CHAPTER THREE: WHAT DO TRINITY STUDENTS LEARN?

Characteristics of Excellence: Through this chapter Trinity will demonstrate compliance with these standards:

Standard 14: Assessment of Student Learning Outcomes

This chapter will demonstrate that Trinity's "students have knowledge, skills, and competencies consistent with institutional and appropriate higher education goals (Standard 14)" and that Trinity's "educational offerings display academic content, rigor, and coherence appropriate to its higher education mission."

Trinity's mission and educational philosophy recognize that students come from many walks of life, all levels of preparedness, and with varied and unique backgrounds, cultures and experiences. This wide diversity deeply informs the Trinity educational experience. For each student, Trinity's mission requires an institutional commitment to quality learning experiences and access to just-in-time educational and support services: in short, a commitment to student success. Trinity's assessment strategies test a variety of pedagogical approaches that enhance these learning outcomes for a Trinity's diverse student body.

In order to ensure success for each student in every program, Trinity has developed a culture of assessment that examines learning performance and outcomes routinely, and that leads to changes in curricula, programs and pedagogy on a continuous basis. In the College of Arts & Sciences (CAS), formal and systematic assessment points include pre-assessment, First-Year assessment, General Education capstone assessment, senior seminar assessment, and graduation surveys. Similar practices guide assessment of adult student learning in the School of Professional Studies (SPS). In the graduate and professional school programs for healthcare (NHP), education (EDU) and business (BGS), specialized accreditation requires systematic assessment, and the programs without specialized accreditation align with professional standards.

Trinity faculty produce published scholarship on the assessment of student learning in their disciplinary journals on teaching and learning; many examples of this scholarship are posted at DR 3.1: Faculty Publications on Assessment. Faculty use embedded assessments in individual courses to examine achievement of university and collegiate unit-wide learning goals; they attend workshops on academic assessment, program review, and general education assessment, and they intentionally design courses and curricula with institutional and program level-learning goals as guides. Trinity's faculty, administrators, and staff then use the data they discover to inform curricular revision at the course, program, collegiate unit, and university levels.

A. Learning Assessment Oversight and Processes

Assessment at Trinity is faculty-driven in collaboration with key academic administrators and integrated across academic units. The University Committee on Academic Policy (UCAP) oversees the assessment processes in all academic units. Faculty representatives from each unit form UCAP's voting body, under direction of a faculty chair, and the deans and other academic administrators contribute ex-officio. The committee also maintains the "UCAP Resource Page"

in Moodle, Trinity's learning management system, providing members of the Trinity community access to assessment work occurring across schools, programs and courses. (Trinity will provide Moodle access for the visiting team.)

Under the Provost's direction, all deans and faculty in the collegiate units at Trinity are engaged in continuous assessment of student learning outcomes at the course, program, and collegiate unit levels (DR 3.2: Program Review Schedule). Assessment work is part of a faculty member's regular workload, whether the faculty person is full or part time, and regardless of category. Recognizing that adjunct engagement in the assessment process is key in ensuring academic integrity across the institution, Trinity deans and administrators have worked hard to lay the groundwork for adjunct participation in continuous assessment. For example, the Academic Affairs Professional Development series offers numerous workshops on learning outcome assessment for both full and part-time faculty, and has expanded offering times to more easily allow adjunct participation (DR 3.3: Sample Assessment Workshop Materials). Schools have developed easy-to-use assessment templates and guides to facilitate adjuncts acceptance of and contribution to this important work (DR 3.4: Sample Unit Goal Assessment Template EDU).

Consistent with Standard 14, Trinity expects faculty in all collegiate units to develop clearly articulated general education, academic program and course level student learning outcomes statements that explain what the student will know, be able to do, and come to value at the successful completion of a course (DR 3.5 Sample Syllabus Guidelines CAS). Trinity promotes a culture in which courses, programs and academic activities are then backwards-designed (meaning designing the course syllabus to meet the actual learning outcomes) to produce thoughtful and intentional learning opportunities that empower students to achieve the articulated knowledge, skills and values goals. These outcomes are expected to be meaningfully assessed using direct and indirect measures, and the resulting data feed back into course and curricular design to improve teaching and learning. Trinity provides numerous opportunities for faculty training on backwards course design both through its professional development series and through special events such as Dr. Dee Fink's two-day, hands-on workshop on "Designing Courses for Significant Learning," in May 2015, attended by more than 60 full-time faculty, instructional specialists and adjunct professors (DR 3.6: Dee Fink on Designing Courses).

In two of Trinity's professional schools, the School of Nursing and Health Professions and the School of Education, specialized accreditation requires stringent, rigorous assessment of learning outcomes that occurs on a timetable and in response to specific and measurable goals. The School of Education is accredited by the National Council for Accreditation of Teacher Education (NCATE, now Council for the Accreditation of Educator Preparation, or CAEP), including Trinity's teacher preparation programs, counseling programs, and educational administration programs. All programs offered by the School of Education are also approved by the DC State Education Agency (OSSE) and meet requirements for state certification. Trinity is considering CACREP candidacy status for the master's in Counseling program which prepares both school counselors and licensed practitioners.

The Trinity Nursing Program is accredited by the Commission on Collegiate Nursing Education (CCNE) and has conditional approval from the D.C. Board of Nursing (D.C. BON); the last CCNE on-site evaluation took place in spring 2012.

The Occupational Therapy Assistant program is accredited by the Accreditation Council for Occupational Therapy Education (A.C.O.T.E.) of the American Occupational Therapy Association (A.O.T.A.). At the Master's level, the entry-level occupational therapy master's degree program has been granted Candidacy Status by the Accreditation Council for Occupational Therapy Education (ACOTE) of the American Occupational Therapy Association (AOTA).

The School of Professional Studies (SPS) and the School of Business and Graduate Studies (BGS) are equally committed to systematic, rigorous, student-centered learning outcomes assessment in their courses curricula and programs. SPS General Education and major programs align with CAS learning goals and objectives, tailored appropriately for adult students. BGS continues the process of updating its Master of Business Administration and Master of Science in Administration degrees to align the program learning objectives with professional standards in the various fields of practice.

B. Trinity Student Learning Goals and Outcomes

Consistent with Middle States Standard 1: Mission and Goals, Trinity's educational goals are derived from its mission statement, and each program must demonstrate alignment of university level educational goals, collegiate unit learning goals, and institutional mission. Trinity's university level educational goals are:

Trinity Washington University Educational Goals

Consistent with Trinity's Statement of Mission, the university's educational goals for all programs are:

- To prepare students intellectually, ethically, and spiritually for work, civic, and family life by infusing the curriculum with the knowledge, skills, and values that characterize liberal learning (links Mission Statement to Liberal Arts Competencies in Gen Ed and Programs)
- To prepare students intellectually, ethically, and spiritually for work, civic, and family life by infusing the curriculum with principles of equity, justice, and honor (links Mission Statement to Ethics Goals in Gen Ed and Programs)
- To prepare students intellectually, ethically, and spiritually for work, civic, and family life by emphasizing integration of liberal learning with professional preparation (links Mission Statement to Applications goals in Gen Ed and Programs)

As an example of how an academic program aligns its learning goals with the university-wide goals, see the Economics Program goals statement at DR 3.7 Aligning Goals.

Arising from the university-wide educational goals, the College of Arts & Science and the School of Professional Studies have identified the eight learning outcomes for students in the undergraduate programs.

Trinity Washington University

Expected Learning Outcomes for Undergraduate Students
in the College of Arts and Sciences and School of Professional Studies

- **Foundational Skills** (First-Year Experience Goals)
  - GOAL 1: Students will develop their abilities to read, understand, and analyze texts
  - GOAL 2: Students will develop their abilities to communicate effectively in speech and writing
  - GOAL 3: Students will develop their abilities to understand and use quantitative reasoning to solve problems
  - GOAL 4: Students will develop their abilities to locate, evaluate, and synthesize information in the construction of knowledge

- **Knowledge and Inquiry** (General Education Goals)
  - GOAL 5: Student will begin to explore and connect fields of knowledge in the liberal arts
  - GOAL 6: Students will begin to apply diverse modes of inquiry to the study of human societies and the natural world

- **Values & Beliefs** (General Education Goals)
  - GOAL 7: Students will develop facility for moral reasoning and examine the moral and religious dimensions of human experience

- **Applications: Turning knowledge into action** (Capstone Level Goals)
  - GOAL 8: Students will develop capacities for responsible citizenship and leadership in diverse communities

Chapter 4 on General Education discusses the specific objectives associated with these goals. These goals also align carefully with the areas of proficiency stated in Middle States Standard 12: "The institution's curricula are designed so that students acquire and demonstrate college-level proficiency in general education and essential skills, including at least *oral and written communication* (Goals 1 and 2), *scientific and quantitative reasoning* (Goals 3 and 6), *critical analysis and reasoning* (Goals 5 and 7), and *technological competency* (Goal 4)."

C. Framework for Continuous Student Learning Outcomes Assessment

Faculty and academic staff collect and analyze student learning outcome assessment data at the following points during a student's undergraduate tenure at Trinity: 1) Pre-Assessment; 2) First-Year Experience Assessment; 3) General Education/Capstone Assessment; 4) Senior and Experiential Learning Assessment.

The following section presents an account of the multi-modal strategies used to assess learning outcomes on an on-going basis, explains the collaborative and cross-collegiate nature of Trinity's assessment processes and procedures, and provides results from select assessment projects at each data point. The section demonstrates Trinity's approach to student learning outcome assessment: measures and indicators include course pass rates as a function of placement test scores; rubric-derived assignment grades related to increasingly complex, scaffolded writing skills; use of pre-and-post-test *My Math Lab* assessment data; pre-post-test college-level learning goal rubrics in Knowledge & Inquiry and Values & Beliefs courses; student survey data and writing across the curriculum analyses in applications courses; senior assessments and faculty/supervisor assessment of college-level learning outcomes in experiential learning (internships and practica). DR 3.8: Specialist Reports in Reading, Writing and Math is a web page with detailed reports from the first year instructional specialists since 2009.

1. Pre-assessment: Accuplacer and its Use at Trinity

Since, year 2008, all incoming first-year undergraduate students have taken the Accuplacer assessment in critical reading, writing and mathematics. Advisors utilized these scores to guide student placement in first-year skills based courses, but they also provided a baseline for first-year outcomes assessment. Trinity's first-year faculty worked diligently to analyze the scores each year and to redesign the curricula to address specific challenges any new class presented. (Note: with curricular revisions in the first year, starting in Fall 2016 Accuplacer will not be used for course placement, but will still have a role in first year assessment.) As an example of this work **Chart 3.1: Target Topic A - CRS 100s Outcomes by Accuplacer Reading Score Range (2012-2013)** demonstrates the first-year faculty and instructional specialist's annual and on-going evaluation of student outcomes as a function of Accuplacer assessment. CRS 100S was Trinity's initial skills course in critical reading strategies, taken by many students in preparation for the cohorted First-Year Seminar in Critical Reading (CRS 101).

Chart 3.1: Target Topic A - CRS 100s Outcomes by Accuplacer Reading Score Range

CRS 100 Outcome	No. Fall 2012	Accu-placer below 35	Accu-placer below 40	Accu-placer 40 and above	No. Spring 2013	Accu-placer below 35	Accu-placer below 40	Accu-placer 40 and above
Passed	**25**	**2 (8%)**	**10 (40%)**	**15 (60%)**	**6**	**1 (17%)**	**1 (17%)**	**5 (83%)**
Failed	**20**	**8 (40%)**	**10 (50%)**	**10 (50%)**	**10**	**5 (50%)**	**6 (60%)**	**4 (40%)**
Withdrew	**22**	**9 (41%)**	**12 (55%)**	**10 (45%)**	**6**	**3 (50%)**	**4 (67%)**	**2 (33%)**
Abandoned	**13**	**2 (8%)**	**4 (31%)**	**9 (69%)**	**10**	**4 (40%)**	**5 (50%)**	**5 (50%)**
Failed/ Honor Violation	**0**	**n/a**	**n/a**	**n/a**	**2**	**1 (50%)**	**1 (50%)**	**1 (50%)**

Analysis of the above data shows that of the students who passed CRS 100s in academic year 2012-2013, 65% earned an Accuplacer reading score of 40 or above. Of the 80 students who enrolled in CRS 100s in fall 2012, 21 (26%) earned initial Accuplacer reading scores below 35. Only two of the 21 (10%) passed CRS 100s in the fall. The first year faculty were cautiously encouraged that the data supported Trinity's skill level benchmarks; however, pass rates and similar results from Math and Writing analyses strongly informed the 2014-2015 first-year curriculum committee's recommended revisions to first year coursework, including extensive revision in CRS 101 and the addition of CRS 102 to further strengthen students' critical reading skills (see Chapter 4, Foundation for Learning in General Education and Academic Support).

2. First-Year Experience Assessment in CAS and SPS

Since 2008, Trinity's reading, writing and math specialists in CAS and SPS have prepared annual reports that assess student outcomes in foundational skills goals 1, 2 and 3. These course are designed to provide foundations for student learning outcomes in two key general education areas: writing and numeracy. The data these reports produce reveal strengths and weaknesses of first-year critical skills instruction, and are used for curricular and course revision that occurs each summer. The following two examples show use of first year student learning assessment data to identify student learning outcome strengths and weaknesses in writing and math courses. In both cases the data are more granular than the pass rates data in the previous reading score example; these analyses illustrate the accomplishment of skills related to specific writing objectives (scaffolding skills-building from one-paragraph descriptive essays through two-paragraph comparison-contrast to five-paragraph argumentative essays).

Chart 3.2: Target Topic - Grade Progress in ENGL 105/105S, spring 2013

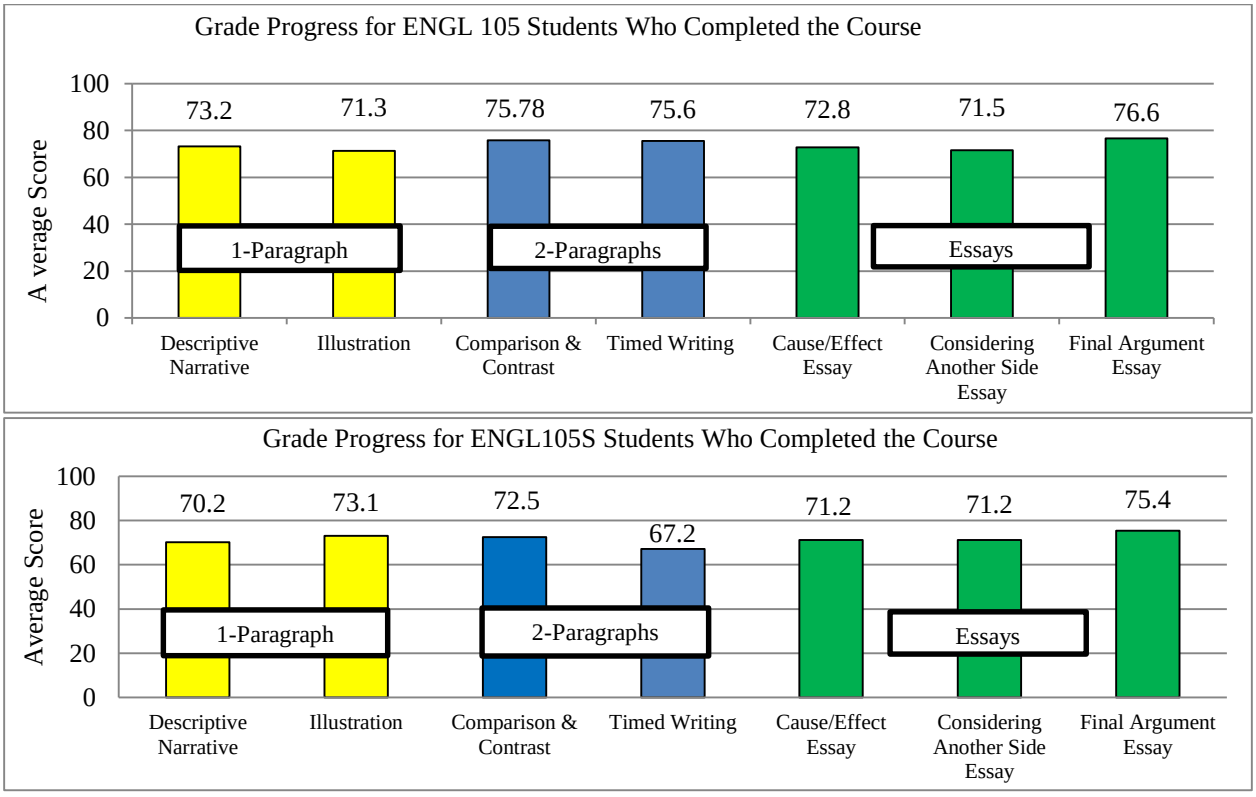
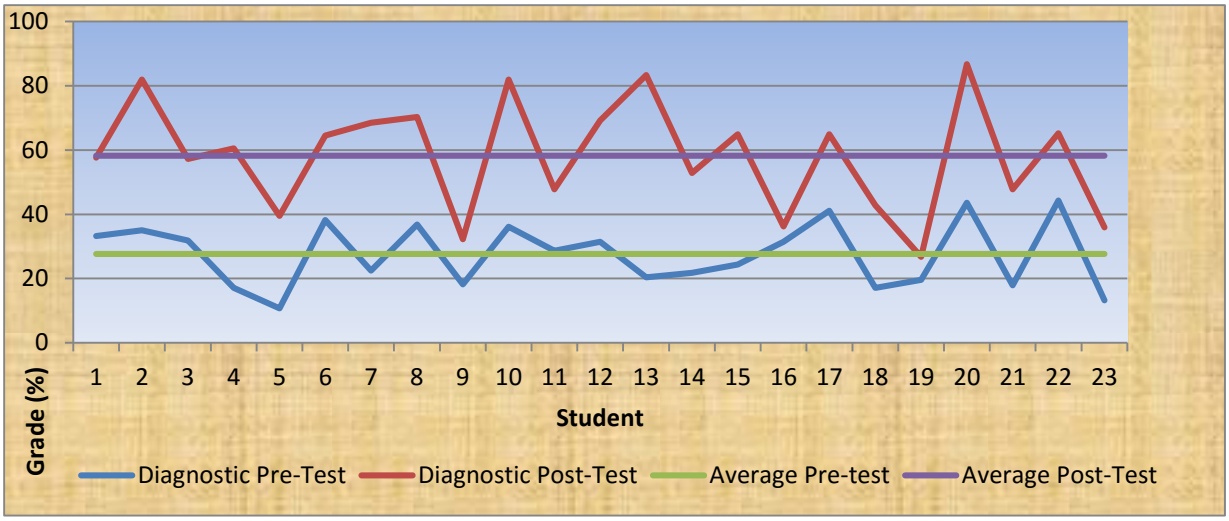


Chart 3.2, above, illustrates the grade progress for all students who completed ENGL105/105S in spring 2013. Students who attempted all of the assignments maintained a consistent level of performance even as they moved into more complex essays and into argumentation, which is required of them in the next sequential course (ENGL 107). In ENGL105S, students on average moved from a 70.2, or a C-, on the first assignment to a 75.4, or C, on the final essay. In ENGL105, students moved from an average 73.2, or a C, on the first assignment to an average 76.6, or a C+, on the final essay.

After making structural changes to the course scaffold in spring 2013, the data revealed more consistent student mastery of course concepts even as assignments increased in rigor, length and complexity: the spring 2013 syllabus called for three essays rather than two, and required inclusion of specific source material. In previous semesters, ENGL105S students usually showed declines on the final paper, while ENGL105 students maintained a consistent level of performance. The noted improvement ENGL105S students' final papers indicated that curricular changes were producing increased student outcomes in foundational writing.

An example from the math program demonstrates yet another methodology for measuring student outcomes; pre- and post-test *My Math Lab* data for Math 102: Intermediate Algebra.

Chart 3.3: MyMathLab Pre- and Post-Test Result Based on Differentiated Instruction – Math 102



These 2014 data clearly show that the use of differentiated instructional methods and MyMathLab were successful; each student made significant progress in their mathematical abilities regardless of entry point into the course. By the semester's end, nearly all students had exceeded the base standard, and the average for all students in Math 102 rose 30.6%. Math instruction at Trinity produces demonstrable learning outcomes, and all members of the Math faculty continue to engage in using assessment work to inform course and curriculum design as a matter of course.

3. General Education/Capstone Assessment: College-Level Learning Outcomes

The College of Arts & Sciences Curriculum and Academic Policy Committee (CAS-CAP) has made General Education assessment a top priority. Programs involved in this effort, and the courses they chose to assess, include Economics, Undecided-Nursing (UNDN-Biology), Physics, Math, Fine Arts, Religious Studies and Theology, Philosophy, Psychology, Business Administration and Women's Studies (DR 3.9: General Education Assessment Courses).

Below is a case study that exemplifies this assessment work in PHIL 253: Business and Professional Ethics (Values & Beliefs: Ethics; CAS learning goals 1,7).

- *CASE STUDY: Does PHIL 253 improve students' critical reading and analysis skills?*

The goal of the PHIL 253 Assessment Project was to determine whether students acquire and enhance skills in critical reading, analysis, and ethical reasoning during the course of a semester. The project investigated students' effectiveness in detailing essential elements of a business ethics dilemma (critical reading, CAS learning goal 1) and arguing a resolution (critical analysis and ethical reasoning, CAS learning goal 7).

Students first analyzed a business case, which asked them to identify the central ethical dilemma and to argue for a possible solution. The instructor developed a rubric to evaluate students' abilities to focus on key information vital to an accurate understanding of the dilemma and to incorporate ethical theory into their proposed solutions. One month after the first critical analysis was completed and evaluated, and after instructional intervention, students completed a second analysis of a fresh case. The instructor subsequently evaluated the second submission utilizing the same rubric, and collected grading data for comparison with the first submission. In total, the instructor analyzed data from 105 individual students over the course of four semesters. The two sets of data were used to measure the effectiveness of current pedagogical practices in the course. As the ultimate outcome of the project, the instructor will utilize the data and analysis to formulate new pedagogical strategies and refine of existing classroom practices to further enhance students' abilities in these essential academic skills.

Outcomes for the two data points, critical reading and ethical analysis, are in **Chart 3.4**:

Chart 3.4: Critical Reasoning Outcomes, PHIL 253: Business & Professional Ethics*

	Case Study #A1: Critical Reading	Case Study #B1: Critical Reading		Absolute Increase	Percent Increase	N of Observations
Average Score	4.283	4.385		.102	2.38%	105
	Case Study # A2: Ethical Reasoning	Case Study # B2: Ethical Reasoning				
Average Score	3.716	4.144		.428	11.52%	105

*Final Course Grade: 3.28 (correlation with Case Study B2 [4.144] =.25)

The data show that for critical reading, students showed a small (2.38%) increase on the second case compared to the first. Ethical reasoning, though, showed a more dramatic 11.52% increase,

with scores increasing, on average, by close to half a point. The data indicate that instructional intervention is having some effect on students' abilities to improve ethical reasoning.

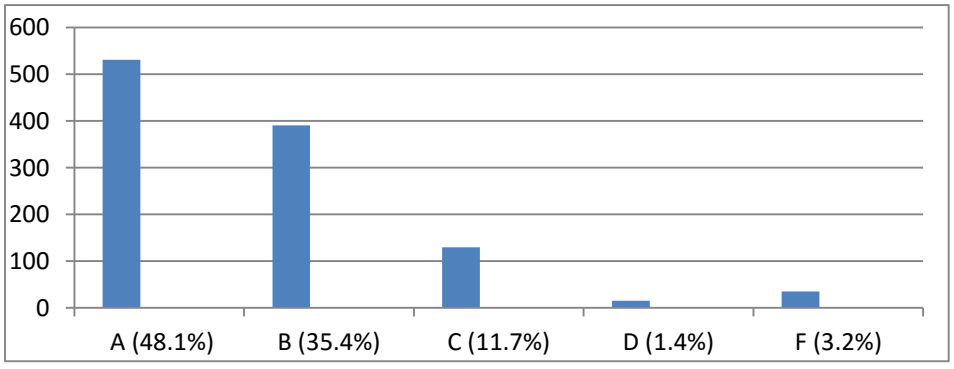
Interestingly, scores on case study B2 (mean score=4.14), a later assignment in the semester, were only mildly correlated (.25 corr.) with final grades in this sample (mean final grade=3.716). As a result of this analysis, the PHIL 253 syllabi will be adjusted to incorporate more complex reading items (students are already performing at a high reading level, but can go further) and pedagogies will build on successes in increasing ethical reasoning capacity.

4. Senior and Experiential Learning Assessment

All majors and graduate programs at Trinity culminate in a senior or capstone assessment as a summative measure of learning outcomes across a Trinity degree program. Students must successfully complete this assessment as a requirement for graduation, and program faculty are responsible for evaluating and auditing student knowledge, skills and values as they complete their degrees. Major and graduate programs assess this learning using a variety of program-specific methodologies: oral and written comprehensive exams, senior seminar and senior thesis courses, capstone course projects, comprehensive portfolios, research projects, poster presentations, and colloquia are among the most common methods of assessment.

While a primary goal of the senior assessment is to measure students' mastery of discipline-specific materials, programs at Trinity use interdisciplinary rubrics and methodologies to measure proficiencies in collegiate unit learning goals (DR 3.10: Sample Senior Assessment Portfolio Rubrics). Therefore, while understanding that grades alone do not necessarily assess all learning, the faculty believe that grades in senior seminar, capstone and thesis courses can indirectly assess student achievement of collegiate level learning goals. **Chart 3.5** displays percentages of final grades for all senior assessment courses offered at Trinity during this period.

Chart 3.5: Final Grades for All Senior Assessment Courses, 2011-2015 (N=1104)



Nearly 50% of Trinity students earned an A in a senior assessment course, and the large proportion – 83.5% - earned a B- or better (in almost all cases, students must achieve a C or better in their senior assessment course in order to graduate), indicating that Trinity seniors have gained the knowledge, skills and values embedded in Trinity's learning experience.

With regard to experiential learning, many major programs require an internship as part of the capstone experience. Hence, the academic programs developed an electronic, rubric based assessment to measure students learning outcomes in internships. The assessment group deemed

the measurement of learning outcomes in the pre-professional setting the best proxy for the application of knowledge, skills and values to their future professional experiences.

Chart 3.6: Quantitative Outcomes on Collegiate-Unit Learning Goals in Internships, Practica and Experiential Learning Courses: 2014-2015 (N=53)

Semester	Oral Comm	Written Comm	Teamwork	Interpersonal Skills	Computer Skills	Problem Solving	Work Ethic	Mean Score
Spring 2014 (Pilot)	4.00	3.40	4.60	4.60	4.60	4.40	4.80	4.34
Fall 2014	3.86	3.64	4.29	4.36	3.64	3.64	4.00	3.66
Spring 2015	3.97	3.91	4.56	4.50	3.09	3.94	4.34	4.34
Average across semesters	3.94	3.65	4.48	4.49	3.78	3.99	4.38	4.11

Legend of Scores 1 = Poor 2 = Fair 3 = Satisfactory 4 = Good 5 = Excellent

The above data suggest that in their senior or capstone internship placements, Trinity students overall perform at a satisfactory or better level on several important college learning outcomes that predict future professional experiences. Trinity students score lowest on writing, followed by computer skills, and highest on interpersonal skills and ability to work on teams (arguably related skills, so this question may be measuring the same dimension). Trinity's faculty continues focusing on how the assessment results, particularly on writing and technological skills, must continue to inform curricular revisions.

Conclusion to Chapter Three

Trinity has made great strides in systematizing broad, integrated learning outcome assessment using both direct and indirect measures across all courses, curricula, and collegiate units. Assessment at Trinity is faculty-driven, interdisciplinary and collaborative, as well as mission-driven and student-centered. Assessment informs program development from micro to macro levels of the academic enterprise.

Student learning outcome assessment data are collected at numerous points across students' Trinity experience: 1) Pre-Assessment; 2) First-Year Experience Assessment; 3) General Education/Capstone Assessment; 4) Senior and Experiential Learning Assessment. The assessment data, as summarized in this report and demonstrated in the multiple assessments in the document room, are clear: Trinity's students achieve good learning outcomes.

Recommendation:

- Trinity can improve its teaching and learning endeavors in the areas of writing and information literacy across all degree levels. These data are already used in general education reform at the undergraduate levels. Chapter Four of this report will discuss general education assessment and reform in even greater detail.