
# Snow College

## MID-CYCLE SELF-EVALUATION REPORT

Northwest Commission on Colleges and Universities
Submitted September 2015

# Table of Contents

## Institutional Overview

Snow College is one of eight public colleges and universities in the Utah System of Higher Education (USHE) governed by a nineteen-member Utah State Board of Regents appointed by the Governor. Snow College also has a ten-member board of trustees, who are appointed by the Governor.

Founded in 1888, Snow College is one of the oldest two-year state colleges in the western United States. Originally established as a residential academy, the institution provided teaching and learning opportunities tailored to the formative years of early adult and adult learning. Today, Snow College is a comprehensive two-year community college with campuses in Ephraim and Richfield. Its purpose is to transmit knowledge and skills through transfer education, a bachelor of commercial arts (in music) degree, associate of arts and associate of science degrees along with offering associate of applied science degrees, career and technical education, customized training for employers, developmental education, and strong student services to support these functions. Emphasis is placed on teaching, training, scholarly, professional, and creative achievement, and community service (taken from the 2014-2015 Snow College Catalog).

Most course offerings are delivered live in a face-to-face format, frequently with technology enhancement, with some courses broadcast from one campus to another. Some limited Snow College courses are offered at the Central Utah Correctional Facility in Gunnison and in area high schools. Students also have access to Snow College programs through online distance education offerings. Snow College is a teaching institution which means the majority of faculty (66%) devote their full attention to instructing students.

The composition of the student body is approximately 40 percent from the local six-county area, another 40 percent from elsewhere in Utah, and 20 percent from other states and international locations. Since 2008, Snow College has been the clear leader in enrollment growth among all state higher education institutions with 45% headcount and 26% FTE growth, respectively.

Snow's rural location is a wonderful setting for a college. Students and their parents like the fact that Snow is a safe, comfortable environment. There is a real feeling of 'family' at Snow with many students representing the third or fourth generation of their family at the college.

The College also serves as the intellectual, artistic, musical, educational, and sports center of central Utah. The institution is accredited by the Northwest Commission for Colleges and Universities and holds specialized program accreditation by the National Association for Schools of Music, the National Association for Schools of Theatre, the Association of Collegiate Business Schools and Programs, and Accreditation for Education in Nursing.

In recognition of the quality of Snow College, the Aspen Institute, headquartered in Washington, D.C., recently announced that Snow College was included in their list of “120 Top U.S. Community Colleges” for the fifth year in a row (http://www.aspeninstitute.org/policy-work/college-excellence/overview). Additionally, our collegiate performance groups have been honored across the intermountain west and the athletic programs are consistently ranked among the best in the country. Notably, the women’s basketball team has achieved the highest academic team recognition from the National Junior Collegiate Association for two years running (2014 and 2015).

# Mid-Cycle Evaluation, Part 1: The Process of Assessing Mission Fulfillment

## 1.A.1: Introduction

Snow College continues to develop a comprehensive assessment plan within the context of the College's core themes and many other institutional changes. An update of institutional improvements and changes as related to the Snow College's core themes is provided in the Appendix, pages 1 - 4. Also appended to this document are responses to recommendations from the last accreditation site visit (Appendix, pages 5 - 10).

## 1.A.2 Snow College's Planning and Assessment Model

Snow College's 2012 Comprehensive Evaluation report presented an assessment model of several boxes, rows, and arrows that (read from the bottom to the top) represented how various types of evidence informed decision-making at the institution. As a part of this planning process, Snow College articulated and reviewed measurable indicators by which it evaluated adherence to its mission and progress toward fulfillment of core themes (https://www.snow.edu/academics/office/pa/index.html).

Notably, in March 2013, the College initiated a comprehensive, 18-month strategic planning and program prioritization process. This process sought the recommendations of various internal and external sub-committees and stakeholders regarding the mission and core themes of the institution as they relate to the progress of the College for the next five to ten years. As a part of this process, every faculty and/or staff member completed a detailed program review questionnaire that evaluated core theme and strategic objectives against measurable indicators (https://www.snow.edu/academics/office/).

In addition, higher institution funding in the state of Utah was changed from mission-based to performance-based pursuant to indicators established by the Utah State Board of Regent's Commissioner's Office (spring 2015). These performance indicators complement and (in some cases) provide additional evidence in support of the indicators associated with Snow College's core theme objectives.

With the development of core themes, strategic planning goals, and state-mandated performance measures, the College has adopted a new planning and assessment model that puts the institution's mission at the center (see figure 1). Indicators associated with the College's core themes, strategic goals, and performance measures along with results from distinct academic and non-academic reviews/assessment activities serve as the environment and organizational structure by which Snow College assesses the fulfillment of its mission.

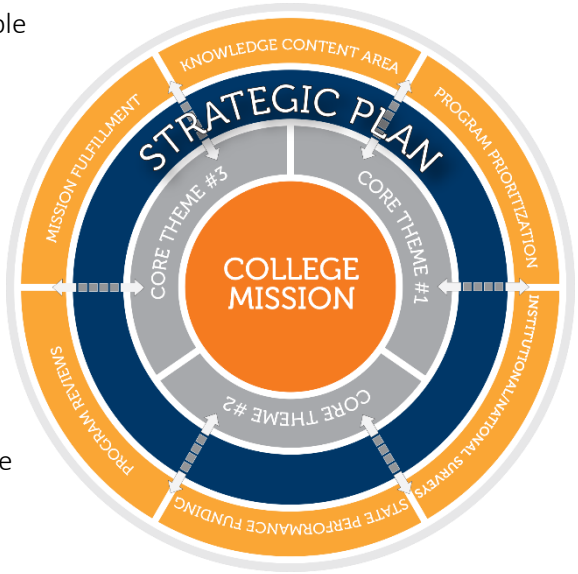



*Figure 1: Snow College Planning and Assessment Model*

The entire set of core theme and strategic planning indicators is tracked by the Office of Institutional Research and updated as new data becomes available. All institutional performance indicators listed above are represented in the Overall Performance Indicator Summary Table (see Appendix, pages 15 – 19) according to core theme. It is noted that some indicators represent multiple core theme areas.

The following assessment activities included in the College's model help drive mission fulfillment by providing qualitative and quantitative evidentiary support to core theme, strategic planning, and state performance indicators.

**Program Prioritization:** Based on the program prioritization model outlined in *Prioritizing Academic Programs and Services—Reallocating Resources to Achieve Strategic Balance*, by Robert C. Dickeson (2010, Jossey-Bass Publishing), all programs (academic and non-academic as identified by unique budget line item) completed a program questionnaire. This instrument was designed to capture data from ten key elements including items such as the history, development, and expectation of each program; internal and external demand; quality of program resources, size, scope, and productivity; costs; and the impact, justification, and overall necessity of the program. One hundred and sixty three questionnaires were received covering all but a few minor programs.

**Knowledge/Content Area Assessment**: Snow College systematically assesses the quality of specific knowledge or content areas as they relate to the institution's general education curriculum. Faculty who teach courses in a given knowledge/content area select and submit signature assignments or other assessment evidence for review. Under the direction of the General Education Director, these artifacts are analyzed using modifications of the American Association of Colleges and Universities' (AAC&U) Liberal Education and America's Promise (LEAP) rubrics and other program-specific accreditation/evaluation guidelines. Results are used to determine and report back to faculty the level by which students are achieving particular content (and in some cases, program) learning outcomes. Assessments have been completed for composition, biology, foreign language, quantitative reasoning, and humanities. A copy of the knowledge/content area assessment cycle is located in the Appendix, page 20.

**Systematic Program Reviews:** Utah's State Board of Regents, R411 Code (http://higheredutah.org/wp-content/uploads/2013/08/R411.pdf) provides for the systematic review of existing higher education programs. For undergraduate programs, this comprehensive review occurs every five years. Program faculty and staff under review complete a comprehensive self-study and arrange a site-visit from at least one external evaluator and one internal evaluator. After the site visit, a review report complete with program commendations and recommendations is submitted to the program. Elements of the self-study, program recommendations, and an institutional response to program recommendations represent an official R411 document. This document is reviewed by Snow College's Board of Trustees, and (upon approval) is submitted to the Utah State Board of Regents for final approval. Snow College's program review timeline is in the Appendix, page 21.

**National and Institutional Assessments:** Snow College participates in national surveys such as Complete College America (CCA), the Community College Survey of Student Engagement (CCSSE), and, most recently, the State Higher Education Executive Officers Association's (SHEEO) multi-state collaborative to advance learning outcomes assessment (MSC). These affiliated assessments help the College determine reasonable benchmarks as well as the achievement mission fulfillment targets and thresholds. In addition, Snow College initiated a Student Learning Outcomes assessment. Beginning fall 2013, entering and exiting students (spring collection) complete this instrument which is used to determine the degree to

which students have improved in their acquisition and understanding of specific general education learning outcomes (https://www.snow.edu/academics/ir/surveys.html).

Mission Fulfillment Review: Select representatives of the College, organized around a core theme, review data collected for respective themes and decide whether performance (1) met the target, (2) met the threshold, (3) exceeded target and threshold, or (4) needs revision for more definitive assessment. Results from respective core theme groups are combined into a comprehensive report on how well the College achieves targets and/or thresholds. In addition, recommendations are made that address plans to maintain, improve, or revise current performance measurements. Mission fulfillment teams were first used by the institution prior to the College's Year One site visit in 2012 (https://www.snow.edu/academics/office/pa/index.html).

## 1.A.3: Planning and Assessment Personnel—Who is involved?

**Theme Teams**: Select faculty and staff representatives from the College were organized to determine the performance of core themes prior to an accreditation visit in 2012. During the 2013 – 2014 academic year, much of the work of theme teams was accomplished by strategic planning committee members. The related program prioritization process provided a comprehensive assessment of the college's academic and non-academic units in consideration of core themes supporting strategic goals. 2016 marks the commencement of new mission fulfillment teams with an updated mission fulfillment report to be completed by spring 2017.

**Strategic Planning Committee:** Snow College's 18-month strategic planning process (March 2013 to September 2014) provided for a comprehensive review of core theme performance indicators. The strategic planning committee had 21 full-time faculty and staff members who represented the diversity of the College and its campuses. The committee was co-chaired by the Vice President of Finance and Administrative Services and an English professor serving as Humanities Dean. For a complete list of members and their college affiliation (https://www.snow.edu/academics/office/).

**K-16 Alliance:** Statewide the K-16 Alliance was established in 2006 with representatives from Utah's System of Higher Education, Utah's State Office of Education, the Governor's Office, and members from Utah's Senate and House of Representatives. Locally, Snow College administration, faculty, and staff meet regularly with public education superintendents and counselors to unify and minimize boundaries between K-12 and higher education with the added perspective to help secondary school students in the College's service area be better prepared for college-level work. Two programs in particular have dominated our K16 alliance efforts. We send a team of students, teachers and administrators to visit 8th grade classes to talk about preparing for college, highlighting particular courses that students should plan on taking in their high school years. We also talk to students about financing their college education and where they can go to learn about funding opportunities. We have formed a working committee with our K16 partners which focuses on ways to teach common core math. Math teachers from the elementary level through high school are meeting with members of our math department and exploring creative and effective ways to get the most out of student learning in the math common core curriculum.

**Institutional Committees:** In an effort to forward the recommendations of Snow College's strategic planning process and in support of mission fulfillment, the following committees provide in-depth research, assessment, and recommendation for policy and practice. Both full-time faculty and staff serve on these committees and a complete membership list (by committee) is located on the Vice President of Academic Affairs web-site (https://www.snow.edu/academics/office/).

- *Inclusion Committee* (Core Theme 3): This committee looks at progress and proposes new practices toward recruiting and retaining faculty, staff, and students of diverse or underrepresented groups.
- *General Education Committee* (Core Themes 1 & 2, Strategic Goal 1): As a subset of the College's Curriculum Committee and under the leadership of the General Education Director, this faculty committee assesses general education learning outcomes and proposes improvements to Snow College's general education model. The committee also reviews general education course syllabi prior to full Curriculum Committee approval.
- *Global Engagement Committee* (Core Theme 3): Faculty and staff members on this committee are tasked with assessing current efforts to make students, faculty, and staff more globally aware while providing support to the College's international student population. This includes developing more activities such as Fulbright sponsorship, course-based foreign travel, and individual study abroad that internationally expand the Snow College campus.
- *Service Learning Committee and Honors Committee* (Core Themes 1 & 2): These academic committees regularly assess the service learning and honors program efforts of the College, respectively. Members of these committees also work to improve the pedagogical quality of service learning and honors courses/experiences and expand such course offerings to a greater number of students.
- *Compensation Committee* (Core Theme 1): This committee involves select Snow College faculty and staff in reviewing existing compensation packages and policies (for faculty and staff) against peer institutions, market trends, and cost of living adjustments. It is proposed that recommendations from this committee for the retention and competitive hiring of high quality faculty be made directly to Snow College administration.

Existing Standing Committees: Since 2012, existing committees such as Faculty Senate, Advancement and Tenure, Academic Deans' Council, and Curriculum Committee have adopted the College's core themes as qualifiers for discussion items and/or decisions. For example, successful faculty requests for course-based student travel funds must address how the proposed instructional experience will promote Snow College's tradition of academic excellence, culture of innovation, and/or atmosphere of engagement.

## 1.A.4: Core Themes, Objectives, and Indicators: Valid or need improvement?

The mission of Snow College is governed by the core themes of:

1. Tradition of Excellence: Snow College honors it history and advances its rich tradition of learning by providing a vibrant learning environment that empowers all students to achieve their educational goals.

2. **Culture of Innovation:** Snow College encourages and supports innovative initiatives among students, faculty and staff that create dynamic learning experiences for the entire college community.

3. **Atmosphere of Engagement:** Snow College fosters many opportunities that engage the college and surrounding communities in local and global learning and service opportunities.

**Mission/Core Theme Indicators**. Snow College has identified objectives which "define" respective core themes. Each objective has one to four key performance indicators (KPIs) which "define" the objective for a total of 16 main performance indicators. Data is collected for each KPI throughout the year and is reviewed by institutional personnel to evaluate the extent to which each core theme objective is being achieved. By judging the level of achievement of each core theme objective, and then the core theme itself, a comprehensive picture of institutional achievement emerges and is used in assessing mission fulfillment.

### Themes

In 2010, Snow College commenced a process to create a new mission statement. This comprehensive process also involved the selection of core themes (pursuant to new NWCCU standards) by which to adjudicate mission fulfillment. An 18-member Accreditation Steering Committee worked through and presented numerous drafts to Snow College constituencies for feedback. The Snow College Board of Trustees adopted the new mission statement and approved the three core themes of 1) Tradition of Excellence, 2) Culture of Innovation and 3) Atmosphere of Engagement on February 16, 2011. These core themes remain valid because they directly support the mission of the Snow College and help preserve the distinct identity of the institution as a great place for students to start and succeed in their higher learning, career aspirations, and life-long goals. During the College's strategic planning process, concerns were raised regarding the efficacy of the existing core themes given the developing strategic goals. However, each of Snow College's five strategic planning goals confirms the value of the core themes. In fact, objectives related to strategic planning goals support (in many cases clarify) core theme objectives for better mission fulfillment assessment.

### Objectives

Core theme objectives were first reviewed by Snow College mission fulfillment teams prior to the 2012 accreditation visit. The review included targets and thresholds for each objective and key performance indicator as well as an evaluation of target and/or threshold achievement. These objectives have had further review in light of recommendations from the 2012 accreditation site visit, Snow College's strategic planning process, and the implementation of performance-based state funding measures.

Through these activities, Snow College recognizes the need to modify some objectives in order to better reflect what the College wants to do and can reasonably measure. Such modifications are intended to also demonstrate a clearer connection to core themes and better inform mission fulfillment.

For example, under the Tradition of Excellence core theme, separate objectives exist for students achieving their intended goals at Snow College and student transfer success. Often, Snow College reports graduation rates and transfer rates as distinct, but united, indicators of student success. The majority of Snow College students intend to transfer to four-year programs, with or without an associate degree, and in many cases, Snow College reports a combined graduation and transfer student success rate. Therefore, it is recommended that the student-goal achievement objective represent both graduation

and transfer success. This eliminates the distinct transfer objective while rendering assessment measures more consistent with Snow College's academic mission.

Snow College continues to analyze the relevance of core theme objectives. Making sure that these objectives relate strategic planning goals and performance measures to core themes is paramount to this process, and will focus on how each objective should have (1) a clear connection to core themes, (2) institutionally relevant and measurable indicators, and (3) consistency across all core themes.

### Indicators

Satisfaction with indicators varies across objectives and core themes. One of the unintended results of Snow College's strategic planning process was the realization that some indicators associated with strategic goals and objectives were better measures than those related to core themes. The same results were true considering new state-mandated performance evidence. For example, Utah's *15 to Finish* campaign was designed to improve graduation rates both in terms of the number of graduates and reduced time to graduation. State colleges and universities were encouraged to develop campaigns influencing full-time students (normally taking 12 credits) to take 15 credits, largely by offering tuition breaks and expedited graduation/transfer incentives. And so, beginning in 2013, state institutions began reporting the number of students taking 15 or more credits per semester to Utah's System of Higher Education. In addition, and in concert with the Complete College America agenda, higher education initiatives began assessing the timely completion of math general education requirements.

As an open enrollment institution, Snow College prides itself on the preparation of students possessing a variety of educational abilities. This quality is integral to the College's Tradition of Excellence core theme. Consequently, new indicators representing the number of students completing 15 or more credits per semester (or 30 credits per year) and the number of semesters new students take to complete the general education math requirement are recommended as indicators under the proposed objective: efficiency in academic outcome attainment.

The Overall Performance Indicator Summary Table (see Appendix, pages 15 – 19) represents current and proposed (highlighted) core theme objectives and indicators and their relationship to mission, strategic plan, and state performance fulfillment. Clearly, objectives and indicators that inform all three areas are better measures of institutional improvement and/or success. Snow College's theme teams and other internal and external stakeholders will continue to evaluate existing and recommended objectives and indicators to determine the data and evidence most appropriate for mission fulfillment.

## Mid-Cycle Evaluation, Part 2: Using Core Themes to Achieve Our Mission

This section highlights two examples of how Snow College uses core themes to achieve its mission. The examples below represent the core themes of Tradition of Excellence and Atmosphere of Engagement. These examples model the alignment between core themes, objectives, indicators and goals, and/or learning outcomes at the activity or course and program level.

## Example 1: General Education Assessment and Model Reform

The following represents the Core Theme and Objectives related to Snow College's assessment of its general education curriculum.

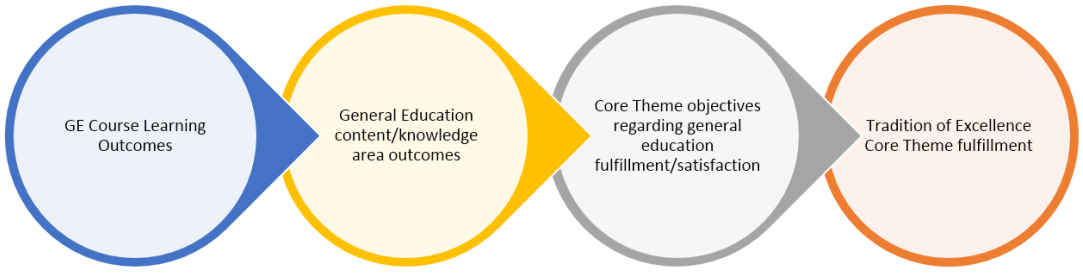
**Core Theme:** Tradition of Excellence
**Objective:** Students completing degrees or certificates demonstrate achievement of the learning outcomes identified for the degree or certificate received.

- Key Indicator 1: Student accomplishment general education outcomes for Associate Degrees (AA, AS, ASB, and APE).
- Key Indicator 4: Students' perception of their [general education] experience at Snow College.

General education completion is required for the Associate of Arts (AA), Associate of Science (AS), Associate of Science-Business (ASB), and Associate of Science-Pre Engineering (APE) degrees. The total number of credits required to complete an Associate-level degree is 63, with 30 to 36 of the credits represented by the required general education curriculum.

The purpose of the general education program at Snow College is to "stretch students' minds and enlarge the foundation of their intellectual and practical skills in order to create in them a lifelong love of learning" (Snow College Catalog, 2014, page 60). The general education curriculum is designed to provide students with a broad exposure to different academic disciplines; a variety of ways of creating knowledge; the means by which to connect information from different disciplines; assistance in selecting a specific program of study; and the foundation from which students can function as thoughtful and responsible citizens.

The general education curriculum is made up of courses that represent the state-mandated GE core (composition, quantitative literacy, and American Institutions) and the content areas of fine arts, oral communication, physical education, humanities, physical science, life science, and science inquiry. Courses included in the College's general education curriculum advance the Tradition of Excellence core theme by providing signature assignment evidence of course-specific learning outcomes that are linked to key general education content/knowledge areas.




For example, courses associated with the achievement of quantitative reasoning (i.e., Math 1030, 1040, 1050) establish course-specific quantitative reasoning learning objectives. Respective assessment activities are collected from the various math classes to inform the level of achievement for the quantitative reasoning knowledge/content area. Specifically, the mathematics department conducted a longitudinal assessment (fall 2014) that measured quantitative reasoning achievement during the 2011 to 2013 academic years. All instructors for the Math 1030 (Quantitative Literacy) course used scores from

two mid-term exams to assess this student learning outcome. The mathematics department established a 70% pass rate as the target. Scores for the first mid-term exam were slightly below target (67%); whereas, scores for the second mid-term exam improved and exceed the target (78%). Additional assessment for quantitative reasoning used course specific content from Math 1040 (Statistics) and Math 1050 (College Algebra). These results facilitated greater collaboration among faculty on how to help students improve quantitative literacy achievement. Namely, faculty worked on changes to instructional presentations that guide students to think through the problem, rather than blindly use formulas. To this end, it was recommended that math faculty re-organize their instruction time to accommodate more in-class practice using real-world applications (see Appendix, pages 22 – 33).

Assessments representative of all general education knowledge/content areas are collected from the course level in a similar fashion and are combined to inform the College the extent to which students have accomplished the general education outcomes of the associate's degree (Core Theme Objective 1). At present, these assessments represent the knowledge areas of writing effectively (composition), biology, quantitative reasoning (mathematics), foreign language, and humanities.

### General Education Comprehensive Assessment Plan

Knowledge/content area assessment results are reported to Snow College's General Education committee according to an established collection cycle (Appendix, page 20). In addition, Snow College participates in the Community College Survey of Student Experiences Questionnaire (CCSSE) every two years and has developed a bi-annual internal survey of Student Learning Outcome (SLO) experiences (administered to entering and exiting students--SLO-Entering and SLO-Exiting, respectively). The results of the CCSSE and SLOs are used to objectively supplement course-related knowledge/content area evaluations. All assessment activities are reported to Snow College's General Education committee and Academic Deans' Council with dissemination to the faculty through division and department meetings, ad hoc faculty gatherings (i.e., Lunch Bunch), and distinct faculty trainings.

#### *Performance Indicator Review*

In the 2011 – 2012 academic year, the English department conducted a longitudinal assessment of students' ability to write clearly, informatively, and persuasively. Final papers from English 1010 and English 2010 courses were collected and evaluated using a rubric designed by the state writing task force. Overall, scores improved from an average of 6.5 for English 1010 papers to an average of 8.0 for English 2010 papers. It was determined that a rating of 7.5 or above represented the ability to "write effectively," and 80% of the English 2010 papers scored at 7.5 or higher on the assessment (see Appendix, pages 34 – 37). Consequently, pedagogical changes were made to improve the quality of generalizations in writing.

For the 2012 – 2013 assessment cycle, foreign language faculty members identified interpretive reading, interpersonal satisfaction, the ability to have an interpersonal exchange of information, and cultural opportunities as learning outcomes at the core of foreign language instruction. Faculty members teaching romance languages assessed student achievement using final exam scores, signature assignments of students' written work, and rubric-rated results from oral quizzes. For interpretive reading, nearly all students who completed the 1020 or higher course met or exceeded the target of having a C- grade or better on interpretive reading assessments. For interpersonal satisfaction, 58% of students who completed their on-line course evaluation reported having satisfaction with their course's

ability to help them achieve their language learning goals. Results from oral assessments suggested that most students are able to use spoken language to exchange information on familiar tasks, topics, and activities. Finally, it was determined that the majority of students are taking advantage of adding at least one or more co-curricular cultural learning opportunities and/or events hosted on campus.

Quantitative reasoning achievement was evaluated during the 2013 -2014 academic year using midterm scores, final exam scores, signature assignments, and research presentations from Math 1030, Math 1040, and Math 1050. The results indicated that overall students demonstrated competency in five of the seven learning outcomes: application of computational skills, effective communication, content mastery of mathematical and statistical terminology, mathematical graphing/charting procedures, hypothesis testing, the understanding and application of "function" models, and the ability to apply mathematics to solve real-world problems (see Appendix, pages 22 – 33).

During the 2014-2015 academic year, humanities learning was assessed using signature assignments from humanities and communications courses. Each faculty member selected an essay indicative of the humanities learning outcomes as the signature assignment. Essays were read and rated using an internally designed three-point rubric. Full results of this assessment are still being analyzed. Furthermore, social science and fine arts general education courses will be assessed this academic year.

In addition, Snow College added 20 local questions to the 2014 administration of the Community College Survey of Student Experiences questionnaire. The local questions holistically addressed student experiences regarding the College's general education curriculum. Among the results, (https://www.snow.edu/academics/office/pa/index.html) the majority of students reported spending "quite a bit of time" on general education activities such as analyzing the basic elements of an idea, writing clearly and effectively, thinking critically, solving numerical problems, or working effectively with others. However, Snow College's averages for these activities were slightly below that of the CCSSE 2014 cohort.

Starting fall semester 2013, the General Education Committee commenced an assessment of student learning outcome experiences using an internally generated questionnaire. Administered to both entering and exiting students, results from the Student Learning Outcomes assessment (SLO) help determine students' general education learning experiences and the perceived value of such experiences completed prior to college and after two years of college-related work. Results for entering students are contrasted with those of exiting students in order to ascertain student growth in general education knowledge areas. The value perception of each knowledge area is also assessed. Trend data for entering students (2013, 2014, and 2015) suggests problem-solving, creative thinking, and the ability to apply knowledge to other/new situations as the skills most frequently used during high school. Trend data for exiting students (2014 and 2015) indicates improvement in critical thinking (up 10%), the application of learning to other/new situations (up 10%), and problem-solving (up 7%) skills based on their college experience. However, of greatest concern was the overwhelming student view of general education as an unsubstantial checklist potentially supportive of a major. Nearly 52% of exiting students viewed Snow College's general education curriculum as something irrelevant—"hoops to jump through"—or only significant if related to a specific major. Only 38% reported the value of GE as being a truly educated person (data based on averages collected from the 2014 and 2015 SLO-Exiting student surveys).

### *Performance Indicator Review Results: Are the indicators substantial and meaningful?*

Using this information, as well as feedback from internal and external stakeholders provided during the institution's comprehensive strategic plan, the College determined that (1) general education needed to be governed by the Office of Academic Affairs under the leadership of a single director (new position); (2) the current "menu" model needed revision in order to better communicate the cohesive breadth and depth of general education to students; and (3) two new general education foundation courses should be developed to provide entering students the means by which they can integrate their learning experiences at Snow College.

In Snow College's Year One report, the two key performance indicators related to the students being able to demonstrate the learning outcomes associated with their degree or certificate program measured only the number of credits achieved in general education courses supporting the respective degree. For example, the accomplishment of student learning outcomes at the associate degree level analyzed general education math, English, and oral communication credits and determined that sufficient credits were achieved in order to satisfy targets and thresholds. As a result, the key performance indicators related to students' general education academic achievement, indicative of Snow College's tradition of excellence, render only vague meaning of student achievement, and more detailed measures of student learning outside of credit-level satisfaction are required.

### *Performance Indicator Progress: What has been learned and how is it communicated?*

Snow College's General Education committee meets regularly to review proposed general education course requirements prior to full curricular approval. This same committee worked with the Director of Institutional Research to design the internal SLO administered to entering and exiting students as well as the general education content area specific questions added to the 2014 administration of the CCSSE. SLO results are regularly reported back to the General Education Committee each fall semester. These results are also communicated to Academic Deans and to the faculty at-large in general academic assemblies. Questionnaire results from the 2012 and 2014 CCSSE administrations were reported back to the General Education Committee, President's Council, Academic Deans' Council, and made available to Snow College's Strategic Planning Committee. All reports are available electronically via the Institutional Research website (https://www.snow.edu/academics/ir/index.html).

Based on evidence representing general education knowledge/content area student achievement collected at the (1) course level using signature assignments and student artifacts, (2) the institutional level using national and institutionally designed surveys, and (3) the community level using feedback from internal and external constituencies (local businesses, public education, transfer schools, economic development and legislative leadership, etc.), Snow College has recommended the following improvements supportive of student achievement (Objective 1).

- The distinct key performance indicators respective of the Associate of Applied Science and Associate Degrees must be combined into one indicator—"students achieve the general education outcomes of the associate-level degree."
- General Education must be realigned under the administrative oversight of the Vice President of Academic Affairs (completed summer 2014).
- A full-time General Education Director must lead the instructional and assessment efforts of Snow College's GE curriculum, including model reform (completed spring 2015).

- A full review of Snow College's general education model must be completed with model reform/recommendations presented to the faculty for consideration (completed August 2015).
- The Director of Institutional Research must continue to serve on the General Education committee in order to report institutional assessment results as well as support content/knowledge area assessment practices.
- Attention must be given to course curriculum to ensure that all stated outcomes are met.
- The College is considering a shift in advising responsibilities from our one-stop-shop advising model to dedicated financial aid advisors, academic advisors, and a new peer advising system.

Under the leadership of the new General Education Director (Melanie Jenkins, Associate Professor of English), general education committee members participated in a week-long retreat. This retreat used all available assessment materials as well as literature on "What is an educated person?" and different general education models to review and re-design Snow College's general education curriculum. This new model was presented to the faculty at large in August 2015 as a part of the College's welcome back/pre-fall semester academic meetings. Faculty feedback from these and other meetings will further inform the development of a model that more adequately addresses the learning outcomes of the College. Another week-long retreat (planned for May 2016) is dedicated to the development of interdisciplinary and integrated general education courses supportive of model directives and learning outcome achievement.

## Example 2: The Development of Industrial Mechanics and Manufacturing Degrees

Snow College is a significant contributor to the quality of life in the College's service area. Additionally, Snow College takes seriously the charge to provide education and training supportive of economic and employment opportunities locally and across the state.

Core Theme: Atmosphere of Engagement
Objective: The College fulfills its regional stewardship by helping to establish "sustainable regions" defined as "innovative economies, livable communities, collaborative governance, and social inclusion."

- Key Indicator 1: Number of new programs in career and technical fields that are created in response to identified local needs.

Snow College is a significant contributor to the quality of life in its six-county service area, providing programs and activities that enrich and connect the population of central Utah. In 2010, the state of Utah published the Higher Education 2020 plan, which called for all higher education institutions to increase their level of economic innovation (http://higheredutah.org/wp-content/uploads/2013/06/pff_2011_highered2020_report.pdf). In response, Snow College identified itself as a Center for Opportunity in Regional and Workforce Economic Development (Snow College Blueprint, 2011). This role was further supported during the College's strategic planning process, which recognized economic development and workforce preparation as one of five critical areas supporting the direction of the institution over the next five to ten years (Appendix, pages 12 – 13).

As a result, Snow College conducted an intensive review and realignment of its career and technical education programs. Working with local economic development leaders, regional employers, and Utah's Department of Workforce Services, the College suspended training areas not well aligned with placement

and family-wage-paying jobs and reinvested funds from suspended curriculums into new certificate and Associate of Applied Science programs.

The Associate of Applied Science program in Industrial Mechanics is a direct outgrowth of this imperative and responds to the immediate need for training to support current and future industrial growth in Snow College's six-county service region. In addition, the Certificate of Proficiency, Certificate of Completion, and the Associate of Applied Science degree in Industrial Manufacturing provides advanced educational opportunities to rurally located high school students, non-traditional post high school students, and industrial technology employees seeking additional credits for certification and/or salary advancement.

The Industrial Mechanics program was implemented in fall of 2012 followed by the Industrial Manufacturing program in fall of 2013. Both programs prepare students for immediate employment or transfer into related four-year programs. The Industrial Mechanics program provides specific, hands-on training as a general mechanic in industrial, manufacturing, processing, or other production environments. The Industrial Manufacturing program offers stackable credentials, allowing students to exit the program at various levels and prepares students to work as technicians in manufacturing, processes or other production environments. Students in the Industrial Manufacturing program receive instruction in quality control, manufacturing and automatic processes, as well as skills training in composites, mechanics, machining, welding, electricity, electronics, internal combustion engine and repair, pneumatics, and hydraulics.

Both programs are designed to complement one another and are implemented using an innovative, accelerated 8-week block instead of the traditional 16-week semester schedule. Additionally, online and hybrid courses were developed to make courses available to outreach locations, including remote high schools, partner technical centers, and workplace education industrial sites. This structure enables better student access and achievement at a speed consistent with industry demands.

### Industrial Mechanics and Industrial Manufacturing Assessment Plans

New programs approved by the Utah System of Higher Education must complete a 3-year program review. The review for the Industrial Mechanics program is scheduled for fall 2015 and the Industrial Manufacturing program is planned for fall 2016. Elements associated with these reviews include number of course offerings, student enrollment, student full-time equivalent (FTE), faculty FTE, program graduates, transfers, and placement. The following tables represent respective growth since program inception.

| Industrial Mechanics Program (fall semester counts) | 2012 | 2013 | 2014 | 2015* |
|---|---|---|---|---|
| # Courses offered | 5 | 11 | 11 | 9 |
| Student Enrollment (duplicated counts) | 5 | 48 | 82 | 37 |
| Student Credits Produced | 12 | 85 | 134 | 94 |
| Student FTE | .8 | 5.6 | 8.9 | 6.2 |
| Faculty FTE | .8 | 1.9 | 1.9 | 1.5 |
| Student to Faculty Ratio | 1 to 1 | 3 to 1 | 5 to 1 | 4 to 1 |
| Graduates (represented by graduating class) | | | | |
| *Certificates of Proficiency* | NA | NA | NA | NA |
| *Certificates of Completion* | NA | NA | NA | NA |
| *Associate of Applied Science* | NA | NA | 0 | 1 |

| | | | | |
|---|---|---|---|---|
| Transfers | NA | NA | 0 | 0 |
| Placement | NA | 1 | 6 | 5 |

*Fall 2015 data represents students enrolled for the first 5-week block.

Originally, Industrial Mechanics courses were taught by existing faculty on a part-time or overload basis. A full-time Industrial Mechanics instructor was hired fall 2013, allowing for program course and student enrollment expansion. Industrial Mechanics graduates employed in Utah annually earn on average between $50,700 and $54,210. In Snow College's service region, this represents a $4000 to $8000 increase over the median annual household income.

Further assessment is provided by an Industrial Mechanics program advisory committee comprised of individuals representing Snow College, area business and industry, economic development leadership, and local workforce services. Committee members serve as external reviewers providing continuous assessment and direction for the program's 3-year review and future growth. Since the majority of students in the Industrial Manufacturing program are also taking courses in the Industrial Mechanics program, the numbers below are distinct only to Industrial Manufacturing (i.e., courses with the subject prefix of MANF).

| Industrial Manufacturing Program | 2013 | 2014 | 2015 | 2016 |
|---|---|---|---|---|
| # Courses offered | NA | 2 | 4 | NA |
| Student Enrollment (duplicated counts) | NA | 6 | 20 | NA |
| Student Credits Produced | NA | 18 | 60 | NA |
| Student FTE | NA | 1.2 | 4.0 | NA |
| Faculty FTE | NA | .40 | .80 | NA |
| Student to Faculty Ratio | NA | 3 to 1 | 5 to 1 | NA |
| Graduates (represented by graduating class) | | | | |
| *Certificates of Proficiency* | This program has only one year of dedicated instruction. The first student completions are anticipated during fall 2015 and spring 2016. | | | |
| *Certificates of Completion* | | | | |
| *Associate of Applied Science* | | | | |
| Transfers | | | | |
| Placement | | | | |

Many of the courses developed for the Industrial Manufacturing program were also required by the Industrial Mechanics program. Some instructional workload shifts occurred to accommodate the new courses, and additional curricular material enhanced existing courses. The program requires one dedicated full-time faculty member to oversee the majority of Industrial Manufacturing courses. This faculty member was hired in April 2015. Part-time, adjunct, and industry specialists are used to supplement specific educational areas such as robotics, composites, and automation technology.

The Industrial Manufacturing program will use the same feedback obtained by the Industrial Mechanics program advisory panel. This program will also seek assessment information from public education superintendents regarding the certificate programs offered to service region high school students.

Industrial Manufacturing graduates at the technician level-one (entry-level) annually earn on average between $44,000 and $51,000, which is consistent with, if not $4,000 higher than, average annual

household incomes in Snow College's service region. Certainly, advancing to higher technician levels merits higher levels of income, which is supported by the stackable credential nature of this program.

### *Performance Indicator Review*

The specific performance indicator associated with this objective and core theme simply reports the number of new programs in career and technical fields created in response to identified local needs. The immediate addition of the Industrial Mechanics and Industrial Manufacturing programs has attracted new students to the College, specifically non-traditional students (adults and high school students) who otherwise would not consider higher education training or instruction. Since 2013, Snow College has developed additional state-approved career and technical education programs such as:

- Associate Degree in Natural Resources (2012): This program utilizes field experience and local industry-based internship experiences complemented with courses in biology, chemistry, geology, botany, and animal science for job placement with land management/resource management enterprises or transfer to regional four-year programs.
- Associate of Applied Science in Agribusiness (2013): With a service region dominated by turkey, sheep, and cattle production, this program offers educational training in agricultural science, animal husbandry, and agricultural production combined with courses in business management, business technology, and accounting. Students in this program graduate prepared to manage a modern farm or ranch business, enter the agricultural industry at mid-level management positions, and/or transfer to related four-year programs.
- Associate Degree in Nursing (2014): Snow College previously offered Licensed Practical Nursing and Certified Nursing Assistant credentials and added the Associate degree in Nursing in response to state and local demand for quality trained nurses.
- Associate of Applied Science in Outdoor Leadership and Entrepreneurship (2014): Outdoor travel and tourism is one of the largest contributors to Utah's economy. Snow College is located only hours away from four national parks, the Grand Canyon, and numerous ski resorts. The Outdoor Leadership and Entrepreneurship program is a field-based program that prepares students to successfully start their own outdoor business, enter Utah's robust outdoor industry at a mid-level position, or transfer to local four-year programs.
- Associate of Applied Science in Networking Technologies (2014): This program trains students with high demand, marketable skills in computer networking, pc hardware, software configuration, and computer programming. Known as the "silicon slope," Utah hosts a multitude of computer-based companies along the Interstate 15 corridor. This degree aims to extend that "slope" to rural Utah with graduates highly trained to work in CISCO, VOIP, Network, Microsoft, Linux, web foundations, database management, cloud management, and data security environments.

Currently, Snow College is working with ACT Aerospace (located in Gunnison, Utah—just 30 miles from the main Ephraim campus) to develop a Certificate of Proficiency and Certificate of Completion in Industrial Composites. ACT Aerospace is in need of trained composites technicians to work in their military and commercial aerospace operations. ACT Aerospace also uses composite technology to develop recreational firearms and medical prosthetics. The proposed program would combine elements of the existing Industrial Mechanics program with new courses in refrigeration storage, laser lay-up, material cutting, curing (using ovens and autoclaves), vacuum processing, adhesive technology, riveting,

assembly, and packing prep/shipping. The Certificate of Proficiency degree is proposed to be a 10-week program leading to immediate employment or employment enhancement. ACT Aerospace employs 153 people at their local manufacturing facility. In addition, Snow College places graduates with Klune Industries in Spanish Fork, Utah and SyberJet in Cedar City, Utah, each of which is asking for more graduates to meet their growing demand for composite material production.

*Performance Indicator Review Results: Are the indicators substantial and meaningful?*

The budding success of the Industrial Mechanics and Industrial Manufacturing programs have fostered the development of the additional aforementioned programs. In a little over four years Snow College has successfully aligned resources to support seven new programs in career and technical fields and continues to explore additional degree opportunities supportive of local and statewide economic needs. Used as an indicator, these new programs and their student outcomes provide generous evidence that Snow College is fulfilling its regional stewardship role under the Atmosphere of Engagement core theme. As more and more students enroll and graduate from these programs and as job placement data becomes available, Snow College will further be able to measure the degree to which it fulfills indicators related to increases in non-governmental technical jobs and per capita incomes for service region residents.

*Performance Indicator Progress: What has been learned and how is it communicated?*

Based on the realization of the Industrial Mechanics and Industrial Manufacturing programs, new programs have been developed. Some of these programs, like the proposed Industrial Composites Technology program, develop a new industrial specialty curriculum on the foundation of existing core technology courses. Offering such programs on reduced, intensive 10-week or 8-week formats with stackable credentials has been positively received by current and prospective students as well as area industry employers. The use of review boards comprised of local industry, business, and economic development leaders provides meaningful insight and necessary oversight for the success of these programs.

Conclusive results on the success and economic impact of these programs is premature at this point. However, as more students enroll, graduate and/or successfully transition to the workforce, Snow College will (1) continue to inform and seek input from program-invested boards to refine and improve program offerings; (2) develop marketing materials that communicate the success and availability of such programs to local, state, and regional business and economic leaders; and (3) develop new programs poised to support local industry and attract new industry to the College's service region.

## Mid-Cycle Evaluation, Part 3: Moving Forward to Year Seven

Snow College has made significant progress toward mission fulfillment via core themes and related objectives and key performance indicators. Having just completed a comprehensive strategic planning process, along with the requirement to answer state performance-funding guidelines, Snow College revised its previous assessment practices into a model that offers a more holistic and systematic approach to mission fulfillment. Through this process, some indicators have been condensed or eliminated, and new and more effective measures have been identified. As the College works toward

Year Seven, redundancies in assessment and reporting practices will be streamlined in support of the College's new holistic model. Additional progress will be made as follows:

- Review Core Themes: While Snow College's core themes remain valid, the College seeks additional review from mission fulfillment teams similar to that accomplished prior to the institution's 2012 accreditation visit. The current plan assigns faculty and staff to new mission fulfillment "theme teams" spring 2016 with an updated mission fulfillment report completed by spring 2017. Specific to this review is an assessment as to how well the College's strategic planning goals coalesce with current core themes, objectives, and indicators to support mission fulfillment.

- Mid-Strategic Plan Review: Snow College plans to conduct a mid-strategic plan review on the progress of the five strategic planning goals. The timeline for this review is planned for the 2017-2018 academic year (the mid-point of the five year strategic planning cycle). Since Snow College's strategic planning process used an assessment instrument/model amenable to non-instructional areas, a specific charge will be to review the effectiveness of the instrument in providing quality assessment information to non-instructional areas of the institution.

- Strategic Planning Program Prioritization: By the 2018 – 2019 academic year (just one year prior to Snow College's Year Seven visit), Snow College is slated to complete a new five-year program prioritization process. First completed prior to the 2015 fiscal year, this review accounts for the history, mission, goals, outcomes, resources, external/internal demands, and future progress of academic and non-academic areas of the institution. Information collected from this assessment will be used to allocate institutional resources to areas of highest priority (according to a tiered ranking system). Given the review of Snow College's core themes and aligned strategic goals, the prioritization of programs and allocation of resources will directly support the College's efforts toward mission fulfillment.

- Assessment and Reporting Management: The Office of Institutional Research worked with the Vice President of Academic Affairs to provide assessment training for new faculty hired in 2014. Such training will now be a part of new faculty training sessions that occur beginning each fall semester. Working with the new Director of General Education, similar assessment training was provided to distinct general education faculty in May 2015 and will be presented again at a similar retreat slated for May 2016 with previously trained faculty serving as mentors. Furthermore, it is the aim of the Office of Institutional Research to (1) continue to offer such trainings to all existing and new faculty; (2) implement ways to offer similar assessment training to non-academic areas of the College; and (3) develop an electronic assessment repository and reporting process (including the availability of all training materials) using Canvas (2015 – 2016 academic year).

In addition to the aforementioned institutional activities, core theme specific exercises include the following:

### Tradition of Excellence Core Theme

- The Tradition of Excellence theme team will determine how to incorporate strategic planning goals and state performance funding elements into current objectives and performance indicators.
- With the above alignment, the theme team will review and present proposed objective and performance indicator changes to the College's planning team, Academic Deans, Faculty Senate, and College Council for eventual approval by the Snow College President and Board of Trustees.
- As new objectives and indicators are finalized, the theme team will work with the Office of Institutional Research to determine appropriate indicator benchmarks, targets and thresholds. This may include the discovery of existing assessment information and/or the design of new assessment information in support of the newly-defined measurements.

### Culture of Innovation Core Theme

- The Innovation theme team will determine how to incorporate strategic planning goals and state performance funding elements into current objectives and performance indicators.
- Based on a review of current objectives as well as that of current innovation activities, the Innovation theme team will recommend changes to current objectives and indicators to the College's planning team, Academic Deans, Faculty Senate, and College Council for eventual approval by the Snow College President and Board of Trustees.
- As new objectives and indicators are finalized, the theme team will work with the Office of Institutional Research to determine appropriate indicator benchmarks, targets and thresholds. This may include the discovery of existing assessment information and/or the design of new assessment information in support of the newly-defined measurements.
- The Innovation theme team will also provide a review of Snow College's Faculty Innovation Academy (now in its third year) with recommendations proposed to the Vice President of Academic Affairs.

### Atmosphere of Engagement Core Theme

- The Atmosphere of Engagement theme team will determine how to incorporate strategic planning goals and state performance funding elements into current objectives and performance indicators.
- Based on a review of current objectives, as well as that of current innovation activities, the Innovation theme team will recommend changes to current objectives and indicators to the College's planning team, Academic Deans, Faculty Senate, and College Council for eventual approval by the Snow College President and Board of Trustees.
- As new objectives and indicators are finalized, the theme team will work with the Office of Institutional Research to determine appropriate indicator benchmarks, targets and thresholds. This may include the discovery of existing assessment information and/or the design of new assessment information in support of the newly-defined measurements.
- This theme team will also consider the three-year reviews of new workforce placement programs, as well as proposals for new economically driven programs, for effectiveness in the College's immediate service area and state-wide.

- Additionally, this theme team is charged to seek objective and subjective feedback from local economic development personnel and business leaders regarding the influence of new career and technical education programs on the quality of life within the immediate service area (i.e., are these programs attracting or driving out future business and economic investment).

Snow College has made significant progress toward mission fulfillment over the past three years. The completion of an 18-month strategic planning process, along with a comprehensive academic and non-academic program prioritization exercise, reaffirmed the validity of the College's core themes and provided a valuable review of existing core theme objectives and indicators. The fact that Snow College now answers to a state performance-based funding model has provided further support to the College's tradition of academic excellence, innovative high-impact practices, and student-community engagement activities. While those associated with Snow College take satisfaction in these and other accomplishments, there remains a strong commitment to improve instructional programs, administrative departments, and all policies and procedures to enable the institution to do an even better job of advancing student excellence and achievement. Snow College has readily adopted the new seven-year cycle, including the preparation of this mid-cycle review, as the means by which the College can most effectively step back and look at progress, focus on needed improvements, and allocate (or re-allocate) the resources needed to support student success.

# Appendix

## Brief Update on Institutional Changes Since 2012

Snow College has made significant progress in achieving the three main core themes since their approval and the institution's Year One report/visit. These accomplishments (with the core theme goals noted in parentheses) during this period include:

- **Implementation of an institutional strategic plan process (Core Themes 1 and 3):** Beginning March 2013, Snow College organized a 21 member task force to develop a strategic plan for the Institution. Task force members reflected the diversity of the campus in areas of ethnicity, gender, service years, positions (faculty, administrative, profession/classified staff), and academic division. Marvin Dodge (then Vice President for Finance and Administrative Services) and Melanie Jenkins (Professor of English) served as task force co-chairs. Members of the task force committed 18 months of dedicated thinking and work following the proven phase-model developed by Patrick Sanaghan *(Collaborative Strategic Planning in Higher Education*, 2009, National Association of College and University Business Officers) and Robert C. Dickeson (*Prioritizing Academic Programs and Services – Reallocating Resources to Achieve Strategic Balance,* 2010, Jossey-Bass Publishing). After a tremendous amount of work with internal and external stakeholders during contract and off-contract time periods, five strategic themes/goals were identified. These goals, as detailed in a comprehensive final strategic plan, were approved by the Snow College Board of Trustees on November 15, 2013 (see www.snow.edu/vision/5.html).

- **Program Prioritization based on Strategic Planning (Core Themes 1, 2, and 3):** Recognizing limited financial resources, a continual decrease in state support, and pressure to moderate tuition increases, the College acknowledged the financial resources to fund the new strategic plan and new programming must come largely from within. Based on a proven model outlined in *Prioritizing Academic Programs and Services – Reallocating Resources to Achieve Strategic Balance*, (Dickeson, 2010) the 21-member strategic planning task force analyzed all academic and administrative programs based on ten weighted criteria and ultimately ranked programs into categories with either (1) recommendations for expansion or enhancement, (2) maintenance of current efforts, and/or (3) the phasing out, elimination, or privatization of programs or parts of programs. The Program Prioritization Report was approved by the Snow College Board of Trustees on August 22, 2014 (http://www.snow.edu/vision/images/finalplan.pdf). Resource reallocation for ranked programs was effective immediately following Trustee approval.

- **Presidential Vacancies and Appointments (Core Themes 1 and 3):**
  - Dr. Steve Hood (formerly of Ursinus College in Pennsylvania) started as Vice President of Academic Affairs in December 2013.
  - Dr. Gary Carlston was appointed as interim President of Snow College in January 2014 and appointed the 16th president of Snow College on December 11, 2014 (http://www.snow.edu/pr/inauguration/).

- **Senate Bill 38 (Core Themes 1, 2 and 3):** Presented to the Utah State Legislature by Senator Ralph Okerlund on behalf of the Utah Rural Superintendent's Association, Senate Bill 38 established the Rural Superintendent Concurrent Education Program with Snow College as the primary

instructional provider (http://le.utah.gov/~2014/bills/sbillint/sb0038.pdf). With state support of 1.3 million dollars, Snow College hired 11 new full-time faculty and provided 33 sections of general education credit to approximately 1,000 high school junior and senior students across the state of Utah using interactive video conference (IVC) technology.

- Faculty Innovation Academy (Core Themes 1 and 2): In response to Senate Bill 38, as well as numerous faculty discussions regarding academic rigor and best practices, the College instituted a Faculty Innovation Academy. This seminar-like program invited select faculty to attend a 4-day full-day theory to practice training on pedagogy, course design, instructional technology, and assessment.
    - The Alan E. Hall Award for Innovation and Undergraduate Success was awarded to Dr. Beckie Hermansen (Director of Institutional Research) and Melanie Jenkins (Professor of English) for the Innovation Academy. This award provided $5,000 of private money toward the implementation of future academies
    - The 2015 Faculty Innovation Academy was implemented May 2015 with a distinct focus on General Education. Select faculty, representing the college's instructional diversity, worked through four full-length days to re-design Snow College's General Education model based on best practices, current resources/realities (majors/transfer-articulation), and assessment. This model was presented to the faculty-at-large in August 2015.
    - Faculty attending the 2015 academy will serve as mentors to faculty selected for the 2016 Innovation Academy. This academy will focus on general education course integration and interdisciplinary re-design. It is anticipated that this academy will also commence an on-going institutional faculty mentoring system.

- Bachelor's Degree in Commercial Music (Core Themes 1 & 2): The Bachelor's Degree of Commercial Music is a program focused on (1) music performance, (2) music production, and (3) songwriting/composition. Current and transfer students started classes fall semester 2012 as juniors, and nine students earned the four-year degree distinction with the class of 2014. This number nearly doubled for the 2015 graduating class, as 17 students earned their Bachelors of Commercial Music Degree. Snow College is the only institution in the state of Utah to offer this degree which allows for students to continue to study music or music education at the graduate level or immediately pursue employment in the music industry.

- Expansion of programs and degrees (Core Themes 1 and 3): Over the past three years, Snow College has worked hard to expand programs and degrees to meet the growing needs of the student population and local/state economy. Proposals for potential four-year programs must consider the College's core themes, strategic planning goals, and service area as well as statewide economic needs. These proposals are currently under review by the President's Cabinet. The following degrees have expanded Snow College's current program offerings.
    - *Associate Degree in Nursing*
    - *Associate Degree in Natural Resources*
    - *Associate of Applied Science in Networking Technologies*
    - *Associate of Applied Science in Agribusiness:*
    - *Associate of Applied Science in Outdoor Leadership and Entrepreneurship*

- *Associate of Applied Science in Industrial Mechanics*
- *Associate of Applied Science in Industrial Manufacturing*
- *General Education Certificate:* Snow College now offers a General Education (GE) Certificate to students who complete 30 to 33 credits of required and elective General Education requirements. This certificate is transportable to all other institutions belonging to the Utah System of Higher Education (USHE). Once they have completed their GE at Snow College, their GE is recognized as completed for any other USHE institution to which they may transfer.

- The Suites at Academy Square (Core Theme 1): The construction of a new 394-bed student housing complex on the Ephraim campus was completed and lodged its first residents fall semester 2012.

- A new Science building (Core Theme 1): Approved by the Utah State Legislature on March 12, 2015 with support from a capital Science Building Campaign, this new and modern building will serve as an anchor for the College's STEM programs. The facility will feature at least four modern lecture rooms, ten high-tech integrated classrooms/labs, six additional advanced labs, and new spaces where faculty and students can collaborate and explore. Its construction features will also include science themes and interactive displays immersing all who enter the structure into a world of science. Groundbreaking will occur during the 2015-2016 academic year.

- Fulbright Scholars (Core Themes 1 and 3): Snow College earned recognition as a top producer of U.S. Fulbright Scholars for 2013-1014 by welcoming a Fulbright Scholar from Egypt and sending an ESL faculty member as a Fulbright Scholar to Chile.

- Athletic Hall of Fame (Core Theme 1): In October 2014, Snow College inaugurated the Athletic Hall of Fame and inducted 19 individuals and one entire team. These original inductees represent 10 decades of athletes, coaches, and administrators in nine different sports and highlighted Snow College's athletic history as one of accomplishment, character, courage, teamwork, and generosity.

- Growing Enrollment (Core Themes 1, 2, and 3): In October 2012, the Church of Jesus Christ of Latter-day Saints announced a significant change in missionary age requirements. Male and female missionaries could commence their service at 18 (formerly 19) and 19 (formerly 21) years of age, respectively. With 92% of the student body attending the Institution for the first two years of their college education coming from within the state of Utah, Snow College braced for a predicted 22% reduction in student enrollment. However, due to innovative and aggressive

recruitment strategies, the College did not experience this decline. In fact, Snow College was one of only two state institutions that did not experience an enrollment decrease (fall 2013). Fall semester 2014 reported the highest headcount in Snow College history (4,779), and the College was one of four USHE institutions to rep ort FTE gains. In addition, Snow College experienced the highest spring 2015 semester enrollment in history, leading all state institutions in spring semester headcount and FTE growth. Projected enrollment for fall semester 2015 is estimated to 4,900 students.

- Advancement Office and Philanthropic Activity (Core Themes 1, 2, and 3): Innovative and new advancement office activities and initiatives have increased philanthropic and grant support to the College by 15% annually.
    - Since fiscal year 2010, the Advancement Office has received more than $10.2 million in philanthropic support (including $3 million in grant support).
    - Over the past four years, private scholarship dollars have more than doubled the number of student recipients (282 to 650) who receive an institutional aid package of $930 on average.
    - Sixteen new scholarship funds were created from private donations.
    - The combined endowment has doubled to be more than $6 million.
    - $350,000 grant from the U.S. Department of Labor to support the creation of the Industrial Mechanics and Industrial Manufacturing programs with an additional $243,000 grant funding to purchase additional equipment and supplies.
    - $179,293 grant from the Substance Abuse and Mental Health Services Administration for campus suicide prevention.
    - $150,000 Job Ready, Willing, and Able Initiative, funded by Walmart and led by the American Association of Community Colleges, to support our Industrial Technology program (Snow College is one of 17 colleges nationwide that received this grant.).
    - More than $300,000 from the U.S. Department of Agriculture in benchmarking and risk management grants for farming/ranching programs.
    - $110,000 from the Utah Department of Workforce Services to support expansion and development of our Computer Science and Computer Networking programs
    - $1.5 million from the George S. and Dolores Doré Eccles Foundation to support the construction of our new science building
    - $1.3 million from the State of Utah to support Senate Bill 38 regarding general education instructional delivery to all rural high schools.

## Response to Topics Previously Requested by the Commission (Addenda)

### Actions to address recommendations from Year One Evaluation (Fall 2012)

Snow College received four NWCCU recommendations from the Year One Evaluation Report conducted in 2012. A description of the actions taken by the College to address each recommendation follows.

Recommendation 1: *Snow College must continue to develop and update financial policies that are approved by its governing board regarding oversight and management of financial resources. It is recommended that the College clearly define and consistently follow its approved policies, guidelines, and processes for financial planning and budget development that include appropriate opportunities for participation by its constituencies (Standard 2.A.30 and 2.F.3).*

The College Budget and Finance Office strives to keep its policies and procedures updated to maintain compliance with the ever changing rules and regulations issued by Federal, State, and other relevant agencies, as well as protect the overall financial health of the College. Official College finance policies are drafted under the direction of the Vice President of Finance and Administrative Services, followed by an official 30 day review process, including a review by the College Council. Subsequent to the review process, the policies are ultimately approved by the College's Board of Trustees.

The College's Payment Card Handling Policy was officially approved in January 2013 and is found on the College's website under the Budget and Finance Office webpage (https://www.snow.edu/offices/business/card_handling_policy.html). This policy was created to set guidelines for the proper handling and processing of payment card information and to comply with requirements set forth under Payment Card Industry Data Security Standards (PCI DSS). The College is in the process of creating a College Investment Policy and the policy is currently going through the review process. To this point, the College has been following the investment policy under the Utah System of Higher Education Regent Policy 541. The creation of this policy will allow the College more control in its investment strategy to better meet its financial needs.

The College Budget and Finance Office recently updated its tuition collection procedures in an effort to improve the College's collection efforts. The tuition payment deadline under the prior procedure was the 21$^{st}$ day of class or 20 percent completion of the semester. As write-offs of tuition charges had nearly doubled over the course of the past three years, it was necessary to evaluate the process in order to improve collections. A committee was created to review and update those procedures. The outcome of the committee resulted in a change to the tuition payment deadline from the 21$^{st}$ to the 5$^{th}$ day of class, as well as improved communication efforts to students regarding payment plans and payment deadlines. The updated procedures were put into effect for the fall 2015 semester and have already resulted in significant improvements in the tuition collection payments compared to prior years.

The Budget and Finance Office also participated in the College's most recent strategic planning process and communicated departmental needs, as well as departmental goals, necessary to help the College achieve its mission. As a result of the strategic plan, the department has undergone job duty restructuring, including the addition of new positions. These changes have facilitated the achievement of specific goals aimed at helping the College achieve its mission.

## Recommendation 2: *The College must continue to clarify, update, and organize academic policies—including those related to teaching, service, scholarship, research, and artistic creation—and clearly communicate them to students and faculty and to administrators and staff along with responsibilities related to these areas (Standard 2.A.12).*

Over the past three years, the College has made particular efforts to address issues relating to teaching, service and professional development. The faculty and administration have worked hand-in-hand to better prepare teachers, consider workload issues, develop better methods for mentoring and evaluating teachers, and to find more creative ways to encourage professional development. We have improved faculty governance and have improved relations between administration and faculty by focusing on student needs.

We have spent considerable time looking at how we recruit, mentor, and evaluate teachers. During the fall semester, teachers who are in the first year of teaching meet together on Thursday afternoons to discuss what is working in the classroom and what challenges they face. In addition we bring in seasoned teachers to lead discussions on topics such as writing across the curriculum, creating assignments, leading discussions, interdisciplinary teaching, creative effective group assignments, organizing teaching observations, and so forth. We are developing a mentoring system where experienced teachers observe new teachers in their classrooms, and new teachers observe experienced faculty in their classrooms. The mentoring process is not yet implemented in all departments but we are confident in the next two years, all departments will be fully engaged in the mentoring program. We have rewritten duties for deans and department chairs to enable these faculty leaders to do more to oversee the mentoring of teachers. They appoint mentors to work with new faculty and they are sharing ideas within and between departments. We are hoping to implement classroom observation not just for junior faculty, but for tenured faculty as well, since all teachers have need of being refreshed in their classroom teaching. An outgrowth of our Strategic Plan has been to appoint a General Education Director to oversee reforms passed by the General Education Committee and create a core curriculum that is engaging for both faculty and students. The Committee emphasizes high-impact teaching practices realizing that reforms implemented in our general education courses will have a beneficial impact throughout the curriculum. Finally, our Advancement and Tenure Committee is rewriting the advancement and tenure document to better evaluate teachers. The document emphasizes the role that deans, chairs, and senior faculty members have in mentoring junior faculty.

Another major focus we are working on is faculty workload. This is a real challenge because workload is not distributed equally across the College. The Deans Council is standardizing workload assignments in and out of the classroom to encourage equity in service and teaching. Several committees have reworked their bylaws to make their organizations more efficient including the Faculty Senate, the General Education Committee, the Professional Track Committee, and the Advancement and Tenure Committee. In addition, we are emphasizing more faculty participation in projects that are not governed by formal committees as a way to harness faculty creativity in matters of governance and teaching. A great model for us is the Honors Committee and the Global Engagement Committee which are governed by faculty volunteers rather than elected representatives.

Even though we are an institution that ranks teaching as our top priority, we fully realize that good classroom teaching is dependent on keeping abreast of trends in one's field. This is difficult with a fifteen-credit per semester teaching load. We encourage faculty to assign readings and creative works in their courses that are new in their field and explore the importance of these scholarly works with their students. In addition, we fund faculty to attend conferences, and where possible, to engage students in their scholarly work. This year, the administration gave an additional $30,000 to the Professional Development Committee to fund faculty to travel to archives, collections, to do field work, order documents and so forth to keep faculty active and interested in their fields. In addition we have an additional $20,000 per year to award faculty members who wish to develop new courses and refresh existing courses using high-impact practices, to incorporate new scholarship, and to integrate material from multiple disciplines into their courses. We have changed our Advancement and Tenure requirements and now recognize the Master of Fine Arts degree as a terminal degree in Theatre, Dance, and Visual Arts. This brings us into alignment with the other institutions in the Utah System of Higher Education, but more importantly, recognizes the contributions the faculty have made academically and encourages them to use their skills professionally and as teachers.

## Recommendation 3: *While recognizing the College's purposeful, systematic, integrated, and comprehensive planning, it is recommended this be an ongoing process leading to mission fulfillment. Implemented plans must be made available to appropriate constituencies. In addition, it is recommended that the institution's planning process continue to be broad-based and offer opportunities for input by appropriate constituencies.*

Snow College Policy 13.1.4 outlines the steps to effect policy or procedure change at Snow College. Any member of the immediate Snow College community may initiate change via proposals to the Campus Personnel Policy Committee. After committee approval, recommended changes are disseminated throughout the College for 30 day review, whereby College personnel may provide comment and/or additional revision(s) to proposed change. After the 30 day review, proposed changes are presented to the Snow College Council and recommended to the Snow College Board of Trustees for final approval (*https://www.snow.edu/offices/hr/policies/13_1_4_changing_personnel_policies.html).*

A presumption with the 30 day review was that all Snow College personnel would actively evaluate proposed change(s) and satisfy the need for additional broad-based communication with constituencies. Also acknowledged was the practice of a few past administrators to make single-handed decisions. Such decisions were communicated to Snow College personnel void of the consultation that should have occurred during the decision-making process. With feedback from faculty and staff regarding these inefficiencies, the College commenced to correct these behaviors by engaging in a systematic and comprehensive strategic planning process leading to mission fulfillment. A strategic planning task force was formed, involving 21 members who reflected the diversity of the College and its campuses.

Central to the strategic planning process was the meaningful engagement with internal and external stakeholders in a manner that was collaborative and transparent. Working through six distinct planning phases, task force members were encouraged to solicit feedback about the critical issues facing the College and openly communicate task force progress. Distinct concept papers were circulated among faculty, staff, and external parties in hard copy and electronic form. A comprehensive "goals conference" promoted discussion of the College's future among faculty, staff, legislative leaders, public education administrators, and economic development individuals. Additionally, task force members attended department, division, area, and small group meetings to answer questions and gather extra feedback. All meeting minutes, concept papers, and other written work (including news, events, and resources) were published to a dedicated strategic planning public web-site. This entire process spanned nine months and involved every campus community member as well as key external associates.

Since then, additional proposals have assimilated the same process supplementary to the traditional 30 day review. For example, the General Education Committee continues to meet with the various academic and non-academic units of the College to gather input on a newly proposed general education model. And efforts toward the revision of a faculty workload policy have involved faculty and staff on both campuses communicating openly through structured meetings and one-on-one conversations. The practice of seeking broad-based input from various College constituencies has proved to be time-consuming and imperfect. However, these efforts have advanced campus morale and attest to be worthwhile activities. The College will continue to provide avenues for across-the-board collaboration and transparent communication in the advance of achieving its goals and fulfilling its mission.

## Recommendation 4: *The College must engage in and develop an effective system of evaluation of all its programs and services, wherever offered and however delivered, and evaluate achievement of clearly identified program goals or intended outcomes. It is further recommended that Snow College evaluate holistically the alignment, correlation, and integration of planning, resources, capacity, practices, and assessment with respect to achievement of the goals and intended outcomes of is programs or services (Standard 4.A.2 and 4.A.5).*

Beginning March 2013, Snow College organized a 21 member task force to develop a strategic plan for the Institution. Task force members reflected the diversity of the campus in areas of ethnicity, gender, service years, positions (faculty, administrative, profession/classified staff), and academic division. Marvin Dodge (then Vice President for Finance and Administrative Services) and Melanie Jenkins (Professor of English) served as task force co-chairs. Members of the task force committed 18 months of dedicated thinking and work following the proven phase-model developed by Patrick Sanaghan *(Collaborative Strategic Planning in Higher Education*, 2009, National Association of College and University Business Officers) and Robert C. Dickeson (*Prioritizing Academic Programs and Services – Reallocating Resources to Achieve Strategic Balance,* 2010, Jossey-Bass Publishing). After a tremendous amount of work with internal and external stakeholders during contract and off-contract time periods, five strategic themes/goals were identified. These goals, as detailed in a comprehensive final strategic plan, were approved by the Snow College Board of Trustees on November 15, 2013 (see www.snow.edu/vision/5.html).

With the approval of the strategic plan, the College initiated a comprehensive program prioritization process. Based on the program prioritization model outlined in *Prioritizing Academic Programs and Services—Reallocating Resources to Achieve Strategic Balance*, by Robert C. Dickeson (2010, Jossey-Bass Publishing), all programs (academic and non-academic as identified by unique budget line item) completed a program questionnaire. This instrument was designed to capture data from ten key elements including items such as the history, development, and expectation of each program; internal and external demand; quality of program resources, size, scope, and productivity; costs; and the impact, justification, and overall necessity of the program. One hundred and sixty three questionnaires were received covering all but a few minor programs proposals for new programs.

The strategic planning task force analyzed all academic and administrative programs based on ten weighted criteria and ultimately ranked programs into categories with either (1) recommendations for expansion or enhancement, (2) maintenance of current efforts, and/or (3) the phasing out, elimination, or privatization of programs or parts of programs. The Program Prioritization Report was approved by the Snow College Board of Trustees on August 22, 2014 (https://www.snow.edu/academics/office/). Resource reallocation for ranked programs (according to a tiered system) was effective immediately following Trustee approval.

Snow College plans to conduct a mid-strategic plan review on the progress of the five strategic planning goals during the 2017-2018 academic year (the mid-point of the five year strategic planning cycle). Since Snow College's strategic planning process used an assessment instrument/model amenable to non-instructional areas, a specific charge will be to review the effectiveness of the instrument in providing

quality assessment information to non-instructional areas of the institution. By the 2018 – 2019 academic year (just one year prior to Snow College's Year Seven visit), Snow College is slated to complete a new five-year program prioritization process. This new review will also assess the academic and non-academic areas of the institution and account for the achievement (or progress toward) area-specific goals and outcomes. Information collected from this assessment will be used to re-allocate institutional resources to areas of highest priority, according to the established program prioritization tiered ranking system.

## Snow College Core Themes

The mission of Snow College is governed by the core themes of:

4. **Tradition of Excellence:** Snow College honors it history and advances its rich tradition of learning by providing a vibrant learning environment that empowers all students to achieve their educational goals.

5. **Culture of Innovation:** Snow College encourages and supports innovative initiatives among students, faculty and staff that create dynamic learning experiences for the entire college community.

6. **Atmosphere of Engagement:** Snow College fosters many opportunities that engage the College and surrounding communities in local and global learning and service opportunities.

**Mission/Core Theme Indicators**. Snow College has identified objectives which "define" respective core themes. Each objective has one to four key performance indicators (KPIs) which "define" the objective for a total of 16 main performance indicators. Data is collected for each KPI throughout the year and is reviewed by institutional personnel to evaluate the extent to which each core theme objective is being achieved. By judging the level of achievement of each core theme objective, and then the core theme itself, a comprehensive picture of institutional achievement emerges and is used in assessing mission fulfillment.

## Snow College Strategic Goals

Snow College's 18-month strategic planning process (March 2013 to September 2014) provided for a comprehensive review of core theme performance indicators. As a result, additional strategic goals were identified under each core theme with new performance indicators. Further, recommendations were made to current performance indicators to provide more reliable assessment measures. These changes were vetted by mission fulfillment committee members (spring semester 2015) with implementation (including established data collection measures, targets and thresholds) completed by December 2015.

The following strategic goals were developed to address budget and resource allocation given the tactical direction of the College for the next five to ten years. These goals are listed along with the guiding core themes in parenthesis (https://www.snow.edu/academics/office/).

- Quality Instruction and Student Services (Core Theme 1): Snow College seeks to identify and employ high impact pedagogy and teaching practices across a variety of educational venues, including distance education via technology to high school students pursuant to legislative mandates (Senate Bill 38). In addition, Snow College will develop a more robust faculty and staff development program to provide consistency and rigor and improve communication and collaborative efforts across all disciplines and co-curricular activities.

- General Education (Core Themes 1, 2, and 3): Snow College accepts the challenge to design and implement a new, integrative general education model. This includes the hiring of a full-time General Education Director, who will coordinate the development of a new model and assessment plan, generate faculty participation through training and mentoring programs, and create a culture of excitement among students to become lifelong learners.

- 2-Year/4-Year Program Development (Core Themes 1, 2, and 3): With the implementation of the Bachelor's Degree in Commercial Music and given current and predicted influences/demands for four-year degrees, Snow College will develop a rubric by which four-year program proposals can be developed, approved, and implemented. In addition, the College will continue to pursue program-specific articulation agreements with in-state and out-of-state schools. Top areas of study (i.e., majors) will be identified and curriculum guides will include pathways to career placement and/or degree attainment.

- Economic Development and Workforce Preparation (Core Themes 1 and 3): Snow College will increase the standard of living in its six-county service region by enriching current career and technical programs with applicable general education knowledge and entrepreneurial skills; structuring current programs into logical pathways that prepare students for various placement in industry; providing new programs and integrated internship opportunities tailored to economic needs; and create educational activities that are amenable to today's working adult.

- Cost and Affordability (Core Theme 1): Recognizing that much of Snow College's excellence rests in the quality of its faculty and staff, the institution will develop a long-term strategy to raise median salaries in order to attract and retain high-quality faculty. In addition, the College will work hard to maintain affordable tuition and housing rates while developing campaigns to

provide more scholarship dollars to new and continuing students as well as improve student employment opportunities on both campuses.

Strategic Goals Indicators. As a result of a comprehensive strategic planning process, 11 indicators were developed representing the five main strategic planning goals.

- Oversee and manage quality in all teaching venues (Quality Instruction and Student Services).
- Identify and implement the use of more high impact practices such as learning communities, service learning, experiential learning, and course pairings (Quality Instruction and Student Services).
- Design and implement a new, integrative model for general education (General Education Development).
- Hire a director for general education who will lead the GE Committee, manage GE assessment, create standards and rubrics for integrative courses, provide faculty mentoring and training, and instigate professional development opportunities for engaged faculty (General Education Development).
- Develop a process and rubric by which new four-year degree programs can be successfully developed, approved, and implemented (2-Year/4-Year Program Development).
- Establish articulated transfer agreements with in-state four-year programs as well as some out-of-state schools (2-Year/4-Year Program Development).
- Enrich workforce preparation programs requirements with GE courses that provide interdisciplinary and entrepreneurial skills (Economic Development and Workforce Preparation)
- Structure programming in order to maximize opportunities for students, create logical pathways, and provide the greatest preparation for students transferring to industry (Economic Development and Workforce Preparation).
- Increase the standard of living in the six-county region by providing career opportunities for graduates of Snow College through economic development partnerships (Economic Development and Workforce Preparation).
- Develop a long-term strategy to increase salaries to their median market range in order to attract and retain high quality faculty and staff (Cost and Affordability).
- Improve student employment opportunities and communication about such on both campuses (Cost and Affordability).

## State Performance Funding Measures

State Performance Indicators. As of March 2015, additional higher educational funds are to be appropriated to each institution according to the following performance indicators. Many of these performance indicators mirror indicators already used by Snow College.

- Overall Persistence and Completion: This is represented by certificates and degrees awarded as well as transfer to four-year programs (representing 25%).
- Underserved Populations: This is represented by the number of certificates, degrees, or transfers completed by minority, first-generation, and Pell-eligible student populations (representing 15%).
- Market Demand: This is measured by the number of STEM-related certificates and degrees awarded (representing 10%).
- Efficiency: This is defined as the number of degrees per 100 FTE (representing 50%).

## Overall Performance Indicator Summary (August 1, 2015)

| Performance Indicator<br>***proposed objectives and indicators are highlighted in yellow* | Mission Essential | Strategic Plan | State Performance |
|---|---|---|---|
| Goal 1: Snow College honors its history and advances its rich traditions of learning by providing a vibrant learning environment that empowers students to achieve their educational goals. | | | |
| 1. Students completing degrees or certificates demonstrate achievement of the learning outcomes identified for the degree or certificate received | x | | |
| a. Student accomplishment of general education outcomes | x | x | |
| b. Student accomplishment of Associate of Applied Science education outcomes | x | x | |
| c. Student accomplishment of program-specific learning outcomes | x | | |
| 2. Efficiency in academic outcome attainment | x | | x |
| a. Number of degrees awarded per 100 FTE | x | | x |
| b. Number of students taking 15 or more credits per semester (30 or more credits per year) | x | | x |
| c. Average time to completion of Math 1050 by prepared and under-prepared students. | x | | x |
| 3. Market-demand of degrees and certificates | x | | x |
| a. Number of STEM-related degrees or certificates | x | | x |
| b. Number of new programs/degrees in STEM-related fields | x | x | |
| c. Number of students pursuing STEM-related fields of study while at Snow College | x | x | x |
| 4. Students achieve their intended educational goals at Snow College | x | | |
| a. Persistence/retention rates | x | | x |
| b. Graduation rates | x | | x |
| c. Success rates | x | | x |
| d. Student perception of their Snow College experience | x | | |
| 5. Students succeed in their major when they transfer | x | | |
| a. Transfer rates | x | | x |
| b. Performance after transfer | x | | |
| 6. Students succeed in the workforce when they find employment in their chosen field | x | | |
| a. Licensure and certification pass rates | x | x | |
| b. Job placement rates | x | | |
| c. Employer satisfaction with graduates | x | x | |

| | | | |
|---|---|---|---|
| 7. Exiting students are satisfied with the services provided by the administrative departments of the College | x | | |
| a. Student perception of their Snow College experience | x | | |
| 8. Snow College continues to achieve national rankings in key elements of the College | x | | |
| a. Institutional rankings (Aspen Institute, etc.) | x | | |
| b. Athletic Team rankings | x | | |
| c. Discipline-specific rankings | x | | |
| d. IPEDS rankings | x | | |
| 9. Support for underserved populations | x | x | x |
| a. Number of minority students | x | x | x |
| b. Success rates of minority students | x | x | x |
| c. Success rates of Pell students | x | x | x |
| d. College completion performance of students in developmental programs/courses | x | x | x |
| 10. Design and implement a new, integrative model for general education | x | x | |
| 11. Hire a General Education Director | x | x | |
| 12. Salary Equity for current and existing faculty | x | x | |
| a. Salary and Benefit equity study | x | x | |
| b. Legislative proposals and funding results | x | x | |
| c. Hiring practices and policies | x | x | |
| d. Faculty workload and compensation policy | x | x | |
| e. Faculty retention rates | x | x | |
| f. Faculty attrition rates and rationale | x | x | |
| 13. Affordably competitive tuition and housing costs | x | x | |
| a. Tuition and Fee rates | x | x | |
| b. On and off-campus housing rates | x | x | |
| **Goal 2: Through initiatives that create and sustain a college-wide culture of innovation, Snow College encourages and supports innovation by developing dynamic teaching, learning and engagement experiences for students, faculty, staff and the community.** | | | |
| 14. The College creates a cultural "blueprint" that encourages innovative curricular and co-curricular practices | x | | |
| a. The Innovation Task Force | x | | |
| b. Innovation "white papers" circulated among faculty and staff | x | | |
| c. An annual report presented to various committees that highlights innovative initiatives and best practice results. | x | | |
| 15. The College allocates resources to promote inventive responses to needs derived from assessment(s) | x | | |

| | | | |
|---|---|---|---|
| a. Funding for innovative faculty/staff proposals | x | | |
| b. Innovation celebration of faculty/staff accomplishments | x | | |
| 16. The College seeks and incorporates new/best practices to maximize student success. | x | | |
| a. Percentage of employees participating in professional development activities | x | | |
| b. Percentage of employees who incorporate information/skills obtained from professional development activities | x | | |
| c. Faculty/Staff summary reports regarding their success in implementing best practices | x | | |
| 17. Establish quality initiatives for the Rural Superintendent's Concurrent Enrollment proposal (Senate Bill 38). | x | x | x |
| 18. Improve quality of developmental education across campus | x | x | |
| 19. Implement more robust faculty and staff development activities that support quality instruction | x | x | |
| 20. Develop a process rubric for four-year degree program proposals | x | x | |
| 21. Program articulation and pathways | x | x | |
| a. Number of articulated programs | x | x | |
| b. Number of majors that offer pathways to job placement and/or transfer | x | x | |
| 22. The College creates a culture of innovation by encouraging creative and original thinking among students | x | | |
| a. Orientation exposure/instruction on creative thinking in the classroom. | x | | |
| b. Division sponsored activities that encourage the use of creative problem-solving skills | x | | |
| c. Number of course re-designs based on best practices | x | x | |
| d. Number of new courses that use best practice pedagogies | x | x | |
| e. Course evaluation averages on creative thinking and innovation encouragement in the classroom | x | | |
| **Goal 3: The College creates learning and service opportunities, locally and globally, to engage students, faculty, staff and the surrounding community.** | | | |
| 23. Wide-ranging student-centered activities and experiences | x | | |
| a. Student perceptions related to engagement as measured by national questionnaires | x | | |

| | | | |
|---|---|---|---|
| b. Percentage of students involved in structured service-learning activities | x | | |
| c. Percentage of students involved in the Honors program | x | | |
| d. Percentage of students involved in student leadership activities on campus | x | | |
| e. Percentage/Number of students participating in global learning or engagement activities on campus or abroad | x | | |
| 24. Collaborative, discipline-specific professional engagement experiences | x | | |
| a. Number of faculty-directed events that apply classroom instruction to real-world settings | x | | |
| b. Number of professional conferences in which students and faculty collectively participate | x | | |
| c. Number of workforce programs with GE infused courses or coursework | x | x | |
| 25. Student employment opportunities | x | x | |
| a. On-campus student employment rates | x | x | |
| b. Career-Badger participation/placement | x | x | |
| 26. The College enriches the surrounding community | x | x | |
| a. Number of public school students who participate in college-sponsored activities | x | | |
| b. Number of adults/seniors or other continuing/community education students | x | | |
| c. Number of community members attending college events or activities | x | | |
| 27. The creation of educational opportunities amenable to the working adult | x | x | |
| a. Number of evening courses offered | x | x | |
| b. Number of weekend of condensed block courses offered | x | x | |
| c. Number of life-skills courses offered | x | x | |
| d. Number of students participating in the College's Adult Education/Literacy program. | x | x | x |
| 28. The development of "sustainable regions" within the College's service area | x | x | |
| a. Number of new programs developed to meet economic need | x | x | |
| b. Percentage increase per capita income in the six-county area | x | x | |
| c. Percentage increase in the number of non-governmental jobs in the six-county area. | x | x | |

| | | | |
|---|---|---|---|
| 29. Improve the relationship of the College with six-country industry providers | x | | |
| a. Number of cooperative relationships with industry | x | x | |
| 30. Implement new technologies and other efficiencies on campus and in the community, where appropriate | x | x | |
| 31. Campaigns to increase funding for institutional aid packages | x | x | |
| a. Employee Giving Campaign | x | x | |
| b. Number of new private scholarships or endowments | x | x | |
| c. Amount of private funding dollars | x | x | |
| d. Capital campaign for building projects | x | x | x |

## General Education Knowledge/Content Area Assessment Cycle:

| Outcome | Major Heading | Minor Heading | 2011-2012 | 2012-2013 | 2013-1014 | 2014-2015 | 2015-2016 | 2016-2017 | 2017-2018 | 2018-2019 |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Fundamental Knowledge | American Institutions | | | | | | | | |
| 1 | Fundamental Knowledge | Social and Behavioral Sciences | | | | | | | | |
| 1 | Fundamental Knowledge | Physical and Life Sciences | | | | | | | | |
| 1 | Fundamental Knowledge | Humanities | | | | | | | | |
| 1 | Fundamental Knowledge | Fine Arts | | | | | | | | |
| 1 | Fundamental Knowledge | Personal Wellness | | | | | | | | |
| 2 | Using Information | Reading | | | | | | | | |
| 2 | Using Information | Information Technology | | | | | | | | |
| 3 | Communication | Oral Communication | | | | | | | | |
| 3 | Communication | Written Communication | | | | | | | | |
| 3 | Communication | Global Communication | | | | | | | | |
| 3 | Communication | Team Work | | | | | | | | |
| 4 | Quantitative Reasoning | Quantitative Reasoning | | | | | | | | |
| 5 | Responding with Sensitivity to Art | Responding with Sensitivity to Art | | | | | | | | |
| 6 | Analytical, Critical, and Creative Reasoning | American Institutions | | | | | | | | |
| 6 | Analytical, Critical, and Creative Reasoning | Social and Behavioral Sciences | | | | | | | | |
| 6 | Analytical, Critical, and Creative Reasoning | Physical and Life Sciences | | | | | | | | |
| 6 | Analytical, Critical, and Creative Reasoning | Humanities | | | | | | | | |
| 6 | Analytical, Critical, and Creative Reasoning | Fine Arts | | | | | | | | |
| 6 | Analytical, Critical, and Creative Reasoning | Personal Wellness | | | | | | | | |
| 6 | Analytical, Critical, and Creative Reasoning | Oral Communication | | | | | | | | |
| 6 | Analytical, Critical, and Creative Reasoning | Written Communication | | | | | | | | |
| 7 | Interdisciplinary Problem Solving | Interdisciplinary Problem Solving | | | | | | | | |
| 8 | Foreign Language | Foreign Language | | | | | | | | |

## Snow College Program Review Timeline

*Affirming Excellence; Assessing for Improvement*

Building upon a tradition of academic distinction, Snow College serves as one of the nation's finest two-year colleges offering liberal arts, sciences, and professional/technical education. Snow College achieves its mission through a constant pursuit of excellence in teaching and learning. In support of teaching and learning excellence, Snow College conducts regular academic program reviews. The primary reason for conducting program reviews is to assure and improve the quality of education.

Program Self-Study

An academic Program Self-Study report is developed by each division every five years under the leadership of the division dean and with assistance from the academic chairs, division faculty, and institutional research. The division dean forwards the self-study to the Provost by December of each year per the following schedule:

***Proposed Schedule:***

2013-14: **Division of Fine Arts, Communication and the Center for New Media:**
*Art, Dance, Music, Theater, Communications**

2014-15: **Division of Science and Mathematics:**
*Chemistry, Biology, Physics, Computer Science & Engineering, Math, Geology, and Natural Resources*

2015-16: **Division of Social Sciences:**
*Home and Family Studies, Social Science, Education, Physical Education, Outdoor Leadership & Entrepreneurship*

2016-17: **Division of Humanities:**
*English, Philosophy, Foreign Language, TESL/ESL*

2017-18: **Division of Business and Applied Technologies**:
*Business, Welding, Diesel Mechanics, Industrial Manufacturing, Industrial Mechanics, Cosmetology, Allied Health, Computer Information Science, Construction Technologies, Farm & Ranch Management*

*(Cycle then repeats)*

The Program Self-Study report includes: 1) program description, objectives, justification, program learning outcomes, quality indicators and ratings, etc., 2) curricula and summaries of expected course-level learning outcomes, 3) students served, including numbers and trends for course enrollments, majors, graduates, etc. 4) numb ers and trends of faculty and staff supporting the program, 5) numbers and trends of budgets and physical resources supporting the program, 6) evaluation of cost effectiveness, and 7) other pertinent information.

# Quantitative Literacy Assessment 2011 - 2013

**Cover Information for Math 1030 (Quantitative Literacy)**

- GE Outcome being assessed: #4 - Students can reason quantitatively in a variety of contexts.
- Assessment Team Members: Cindy Alder, Kari Arnoldsen, Daniel Balls, Jonathan Bodrero, Brian Hansen & Mel Jacobsen
- Assessment Dates: August 2011-April 2013. Actual assessment occurred April 2014.

**Narrative Overview**
The Mathematics Department conducted a longitudinal assessment of the program and GE Outcome #4 during the academic years 2011-2013. Math 1030 students were assessed using midterm exams and final presentations. All students enrolled had their results included.

**Introduction**
The following Student Learning Outcomes were identified and activated for assessment.

- Students will be able to apply computational skills to a variety of contexts.
- Students will be able to communicate effectively in a variety of contexts.

**Materials and Methods**
Instructors in Math 1030, Quantitative Literacy assessed the SLO's using two midterm exams and a final group presentations. Data from the midterm exams and final group presentations were examined to determine student results.

The Key Performance Indicator for each SLO was a particular skill or group of skills included in questions on the midterm exams and/or group presentations as outlined below. The target for each KPI assessed was set at 70% of the students in the class will score at least 70% or higher on each assessment. In addition, a threshold level for each KPI assessed was set at 70% of the students in the class will score at least of 50% of the points on each problem.

| | |
|---|---|
| 1. Students will be able to apply computational skills to a variety of contexts. | Performance will be assessed on chapter and/or midterm exams, individual, and group presentations, which will include questions that entail computational skills in a variety of contexts. |
| 1. Students will be able to communicate effectively in a variety of contexts. | Performance will be assessed on chapter and/or midterm exams, individual, and group presentations, which will include questions that entail computational skills in a variety of contexts. |

**Results**

**Fall 2011**

| | Student Avg. Pct. | # Student Answers | Percent ≥70% | Percent ≥ 50% |
|---|---|---|---|---|
| Midterm Exam I | 67.5 | 20 | 45 | 85 |
| Midterm Exam II | 69.84 | 20 | 55 | 90 |
| Final Group Presentation | 95.75 | 22 | 100 | 100 |

The target score of 70% was not met for either midterm exam but the threshold was met. The target was met for 100% of the students on the final group presentation.

**Spring 2012**

The following data is a compilation from two sections of Math 1030, with an average class size 11.5 students.

| | Student Avg. Pct. | # Student Answers | Percent ≥70% | Percent ≥ 50% |
|---|---|---|---|---|
| Midterm Exam I | 71.9 | 23 | 66.7 | 87 |
| Midterm Exam II | 80.63 | 23 | 78.2 | 91.3 |
| Final Group Presentation | 97.65 | 23 | 100 | 100 |

The target score of 70% was barely missed for the first midterm exam (67%) but was met for the second midterm exam (78%). The target was met for 100% of the students on the final group presentation.

**Fall 2012**

The following data is a compilation from two sections of Math 1030, with an average class size 8 students.

| | Student Avg. Pct. | # Student Answers | Percent ≥70% | Percent ≥ 50% |
|---|---|---|---|---|
| Midterm Exam I | 74.76 | 16 | 68.75 | 93.75 |
| Midterm Exam II | 75.52 | 15 | 60 | 93.3 |
| Final Group Presentation | 96.94 | 16 | 100 | 100 |

The target score of 70% was not met for either of the midterm exams (69% for Exam 1 and 60% for Exam 2) but the threshold was met. The target was met for 100% of the students on the final group presentation.

**Spring 2013**

The following data is a compilation from two sections of Math 1030, with an average class size 17.5 students.

| | Student Avg. Pct. | # Student Answers | Percent ≥70% | Percent ≥ 50% |
|---|---|---|---|---|
| Midterm Exam I | 76.37 | 35 | 68.6 | 94.3 |
| Midterm Exam II | 78.79 | 34 | 73.5 | 91.2 |
| Final Group Presentation | 92.66 | 32 | 100 | 100 |

The target score of 70% was barely missed for the first midterm exam (67%) but was met for the second midterm exam (78%). The target was met for 100% of the students on the final group presentation.

**Conclusions**

The results of these assessments show that students are consistently achieving the target learning outcome of "Students will be able to communicate effectively in a variety of contexts" as evident by high grades on the final group presentation. This is understandable as they are required to meet with their instructor prior to making their presentation. In addition, students consistently achieved higher scores on successive midterm exams.

**Plans for Improvement**

Collaboration will take place among faculty on how to help students improve their performance on midterm exams, especially their initial midterm exam. Embedding questions that cover specific content for better assessment will also be discussed. In addition, dialogue will take place regarding the importance and implementation of the final group presentation in lieu of a final exam.

## Cover Information for Math 1040 (Introduction to Statistics)

- GE Outcome being assessed: #4 - Students can reason quantitatively in a variety of contexts.
- Assessment Team Members: Cindy Alder, Kari Arnoldsen, Daniel Balls, Jonathan Bodrero, Brian Hansen & Mel Jacobsen
- Assessment Dates: August 2011 – April 2013. Actual assessment occurred April 2014.

**Narrative Overview**

The Mathematics Department conducted a longitudinal assessment of the program and GE Outcome #4 during the academic years 2011-2013. In Fall 2011, no data was available to assess

as final projects were given in lieu of a final exam. Beginning spring 2012, a common department final exam was given to all Math 1040 students. A sampling of department final exams were collected for spring 2012, fall 2012 and spring 2013. Seven questions from the Final Exam (spring & fall 2012) and five questions from the Final Exam (spring 2013) were analyzed on the following topics: determining mean , mode, standard deviation, graphing a box plot, a scatter plot, performing a linear correlation test, and a hypothesis test on the difference between two population proportions. A random sampling of students had their results included.

**Introduction**

The following Student Learning Outcomes were identified and activated for assessment.

- Students will be familiar with many common graphs and charts and will be able to create an appropriate graph or chart for a given data set.
- Students will be able to take a given problem and, as appropriate, complete a hypothesis test or compute a confidence interval. Then based on the results from the hypothesis test or confidence interval, the student will be able to make a real world conclusion.
- Students will understand the meaning of statistical measures (mean, median, mode, proportion, standard deviation) and be able to calculate each of them for a given data set.

**Materials and Methods**

Beginning spring of 2012, the Mathematics Department administered a common final exam to all students enrolled in Math 1040, Statistics. The final exam included five to seven embedded questions designed to assess proficiency in the following areas: determining mean, mode, standard deviation, graphing a box plot, a scatter plot, performing a linear correlation test, and a hypothesis test on the difference between two population proportions.

A sampling of final exams were examined to determine student results.

The Key Performance Indicator for each SLO was a particular skill or group of skills included in questions on the final exams as outlined below. The target for each KPI assessed was set at 70% of the students in the class will score at least 70% or higher on selected problems from the exam questions. In addition, a threshold level for each KPI assessed was set at 70% of the students in the class will score at least of 50% of the points on each problem.

| | |
|---|---|
| 1. Students will be familiar with many common graphs and charts and will be able to create an appropriate graph or chart for a given data set. | Through embedded questions on chapter/midterm and/or final exams students will demonstrate SLO. |

| | |
|---|---|
| 2. Students will be able to take a given problem and, as appropriate, complete a hypothesis test or compute a confidence interval. Then based on the results from the hypothesis test or confidence interval, the student will be able to make a real world conclusion. | Through embedded questions on chapter/midterm and/or final exams students will demonstrate SLO. |
| 3. Students will understand the meaning of statistical measures (mean, median, mode, proportion, standard deviation) and be able to calculate each of them for a given data set. | Through embedded questions on chapter/midterm and/or final exams students will demonstrate SLO. |

**Results**

**Spring 2012**

Seven questions from the Final Exam were analyzed from a pool of 84 students had their results included. They are tabulated as follows:

| Question Concept | Student Avg. Pct. | # Student Answers | Percent ≥70% | Percent ≥ 50% |
|---|---|---|---|---|
| "Mean" | 95.24 | 84 | 92.86 | 97.62 |
| "Mode" | 77.98 | 84 | 64.29 | 91.67 |
| "Std. Dev." | 88.10 | 84 | 80.95 | 95.24 |
| "Boxplot" | 74.70 | 50* | 78.00 | 92.00 |
| "Scat. Plot" | 95.63 | 84 | 91.67 | 98.81 |
| "Corr. Test" | 53.27 | 84 | 42.86 | 59.52 |
| "2Prop Ztest" | 83.16 | 82 | 79.27 | 86.59 |

* - No data was available for 34 students on this question.

**SLO #1 - Graphs and Charts**

**Results:** Three of the four sections included a question on the final exam asking students to compute the five number summary and create a box plot (aka box and whisker plot) for a data set of 16 values that included one outlier. 39 of the 50 students (78%) scored at least 7 of the 10 points possible for this question meaning the target was met.

For all three sections, the final exam included a question asking students to create a scatterplot (with appropriate scale and labels) for 9 data points. Of the 84 students, 77 (92%) successfully created the scatterplot earning 5 of more of the total 6 points possible exceeding the target.

**SLO #2 – Complete Hypothesis Test / Compute Confidence Interval and Make Real World Conclusions**

**Results:** The final exam included a question asking students to perform a linear regression hypothesis test. Two points were allotted for correct hypotheses, three points for calculating the correct test statistic or P-value, and three points for an appropriate real world conclusion based on the data. Only 36 of the 84 students (43%) earned 6 or more of the 8 points possible for the question, well below the target. However 50 of the 84 students (60%) earned 4 or more of the 8 points possible for the problem.

The final exam included a question asking students to perform a 2 sample Z proportion hypothesis test. Two points were allotted for correct hypotheses, three points for calculating the correct test statistic or P-value, and three points for an appropriate real world conclusion based on the data. The target was met as 79% of the students earned at least 6 of the 8 points possible for the question.

**SLO #3 – Understand and Compute Statistical Measures**

Results: On the final exam, each student was asked to find the mean, mode, and standard deviation for a data set of 16 values that had two modes and one outlier. 78 of the 84 students (93%) were able to calculate the mean correctly. 54 of the 84 students (64%) correctly reported both modes and 77 of the 84 (92%) correctly reported at least one of the two modes. 68 of the 84 students (81%) correctly computed the sample standard deviation and reported it to an appropriate number of decimal places.

**Fall 2012**

Seven questions from the Final Exam were analyzed from a pool of 19 students had their results included. They are tabulated as follows:

| Question Concept | Student Avg. Pct. | # Student Answers | Percent ≥70% | Percent ≥ 50% |
|---|---|---|---|---|
| "Mean" | 100 | 19 | 100 | 100 |
| "Mode" | 76.32 | 19 | 63.16 | 89.47 |
| "Std. Dev." | 86.84 | 19 | 84.21 | 89.47 |
| "Boxplot" | 86.84 | 19 | 78.95 | 94.74 |
| "Scat. Plot" | 78.95 | 19 | 57.89 | 100 |
| "Corr. Test" | 65.26 | 19 | 52.63 | 73.68 |
| "2Prop Ztest" | 71.05 | 19 | 68.42 | 78.95 |

**SLO #1 - Graphs and Charts**

**Results:** The final exam included a question asking students to compute the five number summary and create a box plot (aka box and whisker plot) for a data set of 16 values that included one outlier. 15 of 19 students (79%) scored at least 70% on this question meaning the target was met.

The final exam included a question asking students to create a scatterplot (with appropriate scale and labels) for 9 data points. Of the 19 students, 11 (58%) successfully created the scatterplot. The target was missed by 12%.

**SLO #2 – Complete Hypothesis Test / Compute Confidence Interval and Make Real World Conclusions**

**Results:** The final exam included a question asking students to perform a linear regression hypothesis test. Only 10 of the 19 students (53%) earned at least a 70% for the question. However 14 of the 19 students (79%) earned at least a 50% for the problem. The target was missed but the threshold was met.

The final exam included a question asking students to perform a 2 sample Z proportion hypothesis test. The target was just barely missed as 68% of the students earned at least 70% for the question but the threshold was met.

**SLO #3 – Understand and Compute Statistical Measures**

**Results:** On the final exam, each student was asked to find the mean, mode, and standard deviation for a data set of 16 values that had two modes and one outlier. 19 of the 19 students (100%) were able to calculate the mean correctly. 12 of the 19 students (63%) correctly reported both modes. 16 of the 19 students (84%) correctly computed the sample standard deviation and reported it to an appropriate number of decimal places.

**Spring 2013**

Five questions from the Final Exam were analyzed from a pool of 62 students had their results included. They are tabulated as follows:

| Question Concept | Student Avg. Percentage | Percent ≥70% | Percent ≥ 50% | Weight (Brian) | Weight (Jonathan) |
|---|---|---|---|---|---|
| "Scatterplot" | 79.44 | 62.90 | 96.77 | 2 | 4 |
| "LinRegTest" | 57.88 | 38.71 | 61.29 | 10 | 6 |
| "2PropTest" | 73.52 | 72.58 | 87.10 | 10 | 6 |
| "5#, B&W" | 76.08 | 66.13 | 87.10 | 2 | 6 |
| "μ, Mode, σ" | 81.32 | 72.58 | 93.55 | 6 | 4 |

**Note:** Different weights were assigned to each problem by the two different teachers whose students' scores are summarized in the preceding table. This is illustrated in the last two columns of the table. It should be further noted that the different weights do not affect the percentages listed in the preceding three columns.

**SLO #1 - Graphs and Charts**

**Results:** The final exam included a question asking students to compute the five number summary and create a box plot (aka box and whisker plot) for a data set of 16 values that

included one outlier. 66% of the students scored at least 70% on this question meaning the target was just missed but the threshold was met.

The final exam included a question asking students to create a scatterplot (with appropriate scale and labels) for 9 data points. 63% successfully created the scatterplot. Again, the target was just missed.

**SLO #2 – Complete Hypothesis Test / Compute Confidence Interval and Make Real World Conclusions**

**Results:** The final exam included a question asking students to perform a linear regression hypothesis test. 61% of the students earned at least a 70% for the question. This target was missed by 9%.

The final exam included a question asking students to perform a 2 sample Z proportion hypothesis test. The target was met with 73% of the students earned at least 70% for the question.

**SLO #3 – Understand and Compute Statistical Measures**

**Results:** On the final exam, each student was asked to find the mean, mode, and standard deviation for a data set. The target was exceeded with 94% of the students able to correctly calculate the values.

**Conclusions**

The results of these assessments show that students are fairly consistently achieving the target learning outcomes of "Understand and Compute Statistical Measures". This is understandable as they are learning outcomes that are easier to achieve. The "Graphs and Charts" learning outcome target was also usually achieved, showing that students are generally able to create visual displays of data. For the hypothesis test and confidence interval learning outcome, the results were mixed. The 2 Prop Z test results hovered within 10% of the target. The Correlation Test / Linear Regression T Test target was not met in any of the semesters. This could be because it is one of the last concepts covered in the course and student may not have fully mastered it by the final or instructors may have had to hurry through the concept because the end of the semester was approaching.

**Plans for Improvement**

As illustrated by two of the three target learning outcomes being met, much good work is being done. However, the third learning outcome needs attention. Collaboration will take place among faculty on how to improve the performance of students on linear regression (correlation) tests, including pacing of the semester to ensure that enough time is spent on this topic. In addition, adoption of a different textbook with more and/or earlier emphasis on linear regression will be discussed.

**Cover Information for Math 1050 (College Algebra)**

- GE Outcome being assessed: #4 - Students can reason quantitatively in a variety of contexts.
- Assessment Team Members: Cindy Alder, Kari Arnoldsen, Daniel Balls, Jonathan Bodrero, Brian Hansen & Mel Jacobsen
- Assessment Dates: August 2011-April 2013. Actual assessment occurred April 2014.

**Narrative Overview**

The Mathematics Department conducted a longitudinal assessment of the program and GE Outcome #4 during the academic years 2011-2013. A common department final exam was given to all Math 1050 students. A random sampling of department final exams were collected for fall 2011, spring 2012, fall 2012 and spring 2013. Four to six embedded questions from the Final were analyzed on the following topics: systems of equations, polynomials, data graphs, linear programming, the concept of a function, function model application, and investment rates. A random sampling of students had their results included.

**Introduction**

The following Student Learning Outcomes were identified and activated for assessment.

- Students will be able to apply computational skills to a variety of contexts.
- Students will be able to understand and apply mathematics in other disciplines.
- Students will be able to understand the notion of "function" and how"function" models real-world quantities.

**Materials and Methods**

The Mathematics Department administered a common final exam to all students enrolled in Math 1050, College Algebra. The final exam included four to six embedded questions designed to assess proficiency in the following areas: systems of equations, polynomials, data graphs, linear programming, the concept of a function, function model application, and investment rates.

A sampling of final exams were examined to determine student results.

The Key Performance Indicator for each SLO was a particular skill or group of skills included in questions on the final exams as outlined below. The target for each KPI assessed was set at 70% of the students in the class will score at least 70% or higher on selected problems from the exam questions.

| | |
|---|---|
| 1. Students will be able to apply computational skills to a variety of contexts. | Through embedded questions on chapter/midterm and/or final exams students will demonstrate SLO. |
| 2. Students will be able to understand and apply mathematics in other disciplines. | Follow students to the end of Calculus I (Math 1210, identify a sample of those who have taken our Math 1050 Course and assess their success in Calculus. |
| 3. Students will be able to understand the notion of "function" and how "function" models real-world quantities. | Through embedded questions on chapter/midterm and/or final exams students will demonstrate SLO. |

**Results**

**Fall 2011**

Data for fall Semester 2011 was all summarized in TracDat. As the total number of students was not indicated in TracDat, it is estimated that 200 students took the final exam (assuming an average of 25 students in 8 sections). As these were multiple choice problems having the same weight, we report only the proportion of correct responses among all students.

| | |
|---|---|
| System of Equations: | 90% |
| Polynomial: | 39% |
| Data Graph: | 64% |
| Linear Programming: | 52% |
| Concept of a Function: | 7% |

The target was only met for Systems of Equations and fell short for Polynomial, Data Graphs, and Linear Programming. The majority of the students completely missed the problem relating to the concept of a function.

**Spring 2012**

Four questions from the Final Exam were analyzed on the following topics: solving systems of equations, working with a polynomial function, using a data graph, and a solving a linear programming problem. Results from 106 students were analyzed.
As these were multiple choice problems having the same weight, we report only the proportion of correct responses among the 106 students (all 106 answered each of the questions):

| | |
|---|---|
| Systems of Equations: | 89.62% |
| Polynomial Function: | 39.62% |
| Data Graph: | 68.87% |
| Linear Programming: | 54.72% |

Similar to the previous semester, the target was only met for Systems of Equations and fell short for Polynomial Functions, Data Graphs, and Linear Programming.

**Fall 2012**

Five questions from the Final Exam were analyzed on the following topics: solving a 3x3 system of equations, working with a polynomial function, solving a linear programming problem, applying a function model, and solving an investment rate application problem. Results from 31 students were analyzed. As these were multiple choice problems having the same weight, we report only the proportion of correct responses among the 31 students (all 31 answered each of the questions):

| | |
|---|---|
| 3x3 System of Equations: | 51.61% |
| Polynomial Function: | 32.26% |
| Linear Programming: | 54.84% |
| Function Model Application: | 74.19% |
| Investment Rates: | 51.61% |

This semester, the target was only met for Function Model Application and fell short for 3x3 System of Equations, Polynomial Functions, and Linear Programming.

**Spring 2013**

Five questions from the Final Exam were analyzed on the following topics: solving a 3x3 system of equations, working with a polynomial function, solving a linear programming problem, applying a function model, and solving an investment rate application problem. Results from 21 students were analyzed. As these were multiple choice problems having the same weight, we report only the proportion of correct responses among the 21 students (all 21 answered each of the questions):

| | |
|---|---|
| 3x3 System of Equations: | 47.62% |
| Polynomial Function: | 33.33% |
| Linear Programming: | 61.90% |
| Function Model Application: | 57.14% |
| Investment Rates: | 52.38% |

This semester, the target was not met on any of the embedded questions.

**Conclusions**

The results of this assessment indicate that Math 1050 students, in general, seem to do well solving systems of equations but struggle with 3x3 systems of equations. The weakest concept

for students appears to be polynomial functions. This could be because polynomial functions are a broad topic and the assessment of this topic was not consistent from semester to semester.

**Plans for Improvement**

Collaboration among Math 1050 teachers will take place to discuss teaching methods for improvement, the relevance of selected embedded questions on the final exams, and the effectiveness of assessment through the use of a common department final.

Discussion topics may include the following:

- students not just blindly using formulas, but thinking through a problem
- finding ways to incorporate more practice for students
- determining the key concepts related to polynomials functions and consistently assessing those concepts from semester to semester
- finding ways to help students understand the notion of "function" and how "function" models real-world quantities

## Composition Assessment 2011 – 2012

**Cover Information**

- GE Outcome being assessed: #2; Write clearly, informatively, and persuasively.
- Assessment Team Members: Melanie Jenkins, Gregory Wright, Jeff Carney, David Allred, Rachel Keller.
- Assessment Dates: August 2011-April 2012. Actual reading occurred May 2012.

**Narrative Overview**

The English Department conducted a longitudinal assessment of the program and GE Outcome #2 during the academic year 2011-2012. Papers were collected from 1010 students the first week of class fall semester. Final papers were collected from 2010 students spring semester 2012. Papers were matched, by name, and then randomly selected for assessment. A committee of 5 read the essays using a rubric designed by the state writing task force.

Overall, scores improved from an average 6.5 in English 1010 to an average 8.0 at the end of 2010. We determined that a rating of 7.5 or above corresponds with GE outcome, "write effectively." 80% of 2010 papers scored 7.5 or higher on the assessment.

**Introduction**

The following Student Learning Outcomes were identified and activated for assessment.

- Students will be able to construct an essay using conventions of Standard American English.
- Students will be able to construct an essay with a clear organizational pattern.
- Students will be able to effectively document outside sources.
- Students will be able to examine a topic from multiple perspectives and/or defend a position.
- Students will be able to integrate their own ideas with those of others.
- Student selects a perspective from which to argue his/her point.

This study replicates a study that we did statewide a few years ago. We used the same rubric because we already had data that corresponded to that rubric. These SLO's were chosen because they could most easily be assessed with that particular rubric, with the exception of documenting outside sources. We also chose them because, for the most part, they represent the focus and expected outcomes of English 1010/English 2010 as a two-semester course.

**Materials and Methods**

In the fall of 2011, the English Department collected essays from every on-campus English 1010 student. The essay was assigned the first week of class, the students had one week to complete the assignment, every student used the same prompt (prompt attached).

Spring semester 2012, final research papers were collected from every student enrolled in English 2010. Those papers were matched, by name, to the 1010 papers collected the previous semester. Only those student who completed 1010 in the fall and 2010 the following spring were included in the assessment.

All papers were rated using the same rubric, a rubric that focuses on 2010 writing skills (rubric attached) by 5 members of the English Department. Names were removed, two different readers read every essay, and any essay receiving scores that varied by more than one point were read by a third reader.

Scores were matched by name: each student has a 1010 score, a 2010 score, and a +/- differential score. Those scores were averaged for the entire cohort to obtain a single 1010, 2010, and differential score. Those scores were also figured for each item on the rubric.

The Key Performance Indicator for each SLO was a particular skill or group of skills scored on the rubric as outlined below. The target for each KPI assessed was set at 80%.

| | |
|---|---|
| 1. Students will be able to construct an essay using conventions of Standard American English. | Style and Sentence Structure<br>Surface Mechanics |
| 2. Students will be able to construct an essay with a clear organizational pattern. | Organization |
| 3. Students will be able to effectively document outside sources. | |
| 4. Students will be able to examine a topic from multiple perspectives and/or defend a position. | Multiple/oppositional perspectives are present |
| 5. Students will be able to integrate their own ideas with those of others | Interpretation<br>Quality of Generalizations<br>Coherence and Consistency |
| 6. Student selects a perspective from which to argue his/her point. | Purpose/Thesis<br>Focus |

**Results**

Comprehensive results are attached. The following table summarizes those results.

| SLO | KPI | Rubric Equivalent | Proficiency Score | Percent of students who received proficiency score | Analysis |
|---|---|---|---|---|---|
| 1. | Longitudinal Portfolio Review | Style and Sentence Structure | 5 | 82% | Target met |
| 1. | Longitudinal Portfolio Review | Surface Mechanics | 4.5 | 89% | Target met |
| 2. | Longitudinal Portfolio Review | Organization | 4 | 83% | Target met |
| 4. | Longitudinal Portfolio Review | Multiple / oppositional perspectives are present | 3 | 83% | Target met |
| 5. | Longitudinal Portfolio Review | Interpretation | 3.5 | 85% | Target met |
| 5. | Longitudinal Portfolio Review | Quality of Generalizations | 4 | 74% | Target not met, threshold met |
| 5. | Longitudinal Portfolio Review | Coherence and Consistency | 4 | 83% | Target met |
| 6. | Longitudinal Portfolio Review | Purpose/ Thesis | 4 | 89% | Target met |
| 6. | Longitudinal Portfolio Review | Focus | 5 | 81% | Target Met |

**Conclusions**

The results tell us what we already know: writing courses help students become better writers. The results also correlate with data we collected in 2004 that told us even though our students start low (in terms of ability and preparation), we are able (through individual attention, class size, and commitment to our students) to help them succeed with the objectives of the program. We also learn from the assessment that we need to improve our teaching of "quality of generalizations." The criteria states an essay that does this well uses generalizations particular to the essay and an essay that does not do this well uses unintegrated, common aphorisms.

**Plans for Improvement**

If we do this study again, we will revise the rubric and probably the set up. We like the idea of a longitudinal study for statistical reasons, but we realized during the reading of the essays that we were seeing only the students who persisted in writing courses the following semester. We feel like the numbers might not be representative of the entire group.

We revised the rubric so it better aligns with our course goals (revised rubric attached). We used the state rubric initially because we could use it for comparative data and a baseline. Next time, though, we will use a rubric that focuses more specifically on our course objectives. We may make additional changes to that rubric when we repeat the assessment.

We are discussing pedagogical options for improving the teaching of quality of generalizations.