

2013-14 Annual Assessment Summary Report

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Executive Summary

The Institutional Effectiveness Office, with the technical and administrative assistance of the University's Test Center, coordinates several student learning outcomes assessments annually. The student outcomes testing program involves three (3) groups of students. [1] Students entering the traditional undergraduate program complete one of three (3) general education assessments during the new student transition activities. One-third are randomly assigned to complete the *Test of Bible Knowledge*, another third completes the *Defining Issues Test* (DIT-2), while the final third completes the Educational Testing Service (ETS) *Proficiency Profile*. [2] These pretests serve as baselines for determining the growth or change occurring between entry and the junior year, when they complete these same instruments again in a posttest setting. [3] End-of-program assessments employ multiple evaluation methodologies. When nationally developed instruments do not exist for specific disciplines or if the department determines that the national instruments do not align well with the department's curriculum, departments have developed local instruments, which they and/or the Test Center personnel administer during the spring semester of the senior year.

Other departments utilize nationally developed and normed instruments for assessing the students' mastery of disciplinary content and/or skills. Some employ one of the *Area Concentration Achievement Tests* (ACAT) series from PACAT, Inc. of Clarksville, Tennessee (<http://www.collegeoutcomes.com>). Others rely on the *Major Field Test* (MFT) series from Educational Testing Service (<http://www.ets.org>), business tests from Ivy Software (<http://www.ivysoftware.com/#tests>) or the Family and Consumer Sciences (022) examination from the Ohio Assessments for Educators (OAE) provided by the Evaluation Systems Group of Pearson (<http://www.oh.nesinc.com/Home.aspx>). As a general rule, the practice has been to recommend that department establish performance targets or benchmarks at the 50th percentile or national average as the minimum measure of effective departmental performance, given that on admission tests MVNU's entering students generally score at or slightly above national college-bound norms.

As a general rule, Mount Vernon Nazarene University first-time freshmen are competitive with their peers outside the University, and are competitive with their peers when they graduate at the end of four years. There is significant growth from the freshmen year to the junior year in general education, and MVNU juniors improve their rank with comparison groups during that period of time. For those end-of-program assessments that have national norms, there is no discernible pattern of overall performance; there is significant variation between individuals, between cohorts from year to year, and variation between MVNU programs.

General Education Assessments

The University administers three (3) primary instruments to assess its general education outcomes. Over time, the Student Assessment and Learning Committee developed a structure for the assessment that provides information about change or growth in individuals through a pretest-posttest design. At new student transition activities, the entering class of students (first-time freshmen and transfer students) are split randomly into three groups, each of which tests on one of the following instruments to provide baseline information related to individuals and the entering cohort. At the end of the junior year, the students are then retested on the same instruments, and the results are analyzed to determine the growth of individuals and change in average scores. Individual scores and cohort averages are provided as feedback to the pretest and posttest groups through a letter.

The adoption of new student learning outcomes and the associated liberal arts core necessitates significant re-visioning of the methodology and strategy for evaluating the core's actual impact on students and their learning. The first year curriculum was implemented in fall 2012 with second year courses implemented in fall 2013; the relevant assessments remain a work in progress.

Defining Issues Test (Entering Students)

The *Defining Issues Test* (version 2, *DIT-2*), developed and administered by the Center for the Study of Ethical Development at the University of Minnesota, presents information on the moral schemas students employ in moral decision-making. Three (3) general scores are reported along with more technical indices. [1] The personal interest schema score reflects the individual's focus on direct advantage to the actor, simple exchanges of favor for favor, the good or evil intentions of the parties, maintaining friendships and good relationships, and maintaining the approval of others. [2] The maintaining norms schema score is directed toward maintaining the existing legal system, maintaining existing roles, and formal organizational structure. [3] The post-conventional schema score focuses on organizing society by consensus, insisting on due process, safeguarding basic human rights, and appealing to ethical ideals. N2 is a calculated score that prioritizes post-conventional schema and minimizes the weight given to simplistic thinking, theoretically presenting a more highly principled ethical decision-making capacity.

In fall 2013, during new student transition activities, the *DIT-2* was completed to 110 students entering the traditional undergraduate program; most were first-time freshmen with a small contingent of transfer students. The average scores are presented below with the national freshman averages.

Group	DIT-2 Scores			
	Personal Interest	Maintain Norms	Post-conventional	N2
MVNU Freshman Average	27.0	38.6	29.2	27.0
National Freshman Average	28.5	33.6	32.2	31.1

As a group MVNU's entering students are most likely to make their moral decisions by reference to maintaining group norms and less by either a sole concern for their own personal interests, or by employing more principled ethical schemas. This pattern is replicated across several years of entering students, and is likely to evidence the role of the faith community as a significant moral and ethical social force.

Ethnocentrism

For several years, the *Ethnocentrism Scale* has been administered to incoming freshmen and again to juniors, although the rationale for its administration was initiated as the personal research interest of a former director of assessment. There has been no systematic link of its use to institutional learning outcomes, nor the data utilized in designing programs, or implementing corrective action. The *Ethnocentrism Scale* is not widely utilized in research practice.

The *Ethnocentrism Scale*, composed of 18 items of which 12 are positively worded and scored while 6 are negatively worded and reverse scored, measures a generalized tendency to “view . . . one’s country . . . (as) the center of the universe,” or to see and interpret those from other cultures and backgrounds through the lens of one’s own cultural assumptions, preferences, and values. High scores indicate a generalized prejudice against individuals with alternate ethnicity, orientation, or religiosity and portray some degree of favoritism for in-groups and stereotyping of out-groups, often negative.

The *Ethnocentrism Scale* was administered to one cohort of freshmen during the new student orientation. One hundred sixteen (116) participated in the assessment; of those 38 answered all questions, while 78 failed to respond to all items. Those who completed all questions had an average score of 60.0, while those who missed items had an average score of 66.0. However, both are significantly higher than those who completed the scale in fall 2012, indicating an overall elevated level of prejudice and tendency to think of others in one’s one ethnic perspective. The number leaving items unanswered remains a concern as does the relationship between the instrument, learning outcomes, and instructional activities.

ETS Proficiency Profile (Entering Students)

One hundred eighteen (118) entering students completed the *ETS Proficiency Profile* in fall 2013; four were excluded from the data analysis because of score irregularities, so that the analysis reported below is based on a sample of 114 students. The following table presents the national average scores, MVNU’s entering student averages, and the percentile equivalents based on the entering freshmen, no hours completed, baccalaureate college norms covering July 2008 through June 2013.

	Total	Skills Subscores				Context-based Subscores		
		Critical Thinking	Reading	Writing	Mathematics	Humanities	Social Sciences	Natural Sciences
National Freshman Average	437.0	109.7	115.5	112.9	111.8	112.9	111.5	113.3
MVNU Freshman Average	442.9	111.2	117.0	114.5	114.0	113.9	111.7	115.3
National Freshman Percentile Equivalent	68 th	61 st	58 th	60 th	65 th	61 st	51 st	63 rd

Overall, the MVNU entering students in fall 2013 were similar in ability to their peers in the Baccalaureate (Liberal Arts) Colleges I and II classification that constitutes the University’s comparison group. They performed slightly above peers nationally on the total score and on each of the seven (7) subscores. The general tendency was for the fall 2013 entering cohort to perform similar to their MVNU

peers entering in fall 2012. Generally, MVNU's scores (entering *ACT* and *Proficiency Profile*) remain stable across time.

Test of Bible Knowledge (Entering Students)

One hundred twenty-two (122) traditional students completed the *Test of Bible Knowledge* during the new student transition activities as a pretest in fall 2013. As juniors the same students will complete the test as a posttest. The pretest and posttest scores give the University significant information on the degree of growth in Bible knowledge that students demonstrate during the MVNU educational experience. The following table summarizes the 2013 entering class profile on the *Test of Bible Knowledge*.

	Average Score	Highest Score	Lowest Score	Total Possible
Old Testament	25.5	49	9	53
New Testament	21.9	40	3	47
Total	47.3	88	21	100

Items 1-53 are from the Old Testament and 54-100 cover New Testament information. The entering Bible knowledge of incoming students, their testing motivation, or both, vary significantly from student to student. The scores for the new students entering in fall 2013 fall slightly below their peers who entered in fall 2012.

Defining Issues Test (Juniors)

During the spring 2013 testing period, 114 MVNU juniors completed the *Defining Issues Test*, of which 109 had usable scores. The average scores and the national average scores for juniors are presented below.

Group	DIT-2 Scores			
	Personal Interest	Maintain Norms	Post-conventional	N2
MVNU Junior Average	22.8	36.1	35.9	36.1
National Junior Average	27.4	32.9	34.5	32.7

MVNU juniors were less likely to base moral decisions on factors of personal interest or benefit than juniors nationally, but they were more likely to give consideration to legal, organizational, and social norms than their peers, showing a higher degree of social norm awareness. Also, the spring 2014 juniors were slightly more likely to make post-conventional principled decisions than their national peers, a trend also supported by elevated N2 scores. The 2014 cohort made more principled decisions (post-conventional and N2) than previous MVNU junior cohorts. Collectively this can be considered evidence of the overall effectiveness of university efforts on ethical and moral education.

Ethnocentrism (Juniors)

One hundred and fourteen (114) juniors completed the *Ethnocentrism Scale* with a group average of 40.0, significantly below the previous means of freshmen and juniors; thus they were less centered in their own culture's orientation than previous students. The scores ranged from 22 to 67, although the actual range possible lies between 18 and 90.

Unlike previous administrations in which a significant number of students omitted one or more items, thus rendering the responses meaningless, the instructions were rewritten and clarified this spring to emphasize the necessity of completeness. The revised instructions produced the intended results.

ETS Proficiency Profile (Juniors)

In spring 2014, 84 juniors completed the *ETS Proficiency Profile*, 83 (99%) of which had previously completed the instrument as a pretest; most completed the pretest in fall 2011. The following table compares the pretest and posttest averages and shows a pattern of significant improvement over time for students who had completed both assessments.

	Pretest Average	Posttest Average	Change
Total	444.3	453.8	+9.6

*The differences were statistically significant, using a paired-comparison t-test ($p < .001$).

Additional details on skills and context-based subscores are presented in the following table.

	Skills Subscores					Context-Based Subscores		
	Total	Critical Thinking	Reading	Writing	Mathematics	Humanities	Social Sciences	Natural Sciences
National Junior Average	443.2	111.7	117.8	114.1	112.9	114.7	113.4	115.1
MVNU Junior Average	454.2	114.3	120.4	117.4	116.6	118.1	114.7	117.6
National Junior Percentile Equivalent	72 nd	64 th	57 th	67 th	69 th	66 th	52 nd	56 th

ETS updates the norm tables as more students complete the specific edition of the *Proficiency Profile*. The norms referenced in the table above are based on students tested between July 2008 and June 2013 and involves 47,860 juniors attending baccalaureate (liberal arts) colleges (I and II).

The MVNU juniors performed at or above the national average on the total score and all subscores. The 2014 cohort also performed better than their 2013 MVNU peers on all scores (total and subscores).

Test of Bible Knowledge (Juniors)

In spring 2014, 86 juniors completed the *Test of Bible Knowledge* (posttest), 82 (95%) had completed the pretest upon entering; most entered in fall 2011. The distribution of scores and the average subscores and total scores are provided in the table below. Of those completing both the pretest and posttest, 69 (84%) improved on the total score, 1 (1%) remained at the same level, and 12 (15%) declined in performance. The 2014 cohort scored slightly above the 2013 cohort on each score.

	Average Score	Highest Score	Lowest Score	Total Possible
Old Testament	35.0	51	14	53
New Testament	29.7	44	15	47
Total	64.7	93	32	100

The testing protocol provides for pretest-posttest comparisons. For those students who completed both the pretest and posttest, the following table summarizes the average subscores, total scores, and change from the freshman to the junior year.

	Pretest Average	Posttest Average	Average Change
Old Testament	29.7	35.0	+5.1*
New Testament	25.6	29.7	+4.2*
Total	55.3	64.7	+9.3*

*The differences were statistically significant, using a paired-comparison t-test ($p < .001$).

The totality of the MVNU experience (e.g., academic, campus ministries, etc.) provides for some growth in Bible knowledge, especially considering that a significant portion of freshmen complete the Bible course during the freshman year, with as much as two years between the Bible course and the posttest (a forgetting curve).

Department Assessment using Locally Developed Instruments

Academic departments are encouraged to utilize nationally normed (standardized) instruments whenever possible for determining the level of mastery of valued content and skills of seniors for a component in an end-of-program assessment. If the department's curriculum follows that commonly found in other colleges and universities, the national instruments provide a reference point and/or benchmark for how the department's students compare with those on the national scene. However, for some disciplines, national examinations are lacking. For other programs, the program goals, objectives, and curriculum are distinctively different from common practice. In these cases, academic departments at Mount Vernon Nazarene University have developed and employed locally generated instruments. A table follows that details the discipline, number of students participating in the assessment, and performance information.

Discipline or Department	Number of Students Completing the Examination	Possible Points	Average Points Earned
Christian Education	13	185	99.7
Exercise Studies	4	100	62.5
Graphic Design	9	50	35.2
Intercultural Studies	7	127	70.6
Philosophy	2	163	82.0
Public Relations	3	100	56.3
Religion	10	142	93.8
Religion-Humanities	1	133	103.0
Sports Management	9	100	53.2
Urban Ministries	1	142	76.0
Video Broadcasting	7	100	74.0

It merits notation that the exercise studies and sports management examinations were updated in spring 2014, with the number of items changing. Therefore comparisons with previous years in the Physical Education Department must be cautious. However, the majority trend from the locally developed instruments across all departments is for scores to be lower than in 2012-13.

The number of students completing the examinations, the difficulty level of the items, and the lack of correlation between the locally developed test scores and external information (i.e., criterion-related validity) render it difficult to interpret the quality of programs. The best information available is that of

the relative performance of individuals within the cohort and the trends across time, if there were not significant revisions of the examinations.

Department Assessment using Nationally Developed Instruments

ACAT in Art

Eleven (11) seniors pursuing the art or visual arts education majors completed the *ACAT in Art*. The average subscores, average total score, and the average total score percentile equivalents are presented in the following table. The ACAT scores are calculated as standard scores where 500 is the average over time and the standard deviation is 100.

Nine of eleven students scored above 500 on the overall score. As a group, then, MVNU art graduates in 2014 exceeded the national peer group average, performing at the 66th percentile. For this particular cohort, their strength lay in history of art and general design, above their performance in studio art. The overall cohort performance exceeds the strong achievement of the 2013 group.

	History of Art	General Design	Studio Art	Overall
Cohort Average	528	564	522	550
Percentile Equivalent	61 st	74 th	59 th	69 th

ACAT in Biology

Over the years, the Biology Department has utilized different assessment instruments. For several years the Biology Departments employed the *ETS Major Field Test in Biology*, then replaced it with one developed locally. The local one did not provide comparison or context information with peer institutions. For four years now, the department has utilized the *ACAT in Biology*, and selected from available subscales to compose the test with five (5) subdisciplines.

Seventeen (17) biology majors completed the test in spring 2014. The following table presents the cohort averages on subscores and total score, and the equivalent total score percentiles.

	Ecology	Genetics	Invertebrate Zoology	Vertebrate Zoology	Vascular and Non-vascular Plants	Overall
Cohort Average	475	491	452	560	494	468
Percentile Equivalent	40 th	46 th	32 nd	73 rd	48 th	37 th

Each of these, except vertebrate zoology, lags behind the average from the 2013 cohort and is below the national average.

ACAT in History

The History Department requires the history and integrated social studies education seniors to complete the *ACAT in History*. ACAT provides departmental options on the subdisciplines and related subscores, and the History Department selected the option of 10 subdisciplines. During 2013-14, nine (9) seniors

completed the end-of-program assessment. The following table presents the cohort averages on subscores and total scores, and the equivalent total score percentiles.

	U.S. 1820 to 1890	U.S. Colonial to 1763	U.S. 1890 to 1940	U.S. 1763 to 1820	U.S. 1940 to present	European Ancient	European Early Modern	French Revolution and Napoleon	European Medieval	European Modern to Present	Overall
Cohort Average	509	474	522	575	557	453	582	500	484	591	545
National Percent- ile	54 th	40 th	59 th	77 th	72 nd	32 nd	79 th	50 th	44 th	82 nd	67 th

Generally across time, MVNU history and integrated social studies education majors perform better than the average of their national peers; this conclusion relates especially to their overall performance on the *ACAT in History*. Spring 2014 was the fourth year for the History Department employment of this instrument. With the small samples from year to year, there is significant variation in subscore patterns, so that trend determination at the microscopic level warrants caution.

ACAT in Social Work

The Social Work Department offers programs for two (2) types of social work students: traditional undergraduate and degree-completion students. Eighteen (18) traditional seniors in social work completed the *ACAT in Social Work* in 2013-14; sixteen (16) were female and two (2) were male. The following table presents the subdisciplines, average subscores, the total score, and the equivalent percentiles of that total score.

	Diversity	Populations at Risk	Social and Economic Justice	Values and Ethics	Policies and Services	Social Work Practice	Human Behavior in the Social Environment	Research Methods	Overall
Cohort Average	507	568	500	551	575	565	535	538	560
Percentile Equivalent	53 rd	75 th	50 th	69 th	77 th	74 th	64 th	65 th	73 rd

The 2014 cohort performed at or above the national average on each subscore and the total score. This represents significant improvement and achievement over the 2013 cohort.

The Social Work Department administered the *ACAT in Social Work* to its degree-completion seniors in fall 2013 (Mount Vernon 006 and Newark 002 cohorts). This testing was scored as two separate groups. The following table presents the performance of those combined fall degree-completion cohorts. The profile of the first group (24 females and 2 males) is presented in the following table:

	Diversity	Populations at Risk	Social and Economic Justice	Values and Ethics	Policies and Services	Social Work Practice	Human Behavior in the Social Environment	Research Methods	Total
Cohort Average	480	520	491	503	552	538	492	511	516
Percent- ile Equival- ent	42 nd	58 th	46 th	51 st	70 th	65 th	47 th	54 th	56 th

The results from the second group (Mansfield 001 cohort), comprised of 33 students (all females) are summarized in the following table:

	Diversity	Populations at Risk	Social and Economic Justice	Values and Ethics	Policies and Services	Social Work Practice	Human Behavior in the Social Environment	Research Methods	Total
Cohort Average	440	470	466	488	505	515	477	460	470
Percentile Equivalent	27 th	38 th	37 th	45 th	52 nd	56 th	41 st	34 th	38 th

ETS Major Field Test in Business (BBA degree-completion students)

Prior to fall 2012, the Jetter School of Business tested its BBA degree-completion students with the *ETS Major Field Test in Business*. The scores were not as strong as the school anticipated, which prompted faculty to begin a review whether the test aligned well with instructional objectives and initiate a search for alternate assessment instruments. As a consequence, the BBA students were not tested in 2013-14, while the school researched and evaluated alternate testing instruments. The plan is to employ tests from Peregrine Academic Services, beginning in July 2014 for the BBA degree-completion program, assessment tools aligned with Accreditation Council for Business Schools and Programs (ACBSP) program accreditation standards.

ETS Major Field Test in Business (traditional undergraduate students)

Thirty-eight (38) graduates in the Business Department completed the *Major Field Test in Business* in 2013-14. The cohort's average total score was 151.7 and corresponds to the 48th percentile; the cohort performed slightly below the average baccalaureate level business student nationally, and was similar to those of 2011 and 2012.

The following table provides the assessment indicators, the average percent of items mastered by the 2014 cohort, and the national percentile equivalents as a reference point.

Assessment Indicator	Average Percent of Correct Items	Percentile Equivalent
Accounting	45	64 th
Economics	37	28 th
Management	59	67 th
Quantitative Business Analysis	30	8 th
Finance	45	60 th
Marketing	59	61 st
Legal and Social Environment	63	60 th
Information Systems	50	37 th
International Issues	46	75 th

As a group, the cohort of traditional undergraduate business students matched or exceeded the 50th percentile on five (5) of the nine (9) assessment indicators, demonstrating that when compared to other undergraduate business students, they are at or above the national average in those subdisciplines. Results of these assessment indicators do vary from the pattern of previous years.

Of those who completed the end-of-program assessment, 31 (82%) had completed the *Major Field Test in Business* when they began study in the Business Department. The pretest, posttest, and change averages are presented below.

Pretest Average	Posttest Average	Average Change
141.5	151.8	10.3

The improvement was significant at the $p < .001$ level, and the correlation between pretest and posttest scores was .86; those who performed well on the pretest also tended to perform well on the posttest. Change scores ranged from -8 to +31. Three students performed better on the pretest than on the posttest, while 28 improved their scores an average of 11.9 points, evidencing significant learning.

ETS Major Field Test in Chemistry

Five (5) MVNU students completed the chemistry examination in spring 2013 and 2014, earning a collective average of 142.2, representing the 39th percentile; the national total score mean was 148.2. The subscores and comparison information is provided in the table below.

Subscore	MVNU Average	National Average	MVNU Percentile
Physical Chemistry	47.0	48.2	50 th
Organic Chemistry	46.6	48.5	48 th
Inorganic Chemistry	37.6	48.5	21 st
Analytical Chemistry	40.2	48.4	34 th

The following table provides the assessment indicators, the average percent of items mastered by the 2014 cohort, and the national percentile equivalents as a reference point.

Assessment Indicator	Average Percent of Correct Items	Percentile Equivalent
Biochemistry	48	44 th
Critical Thinking and Reasoning	39	29 th

ETS Major Field Test in Computer Science

Due to low program enrollments, the computer science graduates from spring 2013 and spring 2014 were reported as one cohort with seven (7) graduates, all males. The cohort's average total score was 158.0, corresponding to the 69th percentile in the national norms for domestic institutions. From 2007 to the present the department's average total score is 153.4 (59th percentile). Of those completing the examination in this cohort, five (5) of the seven (7) scored at or above the national average.

The assessment indicators indicate a good level of mastery over the content domains or subfields of computer science.

Assessment Indicator	Average Percent of Correct Items	Percentile Equivalent
Programming	59	80 th
Discrete Structures and Algorithms	48	81 st
Systems: Architecture/Operating Systems/Networking Database	49	84 th

Over time the computer science graduates have scored consistently above the national average across all subdivisions of the computer science curriculum.

ETS Major Field Test in Criminal Justice

Thirteen (13) criminal justice graduates completed the ETS *Major Field Test in Criminal Justice* in 2014. Collectively the graduates performed very well when comparing their total and subscores with their peers on the national scene. The cohort's total score average of 165.5 was above the national average of 153.3; the cohort's equivalent average was the 75th percentile. Eleven (11) of the thirteen (13) graduates (85%) scored at or above the national average.

Like the majority of ETS *Major Field Tests*, the criminal justice examination presents assessment indicators to provide students and departments with additional feedback about the mastery of specific content areas within the larger criminal justice field. The following table summarizes the average percent of correct items on each indicator, and the percentile equivalent for that number of correct items. The department and the individual students are to be commended upon their overall performance.

Assessment Indicator	Average Percent of Correct Items	Percentile Equivalent
Theories of Criminal Behavior	56	96 th
The Law	64	94 th
Law Enforcement	70	97 th
Corrections	67	96 th
The Court System	68	92 nd
Critical Thinking	70	99 th
Research Methodology	58	93 rd

Their mastery appears to be well distributed across the broad content domains in the criminal justice field.

ETS Major Field Test in Literature in English

ETS released a new edition of the *Major Field Test in Literature in English* for the 2011-12 year. Twelve (12) MVNU students completed the examination in spring 2014, and the average total score for the cohort was 162.8, which corresponds to the 68th percentile nationally. The following table provides the subscore profile and national comparisons. On each of the subfields MVNU seniors collectively performed about their national peers.

Subscore	MVNU Average	National Average	MVNU Percentile
Literature 1900 and Earlier	61.4	53.8	63 rd
Literature 1901 and Later	64.4	54.0	72 nd
Literary Analysis	62.3	53.8	66 th
Literature History and Identification	62.7	53.8	68 th

Assessment indicators disaggregate questions in other ways than subscores and provide additional perspectives on the examinations and student knowledge. The assessment indicators for the *Major Field Test in Literature in English* are summarized in the following table.

Assessment Indicator	Average Percent of Correct Items	Percentile Equivalent
British Literature Pre-1660	60	81 st
British Literature 1660-1900	46	60 th
American Literature to 1900	62	85 th
British and American Literature 1901-1945	56	83 rd
Literature in English since 1945	62	89 th
Literary History	51	59 th
Identification	52	90 th
Literary Theory	45	65 th

The 2014 cohort performed well above the national norms, but slightly above the strong performance of the 2013 seniors.

ETS Major Field Test in Mathematics

The Educational Testing Service provides subscore and assessment indicator information only if the minimum cohort size of five (5) is attained. To secure the detailed information, the graduates of 2013 and 2014 were pooled into this reporting cohort of seven (7) members that achieved a total score mean of 142.0, which corresponds to the 18th percentile on the most recent norms provided by ETS. This lagged behind the previous two cohorts. The average total score from 2007 through 2014 is 150.0, which approximates the 42th percentile nationally.

The current version of the examination has five (5) assessment indicators. The following table summarizes the assessment indicators and provides a reference to national percentile equivalents.

Assessment Indicator	Average Percent of Correct Items	Percentile Equivalent
Calculus	21	9 th
Algebra	20	1 st
Routine	20	2 nd
Non-routine	19	9 th
Applied	30	26 th

ETS Major Field Test in Music

There were fewer than five (5) music majors completing the program in 2013-14 for ETS to provide cohort performance information. Therefore the cohort score remains open and the graduates from 2014-15 will be included in the next report and analysis.

ETS Major Field Test in Political Science

There were fewer than five (5) political science majors completing the program in 2013-14 so that ETS could provide cohort performance information. Therefore the cohort remains open and the graduates from 2014-15 will be included in the next report and analysis.

ETS Major Field Test in Psychology

Twenty-one (21) psychology seniors completed the *Major Field Test in Psychology*. This year, as well as in three other years of the last seven, the total score average was above the national average of 155.8; this year the cohort average of 162.0 represented the 64th percentile nationally with a fairly balanced subscore pattern across the departmental curriculum.

Overall there is relative balance of mastery on psychology's subfields as illustrated in the following table.

Subscore	MVNU Average	National Average	MVNU Percentile
Learning and Cognition	59.0	55.1	58 th
Perception, Sensation, and Physiology	64.2	55.8	72 nd
Clinical, Abnormal and Personality	67.0	56.2	74 th
Developmental and Social	55.3	55.4	48 th

The assessment indicators with the average percent of correct items and the contextualizing information are provided in the following table.

Assessment Indicator	Average Percent of Correct Items	Percentile Equivalent
Memory and Thinking	46	57 th
Sensory and Physiology	61	88 th
Developmental	51	44 th
Clinical and Abnormal	75	91 st
Social	62	56 th
Measurement and Methodology	60	69 th

The assessment indicator information speaks again to the overall strength of MVNU's curriculum as embodied in the performance of its psychology graduates.

ETS Major Field Test in Sociology

There were fewer than five (5) sociology majors completing the program in 2013-14 and for ETS to provide cohort performance information. Therefore the testing cohort remains open and the graduates from 2014-15 will be included in the next report and analysis.

Ivy Software MBA Test

After pilot testing the *Ivy Software MBA Test* in 2011-12, the Jetter School of Business has continued with it as the end-of-program assessments for the Master of Business Administration (MBA) and Master of Science in Management (MSM) degrees. In 2013-14, 66 MBA and MSM students completed the assessment in the capstone course; 36 completed the assessment in fall 2013, and another 30 did so in spring 2014.

The summary is provided in the following table with comparison information the national and Accreditation Council for business Schools and Programs (ASBSP), of which the Jetter School of Business is a member.

	Total Score (Percent Correct) Average
MVNU Testing	52.9
All (National) MBA Testing	56
ACBSP Member Testing	56

The *Ivy Software MBA Test* provides scores for subdisciplines with the field of business. The following summarizes the subject matter differentiation with reference to the national and ACBSP norms during the same timeframe.

Subject Matter Area	MVNU Average	All (National) MBA Testing	ACBSP Member Testing
Financial Accounting	57.0	62	62
Management	61.1	62	62
Marketing	53.4	57	57
Strategy	51.8	48	48
Managerial Accounting	51.0	55	55
Corporate Finance	48.5	52	52

As a group, MVNU graduate business students scored at or above the reference groups on management and strategy (non-quantitative) domains, and slightly below on the quantitative areas.

OAE in Family and Consumer Sciences

For several years, the Family and Consumer Sciences Department employed the ETS *Praxis II* test in family and consumer sciences to measure the content knowledge gained by family and consumer sciences seniors. In 2013, the Ohio Department of Education moved away from its use of the *Praxis II* series as a licensing instrument and replaced it with a similar series developed and administered by Pearson Education. The Family and Consumer Sciences Department then adopted the Ohio Assessment for Educators (OAE) family and consumer sciences instrument and administered to the 2014 graduates.

The total assessment score is reported on a scale of 100 to 300, based on the number of questions that students answer correctly. Ohio has selected the score of 220 as the minimum score necessary for licensure in order to teach consumer and family sciences in career and vocational programs (i.e., passing score = 220). The following table presents the total scaled score and content domain subscore averages. Three (3) of the four (4) students who completed the assessment failed to earn the minimum pass score.

Total Scaled Score	Human Development and Relationships	Personal Financial Literacy and Consumer Skills	Nutrition and Foods	Workplace Skills and Careers
207.3	3.0	1.8	1.8	1.8

As of this writing, the Ohio Department of Education has not published normative or comparative data to determine how the collective performance of the cohort compares with peers from other institutions.

Additional Departmental Assessments

The results described in this report are from the administration of instruments organized by the Institutional Effectiveness Office. A number of academic units require and/or administer other direct performance-based assessments dedicated to documenting the mastery of content and technique, some of which include the following:

- Senior art shows – Art and Design Department
- Junior and senior recitals, ensemble concerts – Music Department

Observations and Recommendations

While not unique to Mount Vernon Nazarene University, collecting assessment data that is reliable (repeatable) and valid (accurately measuring learning), dialog needs to continue on improving student motivation and creating value to students and departments through communication, feedback, and establishing minimum, acceptable performance levels.

(7/1/2014)