently, depending on who they address and on the overt and underlying goals of both sender and receiver. Students should also understand that their messages may have both short- and long-term effects in local or wide-ranging contexts.

The four principles above have guided and continue to guide the development of our program. Since the success of the program requires that many people across the University share these or similar beliefs and commitments, we have—after the initial administrative and School of Communications and Information Systems meetings—worked with interdisci-

plinary faculty every step of the way, from planning to integrating, and, finally, to assessing the program.

In Spring 1999, the first students to have taken all nine required CSP courses graduated from Robert Morris. By the following September, 45 different CSP courses had been created in disciplines all across our curriculum. More than 800 sections of the initial five CSP courses and 400 sections of CSP Courses VI-IX (those taught in students' disciplinary majors) have been taught. Below we share our initial efforts to measure the impact of the Program on particular aspects of students' communication skills.

The CSP Portfolio

Every student going through the curriculum at Robert Morris University is expected to maintain a portfolio throughout the CSP courses. This portfolio should include the range of assignments built to highlight various communications skills, from essays or reports to videotaped presentations. As it evolves, the CSP Portfolio can serve multiple functions, providing Program as well as individual and course assessment.² For Program-specific purposes, students are asked to keep their own materials from each CSP course to arrive at a balanced portfolio with some of each of the following:

- their best pieces of writing
- their best videotaped presentations
- evidence of their performance on listening assignments and tests
- evidence of their performance on reading assignments and tests
- feedback on any of the above from instructors and peers
- their own self-assessments on or reflections of all of the above

Among other purposes, the portfolio serves an individual diagnostic function. At the beginning and end of Course V, instructors and students are asked to review the portfolio carefully, initially identifying the particular communication skill each student seems to have the most strengths in as well as the skill the student needs to attend to most during Course V. The rubrics for the portfolio review are based on the Final

Assessment standards of Courses I-IV. Typically the instructor and student agree to a development plan in narrative form specifying how the student will work on improving his or her weakest skill, such as speaking. Currently, students may also be encouraged to attend sessions in a new CSP Communications Lab. (In 2001, the CSP hired, in addition to peer tutors for the lab, writing/speaking instructors to support the range of abilities found among CSP students.) At the end of the course the student's portfolio is rated by, in addition to the instructor, two other faculty readers according to rubrics with clear standards of performance as noted below. If a student's portfolio and performance in the course are not satisfactory, the student is asked to take the course again before moving on to the four communications-intensive courses required in his or her major.

As the Program evolved, CSP V faculty met to define the goals and items to be tested and then created appropriate rubrics for the semester's end. One result of the meetings is the sense that all of the instructors understand the program and course goals as well as the criteria for assessing portfolios and are able to convey them to their students. This collaboration, an important social dimension of improvement, is bringing more coherence to the CSP by raising faculty awareness of program goals and helping them to focus on criteria in courses.

Throughout, faculty across all disciplines teaching CSP courses across the curriculum are encouraged to review their students' portfolios and to suggest particular course assignments that might be useful to include in a job portfolio. In addition to gathering portfolio materials throughout the CSP courses, students are writing self-assessments of their own work and progress as well as receiving feedback on their communication performances (presentations, reports, and so on) from peers and instructors. Portfolios, including all of the above materials, provide important, direct examples of students' communications abilities and progress. Portfolio reviews are important supplementary measures to other graded course work showing students' ability and progress. A portfolio approach, of course, can serve program evaluation purposes as well.

Prior to the portfolio review or our programmatic testing (about to be described), students have multiple opportunities to practice and hone each communication skill. In all CSP

courses students complete a variety of assignments, most asking them to compose and/or present material related to the given course. Students therefore use writing, reading, speaking, and listening for a range of purposes in a variety of contexts. In addition, faculty measure these skills directly in final examinations given in each course.

Finally, the completed portfolio is also used as a way of providing a qualitative measure of the Communications Skills Program as a whole. Random samples of student portfolios are collected and evaluated by trained readers according to the exit standards of Course V. Some sample standards, for instance, ask that students demonstrate rhetorical improvement in presentation skills (evident from videotaped presentations) and in writing successfully in a range of genres appropriate to their fields.

At the end of the most recent term, Spring 2002, we added a more rigorous dimension to our program evaluation. The 13 faculty who teach CSP V performed a criterion-referenced assessment of 417 portfolios available from the 462 CSP V students. Of the 417 portfolios scored, 18 (4.3%) were incomplete and could not be given a final rating. Of the ones rated, 105 (25.1%) were exemplary, 285 (68.3%) were proficient, and 9 (2.2%) did not meet standards.

Each portfolio had two trained readers and, to ensure validity, no instructor was allowed to rate portfolios from his or her students. The portfolios included a few edited pieces of very basic business communications—a cover letter and résumé, a letter or memo—and printouts of six PowerPoint slides. The rating rubrics, based on course goals and practices, were created by CSP V faculty. Faculty shared the rubrics with their students beforehand so that students would know how they were being assessed and that they should take assessment seriously.

The results indicate that CSP V students are achieving appropriate outcomes as designed. We expect a high proficiency rate in this course since students have completed four previous CSP courses. (Some transfer students may be more or less proficient, but they are nonetheless all required to take CSP Course IV and Course V.) Most recently, as Table 1 below indicates, CSP V students demonstrated that nearly 94 percent of them are considered exemplary or proficient in their abilities to write basic business communications.

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Total Portfolios Scored	417		
Total CO230 Enrollment	462		
No Submissions	47	10%	of 462
Portfolios Scored	417	90%	of 462
SCORES (6 highest-1 lowest)			
	Total	% of 417	
6 - Highest	6	1.4%	
5 - Exemplary	99	23.7%	
4-3 - Proficient	285	68.3%	
2-0 - Does Not Meet Standards	9	2.2%	
I - Incomplete Submissions	18	4.3%	
		~100%*	

Table 1: Summary of CSP V Portfolio Assessments, Spring 2002.
*Scores do not add up to 100% exactly due to rounding.

Informative as the review of CSP Portfolios can be, we have found that the business and professional community as well as government and other funding agencies are often most convinced by further quantitative assessments.

Assessment Instrument: Creation and Constraints

The results of the portfolio assessment allow us to conclude that, in the opinion of faculty members, students who have taken CSP V show proficient or exemplary communication skills. This result is certainly encouraging assuming that employers of RMU students will agree in this assessment. However, the portfolio assessment is not an “added-value” assessment. That is, it does not tell us that the good performance of the students is the result of the instruction that they received at RMU. To assess the effectiveness of the CSP program, at a minimum, one needs to compare student performance before they had CSP instruction with their performance after they had that instruction. It would not have been feasible to obtain portfolios from RMU students before they entered the program. Therefore, we sought a practical alternative that would allow us to assess the value added by the CSP.

To begin developing such an additional element for our program assessment, in late Fall 1998, the Director of the Language Across the Curriculum Programs appointed a Communications Skills Evaluation Committee made up of faculty from nearly every major at Robert Morris. The Director then

invited John R. Hayes from Carnegie Mellon University, a specialist in curriculum evaluation procedures, to participate as an outside consultant on the Evaluation Committee. After reviewing the needs and constraints of the school, as well as the strengths and weaknesses of a number of evaluation methods, the Committee decided on and began creating its own program evaluation instrument. In considering how to assess the students' communication skills across the curriculum, we had to take into account all facets of the existing CSP, including program goals, shared values and beliefs, possible methods, other assessments (see "The CSP Portfolio," above), and constraints.

Creating a new assessment instrument is never an easy task. One shared belief about evaluation that arose quickly in our discussions was that the best assessment instruments are those that are locally created, designed within a specific context to evaluate locally developed goals, rather than national standardized tests from outside assessment companies (Huot). In their article on assessing competency in business writing, Varner and Pomerence concur, stating that "while standardized tests may make the task of assessing writing easier, the custom-made, site-based test is a better tool for assessing the quality of student writing" in the context in which it was created (85). This aspect became central in the development of our new instrument.

Another shared assumption the committee quickly agreed on is that the best way to measure writing is by examining writing, preferably through multiple pieces, each aimed at particular audiences with specific purposes (White "Assessing"; Camp; Huot). We believe the same holds true for the other abilities: Listening, speaking, and reading can best be measured by examining students performing these abilities, ideally in multiple contexts.

While considering some of these initial beliefs, we had to keep other program measures in mind, such as CSP course final examinations, and our major qualitative individual and program assessment: the evolving CSP portfolio. At the same time, we had to take into account a number of constraints affecting the creation of an evaluation instrument, including time, money, expediency, and space within an already full program. As a result of the existing measures already in place and our existing constraints, our interdisciplinary Committee chose to create a multiple-choice test focused on as-

pects of the communication skills that we considered critical. The development of our specific instrument can best be understood in the context of our needs, purposes, goals, and constraints—all of which we attempt to share below. We do so with hopes that others facing similar challenges can benefit from recognizing the complexities of our experience.

One major constraint was our budget. With our CSP funding and resources already stretched by support for faculty training, presentation classrooms, and additional faculty, we had a smaller budget for evaluating the program. We also faced the significant challenges of limited time. The Evaluation Committee began meeting near the end of Fall 1998. The administration originally requested that quantifiable evaluation measures be attempted the very next semester but compromised on conducting the test the following academic year. Although we had made provision for qualitative assessment of the program through the use of portfolios and the faculty's incorporation of CSP goals into detailed course plans (systematically reviewed by a Communication Skills Program committee), we had not fully prepared an additional quantitative assessment. Being able to avoid such a time constraint is a good reason to include assessment planning throughout the life of program planning. We had spent our earlier time developing one new course after the next and modifying the courses for subsequent offerings. Focused on individual and course assessment, we waited to institute program assessment until all five CSP courses had been offered within the Communications and Information Systems Department at least once.

Again, crucial to an effective programmatic assessment was considering the key goals of our own Communications Skills Program (White "Pitfalls"; Jankovich and Powell). In an attempt to make the CSP concepts very explicit, the early collaborative meetings had unpacked large concepts into some 40 instructional objectives. Translating such a large number of instructional objectives into an effective test that could be used by both Communications Department and faculty from across the entire curriculum became an unmanageable task. Under the direction of our outside consultant, the Evaluation Committee reconsidered the key concepts of the Program.

In the end, we organized our test around measuring five of the most important goals of the Program that could be ex-

amined inexpensively, expediently, yet usefully through multiple choice instruments focused on the following:

1. Reading a longer text and identifying effective corresponding summaries, implications, and key points
2. Reading and selecting effective, contextually based arguments for use in given pieces of writing
3. Identifying appropriate usage and correctness in given pieces of contextualized professional writing
4. Selecting best practices for choosing and incorporating the most relevant analytical research and identifying the best published research on given topics within given contexts
5. Displaying an understanding of proactive listening approaches in given contexts

As we moved to the decision to assess through a multiple-choice instrument, we committed ourselves to creating the best possible instrument of this type, applying principles of user-testing, iterative design, and piloting. We believe we have created a sophisticated instrument that addresses some of the more complex communication strategies and requires students “to *think* about communication problems and solutions” (Allen 372). In designing our instrument, we took into account the common criticism of multiple-choice tests as focusing on one-dimensional questions and worked to ask students to show they “knew how” as well as “knowing that.”

To do so, we focused on creating questions that could provide a glimpse at critical thinking abilities underlying communicative performance (McEwen). As Aiken explains, although multiple-choice tests are notorious for not doing so, carefully designed multiple-choice tests can address complex as well as straightforward aspects of learning.

We specifically strove to create questions that would prompt students to think critically in addressing the five goals listed above. In adopting this approach, we are trying to avoid a trap many educational approaches fall into, namely, focusing on “the lowest level of the cognitive taxonomy—dispensing and testing facts—at the expense of higher order skills” (McEwen 101). Instead, we drew from a number of strategies allowing students to apply critical thinking (McEwen) in such

aspects as the following. After each aspect, we have included a related example from our new assessment instrument.

- **Identifying central issues.** *Example:* After reading a critique of Robert Kelley's book *How to Be a Star at Work*, students are asked: "Your supervisor asks you to write a summary of *How to Be a Star at Work* for a committee she is heading on Peak Performances at your growing company. Based on your reading of DeBare's article, which of the following four passages would best serve as a summary in the memo you send to your supervisor?"
- **Recognizing underlying assumptions.** *Example:* After reading a paragraph on the drinking age, students are asked: "The paragraph above would be most useful to support:
 - A. An **argumentative thesis** supporting lowering the drinking age.
 - B. An **argumentative thesis** opposed to lowering the drinking age.
 - C. An **informational thesis** presenting both sides of the drinking age issue.
 - D. An **informational thesis** identifying benefits to lowering the drinking age."
- **Evaluating evidence or authority.** *Example:* After reading a piece on legalizing riverboat gambling in the local (Pittsburgh) community, students are asked: "Which of the following would be viewed as the most **impartial source** for information on the issue of gambling impact on communities?"
- **Drawing warranted conclusions.** *Example:* After reading a piece on a new tax system, students are asked: "Given the disadvantages mentioned above, which of the following would most likely **oppose** a flat tax proposal?"
- **Considering alternatives to an argument.** *Example:* At a party, you overhear four people talking about *How to be a Star at Work*. You conclude that three of the people trust Kelley's research, but one

doesn't accept Kelley's findings. Which comment would most likely belong to this fourth person?

- A. "Most stars are more intelligent and ambitious than average performers."
- B. "Stars often work the same number of hours as average performers do."
- C. "The workers I know want to be more productive but cannot seem to make it click for themselves."
- D. "Stars are made, not born."

- **Locating and evaluating sources of information.** *Example:* After reading a piece on complexities of the new tax system, students are asked: "Which **key phrase** would be most useful in conducting additional search on this topic to aid in your understanding of its implementation?"

As do many faculty, we believe that open-ended questions and opportunities for more authentic measures can allow the most direct and highest level evidence of learning (White "Assessing"; Kubiszyn & Borich). In our case, such opportunities are instituted within the final examinations assessing the four main communications skills in each CSP course, as well as within materials included in each student's portfolio. Like a number of faculty and researchers, we hold the additional belief that well constructed multiple-choice tests can provide revealing and informative results (Hansen and Dexter) and that they can complement well the range of measures gathered through other means. We would not argue that a program evaluation should rely on just one type of assessment. In our case, the range included performance in the CSP course, final examinations focused on communications skills, an evolving portfolio displaying authentic student performance, and scheduled multiple-choice assessments.

In the end, we see our test as a means to provide a quantitative picture to complement the qualitative measures already being gathered through the CSP portfolio and the creation and systematic review of detailed CSP course plans.

Administration of the Initial Evaluation Test

The resulting multiple-choice assessment is designed to test students at three stages in the CSP Program: at the beginning of Course I (as a pre-test), at the end of Course V (as a mid-test in the Program) and at the end of Course IX (as a post-test).

Our initial evaluation instrument was completed and piloted in early March 1999. Since the entire test instrument requires more than a 50-minute class period to administer, the Committee decided to give the test in the following major parts, each taking about 30 minutes:

- Part 1 is Assessment of Reading and Constructing Arguments
- Part 2 is Assessment of Correctness and Usage
- Part 3 has two sections, each taking about 15 minutes
 - 3a. Assessment of Research Skills and
 - 3b. Assessment of Listening Skills.

As the pretest sample, 69 students in various sections of the first CSP course each took one of the three parts of the test in mid-March 1999. Although these students already had the benefit of about half a semester of their first CSP course, they were deemed sufficiently naïve of the program to take part in a trial run of our pre-test. In May 1999, the various parts of the same test were administered as a mid-level assessment to 156 students in sections of Course V, and as a post-test to 99 students in sections of those courses across the disciplines generally taken as students' last CSP requirement. Additionally, 17 CSP faculty also took parts of the test at a Spring 1999 Language Across the Curriculum workshop to field-test the instrument and any possible problems with difficulty levels and so on.

Our initial hypothesis about the results was that, because of the strongly integrated and sequenced nature of the first five courses, students would increase their skills significantly from CSP Course I to Course V. The Evaluation Committee thought that, since the emphasis of the last four CSP courses is on the application of communications skills in disciplinary discourse communities rather than on increased knowledge of communication skills per se, we might expect, minimally,

no drop off in scores by Course IX. Any improvement would, of course, be an important plus.

Initial Results of the Program Assessment Tool

The results from pilot tests at all three levels indicate that our hypotheses were partially supported. As Table 2 shows, students in the fifth communications course performed, on average, better on the various tests than did students in the first communications course. In particular, Course V students scored substantially better than Course I students on the “correctness” and the research tests. In this respect especially, our hypothesis that the CSP was helping the students to improve in communications-related abilities was confirmed.

	Course V minus Course I		Course IX minus Course I	
	<i>Advantage%</i>	<i>Possible Gain</i>	<i>Advantage</i>	<i>% Possible Gain</i>
Part 1: Critical reading and writing	.062	14.6%	-.008	-.1.7%
Part 2: Correctness and usage	.153	35.0%	.045	10.3%
Part 3a: Research	.235	42.3%	.102	18.4%
Part 3b: Listening	.102	18.7%	-.001	-.2%
Averages from the entire test	.138	27.7%	.0345	11.3%

Table 2: The advantage of Course V students and Course IX students over Course I students in proportion of correct responses. (The percent of possible gain is the advantage score divided by one minus the proportion of correct responses for Course I students).

However, average scores of students in Course IX, the fourth of the communications-intensive courses in the majors, tended to be lower than the average scores of students in the fifth communications course and quite similar to those of students in the first course.

Table 3 provides another view of the scores provided above. This table offers a statistical look at the general gains that Course V and Course IX may offer to students following their introduction to the Program. While the gains by Course IX are not as large as those by Course V, students' scores in Course IX indicate an improvement of 11.3% of possible gain over Course I scores.

	CSP V minus CSP I		CSP IX minus CSP I	
	Advantage	% Possible Gain	Advantage	% Possible Gain
Test 1: Critical reading and writing	.062	14.6%	-.008	-.1.7%
Test2: Correctness and usage	.153	35.0%	.045	10.3%
Test 3a: Research	.235	42.3%	.102	18.4%
Test 3b: Listening	.102	18.7%	-.001	-.2%
Average of the four tests	.138	27.7%	.0345	11.3

Table 3: The advantage of CSP V students and CSP IX students over CSP I students in proportion of correct responses. The percent of possible gain is the advantage score divided by one minus the proportion of correct responses for CSP I students.

Discussion of Results

The scores clearly indicate that students perform better on our tests of communications-related skills after experiencing CSP Courses I-V. Students' scores increased from the pre-test, Course I, to the mid-test in Course V, by an average of 13.8%. That figure represents 27.7 % of possible gain. Test results also indicate that although students' average scores improved between Course I and Course IX, students' communications scores did drop off from CSP Course V to Course IX. This is a puzzling result since students in Course V have, the test indicates, already mastered many aspects of these skills. We are examining reasons for improvements as well as focus-

ing on the Course V to Course IX fall off in test scores. Below we share a series of possible explanations for the drop in scores.

First, a possible explanation is that a large percentage of Course IX test-takers were transfer students but unidentified as such. Although they are required to take at least CSP Course V and therefore show themselves to be proficient in CSP skills prior to taking the four communications-intensive courses in their majors, transfer students might still be considered to have absorbed fewer CSP skills and to have absorbed them less thoroughly than students who actually took CSP Courses I-V. In an attempt to control for this possibility, we asked students to fill out extensive headers at the beginning of each test. One header question asked students to state whether or not they were transfer students. Unfortunately, a number of Course IX students did not fill out the headers at all, which prevented us from identifying transfer status in our Course IX sample. However, a comparison of scores between students in sections of Course V identifying themselves as transfers and those identifying themselves as non-transfers indicates no significant difference in scores.

Second, it is possible student skills fall off from Course V to Course IX because the skills taught in Courses I-V are not being sufficiently reinforced in Courses VI-IX. In an attempt to meet the rigorous disciplinary requirements of Courses VI-IX, some faculty may not be fully exploiting the possibilities of applying CSP goals in these courses. Whether or not that is the case, as many other researchers have noted, knowledge transfer (in this case, from communications skills in Communications Department courses to communications skills applied in the courses across the curriculum) doesn't carry as well as or doesn't have the reach that we would like to think it does (Beaufort; Pennington, Nicolich, & Rahm; Teich).

A third possibility for the fall off in scores is that there may be problems of validity inherent in the pilot test. These problems can be discovered only after a pilot test is given and are, in fact, a reason for a pilot study. In our case, a number of test questions were discovered to be too easy. Such questions were identified by the large number of students (more than 85%) who answered them correctly in the pre-test, that is, before CSP training. Similarly, a number of questions were too hard for students in the post-test or were poorly written. The questions judged unusable on this end of the spectrum were ones that Course V students and faculty answered cor-

rectly fewer than 15% of the time. Both the “too easy” and “too difficult” questions need to be rewritten for a more valid test and tested once again. Generalizations about the questions we eliminated are difficult since results depend not only on effective test-construction but on the types of incoming students and their pre-university training as well as on the emphasis of instruction in various communications programs.

A fourth explanation for our pilot results is that students are not taking the test seriously. Robert Morris evaluators have reported an ongoing problem with standardized evaluations given to seniors at the end of the school year. These evaluations have no bearing on students’ grades, and, therefore, students may not apply themselves to the test. Several on the CSP Evaluation Committee, particularly those teaching Course IX versions of classes in the majors, say they do not believe that this argument fully explains the phenomenon of falling scores. Many members of the Committee used their own classes to give the pilot test and encouraged students to take it seriously. Nonetheless, it is often the case that when students perceive no connection between their performance and their grades, performance can drop off. Our consultant additionally suggests that a failure among Course IX students to complete header information is a good indication of failure to take the test seriously.

Along the same lines, it could be that the students in the communications-intensive courses did not take the tests as seriously as did students who were under the jurisdiction of faculty teaching communications courses exclusively. In other words, students in CSP courses in their majors may have put more effort into their final examination on course content rather than on our programmatic assessment attending to communications-related concerns.

A fifth possibility relates to the “newness” factor—most of the students being tested in Course IX had been the first students taking the totally new CSP courses, taught by instructors teaching a new version of a course, within a new program. In other words, when the Course IX students had taken Course I, they were the first students ever to take the course. When they took Course II, they were also the first students ever to take Course II and so on. Since its inception, the program and its courses have continually been revised and, we hope, improved. CSP faculty continue to spend substantial amounts of time working on the program itself, meeting once

or twice a month as a group for several hours at a time to discuss and make improvements in each course of the program. In effect, then, the particular Course IX students taking our pilot test did not have the benefit of our improvements or revisions, whereas the tested students in Course V did. As we continue to refine our assessment instrument, we hope to be able to track individual students as they take all 3 parts of the test—the pre-, the mid-, and the post-tests. This approach should, of course, be even more revealing of any programmatic effects on student abilities.

Recommendations

Below, we share more general suggestions that may be useful for other institutions interested in creating and refining local evaluation instruments. Specific suggestions relevant to our own program are included as well. We apologize if some of these seem too obvious, but we wanted to err on that side, rather than leaving something useful out.

1. *To achieve greater faculty “buy in,” invite representatives from across the disciplines to participate in the entire assessment process, including the creation of the instrument.*

Mottilla, Hatfield, Taylor, and Stone remind us that “interpreting standards and identifying appropriate responses . . . is a faculty-driven process, and it must be remembered that ‘faculty’ is a collective noun” (292). We strongly believe that instructors who help design the assessment instruments are more likely to attend to and work with the results. As Greenberg, Wiener, and Donovan state, “Teachers who shape an exam . . . will see that its principles infuse the curriculum and classroom practice” (xv). Our Evaluation Committee represents a cross section of University disciplines. In our case, faculty from across the disciplines have not only helped design the assessment instruments, but also helped shape each aspect of the program—from participating in planning, training, re-envisioning approaches to teaching course material, adapting existing courses into communications-intensive versions of the courses, serving on the Evaluation Committee itself, and making room in

their courses for program assessment. This level of participation will increase the likelihood of accountability, growth, and improvement within the program (Haswell and Wyche-Smith).

2. *Create your own, locally based instrument that reflects and tests your program goals.*

Varner and Pomerence note that “a custom-made instrument will ensure that the assessment fits the local conditions” (83). Haswell and Wyche-Smith put it another way: “Let the local scene shape the examination, not the other way around” (223). Our instrument focuses on the five objectives that a committee from across the curriculum agreed to be most important to the students’, the Program’s, and the University’s interests. We believe that this approach allows us to focus on those qualities that we—and not outside testing agencies—deem most critical for our students and our program. Other institutions interested in assessing communication skills across the curriculum may likewise want to invest the additional time and reflection required in the creation of a useful locally based instrument.

3. *Use a workable set of objectives.*

Although we knew this simple maxim, we didn’t truly understand its importance until we began creating an assessment with our original 40+ goals. Such a large number of goals, even though well articulated, proved unworkable. We therefore streamlined them into five main goals to be connected to the test areas. A more focused set of objectives can prove more productive for an evaluation committee as well as more operational for instructors creating course plans and for students attempting to meet program and course goals. This process, we believe, helped unify and improve our vision for the Program as well.

4. *Rewrite test questions that are found to be too easy or too difficult.*

Problematic questions can be identified in pilot tests as those answered correctly by more than 85% of test takers *before the program* (too easy) and those an-

swered incorrectly by more than 85% of the test takers *after the program* (too hard or poorly written). Similarly, questions that most participating faculty cannot answer will likely be too difficult for students. As mentioned earlier, those questions will depend on student high school training and on the emphases of the individual program.

5. *Allow ample time for pilot-testing the assessment instrument.*

Since pilot tests are most useful for identifying problems with the test, plan on giving at least one revised pilot test. In doing so, your committee can attend to the instrument's validity, the extent to which the assessment instrument is measuring what it is intended to measure through a variety of procedures such as triangulating results with other measures. Revised pilot testing also allows for a trial run of any additions or other changes to the instrument that occurred after addressing problems such as floor and ceiling effects. As Haswell and Wyche-Smith state, "To the degree that the test is innovative . . . follow-up studies are essential" (234).

6. *Design test headers to capture desired information.*

Some institutions may be interested in performance by gender, non-traditional status, or other factors. For our purposes, we hoped that isolating a population of transfer students could allow us more information about contributions of early CSP courses. Our headers, therefore, should either define what "transfer student" means or ask students how many communication credits they have transferred.

7. *Suggestions should be provided for helping faculty and any proctors to motivate students to take the test seriously.*

If faculty treat the test as a frivolous administrative add-on, students will also. One suggestion is to have faculty check the tests as students hand them in to be sure that students complete the headers as well as the test. Alternately, a computer or research center can provide tests pre-labeled with students' names

and other header information. Or such information can be referenced by the school research or computer center later. Total anonymity on these kinds of tests can lead to irresponsibility. We have already instituted one change in the procedures for the test. Faculty are given a sheet of prompts, one which asks faculty to wait until all students have filled out the headers before they allow the test to begin.

8. *Faculty teaching courses in the program being assessed should be made aware of the results and encouraged to learn from the positive as well as the poor results.*

In our case, we need to inform the CSP faculty of patterns such as rising and falling scores as well as possible reasons for both. We can also solicit the faculty's hypotheses to help explain student strengths and weaknesses suggested by the tests. We can do more to encourage all faculty to tap into creating, using, and evaluating communications-oriented approaches. Faculty from across the university can discuss indications of successes and problems at workshops and meetings as well as in online interactions. In our case, CSP Courses I – V faculty meet for such purposes once or twice each month; CSP Courses VI – IX faculty currently share experiences and successful materials at a once-a-semester workshop.

9. *Determine when to assess—and why; it's not just "what to assess" that is meaningful.*

In our case, in addition to instituting a Course V portfolio measure, we chose to pre-test, mid-test, and post-test. We want to see how students are performing on our measures at three times during their exposure to the Communications Skills Program: first, prior to taking any courses in the Program; again, when they've completed a little more than one half of the CSP courses (typically at the end of their sophomore year); and, finally, once they've completed all nine CSP courses (typically at the end of their senior year). This approach will allow us to identify patterns and to examine whether students are maintaining the communication abilities they have developed in the first

five courses. Since our initial pilot testing suggests a possible drop off rather than maintenance of communications skills, we are considering testing students at the end of their junior year to more clearly identify where students are falling off in our measures of communications-related skills. We are also planning to track results from individual students as they move through the four years of the Program.

10. *If possible, provide student incentives for the assessments.*

We are considering options such as asking faculty to count the assessments as part of the course grade. Following such a recommendation could send the important message that administering and taking the test is serious and meaningful University business.

11. *Work with those at the administrative level to ensure support.*

As White reminds us, “Political matters exist at all phases of the testing program, from the planning of goal statements (which require general assent) to test development and scoring (which require funding and general participation) to evaluation (which is often prepared for the use of public funding agencies)” (“Pit-falls” 77). Sometimes those with power over budgets have goals that differ from those within a program and those most affected by the program’s development. In working with administration to seek budgetary lines for evaluation, it should be kept in mind that “money spent to compensate teachers for involvement in assessment is also money spent on faculty development and curriculum reform” (CCCC Committee on Assessment 433). Keeping in close touch with the upper-level administrators can keep the paths to shared goals, commitment, and support open throughout the process (Varner and Pomerence; Jankovich and Powell).

12. *Incorporate multiple measures of program assessment.*

As we all know, learning styles vary from student to student (Sharp). Our program attempts to respond

to that fact through its emphases on various facets of communication. Similarly, our program attempts to respond to that fact through its program evaluation instruments. Assessing a program through multiple measures can help identify and more clearly confirm successes and problems that just one type of measure might not capture.

Much has been done and much remains to be done in building and assessing our innovative program. Given the constraints of our system, for example, that our budget did not currently permit holistic scoring, we believe our pilot testing has taught us a great deal about the Program, its successes, and what needs to be done for a better assessment and an improved program. We consider our experience so far a formative evaluation in the life of the Program. We will spend more time exploring the results, including identifying features that make an exemplary portfolio and what aspects of our Program can account for a lowered score on our new assessment instrument between the CSP V and the CSP IX courses. We look forward to learning more about how we can use such evaluations to better help prepare students to use communication abilities effectively in the classroom, workplace, and life settings that await them.

References

- Aiken, Lewis R. "Testing with Multiple-Choice Forms." *Journal of Research and Development* 20.4 (1987): 44 - 58.
- Allen, Jo. "The Role(s) of Assessment in Technical Communication: A Review of the Literature." *Technical Communication Quarterly* 2 (1993): 365 - 388.
- Beaufort, Anne. "Transferring Writing Knowledge to the Workplace: Are We On Track?" In Mary Sue Garay and Stephen A. Bernhardt (Eds.), *English Teaching and the New Workplace*. New York: Suny Press, 1996.
- Camp, R. "Changing the Model for Direct Assessment of Writing." *Validating Holistic Scoring for Writing Assessment: Theoretical and Empirical Foundations*. Eds. Michael M.

- Williamson and Brian A. Huot. Creskill, NJ: Hampton, 1993. 45 - 78.
- Carson, Jay, William Sipple, Michael Yahr, Tom Marshall, and John O'Banion. "A New Heuristic for Planning WAC Programs: Ensuring Successful Collaboration from All Stakeholders." *Language and Learning Across the Disciplines* 3.3 (2000): 3 - 35.
- Conference on College Composition and Communication Committee on Assessment. "Writing Assessment: A Position Statement." *College Composition and Communication* 46 (1995): 430 - 437.
- Cooper, L.O. "Listening Competency in the Workplace: A Model for Training." *Business Communication Quarterly* 60(4) (1997): 75-84.
- Cross, Geoffrey A. "Recontextualizing Writing: Roles of Written Texts in Multiple Media Communications." *Journal of Business and Technical Communication* 8 (1994): 212 - 230.
- Debreceeny, Roger. "Outcomes Assessment: The Accreditation Process." Feb. 11, 2000. <http://www.lgc.peachnet.edu/sacs.htm>.
- Greenberg, Karen L., Harvey S. Wiener, Richard A. Donovan, eds. *Writing Assessment: Issues and Strategies*. New York: Longman, 1986.
- Hansen, James D., & Lee Dexter. "Quality Multiple-Choice Test Questions: Item-Writing Guidelines and an Analysis of Auditing Testbanks." *Journal of Education for Business* 73 (1997): 94 - 97.
- Haswell, Richard and Susan Wyche-Smith. "Adventuring into Writing Assessment." *College Composition and Communication* 45 (1994): 220 - 236.
- Huot, Brian. "Toward a New Theory of Writing Assessment." *College Composition and Communication* 47 (1996): 549 - 566.

- Jankovich, Jackie L. and Karen Sterkel Powell. "An Implementation Model for a Communication Across the Curriculum Program." *Business Communication Quarterly* 60.2 (1997): 9 - 19.
- Kubiszyn, Tom, and Gary Borich. *Educational Testing and Measurement: Classroom Application and Practice*. 6th ed. New York: John Wiley & Sons, 2000.
- McEachern, Robert W. "Meeting Minutes as Symbolic Action." *Journal of Business and Technical Communication* 12 (1998): 198 - 216.
- McEwen, Beryl C. "Teaching Critical Thinking Skills in Business Education." *Journal of Education for Business* 70 (1994): 99 - 104.
- Mottilla, Donna T., Louise Hatfield, Ronald Taylor, Susan Stone. "The View from the Trenches: A Steering Committee's Retrospective on Implementing the New AACSB Accreditation Standards." *Journal of Education for Business* 72 (1997): 289 - 292.
- O'Banion, John. *Reorienting Rhetoric: The Dialectic of List and Story*. University Park: Penn State Press, 1992.
- Payne, David. "Techniques of Assessment in American Higher Education." March 3, 2000. <http://www.friends-partners.org/oldfriends/education/audem93/payne.html>.
- Pennington, Nancy, Robert Nicolich, and Irene Rahm. "Transfer of Training between Cognitive Subskills: Is Knowledge Use Specific?" *Cognitive Psychology* 28 (1995): 175-224.
- Sharp, J.E. "Applying Kolb Learning Style Theory in the Communication Classroom." *Business Communication Quarterly* 60(2) (1997): 129-134.
- Teich, Nathaniel. "Transfer of Writing Skills: Implications of the Theory of Lateral and Vertical Transfer." *Written Communication* 4 (2) April 1987: 193-208.

Varner, Iris I. and Paula J. Pomerence. "Assessing Competency in Business Writing." *Business Communication Quarterly* 61.4 (1998): 83 - 91.

White, Edward M. "Assessing Higher-Order Thinking and Communication Skills in College Graduates Through Writing." *JGE: The Journal of General Education* 42 (1993): 105 - 122.

White, Edward M. "Pitfalls in the Testing of Writing." *Writing Assessment: Issues and Strategies*. Eds. Karen L. Greenberg, Harvey S. Wiener, Richard A. Donovan. New York: Longman, 1986. 53 - 78.

Young, Richard, Alton Becker, and Kenneth Pike. *Rhetoric: Discovery and Change*. New York: Harcourt Brace, 1970.

Endnotes

¹ It is worth noting that the promise of graduates/employees with improved communications skills has made the business community more willing to provide such needed funds.

² Many students additionally choose to rework the CSP portfolios into job interview portfolios.