

Chapter XIII: PORTFOLIO ASSESSMENT

Portfolio Assessment

Who takes it?

Right now, only seniors in classes that require creation of a Liberal Arts and Sciences Portfolio (most often capstone courses or senior seminars) submit portfolios. Currently more than 65% of graduating seniors turn in portfolios.

When is it administered?

The instructor of the course requiring participation in the portfolio assessment distributes guidelines and collects portfolios during the course during whichever semester seniors take the course.

How long does it take for the student to compile the portfolio?

The average is about three hours and one-half hours.

What office administers it?

The class that requires it.

Who originates the submission requirements for portfolios?

Faculty readers and evaluators, the Assessment Committee and the director of the portfolio assessment design, evaluate and publish the requests for specific portfolio items.

When are results typically available?

The portfolios are read and evaluated in May and generally the results are available in late summer or early fall.

What type of information is sought?

The types of works requested from students are designated by faculty evaluators and the Assessment Committee. It is expected that with the arrival of the new Liberal Studies Program (that will be required of all undergraduates), the Undergraduate Council and Faculty Senate may have a greater say as to what is requested of students. In the past, many of the requested items have remained fairly constant. In fiscal year 1997, the portfolios sought two items showing growth as a thinker, an item showing thinking in an interdisciplinary way, an item demonstrating the application of quantitative reason, one demonstrating the application of scientific reasoning, one showing aesthetic analysis and evaluation, a work or experience that the student considered most personally satisfying, and a cover letter that asks students to reflect on ways they have changed during their time at Truman or anything else that they would like to say about their experience here. Other items may also be included, and a few disciplines may require more items relating specifically to their major.

From whom are the results available?

The director of portfolio assessment.

Are the results available by division or discipline?

By assessment tradition at Truman, results are not reported by division or discipline. However, results can be generated from the database for divisions or disciplines who request them. Several disciplines used data from the fiscal year 1997 for disciplinary workshops or retreats.

Distribution regularly made to whom?

Taskforce findings are shared with faculty and administrators through planning workshops, faculty development luncheons, and written reports. Specifically in 1994 and 1995, the university used quantitative and qualitative information in a self-study report which led to reaccreditation for ten years by the North Central Association. The Undergraduate Council (which has the responsibility for overseeing and evaluating the core curriculum) looked at four years of findings while it discussed core reform. The reports had a particular impact on interdisciplinary and quantitative requirements. The reports also were available to Faculty Senate and Student Senate when they worked on planning documents. In discipline committees, some faculty use the information while they review their major and its program, both for curricular reform and program improvement. Portfolios have also affected the assignments and syllabi of faculty who have read and evaluated them. A written report for this last year was due in August 1998.

Are the results comparable to data of other universities?

No. Few universities are using portfolios for assessment of general education or liberal studies; however, many institutions have inquired about the development and results of the portfolio assessment at Truman.

1998 Liberal Arts and Sciences Portfolio

In 1988, President Charles McClain charged a faculty committee to design a local assessment of the liberal arts and sciences curriculum at then Northeast Missouri State University. The Liberal Arts and Sciences Assessment Committee recommended the use of senior portfolios for sampling and assessing materials that demonstrated student achievement and learning. Volume Three of the Assessment Almanac fully traces the history of the proposal, design, implementation and use of Liberal Arts and Sciences Portfolios since that recommendation. This volume reports and analyzes the 1998 assessment findings, concluding with a series of recommendations about the assessment processes and about the use of the data for improving teaching and learning.

In May 1998, eight hundred seniors, 61% of the 1997-1998 graduates, submitted portfolios with evidence of their achievement and growth as learners. Although this is a larger number of participants, it matches the 61% participation of the 1996-1997 graduates. Economics, Business Management, and Accounting majors brought the number of participating disciplines to twenty-three. Three seniors submitted the first LAS digital portfolios.

Sixty-two faculty members read and evaluated the portfolios, representing twenty-six academic disciplines and all ranks. Twenty-nine faculty were new readers. Two faculty members co-chaired the assessment project, organized the readings sessions, trained readers in holistic evaluation, facilitated discussions, and served as second or third readers of materials that were difficult to assess. Twelve faculty served as “table leaders” consulting with colleagues about issues or problems in any entries which challenged faculty as they evaluated the entries. The table leaders helped most specifically in establishing and maintaining interrater reliability of the scores awarded for interdisciplinary thinking and quantitative analysis submissions.

In response to recommendations from the 1997 readers about smaller cohorts to insure more opportunities for participating in discussions, three weeks of reading were scheduled. The third week experimented with a four-day schedule due to the Memorial Day holiday.

Portfolio submissions were elicited by prompts for demonstrating “growth as a thinker”, “interdisciplinary thinking”, “quantitative reasoning”, “scientific reasoning”, and “aesthetic analysis and evaluation”, focusing on critical thinking skills across the liberal arts and sciences curriculum. A sixth prompt asked students to demonstrate or describe their “most personally satisfying work or experiences” during their Truman tenure. Seniors were asked to draft reflective cover letters for the portfolios.

With the inception of the Liberal Studies Program in 1998, the May assessment findings provide useful baseline data for future review and monitoring of both the shared Liberal Studies Program and liberal learning culture at Truman. Because the mathematical

“mode of inquiry” for the Liberal Studies Program will not be determined until 2000, reliable baseline data about quantitative reasoning should be useful to the conversations about what course work should satisfy that requirement. Faculty consultants from Math, Computer Science, Chemistry, Economics, Physics, and Psychology collaborated to create an interrater reliability process by identifying quantitative reasoning “anchors”, designing a scoring rubric for readers to use when they evaluated submissions. and serving as table leaders during the assessment. A reliability rate of 90% with a four-point scale was achieved.

In the third year of using a five-point scale and descriptors of interdisciplinary thinking levels, a reliability rate of 80% was achieved, a lower rate than the 86% reliability achieved in 1997. Each year, the directors of the LAS Portfolio Assessment will work with faculty colleagues to increase the reliability of the qualitative assessment.

1998 LAS Portfolio Findings

The findings of the 1998 LAS Portfolio Task Force are always presented for the entire group of participating seniors. This year, data are also being reported for three large groupings of students: Arts, Sciences, and Professional Studies. Data for specific majors can be requested by each discipline.

Because this assessment relies on students to first keep and then select materials for inclusion in their Liberal Arts and Sciences Portfolios, the data that results is “fuzzier” than data from a standardized, systematically controlled instrument. Students occasionally indicate that they are submitting work that is not their strongest demonstration because they did not keep or did not receive back the artifacts which better demonstrate their competence in the area specified. Other students report that they never were challenged to use the thinking skills or the mode of inquiry requested by individual prompts and, therefore, cannot submit material. Lack of motivation may inhibit the thoughtfulness of the selection process or engagement in self-assessment which prompts encourage on cover sheets for each submission. The reflective cover letter makes it clear that often a student’s source of information about the LAS portfolio and its place in the major is the junior or senior student in their major who advises them to ignore the portfolio because “you don’t need it in our major .” The fostering of student self-assessment through portfolios is uneven campus wide.

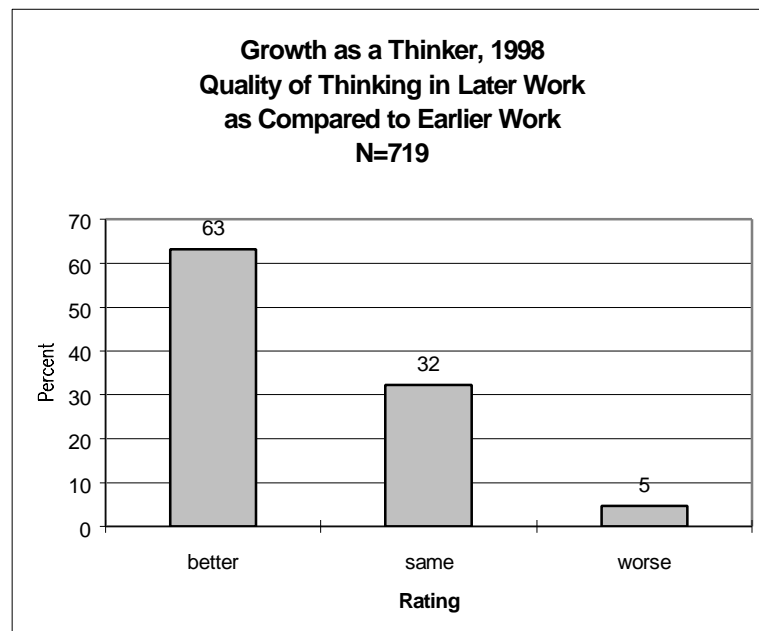
Historically, students have not submitted material in certain categories, believing that they had not produced the critical thinking elicited by the prompt. Occasionally, faculty readers find entries which those students submitted as, for example, scientific reasoning which are equally strong demonstrations for the interdisciplinary thinking or quantitative categories that lacked submissions. Routinely, some submissions lack cover sheets or commentary that specifies which prompt the entries satisfy. Consequently, the number of submissions varies from category to category in the report, even though 800 portfolios were distributed for review and evaluation.

Growth as a Thinker

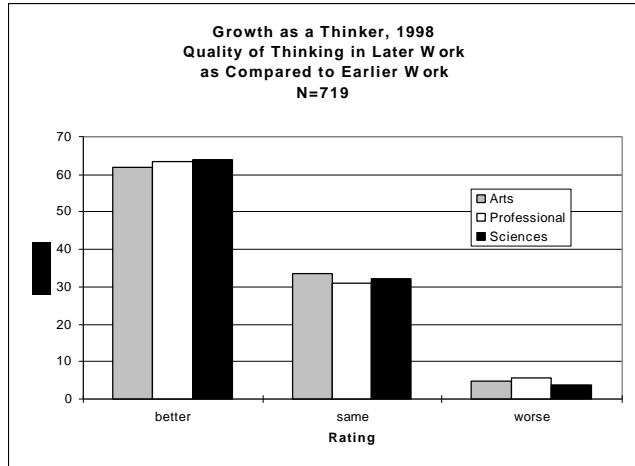
To demonstrate growth over time as critical thinkers, seniors select early and later work. Materials come from every sector of the curriculum; some students pair a problem-solving essay from Composition I with a researched argument from Composition II to show the change in their response over time to the same assignment. Others might pair a Logic exam with an internship paper. The prompt encourages metacognition when it specifies that seniors describe how and why the materials demonstrate growth as thinkers on the cover sheet.

Faculty read both submissions, comparing and evaluating the thinking in each as they make three judgments. One faculty member reads the materials and then evaluates whether the thinking in the second work is about the same as, better than or worse than that in the early work, evaluates the quality of thinking in the entries, and evaluates the “accuracy” of each student’s description and self-assessment of growth as a thinker.

Paired submissions were presented by 719 seniors. In 1998, 63% of submissions demonstrated “better” thinking in the later work, 32% demonstrated the “same” quality of thought as the early work, and 5% of submissions demonstrated “worse” thinking. This pattern is demonstrated in both the graph for all seniors and the graph with three groupings of seniors: Arts (includes Humanities), Professions (includes Accounting, Business Management, Nursing, and Communication Disorders), and Sciences (including Math).



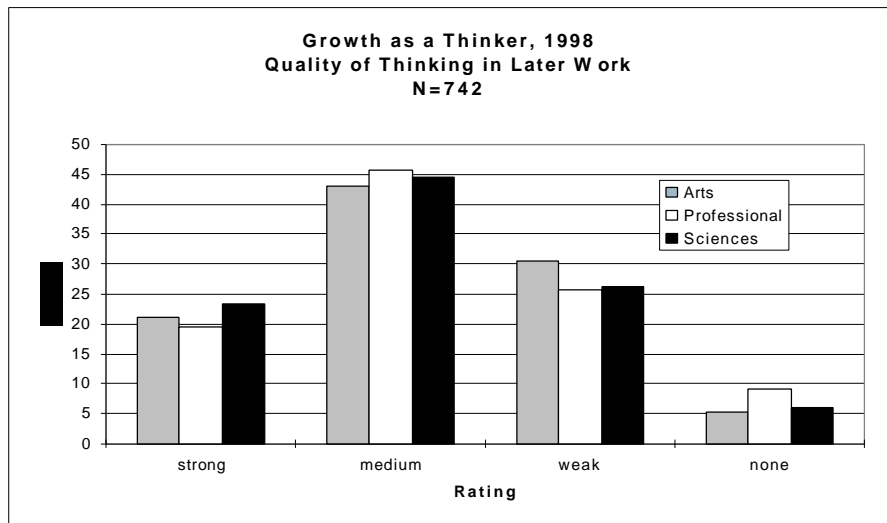
These data are similar to the 1997 data. Both years, 63% of seniors submitted later work with “better thinking” than the first submission evidenced. For 32% of 1998 entries and 34% of 1997 entries, the thinking was the same. This data needs to be read against the evaluation of the quality of thinking in the later work. Many of the entries demonstrated strong critical thinking in both entries, reflecting a pattern that appears in the standardized assessments used for freshman and junior year testing.



The designation of “worse” occasionally results when students submit later work that they “enjoyed producing” even as it fails to demonstrate growth or improvement. It occasionally results when students submit work which they identify as work requiring a more complicated level of cognition. The students recognize that their thinking “improved”, but the work may not communicate it because of the “getting worse before you get better” aspect of functional regression. Although faculty must judge the thinking demonstrated as “worse”, they gain a perspective on the multiple frames of thinking and on processes of learning that may be useful to their teaching and advising.

Quality of Thinking in Later Work

Some students only submitted an example of work later in their careers. Faculty readers holistically evaluated the quality of critical thinking in 742 submissions as “strong”, “competent”, “weak”, or “none”. 22% of seniors submitted material judged as demonstrating “strong” thinking; 44.5% submitted material with thinking judged as “competent”; 27% submitted materials judged as demonstrating “weak” thinking; 6% of seniors submitted work judged as demonstrating “no (critical) thinking.”

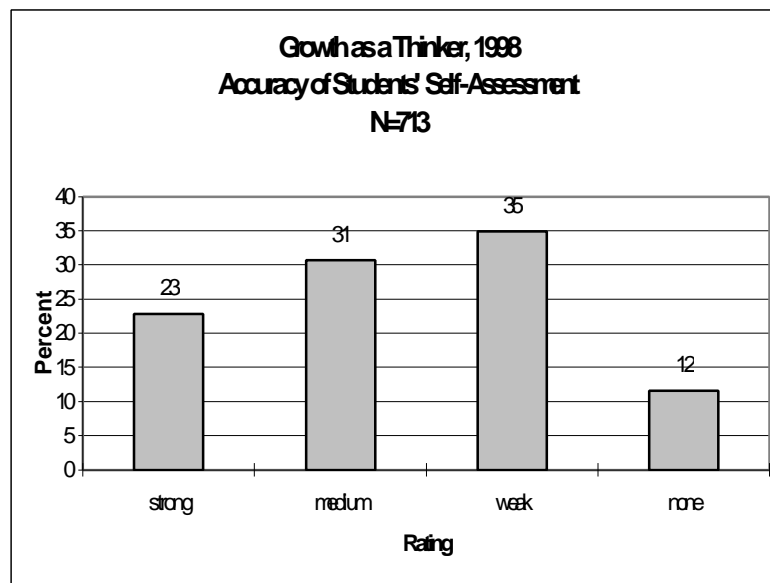


Typically, entries evaluated as “none” were carefully researched reports without analysis or evaluation.

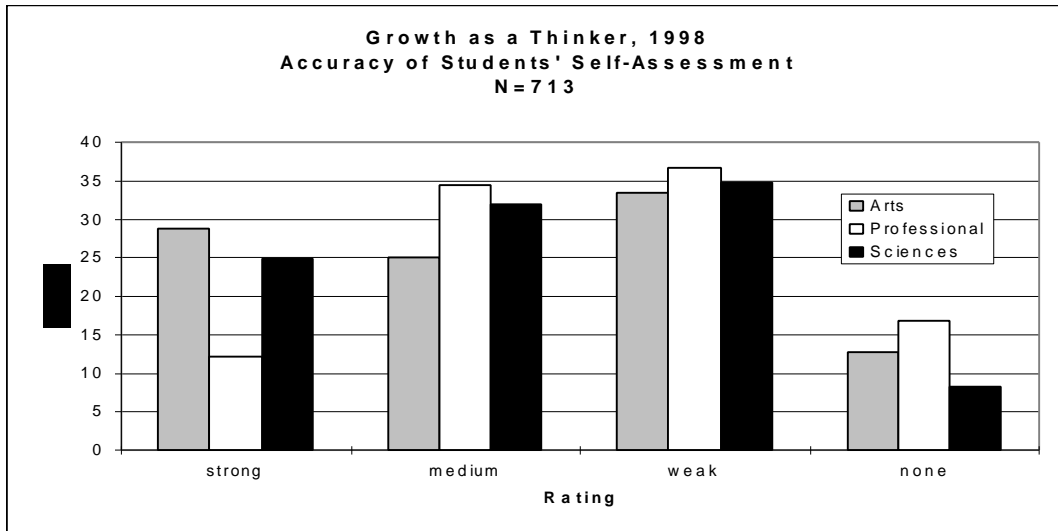
The 66.5% of students whose mature critical thinking was evaluated as at least competent if not strong contrasts with the 71% of 1997 seniors. The overall pictures compare, with 93.5% of seniors demonstrating some critical thinking in their submissions in 1998, 97% in 1997, and 95% in 1996.

Quality for whole population

Accuracy of Self-Assessment



Readers judge the “accuracy” of student self-assessment of growth as a thinker by comparing their observations and scoring with the student’s description and evaluation of the critical thinking demonstrated in both works. The 1998 data contrasts with that of 1997. The percentage of seniors who did not assess their growth as thinkers increased 12% (1997, 9%); the percentage of “weak” self-assessment increased to 35% (1997, 32%) and the percentage of students whose accuracy of self-assessment was strong declined to 23% (1997, 27%).



Interdisciplinary Thinking

In 1998, 8% of participating seniors did not submit entries to demonstrate “interdisciplinary thinking”, the lowest non-submission rate to date in this assessment of interdisciplinary thinking. Four per cent of seniors provided “self reports” of work that demonstrated interdisciplinary thinking; some of those reports were so well-detailed that readers were convinced that the students had clear concepts of interdisciplinary thinking. Because faculty could not work directly with texts or other evidence of interdisciplinary thinking in comparison to other submissions, those self-reports were not scored. Some seniors submitted several interdisciplinary works..

Two faculty readers scored each of 706 submissions “holistically”, keeping these directions and descriptors at hand.

Some Descriptors of Competence as an Interdisciplinary Thinker

The items submitted may have none, some, many of all of these features which influence your holistic response to the material you review.

4 Strong Competence

- A number of disciplines
- Significant disparity of disciplines
- Uses methodologies from other disciplines for inquiry
- Analyzes using multiple disciplines
- Integrates or synthesizes content, perspectives, discourse or methodologies from a number of disciplines

3 Competence

A number of disciplines

Less disparity of disciplines

Moderate analysis using multiple disciplines

Moderate integration or synthesis of content, perspectives, discourse, or methodologies from a number of disciplines

2 Minimal Competence

A number of disciplines

Minimal disparity of disciplines

Minimal analysis using multiple disciplines

Minimal comprehension of interdisciplinarity

1 Insufficient Competence

Two or more disciplines

Mentions disciplines without making meaningful connections among them

No analysis using multiple disciplines

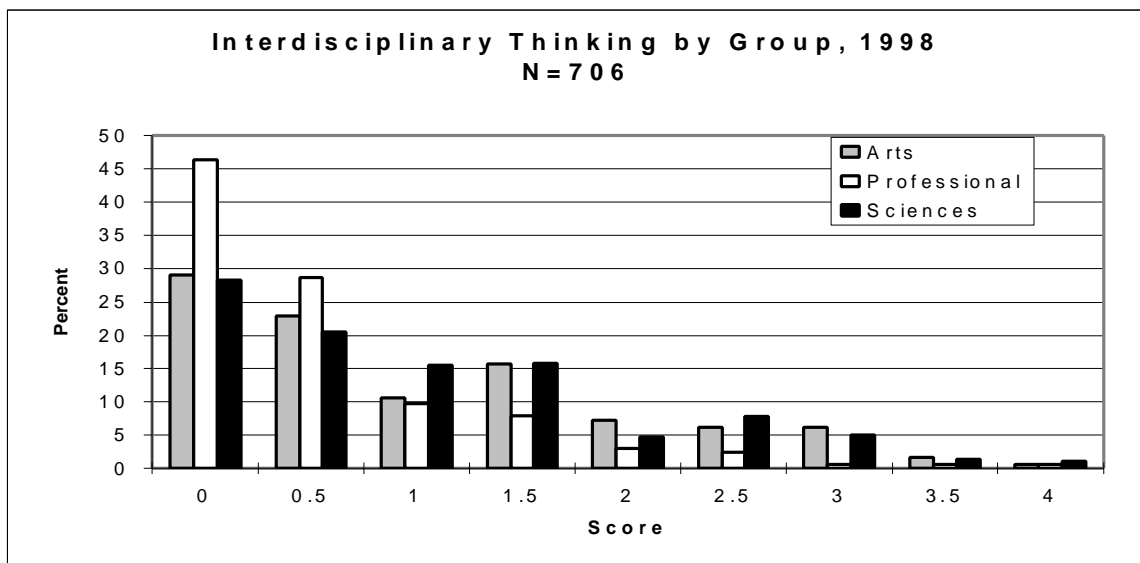
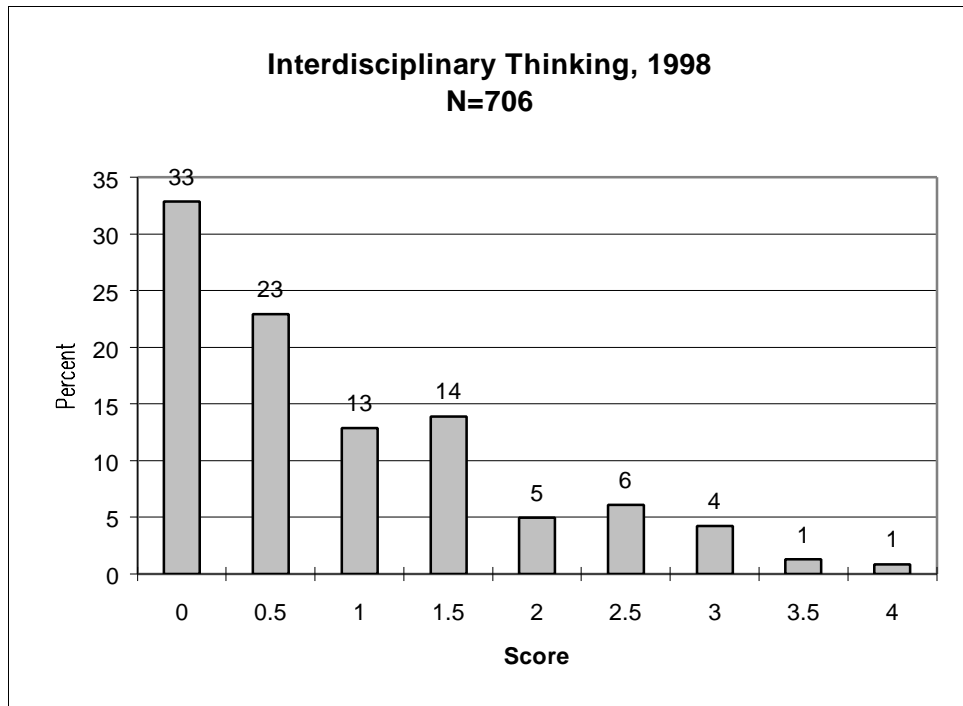
No evidence of comprehension of interdisciplinarity

0 No Demonstration of Competence as an Interdisciplinary Thinker

Only one discipline

No evidence of multiple disciplines, of making connections among disciplinary content, perspectives, discourse, or methodologies, or of some comprehension of interdisciplinarity

All readers used the entire range as they scored submissions, an indication of careful evaluation of individual entries. The three 1998 reading sessions demonstrated an acceptable interrater reliability across sessions as well as within sessions.



Interdisciplinary submissions of course assignments and materials came from 36 academic divisions. Major courses were the source of 63% of submissions; core courses were the source for 34%. Sources for the remaining 3% of entries included an application for a competitive fellowship, employment, performance in French drama, *The Index*, internships, KNEU/KTRM, *The Monitor*, independent research, the Sophomore Writing Experience, and Student Senate. Seniors presented work from 32 English courses, 18 History, 17 Philosophy, 14 Psychology, and 13 Business Administration. English courses were the source for 21% of all submissions. English 314: Composition II was the source for 11%; this course has been the largest single source for interdisciplinary submissions

each year of the portfolio assessment. Disciplines can request the evaluation data for submissions from their courses along with data for their majors.

During the reading sessions, several faculty at each session expressed disappointment that they had worked with few submissions they could describe as competent or strongly competent. Overall, 124 submissions were scored as minimally competent, competent or strongly competent, 17.4% of submissions. In 1997, 41% of entries were evaluated as demonstrating some competence. Faculty were also troubled by the number of submissions they encountered which did not demonstrate interdisciplinary thinking. 232 entries did not persuade two readers that interdisciplinary thinking had been demonstrated.

The 1997 submissions were similarly skewed to the “no evidence” or “weak” side of a graph. However, a respectable number of submissions which demonstrated some competence (41%) were identified in contrast to the 17.4% identified by readers in 1998. The 1998 data wave a red flag to the University as it begins implementation of the Liberal Studies Program with the Junior Interdisciplinary Seminar as its “signature course”.

A few readers worry that “the bar is set too high” and that descriptors for “strong” interdisciplinary submissions describe the outlier rather than what our most able students would be likely to produce when working in an interdisciplinary manner.

Other readers speculate about the effects on interdisciplinary learning of asystematic and scattered opportunities for interdisciplinary inquiry. Those faculty worry that the data provide too reliable and discouraging picture of interdisciplinary learning across the curriculum. In addition, the history of the LAS portfolio assessment tells us that every “first year” that a discipline joins the project, portfolios are incomplete or contain entries which even the students describe on cover sheets as “not being interdisciplinary but as close to the definition as I could find in my work.” Because the portfolio had not been previously required, either by individual capstone professors or by the major itself, some students have not maintained a larger portfolio from which they could select appropriate work to demonstrate interdisciplinary thinking (or other submissions focused on critical thinking). It may be that seniors have engaged more deeply in integrative learning and produced stronger interdisciplinary work than they present in their portfolios.

As disappointing as these data may be, they mirror the pattern evident in each year’s data since seniors first submitted “interdisciplinary” material. The data annually leads faculty readers to reflect on curricular and pedagogical strategies for assisting students to make connections among two or more disciplines and to use multiple perspectives in their analysis, critique, or problem solving. The University Master Plan describes student competency as interdisciplinary thinking as one of the measures by which Truman will assess whether and how successfully it is “deepening an enhanced, self reflective liberal arts culture”. It operationally defines successful demonstration of interdisciplinary thinking skills as a score of 2 or higher on a scale of 0-4, as measured by the annual portfolio review. The faculty referendum on the Liberal Studies Program

endorsed the required Junior Interdisciplinary Seminar. Faculty enthusiasm about designing and teaching interdisciplinary coursework is evident in the grant applications in 1997 and 1998. The faculty face a major challenge and opportunity to foster our students as interdisciplinary learners.

Quantitative Reasoning

In 1998, fewer students selected and submitted items to demonstrate quantitative reasoning than in 1997. 12% of portfolios lacked submissions in 1998; 6% in 1997. Self-reports were submitted by 7% of the participating seniors; these reports could not be scored holistically.

Historically, readers made judgments whether the application of quantitative reasoning in submissions was good, adequate, or not adequate. Because of the experimentation with Calculus for the Liberal Arts and other courses that might be proposed for the mathematical mode of inquiry course, an interrater reliability process was initiated in 1998. A group of faculty consultants from Computer Science, Mathematics, Chemistry, Economics, Physics and Psychology met with the Director of the LAS Portfolio Assessment to read 1997 submissions and to describe the features which influenced their evaluation of submissions as demonstrating “strong competence”, “competence” or “minimal competence” in quantitative reasoning or as offering “no demonstration of quantitative reasoning.”

After a norming session, faculty readers evaluated 647 submissions using a scale of 3 through 0 and these descriptions for each score.

Some Descriptors of Competence in Quantitative Reasoning

3 Strong Competence

Strong demonstration of quantitative reasoning includes some, but not necessarily all, of these features. The submission may:

- show strong inferential or deductive skills
- show a strong ability to explain concepts
- show an appreciation of concepts
- show an ability to ascertain a pattern and relationships
- show an ability to use data or calculations to explore further or to expand the scope of the problem or issue
- interpret the meaning of quantitative results
- explain why quantitative techniques are applied

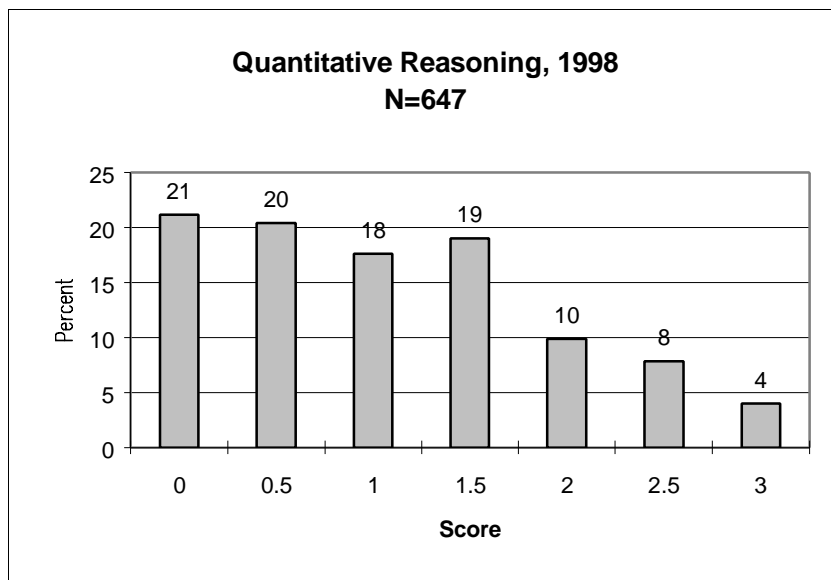
2 Competence

Competent demonstration of quantitative reasoning submissions:

- have a level of inferential or deductive skills
- show an appreciation of concepts
- interpret the meaning of the quantitative results
- explain why quantitative techniques are applied

1 Minimal Competence

Minimally competent demonstration of quantitative reasoning offers a minimal explanation of the meaning of data or calculation used

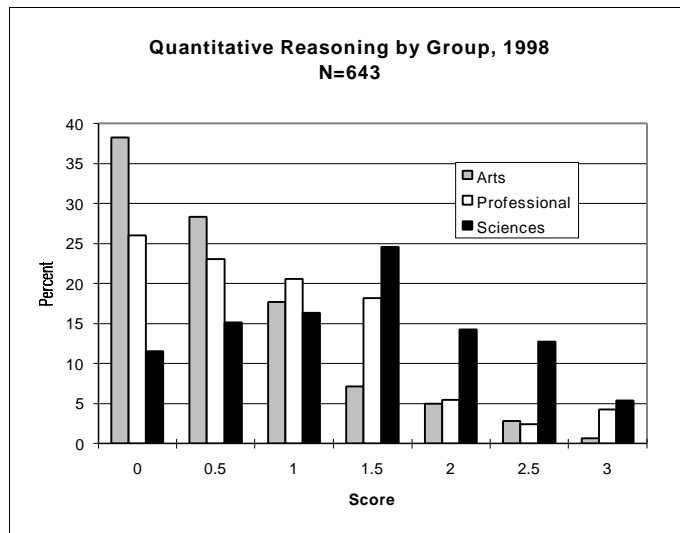


0 No Demonstration of Quantitative Reasoning

The submission has calculations without explanations or explanations without calculations. It manipulates numbers without conclusions or discussion.

Historically, judgments of “not adequate” quantitative reasoning fell within the fortieth percentile or higher. In 1998, 41% of the submissions were judged as not demonstrating quantitative reasoning. 37% of submissions were evaluated as demonstrating minimal competence. 18% demonstrated competence; 4% demonstrated strong competence.

These data illustrate a common generalization. 8% of scores for competence or strong and 66% of the scores of “no demonstration of quantitative reasoning” are awarded to submissions from students in the Arts. 33% of competence or strong scores and 27% of “no demonstration” are awarded to submissions from students in the Sciences. This “two cultures” pattern can be observed as modes of inquiry change from prompt to prompt.

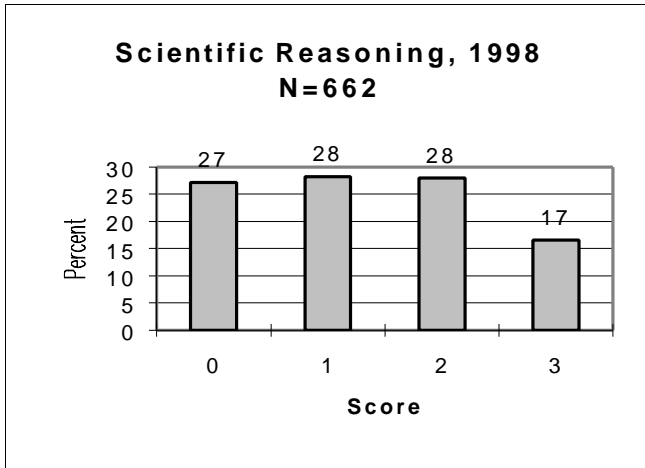


Faculty readers from Mathematics and Computer Science expressed their dismay that the majority of submissions offered either no demonstration of quantitative reasoning or only minimal demonstration. Since May of 1995, one motif of the discussion of the quantitative reasoning results has been the concern that the work of advanced students in Computer Science, Mathematics, and Physics may have been undervalued because the reasoning was less quantitative than abstractly mathematical. During the reading sessions and in the concluding discussion of findings and recommendations, many readers called for revisions: the prompt should state “quantitative/mathematical reasoning” and the assessment should feature a two-factor judgment, considering the coordinates of skill level and of quantitative/mathematical techniques used in the overall judgment made.

Scientific Reasoning

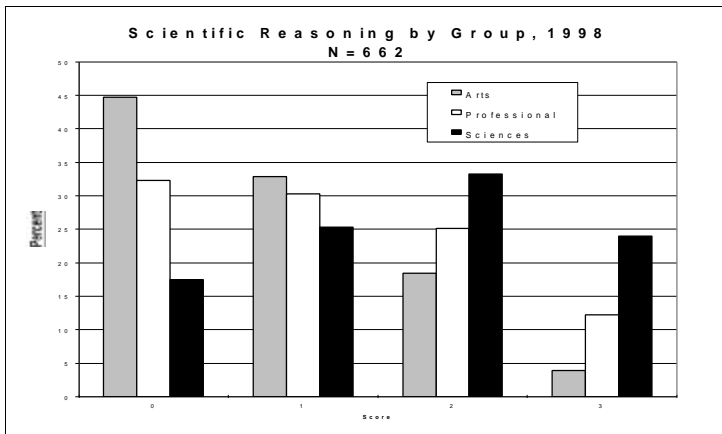
In 1998, 10% of seniors did not submit materials which demonstrated “an ability to reason scientifically”, contrasting with the 1997 non-submission rate of 15%. Frequent comments on cover sheets explained that the students had engaged in scientific reasoning in required courses, but had not kept lab reports or other materials that could be submitted to demonstrate an ability to reason scientifically. 7% of students submitted self-reports. Faculty read but did not evaluate the quality of scientific reasoning described in those self reports.

Readers evaluated 643 submissions one time, assessing whether scientific reasoning was evidenced at all (score of 0) and the quality of the scientific reasoning



evidenced: good (score of 3), adequate (score of 2), or inadequate (score of 1). When readers had questions about the quality of the submission, they consulted with colleagues from the sciences and social sciences. The 1998 percentage rate for inadequate is three times the 1997 rate; the adequate percentage was slightly lower, and the good percentage was almost half the 1997 rate. These

data might reflect the broadened participation of diverse disciplines in the portfolio assessment.



These group data also illustrate the “two cultures” generalization. 45% of submissions from Arts students did not demonstrate “scientific reasoning” and 33% of their submissions were assessed as “inadequate” scientific reasoning. The 23% of submissions scored as

adequate or good contrast sharply with the 38% of adequate or good submissions from seniors in the Professional Studies and with the 47% of adequate or good submissions from students in the Sciences.

At each reading session, faculty evinced surprise at the frequency of submissions that demonstrated inadequate scientific reading. They speculated that student misunderstanding of discourse conventions in the Sciences in their work in core courses may have obscured scientific reasoning which must have occurred.

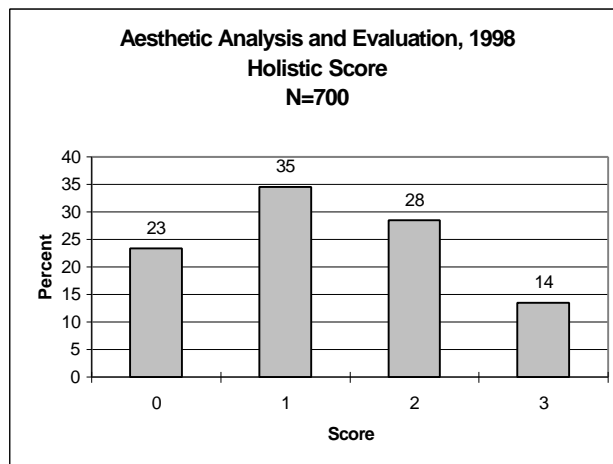
Aesthetic Analysis and Evaluation

The prompt for “aesthetic analysis and evaluation” was requested by the Art faculty after the 1993 Portfolio Assessment and the data have been used to review and

redesign courses offered under the Humanities section of the core as well as to study the achievement of their majors. In 1998 as in 1997, 13% of senior portfolios lacked submissions which might demonstrate “aesthetic analysis and evaluation”. 7% of portfolios had no entry and 6% of portfolio submissions were self reports in which seniors described occasions when they participated in some aesthetic analysis or evaluation. Without artifacts or texts to evaluate with these self-reports, faculty readers could not assess the quality of the critical thinking.

Readers assessed 700 submissions ranging from written texts (the majority) through slides, audiotapes, and videotapes. When students submit their own creative work, the prompt directs them to analyze and evaluate that work and include it with the submission. A few students submitted both the creative work and the reflective writing which accompanied the work during performance or gallery shows.

Readers make three judgments about the quality of thinking demonstrated. They holistically assess the overall quality of all aesthetic reasoning in the submission. They assess the quality of the aesthetic analysis and make a separate assessment of the aesthetic evaluation. Readers use the scoring categories of “no evidence”, “weak”, “competent”, and “strong” for each assessment.

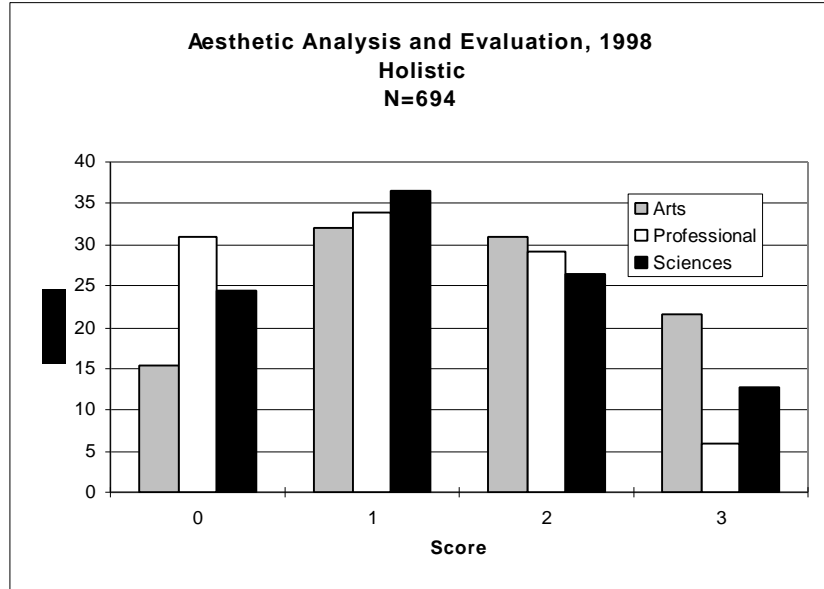


Overall, 77% of submissions demonstrated some skill in aesthetic reasoning but only 42% of those entries were described as competent or strong. Readers who reflected on the distribution asked “Is this good enough?” and expressed disappointment.

These data for aesthetic analysis and aesthetic evaluation demonstrate again the “two cultures” generalization.

53% of submissions from seniors in the Arts were evaluated as competent or good compared

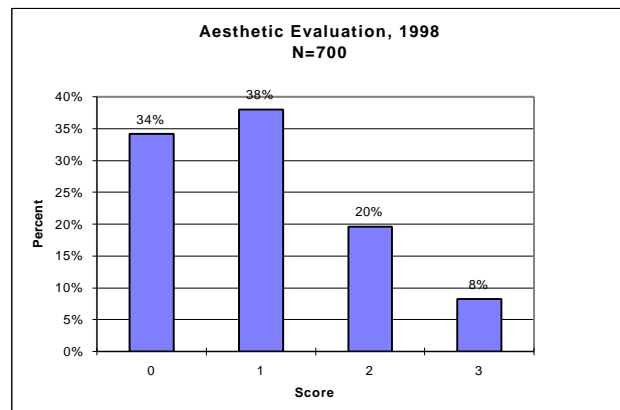
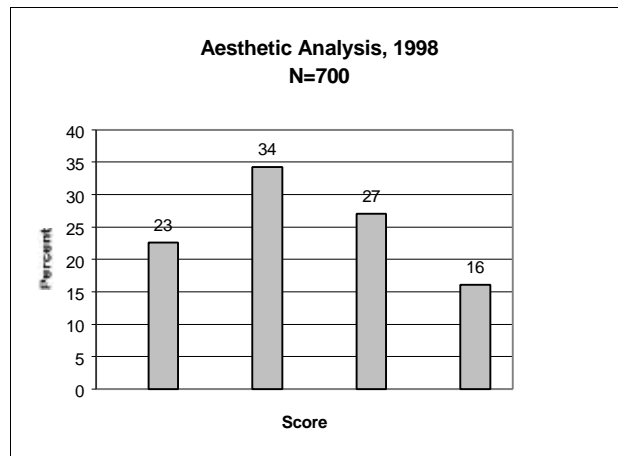
to 39% of submissions from seniors in the Sciences. Notice that students in Sciences have demonstrated more competence in aesthetic reasoning than students in the Arts have demonstrated competence in quantitative or scientific reasoning. These data might prompt further analysis of the curriculum and its delivery.



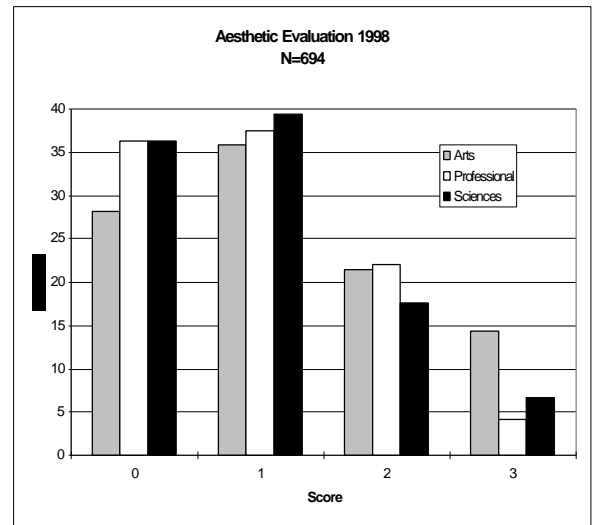
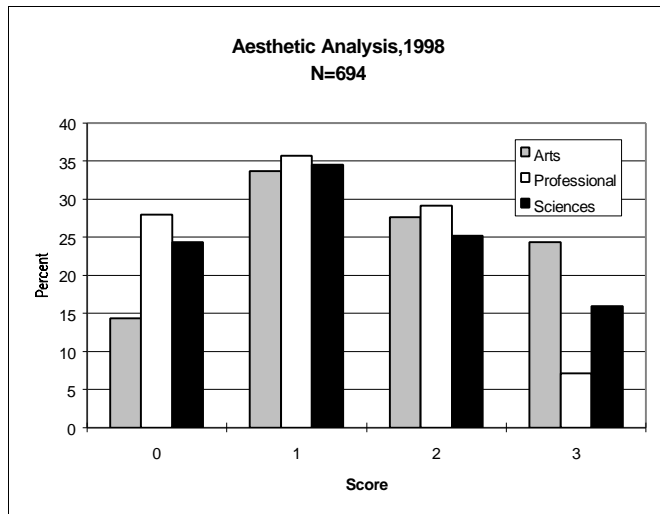
Aesthetic Analysis Compared to Aesthetic Evaluation

Historically, the portfolio entries demonstrate more aesthetic analysis than aesthetic evaluation. Each year, the assignment sheets which seniors append to entries or the student descriptions of the assignments focus on the activity of analysis more often than on evaluation with analysis.

This historical pattern recurred in 1998. 23% of submissions for aesthetic analysis were evaluated as not demonstrating aesthetic analysis while 34% of submissions for aesthetic evaluation provided no evidence of evaluation.



When readers judge the quality of the aesthetic analysis and evaluation, scores for competence in analysis are stronger than those for competence in evaluation. “Weak” describes a minimal competency. Overall, 34% of the entries were scored as “weak” analysis while 38% of entries were scored as “weak” evaluation. Analysis was scored as “competent” at a rate of 27% and “strong” at a rate of 16%. In contrast, evaluation was scored as “competent” at a rate of 20% and “strong” at a rate of 8%.



Most Satisfying Work or Activity

This portfolio category was recommended to the University Portfolio Committee in 1992 by capstone students seeking a site where individuals could describe and discuss experiences or work at Truman which made them proud or most satisfied them. In the 1997 cover letters, thirty-five students queried why the portfolio assessment not allocate room for materials that were “most satisfying, that were most influential to personal, creative, or academic growth, or that were most representative of who they were when they were not in class. In response, the 1998 portfolio guidelines encouraged seniors either to use the “most satisfying work or activity” site or to create their own category for including and explaining the significance of other materials, work or experiences which would be uniquely representative of them. Eleven students submitted additional material outside of the “most satisfying” site and explained that the work was challenging, creative, an achievement of goals, and/or their “personal best.”

Faculty review and describe entries for “most satisfying”. Over time, repeated motifs have been identified, including the reasons offered by those eleven students. Readers use a checklist of most frequent explanations of significance and summarize other explanations, often quoting what the seniors have written.

Of the 767 seniors who submitted materials, 27% explained that they were satisfied because the work or activity had been a “challenge”, an increase of 12% over the

1997 citing. 20% of entries represented a “personal best” 14% of entries were described as “achieved goals”. Challenging and personal best were coupled 65 times as students explained the entry. “Challenging” and/or “personal best” were also frequently partnered with “achieved goals”, “creative”, and “collaborative”. The average submission in 1998 set out two reasons why the work or activity satisfied the senior.

Seniors also derived satisfaction from discreet and extended learning occasions, from enjoyment of classes, athletics or cultural events, from using multiple intellectual skills or applying knowledge in diverse sites, from self-discovery, self-reflection and self-expression (with a specific example of being confident and able to oppose a professor).

The data show a marked increase in citations of academic work or activity as the source of satisfaction and a surprising decline of co-curricular citations.

40% from the major
32% from liberal arts and sciences core classes
8% from elective course
5% from independent research and internships
4% from honorary, service, and social fraternities
2% from capstone experiences
2% from minors

The remaining entries include a wide variety of personal bests: publication of abstracts, *Index* articles and letters, *Monitor* articles and letters, and undergraduate research; the process of writing scholarship essays, resumes, and application letters to graduate, law and medical schools’, presentations at the Undergraduate Research Symposium or at conferences; a student’s first paper after being away a year, a student’s first historiographical essay, and production of a TV show. Seniors cited a wide variety of activities or experiences with deep personal significance: athletic activities and teams were cited as frequently as Campus Christian Fellowship or Newman Center (11 times). Other satisfying experiences included a meditation workshop, an off-campus job, dramatic performances, an instructor requesting to use the student’s work in class, volunteer work at Head Start or with the AIDS Names Project Quilt, participation in the Audobon Chapter, SAB, Student Senate and Residential Life, and service as the “Webmaster for the Business Department”. One student described himself as “not yet satisfied” another indicated he would submit his entry after graduation: “I will fax you my diploma!”

This concentration on academic work or activity seems to tally overall with senior statements in the cover letters about their Truman education. Some faculty readers suggested that the dominance of academic citations in this category and the positive comments about their liberal arts and sciences education in the cover letter might be only “...writing us what they think we want to hear.” Others argued, often on the basis of the writer’s voice in the descriptions, that students were more independent than merely compliant as they explained their entries. More specific analysis of the entries from the majors and capstone experiences might be useful to disciplines for Five Year Reviews.

Reflective Cover Letters

The initial prompt for the cover letters to accompany portfolios asked seniors to report the time involved in compiling and submitting a portfolio because of campus concern that portfolio assessment could be too intrusive in student and faculty lives. It asked students to describe the process they used to generate their portfolios and invited them to describe anything they had learned during the process of selecting materials for the portfolio. It encouraged them to write freely about anything they wanted to tell the University community.

The first LAS Portfolio Assessment Report concluded with a paragraph stating the consensus of the University Portfolio Committee members that, however useful might be the information acquired about the delivery and efficacy of the University's curriculum, the senior portfolio would be valuable even if only for the student self-assessment which occurred. Students that first year reported that the portfolio process provided them with perspective and "closure".

The value of reflection and metacognition to all learners is a constant motif of campus conversations about student learning. Portfolios, whether they are placement portfolios, developmental portfolios for classes or majors, professional portfolios or the Liberal Arts and Sciences portfolios, allow individuals to reflect, to self-assess, to acquire new perspectives, and to set goals for future growth. The 1998 reflective cover letters demonstrate a stronger understanding by seniors of the use and value of portfolios than previously displayed.

At the same time, 18% of seniors did not include a cover letter with their portfolios. 15% of students from Arts, 15.5% of students from Sciences, and 28% of students from Professional Studies submitted portfolios without cover letters. Readers were nonplussed by many portfolios with excellent submissions which lacked cover letters and surprised by the cover letters from one discipline with grades from the capstone professor who reviewed each portfolio. Each year that a discipline decides to require a portfolio, a significant number of seniors comply with the portfolio but ignore the prompt for a cover letter. It is clear from this year's data that faculty need to think more specifically about cover letters as a "genre" intrinsic to portfolios, whatever the purpose of the portfolio.

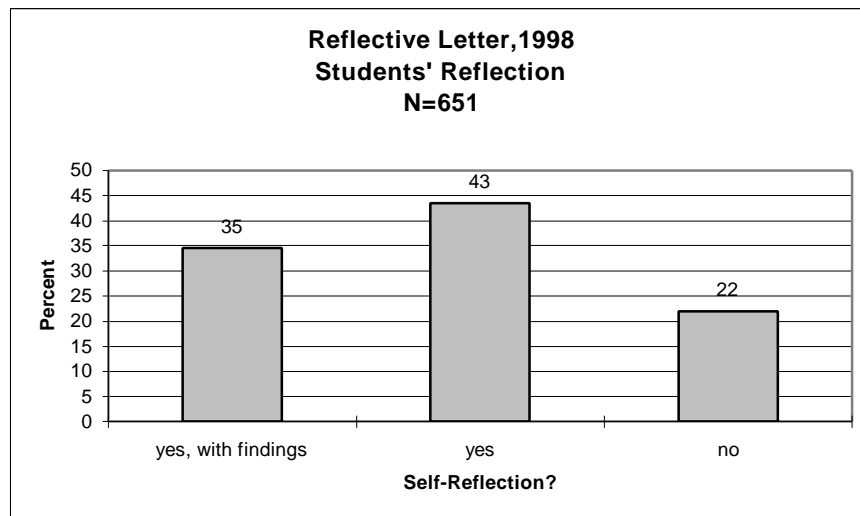
When faculty read cover letters on the last day of weekly assessments, the readers capture a fuller sense of individual students, their achievements, and aspirations even as they are collecting information that leads to a larger picture of student attitudes. Readers describe and record data about the time involved in compiling the portfolio and the use of disks and computer technology to store materials. Readers report whether and how seniors engaged in reflection and self-assessment in their cover letters. They describe the seniors' attitudes towards their education at Truman and towards the Portfolio

Assessment. They highlight statements in letters which should be shared with some or all constituents of the university. They select and read aloud from letters, voicing the concerns, criticisms, recommendations and/or kudos which the faculty believe their colleagues at the reading session should hear.

Cover letters often provide personal and thick description as seniors “sum up” their experiences at Truman. Some writers are specific and laconic. Others expand on their attitudes towards their education at Truman, their personal growth and academic achievement, and their opinions and recommendations about the curriculum, the Liberal Arts culture, and the assessment culture. Many refer to experiences and learning outcomes which best represent them but were not tapped by portfolio prompts.

Reflection in Cover Letters

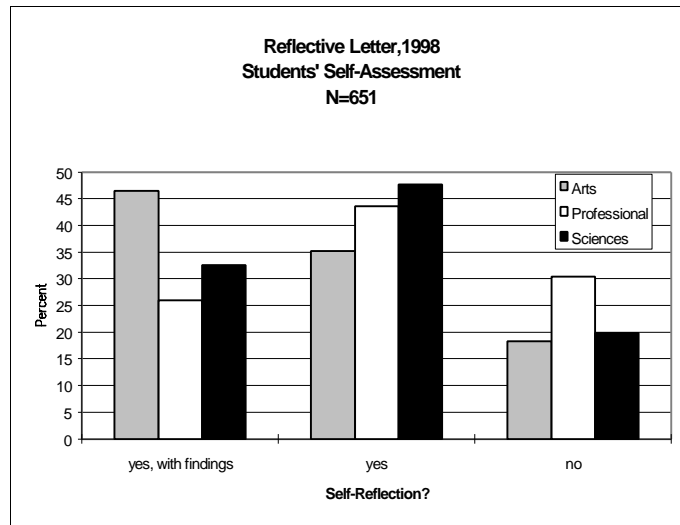
Faculty report whether cover letters are reflective: yes or no. They use “yes” for self-assessment presented only as generalizations and “yes, with findings” to report that the writer develops insights further. The 1998 data of 78% of letters showing self-assessment sharply contrast with the 1997 cover letters when 93% of cover letters demonstrated seniors engaging in self-assessment or reflection; 43% of letters were reported as “yes” and 35% reported as “yes, with findings.”



The data by group show an interesting pattern. Although a majority of students from each population engaged in reflection, students in the Arts wrote letters where self-assessment included “findings” more frequently (46% of an 81% participation in self-assessment rate) than students in the Sciences (33% of a 79% participation rate) or seniors in Professional Studies (25% of 75%).

At each reading session, faculty noticed these differences and speculated about the effects of the professional discourse of each grouping of learners on student communication of reflection. Faculty also speculated about self-assessment opportunities built into courses and disciplinary curricula that would assist students to reflect on their learning and skills.

Faculty readers commented on the broad range of student reflection in the portfolios. Some seniors focus their reflection on their struggle and achievement in the major; some attempt an holistic assessment of personal development over their Truman tenure; others muse about academic growth and achievement. Each excerpt from a cover letter in the almanac was recommended by faculty readers for sharing with the university community.



Upon reflection, I would have to say that my degree in chemistry is very thorough. When I decided to take the chemical route to medical school, I thought that I would not have to do much writing. I thought it would be mostly math. I was wrong. I have written more formal lab write-ups in the last few years than I will probably write in the next 30 years. I feel that the program here has prepared me for any challenges that I will face in the future because they did not fill me with tons of knowledge, but they showed me how to take smaller amounts and apply it to ideas and concepts that I don't fully understand. Essentially, I have been taught how to teach myself. This is an invaluable trait because I now have the confidence to attempt any problem that I am confronted with and I know that I can do a good job at solving that problem.

I guess that my experience here at Truman has mostly changed me as a thinker. I am now much more independent in my thoughts. Before I did not question ideas or people, but now I am continually wondering why something is the way it is. Basically, I believe that my education here has made me become a perpetual learner. I am now more interested in many more topics than I ever was before, and I think that this is great because I am rarely bored with anything that I am doing.

A Psychology major described “outcomes” of her Truman experience.

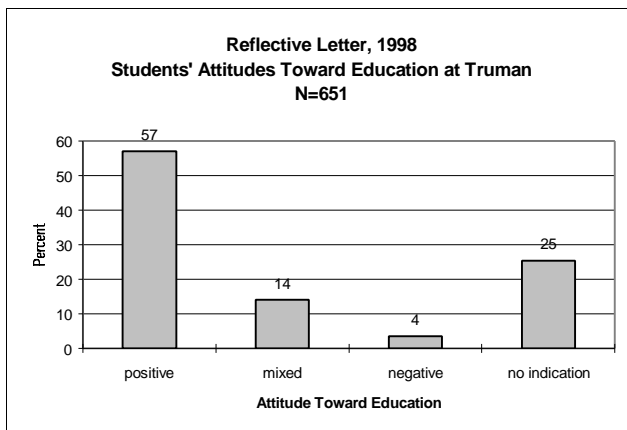
As I prepared my portfolio for your observation, I reflected on my experiences at Truman. I feel that the Liberal Arts experience that I have received

has given me the opportunity to explore and experience a wide variety of disciplines and ideas, which I feel is the purpose of this institution. This portfolio helped me to realize my growth as a student and an individual. I have been given many opportunities to challenge myself and my ideas.

I have changed in various ways due to my experience at Truman. First of all, I have learned to appreciate those of differing disciplines and their contribution to society and the work force. I feel that this is due to my opportunity to take a wide variety of classes. I have also changed my view of research. I used to not appreciate or desire research, but I have grown in my understanding of its importance and capabilities.

Overall, I feel the portfolio was a positive experience that helps a student to reflect on their growth and development through the undergraduate experience. I think that the requirement should be stressed more in all disciplines, because I do know of students in various disciplines that were not fully aware of the portfolio and had a difficult time compiling their assignments when the time actually came to make their portfolio.

Attitude toward Education



In 25% of the cover letters, seniors did not indicate what their attitude might be towards their education at Truman. When faculty report what students do say about their attitudes toward and assessments of their education at Truman, readers use “negative”, “mixed”, or “positive” to categorize the students attitude. Overall, letters tended to be more succinct and

formal than in previous years. One faculty reader recommended this personal, specific, reflective and short letter as an example of a “positive” attitude toward a Truman education.

Well, this portfolio began as more of a way of “wasting” my time than anything. I didn’t really think that I had the time to work on this, moreover, go through all my past work. I spent a good deal of time going through my old works. Once I began searching, I hate to admit that I lost track of time. It was fun to look at some papers that I had done freshman year. I laughed over some of the works. Why did I think that way or why did I say them?

Through the portfolio search, I saw works that I couldn’t believe I had written. And some works brought a smile to my face because I remembered the memories that went into creating the piece. Lots of studying, research, and hard

work went into my studying and papers. And more than the hard work, I remembered the successful feeling of the finished product.

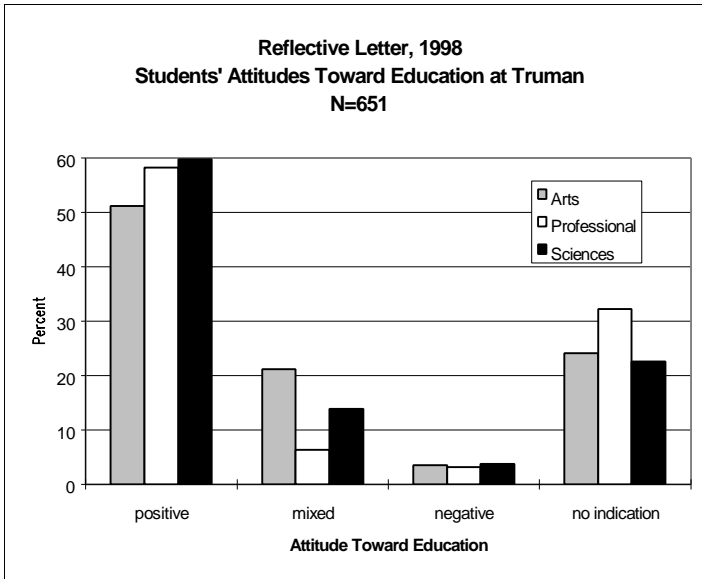
I have grown in several ways while I have been a student here at Truman. I began my college career as a stressed out student most of the time. But, then I learned that only studying and doing my best job was all that I need to get through the stressful times. Now, I work and stress to a degree—but I have been able to concentrate in a way which wasn't as string during my freshman year.

The hands-on experience for my journalism degree here at Truman has been tremendous. I began my freshman year by becoming involved in several groups. Through them I have become one of those students who make the media center their second home. And, I believe, it is through this hand-on experience that I will find job-hunting to be easier than others do.

I am happy that I chose Truman to receive my undergraduate degree. Now that I have been forced to look back, I believe I have grown and become a stronger person— not only in my studies and the papers that I have written, but also through my personality. Truman will always be a piece of my personality. It was an important part of my growing process.

In a “mixed” cover letter, a student might express mixed emotions and opinions about his experience at Truman, perhaps citing positive experiences with the major, talking cynically about core requirements, describing his gratitude about an advisor, and characterizing herself as a proud graduate.

The 57% frequency of positive attitudes toward education in cover letters in 1998 contrasts with the 67% frequency in both 1996 and 1997. The 4% frequency of negative cover letters is similar to 1996 (2%) and 1997 (7%). Overall, the general pattern of a large positive attitude and a small negative attitude towards a Truman education has been demonstrated each year.



Readers find the candor in cover letters refreshing if sometimes painful to hear. They have suggested that more of their colleagues campuswide should have opportunities

to read and discuss the insights and motifs of these students texts. Two letters which follow illustrate a positive attitude toward Truman education.

To all who read this portfolio:

This portfolio does not represent what I have learned here at Truman State University. When it came time to find papers and assignments from past classes, I was very frustrated to find that many of them are lost forever. I have achieved so much more than what is in this folder. I hope you enjoy what is here, but I also hope that you understand that in my 5 years here at Truman I have learned more than I could ever express in this portfolio. ...I hope that this cover letter will be helpful in explaining my experience at Truman.

When I finished high school, I had the option of staying home and going to the community college, or going away. I chose to come to Truman because I wanted to get the full 4-year "college experience". I think I made a wise decision. In these 5 years my mind has been opened to so many different things. Through my classes, I gained a broad knowledge of many different disciplines. I took classes in health, psychology, exercise science, foreign language, history, art, political science, and so many more. Although some of these classes did not directly relate to my major of nursing, each class challenged me to think in a different way and explore different points of view. As the years passed, I grew as a thinker in that my mind was opened to several different topics and bodies of knowledge. With each semester I was a new person with new knowledge to apply to my next classes. It's awesome to think of the many different classes I've taken and how they've each changed me to become the person I am today. I am very thankful that I chose a liberal arts institution. Having a core in liberal arts has helped me to open my mind about many different bodies of knowledge that I wouldn't have been taught about in my nursing curriculum.

As you read my portfolio, you should also know that I am not a very high-achieving student. I do not want to go to graduate school anytime in the near future. I simply want to be the best nurse that I possibly can and live my life for The Lord. My goals are to make a difference in my community through my work as a nurse and to have a healthy, loving family. Although I do not have high academic goals, I do not regret coming to a highly academic school like Truman. My experience here has been very valuable to my development as a person.

An interesting trend in the 1998 cover letters is the specific discussion of the significance of the liberal arts mission and culture to many seniors. Content analysis of the 1998 and 1997 letters would demonstrate a marked increase of discussion about Truman as a site for liberal learning, as illustrated in the excerpt which follows.

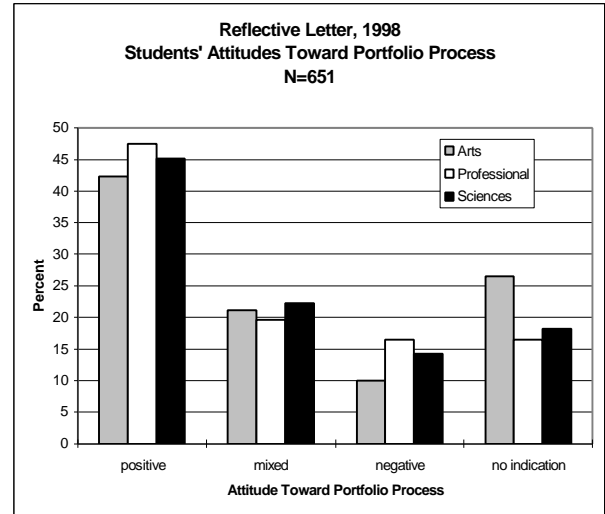
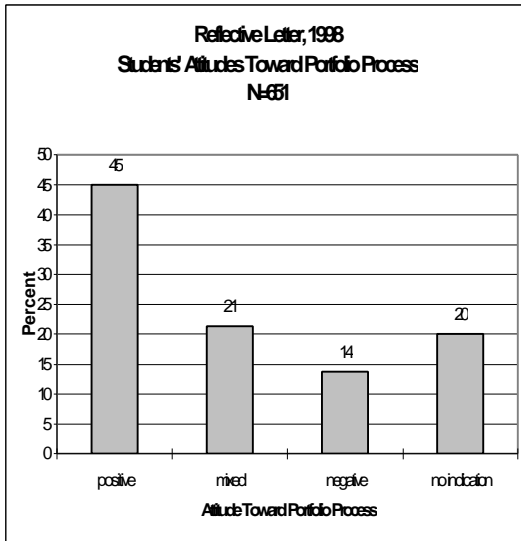
I am very pleased with the education that I have received here. Not only have I learned a great deal from my classes but more importantly I have learned more about myself. The hardest thing for me to realize was that I didn't have to get the "A". For a person who came out of high school with a 4.0, this was a very hard lesson. During my freshman year, I should have seeked counseling because I was

working so hard in my classes to get an A that my life was miserable. Finally, getting a B in calculus was probably the best thing that could have happened. It seemed like a weight was lifted off my shoulders. Since then, I have found the importance of balance in my life. I take time to do enjoyable things, and I reward myself after a rough week. I think that there are several other students who enter this college as freshmen with a similar mentality. I hope that they don't have to go through what I did before I made this realization. I guess that maybe this is something that everyone has to learn for themselves.

As a result of receiving a liberal arts and sciences education I have gained a greater appreciation for areas that I had not previously been exposed to. As a result of most classes being closed when I registered as a freshman, I took an anthropology class. I didn't want to take it, but it turned out to be a very enjoyable experience. I also can appreciate what I have learned. I recently traveled to Philadelphia for an interview and spent some of my spare time at the art museum. It was amazing to recognize paintings that were discussed in art classes that I took as a freshman. I think that the education that I have gotten here has enriched my life in many ways that I may not yet be aware of. I have always enjoyed learning, and I am happy that I chose to attend this college because it seems to promote learning in every area.

Attitude Towards Portfolio Process

Seniors most frequently expressed positive attitudes towards the portfolio assessment and process as indicated by the 66% of entries scored as positive. However, 20% of seniors did not indicate their attitudes this year, in contrast to 7% in 1997 and in comparison to 2% from 1996 when several disciplines first required the LAS portfolio through capstone courses. Of concern is the 14% of seniors with negative attitudes towards the portfolio process because that percentage has shifted from 2% (1996) to 7% (1997) to 14% in 1998. The percentage of letters with "mixed" attitudes towards the portfolio has shifted and increased, but not as dramatically from 10% in 1996 to 19% in 1997 to the 1998 percentage rate. The excerpts that follow illustrate some of the common themes readers encounter each year.



One expressed a positive attitude towards the process of self-assessment and the portfolio as a developmental snapshot; themes in this letter were frequently echoed in other letters.

Dear Taskforce:

I first would like to thank you for the opportunity of putting together a senior portfolio representative of my work, reflections, thoughts and knowledge that I have gained from attending Truman State University. I would have to admit, my very first semester when our residential college peer advisor handed us a brown envelope I didn't quite realize how this would truly help me to understand and evaluate myself as a person, and how many different areas or disciplines I could reflect back on.

After each semester, I tried to organize my folders. And kept handy anything that I might later want to include in my portfolio. I kept all my books and folders in accessible boxes/ However, as time went on and my life got busier and busier, I wasn't able to keep up with the collection of possible works I might use. But within the last couple of semesters, I realized how important, not only to the University, but to myself this portfolio was going to be. I have tried to include works that are a reflection of who I am throughout my college years, and how I have changed in my thinking and knowledge. I presently am in my last semester and have come to realize as I use my portfolio to apply for jobs and think about my future, that my experiences at Truman have been some of the most wonderful in my life. My friendships with peers, and even more importantly with professors and staff members have truly helped to shape me into the person that I have become.

One experience that didn't really fit into my portfolio requirements has been the three and a half years I have been an aerobics instructor for HLTH 194, Health and wellness. Teaching aerobics has not only improved my self-esteem and leadership abilities; it has shown me that whatever I want to do in life is

possible if I work hard and develop a positive attitude in all areas of my life. I never thought I would become a gymnastics team coach (this has been my dream job since I was 11!), but with meeting people and taking the time to get to know those who have had a great influence on me, just last spring I attained that goal. My family, my husband and all the people here at Truman have all had such a positive influence on my life, and I am thankful that I was able to attend a school that could offer me the opportunity to be who I am.

An Art major describes benefits when required to participate in the LAS Portfolio Assessment.

Out of all of the various assessment testing and miscellaneous requirements to graduate from Truman, I found putting together this portfolio the least annoying. It was almost (I hate to say it) pleasant and fun. I got a chance to stroll down memory lane and put my experience here into perspective. I was surprised at how much I had forgotten. While most of the long lost memories were nice, a few I wish had stayed in the deep dark closet, like all the stress involved in putting together a research paper at the last minute, and that one class I just couldn't stand. Overall, I am glad I had to do it. It did take up time that I should have using for other classes, but I don't think I would have looked at all my old work if it wasn't required. I gained some knowledge about how far I have progressed as a student, and more importantly as a person.

Over the years I have wished many a time that there were less core classes required for graduation, but looking back I realize that I have benefited from them more than I gave credit. I have used knowledge gained from my core classes in my artwork, which is most important to me.

Sometimes a call would affect me and it would show up in my artwork even when I wasn't aware it was influencing me. Also, the more I learn and the more things I am aware of, the more my artwork benefits. If it had not been for my core classes, no matter how much time they took away from the things I really wanted to be doing, I, as a person, and my artwork would have suffered for it. I would not change it core in any way except I wish I had been able to take a computer class. I would never take one on my own, but I am beginning to see more and more that I really need to improve my computer skills. At some point I'm sure I'll really need them.

I have grown a great deal at college. Not just because of what I learned in class, but because of all the experiences I have had and all of the people I have met. Thank you for making me reflect on my college experience.

Cover letters which demonstrate a negative attitude towards the portfolio process indicate that seniors have too much to think about and complete in their last year to waste time working with a portfolio, that seniors are disinterested in reviewing and assessing any work beyond their majors, and that they consider the assessment culture at Truman to be unnecessary and of little value to them. 37 cover letters, described by readers as “negative”, leveled the same charge as this excerpt from a 250-word letter.

I found the process a general waste of time, as most of what I was able to actually find meant very little to me now. I learned next to nothing from this portfolio expedition except that it is but another silly thing this University does to torture its students. Yet another useless assessment tool. Yet another way to make the University feel good about itself. Another way for them to boast about what a great University this is but in reality it finishes quite short of their billing. In short, I believe that this University cares more for its image and attraction to new students than it cares for its students once they are here.

Comments about portfolio assessment scattered through all the cover letters indicate an uneven acculturation of students to the personal benefits of collecting artifacts in a portfolio, whether digital, cardboard, or milk crate. More important, encouragement of reflection and self-assessment using the portfolio is uneven from instructor to instructor, advisor to advisor. Ironically, the potential to use LAS portfolio to personalize Truman's planning theme of "deepening an enhanced, self-reflective Liberal Arts Culture" and demonstrate how it cares for and assists student development as they are here is not being fully realized.

Recommendations about the LAS Portfolio Assessment

Both students and faculty readers have offered recommendations about the processes of portfolio assessment. To maximize the benefits to students, faculty and the university community of maintaining and sharing Liberal Arts and Sciences Portfolios, some processes must be fine tuned and enhanced, some new actions must be taken and some broader University commitment to the use of portfolio assessment must occur.

Acculturating the community to a reflective, liberal learning culture

Acculturating students, faculty, and staff to the value of self-assessment and reflection requires equal senior participation in the portfolio process. In Fall, faculty governance will work with a bill forwarded by the Assessment Committee that would make maintenance and submission of a Liberal Arts and Sciences portfolio a graduation requirement. A universally shared requirement would even out inconsistency and confusion which students experience as they receive mixed messages about portfolio assessment.

At present, students are encouraged in Freshman Week to begin a portfolio. As they navigate the university, they hear conflicting information about why and whether they should or must keep a portfolio. Some instructors encourage them to keep everything or to keep particularly successful materials; some courses require portfolios for self-assessment, reflection, and goal setting; some instructors provide students with multiple classroom opportunities for self-assessment and reflection; some advisors confer with their advisees about their portfolios and personal, academic, and career development; some disciplines (notably Music) require advisees to bring portfolios to registration

appointments or (notably Political Science) require majors to submit both the LAS and the major portfolio as part of formal interviews assessing the discipline.

Students are encouraged to describe what they have collected for their portfolios during The Sophomore Writing Experience. Several disciplines require their majors to keep portfolios: Art, Biology, Chemistry, Classics, Exercise Science, History, Nursing, Physics and Psychology are examples . The Business Division voted in Spring of 1996 to require all majors to compile a portfolio which combines the LAS portfolio prompts and prompts focused on accreditation requirements. In other disciplines, individual capstone professors require the LAS portfolio. Some disciplinary faculty who have served as portfolio readers encourage students to participate even as their discipline does not have a capstone course. The student grapevine tells some students that, if they don't have LAS portfolios to submit, they cannot graduate because of this diversity in use and requirement of portfolios. The grapevine tells other students not to bother because "we don't do it in our major."

To afford all students the opportunity to engage in self-assessment, to even out what students perceive as at best inconsistency and at worse unfairness in course requirements, and to gain a full portrait of the curriculum as experienced by all majors, the Liberal Arts and Sciences Portfolio should be required of all students for graduation.

Acculturating faculty to the benefits of portfolio assessment for their students and for their own professional development is also an uneven process. The most effective venue for learning about the benefits to students, to improvement of teaching and learning, and to reflecting on one's own teaching and advising occurs during the reading sessions, both as readers discuss and agree to share scoring criteria and through the cross-disciplinary informal and formal discussions which ensue. The 1998 faculty readers, like readers before, endorsed the process of recruiting readers from all disciplines and ranks and recommended that new faculty be invited early in their careers to participate. Some faculty also recommended smaller reading sessions focused on a specific critical thinking skill be organized to increase the faculty development benefits of participating in portfolio assessment.

Advising workshops or advising materials should be organized to assist faculty and academic advisors to use the LAS portfolio as part of advising conferences. A web page should be developed for the Truman community to make annual portfolio guidelines accessible, to accommodate frequently asked questions, to demonstrate digital portfolios, and to show examples of completed portfolios.

Fine-tuning the portfolio assessment processes

The design of the Liberal Studies Program over the past two years included recommendations about assessment of the curricular units by faculty committees which drafted outcome statements for each essential skill, mode of inquiry and interconnecting

perspective. It is clear that the Liberal Arts and Sciences Portfolio will be one of the assessment strategies used to monitor the efficacy of the curriculum and to generate useful information for enhancing teaching and learning.

For academic year 1998-99, faculty consultants should meet with the Director of the Portfolio Assessment to review the quantitative reasoning data and design an evaluation process which will include consideration of both “use” and “skill” in judgments made about what will be described as “quantitative/mathematical reasoning”. The consultants will assist the Director of Portfolio Assessment in selecting samples or rangefinders for use in training readers. During the reading sessions, they will serve as “table leaders”, reading scored samples of a group of readers and assisting them to evaluate submissions consistently and reliably.

In light of the 80% reliability rate for Interdisciplinary Thinking submissions, more table leaders should be recruited to read scored samples, to confer with colleagues as needed about any inconsistency in scoring, and to discuss problematic submissions as faculty request.

To anticipate the difference in the learning outcomes for the Aesthetic-Fine Arts and the Aesthetic-literature modes of inquiry, the current prompt should be amended to elicit “aesthetic analysis and/or evaluation. To generate more specific and useful baseline data for submissions of aesthetic reasoning, an interrater reliability process should be designed by the Director of Portfolio Assessment with faculty consultants who will also serve as table leaders during reading sessions. These three processes of establishing interrater reliability will engage perhaps a third of the reading corps in assessment leadership activities and create an opportunity for talent development.

Enhancing the maintenance, collection, and storage of LAS portfolios

LAS Portfolios were conceptualized not to intrude greatly on the time or good will of either seniors or their instructors. With increased computer literacy of students and faculty, the use of digitized portfolios for storing texts and other artifacts in many media eases the task of maintaining portfolios. Pilot projects in teaching first year students the use of PDF files for portfolios and in assisting capstone seniors to create digital portfolios on CDs should be funded. Such projects should generate digital templates for creating portfolios, good documentation for use by students, and more spirited and creative student ownership of portfolios.

Storage of student portfolios for longitudinal research can be facilitated through use of digitized portfolios. At present, the portfolios of one large discipline can be burned onto a CD ROM. At the same time that the Assessment Committee ponders future digital storage, it might organize the selection of samples from previous years and store them digitally for use in longitudinal research. The last three years, seniors have been advised that their portfolios will be returned after ten years, if they keep their addresses current with the Alumni office. In two years, the first set of portfolios should be returned.

Sharing Portfolio Assessment Findings

At present the portfolio assessment generates richer data and possibilities than any annual report in the **Assessment Almanac** can accommodate. The new, full-time staff assistant for assessment should maintain the database after production of the almanac and should serve as contact person for data requests from individual faculty conducting research, from disciplines and divisions, and from other curricular or co-curricular programs. In addition, to encourage longitudinal research, a sub-committee of the Assessment Committee should engage in content analysis of portfolios from previous years and add those data points to the collection in the staff assistant's office.

In 1995 and 1996, the Director of Portfolio Assessment and a graduate student sent thank you letters to graduates who had participated in the assessment. They used faculty comments written on scoring sheets and statements in cover letters to personalize the letters which report specific ways that the data were used to effect change or enhance both the curriculum and co-curriculum. In light of both the increased cynicism of some seniors about uses of portfolio assessment data and the good will demonstrated by many seniors turned alumni, this practice should be continued. It might also serve as a means of sharing results with other faculty who might be recruited to review the faculty comments and cover letters.

Faculty Development could work with the Director of Portfolio Assessment to organize an assessment workshop each semester, perhaps using data to facilitate discussion about the progress with an essential skill, with a mode of inquiry, or with interdisciplinarity. Faculty Development could also provide digitized portfolio workshops to follow up on taped teleconferences about teaching portfolios.

Finally, the Assessment Committee should discuss ways of sharing portfolio evaluation and data with interested students. Early in LAS Portfolio Assessment, one student senate president served as a reader. His insights and analyses were useful both to the Portfolio Task Force and to senate planning and activities. Anonymous portfolio samples used for training faculty readers could be shared with interested students in workshops.

An important benefit of such a workshop would be the private self-assessment that would occur as a student thinks about and evaluates the critical thinking demonstrated in a portfolio category. It would mirror the reflection and self-assessment to teaching and advising practices which faculty readers consistently cite as the major benefit of participating in portfolio assessment. Other benefits would be the opportunity for advice from a variety of students about the wording of prompts and suggestions of other questions.

Publication of pertinent data in **Truman Today** or **The Index** of data and of actions taken in light of the data reports might have a positive effect on student

motivation. Publication of student portfolios of portfolio entries on the LAS Portfolio webpage would assist students in their understanding of the possibilities for and benefits of reflective portfolios.