Executive Summary
The “Quality Initiative” fulfills the Higher Learning Commission’s accreditation requirement of engaging in a sustained continual improvement endeavor during the accreditation period. NAU’s Quality Initiative project’s desired long-term impacts are to improve retention rates and strengthen the culture of continual improvement across all student success programs. To do so, we are systematically analyzing the impact of two student success programs on the academic success of our first year students to identify efficient and effective approaches to program design and assessment that will increase the engagement of NAU’s other student success programs in these efforts.

The Quality Initiative project includes the following three components (see page 7 for a timeline):
(1) Conduct an in-depth examination of the Peer Jacks Mentoring and Student Success Coaching programs,
(2) Develop a statistical model for retention that can assist us in determining to what extent each student success program effects student retention, and
(3) Document the most promising assessment processes, findings, and modeling techniques in order to develop a plan for formative and summative assessment that can be utilized by all of our student success programs.

This bi-annual report includes a progress report for the three components of the project and highlights that we are on schedule to successfully complete the project with three years of data (AY 2012-13, AY 2013-14, AY 2014-15) and provide a final report to the Higher Learning Commission by the end of the 2015-16 Academic Year (May 2016).

Progress Report:
Component 1: In-depth examination of two programs
The majority of this report is devoted to describing program design and assessment activities being conducted by the Peer Jacks Mentoring and Student Success Coaching programs. For each program we have provided the following:
- Program Description
- Populations Served
- Academic Performance Findings Using Propensity Score Analyses
- Reflections collected from program coordinators and directors about their program design and assessment efforts to inspire other student success programs to engage in these efforts.

Component 2: Development of Statistical Models for Retention
Through our work last year, we were able to define a model that identifies predictors of first- to second-year retention on the Flagstaff campus. We identified that while Core HS GPA is the best single predictor of GPA, many variables including several first-semester experiences have a direct effect on first-semester GPA (including test scores, deficiencies in math and English, and other factors such as engaging in Supplemental Instruction, Tutoring and Residential Learning Communities; for a full list of variables please see the March 12, 2015 Student Success Initiative Report). Most of these variables work through first-semester GPA to predict retention rather than have a direct effect on retention. In addition, we found that first-semester GPA is the best predictor of retention.
NAU’s Quality Initiative for the Higher Learning Commission

Our goal for the current academic year was to expand the use of Propensity Score Analyses. Propensity scores allow us to better understand the independent effect that each program has on “academic performance,” which we are defining as:

1. first year retention, which measures the rate at which students remain enrolled at NAU after their first year,
2. good academic standing, measured as first semester GPA and academic probation at the end of the first semester.

In order to evaluate the efficacy of these programs, it is critical to tease out the impact that these programs have on student success from the effect of other significant factors such as academic preparedness, student characteristics, and other first-year experiences. Propensity scores are a way of “matching” program participants to non-participants on a variety of characteristics. Through “matching,” we are attempting to separate a program’s impact on student retention from a variety of other possible confounding variables.

Our goal for the coming year is to continue to enhance our use of the Propensity Score Analysis by going beyond null-hypothesis significance testing to explore a variety of additional metrics that will enhance the interpretation of our results. These include effect sizes, confidence intervals, and changes in probabilities. The additional metrics will allow us to incorporate a new section into our Student Success Initiative Reporting that provides program-level recommendations and some overall recommendations related to increasing retention and student success.

Component 3: Documentation, Collaboration and Application to Other Programs

The selection of an Enrollment Management and Student Affairs (EMSA) program (Peer Jacks Mentoring) and an Academic Affairs program (Student Success Coaching) was designed to incorporate strong partnerships and collaborations across these institutional areas. EMSA Assessment Office and the Office of Curriculum, Learning Design and Academic Assessment (in Academic Affairs) have collaborated to conduct Propensity Score Analyses for all of the Student Success Programs, and to share findings and interpretations in annual Student Success Initiative Reports. In particular, the review of findings with program directors has assisted programs to consider both formative and summative assessment goals, and identify approaches to improve program design to enhance their goal achievement.

In addition, the offices have participated in discussions about how to increase the engagement of NAU’s other student success programs in systematic program design and assessment efforts. Some of the most promising approaches include the following:

- Focus assessment initiatives on using data and information to provide evidence on whether the program is achieving its goals.
- Strengthen responsibility for continual improvement within each program, yet ensure skills in data collection, analysis and reporting are developed through professional development work and/or through one-on-one consulting and guidance.
- Incorporate one-on-one consulting and guidance into annual reporting initiatives to build skills across programs in:
  - describing program activities and goals, and other aspects of program design,
  - collecting evidence for key indicators related to performance, and
  - tailoring reports to specific audiences within and outside the NAU community.
- Identify common challenges in program design and assessment across programs, then develop two or three work groups per year. Each group would focus on a specific challenge, and work strategically to make progress resolving their common challenge in a collaborative, supportive environment.
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Peer Jacks Mentoring

Program Description
Peer Jacks is a support program designed to assist first-year, out-of-state students transition to university life. Eligible students have the opportunity to participate in meaningful one-on-one peer mentoring and attend social events tailored to out-of-state students and their need to connect with other students with similar interests. The program helps students develop social networks, become familiar with campus resources and tools for monitoring academic success and progress, learn more about themselves, and deepen their commitment to obtaining a degree. Peer Jacks accomplishes this through the following intermediary (learning and developmental) outcomes:

- Sense of connectedness/community
- Successful transition to campus environment
- Knowledge of campus resources and processes
- Use of campus resources/Referral follow-up
- Purposeful academic monitoring/Self-guided learning
- Values exploration and development

Population Served
Peer Jacks focuses on new, domestic, out-of-state first year students, and mentors approximately 700 students annually. Occasionally, an international student participates in Peer Jacks.

<table>
<thead>
<tr>
<th></th>
<th>2012-13</th>
<th>2013-14</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total First-Time, Full-Time entering students</td>
<td>4,059</td>
<td>4,325</td>
</tr>
<tr>
<td>Participants in Peer Jacks</td>
<td>13.6% (n = 553)</td>
<td>14.6% (n = 631)</td>
</tr>
</tbody>
</table>

Academic Performance Findings Using Propensity Score Analyses:

Summary of Findings Comparing Peer Jack Students to Matched Non-participants:

<table>
<thead>
<tr>
<th>Outcomes</th>
<th>2012-13</th>
<th>2013-14</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retention from first to second year</td>
<td>3.4% higher, not statistically different, p = 0.20</td>
<td>8.1% higher, statistically different, p = 0.00</td>
</tr>
<tr>
<td>Average first-semester GPA</td>
<td>0.15 points higher, statistically different, p = 0.01</td>
<td>0.09 points higher, statistically different, p = 0.09</td>
</tr>
<tr>
<td>Academic probation at the end of the first semester</td>
<td>5.4% lower, statistically different, p = 0.05</td>
<td>comparable, not statistically different, p = 0.36</td>
</tr>
</tbody>
</table>

Reflections from Program Directors and Coordinators:
During this past year, the program design and assessment focus was on using assessment findings to refine and improve peer mentor preparation experiences because we have observed that time spent on the personal and professional development of peer mentors trickles down to participants.

Two specific assessment improvements informed Peer Jacks’ design of professional development experiences for peer mentors:
- more fully connecting assessments throughout the year (pre/post self-evaluations and pre/post observation of skill use)
- evaluating and integrating multiple streams of information in the assessment process:
  - Participant outcomes (GPA, probation, progress, etc.)
  - Mentor skill development measures
  - Mentee program evaluation data (needs, perceived benefits, etc.)
  - Demographic composition of participants and out-of-state population over multiple years

Peer Jacks has made several purposeful programmatic changes for peer mentors based on our findings. Those include:
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- aligning the mentor training course to mentor skills (or lack of skills)
- providing more structure to the GA role, resulting in more consistent guidance for mentors
- offering purposeful alternatives to meeting in the Peer Jacks areas to better connect mentees with resources
- ensuring mentors have access to effective tools to use with mentees

Peer Mentor Programmatic Change Highlights

Goal Setting

- Data on goal setting from both mentors and mentees has informed mentoring training and resulted in staff providing greater access to goal-setting tools for mentors to use one-on-one with mentees.

Program Structure

- Entrée to Resources: Staff’s review of the data helped identify a need for mentor/mentee meetings to occur outside of the physical Peer Jacks area, in order to expose mentees to the physical location of resources and also to help mentees make connections.
- Supervision Structure: Peer Jacks took a closer look at structure of the Graduate Assistant (GA) role in addressing mentee needs and has developed a more intentional plan for interactions with mentors and has revised the way they monitor and nurture mentor development. A GA supervision curriculum was developed (similar to the Program Coordinator’s curriculum) that strengthens the interactions with individual mentors by focusing on timely information, purposeful questioning, and increased understanding of mentors’ comfort level with topics. Additional training for GAs is an essential part of implementing the curriculum.
- Next year, a tool will be used to help mentors regularly identify mentees’ concerns in various areas (academic, wellness/health, social, etc.) in order to more intentionally discuss possible resources, problem solve, and otherwise set goals and plan courses of action. As well as adding structure to all meetings, this process will help tailor the content of mentor/mentee interactions to meet individual mentee needs.

Mentor Skill Development

- A communication rubric was used to evaluate mentors’ skills and provided them with a clearer understanding of expectations. The rubric outlines observable behaviors expected for three skill levels: novice, competence and mastery. Exposing mentors to the rubric in the mentor course, using the rubrics to score role playing in mentor training, and scoring mentors on skills in supervisor observations have given mentors tangible information about how to gauge and improve their communication skills that are essential to being an effective mentor.
- The mentor pre-post analysis measuring the mentors’ abilities to initiate conversations helped identify areas where the mentor training course and supervision could be strengthened. The following are topics of conversation in which mentors are less comfortable from the beginning and exhibit low gains throughout the year:
  - Consequences of poor academic performance
  - Challenging mentee’s unrealistic ideas
  - Discussing health related issues

  Working to enhance mentor comfort and proficiency with having meaningful conversation with mentees on these topics is a priority for the mentor training course this spring.
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Student Success Coaching (SSC)

Description of Program
The mission of the Student Success Coaching (SSC) program is to establish a foundation for success in college and life. The program is designed to empower each student through a voluntary coaching relationship with an NAU employee or retiree trained in life-coaching tools and resources. The program equips students to manage their transition to college, access the support they need when they need it, and explore academic and career opportunities. Student Success Coaching accomplishes this through the following intermediary (learning and developmental) outcomes:

- Connect them with key academic and campus resources
- Identify how they are spending their time and energy
- Develop strategies on how to work with their professors
- Learn to successfully adjust to their new environment
- Clarify their goals
- Discover how to get involved in clubs and organizations

Population Served
SSC targets first-year students who would not otherwise be served in order to increase college retention and graduation rates.

<table>
<thead>
<tr>
<th></th>
<th>2012-13</th>
<th>2013-14</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total First-Time, Full-Time entering students</td>
<td>4,059</td>
<td>4,325</td>
</tr>
<tr>
<td>Participants in Student Success Coaching</td>
<td>2.5% (n = 100)</td>
<td>2.8% (n = 123)</td>
</tr>
</tbody>
</table>

Academic Performance Findings Using Propensity Score Analyses

Summary of Findings Comparing Student Success Coaching Students to Matched Non-participants:

<table>
<thead>
<tr>
<th>Outcomes</th>
<th>2012-13</th>
<th>2013-14</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retention from first to second year</td>
<td>7.0% higher</td>
<td>8.1% higher</td>
</tr>
<tr>
<td></td>
<td>statistically different, ( p = 0.04 )</td>
<td>not statistically different, ( p = 0.13 )</td>
</tr>
<tr>
<td>Average first-semester GPA</td>
<td>0.05 points lower</td>
<td>0.27 points higher</td>
</tr>
<tr>
<td></td>
<td>not statistically different, ( p = 0.75 )</td>
<td>statistically different, ( p = 0.05 )</td>
</tr>
<tr>
<td>Academic probation at the end of the first semester</td>
<td>comparable</td>
<td>6.4% lower</td>
</tr>
<tr>
<td></td>
<td>not statistically different, ( p = .36 )</td>
<td>not statistically different, ( p = 0.17 )</td>
</tr>
</tbody>
</table>

Reflections from Program Directors and Coordinators:

In Fall of 2014, the Dean of University College charged Student Success Coaching (SSC) with finding efficiencies in their current budget to increase capacity of the program in an effort to serve more students. To address this issue, SSC assessed how coaches spent their time and examined the perceived value of the tools coaches used with their students. A range of data was collected and analyzed through:

- A re-designed the Student Success Coaching database
- Gathering and examining Weekly Coaches Report data
- Conducting two focus groups of Student Success Coaches
  - “3D Tools Student Workbook” Focus Group
  - How I Spend My Time in the SSC Program
- Conducting two Coach Surveys
  - Fall 2014 Coach Survey
  - Spring 2015 How I Spend My Time Survey

By analyzing and interpreting a range of quantitative and qualitative assessment data about how coaches spent their time, SSC was able to completely restructure the coach stipend pay model (being paid a flat rate...
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of $375 per semester per student, regardless of how many meetings were conducted) to a new pay-by-meet model (see below), wherein coaches would be paid between $25.00 and $29.00 per meeting per student. The savings from this new model is sufficient to hire and certify 10 additional coaches and serve 25% more students.

“Pay-by-Meet” Model

Productivity assumptions per student

<table>
<thead>
<tr>
<th>Activities</th>
<th>Time</th>
<th>Payment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial Outreach*</td>
<td>60 mins</td>
<td>$25.00</td>
</tr>
<tr>
<td>Meeting Preparation</td>
<td></td>
<td>$27.00</td>
</tr>
<tr>
<td>Meeting with student</td>
<td></td>
<td>$29.00</td>
</tr>
<tr>
<td>Weekly Coaches Report^</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-Select Out*</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Activities</th>
<th>Time</th>
<th>Payment</th>
</tr>
</thead>
<tbody>
<tr>
<td>No call/show student Report^</td>
<td>15 mins</td>
<td>$6.25</td>
</tr>
<tr>
<td>Cancelled Meeting (student or coach) Report</td>
<td>10 minutes</td>
<td>$0.00</td>
</tr>
<tr>
<td>Self-Select Out (SSO) Report</td>
<td>10 minutes</td>
<td>$0.00</td>
</tr>
<tr>
<td>Initial Outreach Report</td>
<td>10 minutes</td>
<td>$0.00</td>
</tr>
</tbody>
</table>

*Activities occur once per student

^Activities subject to 40% reduction if completed after deadline

Based on these findings, the following recommendations were made to the Dean of the University College for implementation in Fall 2015:

- Re-allocate existing funds to increase the capacity of the SSC program by hiring and certifying 10 additional coaches to increase the number of students served by 25%. The program currently has a waitlist of students seeking to obtain coaches, and has received invitations to expand its coaching endeavors to sophomores, transfer students, and students majoring in degree programs of the College of Engineering, Forestry, and Natural Sciences.

- Reinforce student/coach weekly meetings by paying coaches only when they meet with students.

- Incentivize coach retention (data indicated that length of coaching experience improves coaching).

In addition, conducting focus groups provided a forum wherein coaches shared ideas, improvements, challenges and changes, and direct engagement in making intentional changes to the program. We expect to continue providing such forums in the future.