UAA Administrative Review Questionnaire – Spring 2020

1) What are the core functions of your unit that are funded in Fund 1 (i.e. Fund 104110)? (Bullet point list is preferred. No more than one-page, please.)

Teaching and Learning

- ANSEP Middle School Academy
  - STEM Ready
  - STEM Career Exploration
- ANSEP Acceleration Academy
  - Acceleration Ready
  - Acceleration Academy (Anchorage)
  - Acceleration Academy (Mat-Su)
  - Acceleration Academy (Summer)
- ANSEP Summer Bridge
- ANSEP University Success
- ANSEP Graduate Success
- Our growth and success is fueled by a continuous improvement process with qualitative and quantitative research analytics at its core.

Research, Scholarship, and Creative Activity

- Systemic education reform aimed at dramatically improving quality and reducing cost for the state and families.
- Our growth and success is fueled by a continuous improvement process with qualitative and quantitative research analytics at its core.

Student Success

- ANSEP students are going from eighth grade to a STEM BS degree in six years or less.
- ANSEP rural students are arriving academically advanced and socially ready for college.
- Cost of remediation for these students is eliminated.
- Social cost of failure is reduced.

UAA Community

- Increase the cultural, social and intellectual diversity of students at UAA.
- Strengthen donor ties to ANSEP and support an increasingly diverse funding stream from dozens of grants and contracts.
- We are leaders in education transformation.
- The ANSEP 'Grow Our Own PhD' component is providing Alaska Native Faculty to UA.

Public Square

- Develop partnerships that support community engagement. ANSEP currently has over 100 formal partnerships with philanthropic and corporate organizations, local, state and federal agencies and school districts across the state.
- Partner with school districts to improve educational outcomes and performance metrics.
- Provide Alaska Native STEM graduates for high-demand workforce needs in Alaska.

2) If one or more of these functions was reduced or discontinued, what would be the impact on: (Not all elements may be relevant for your unit. Only address relevant items.)
   a. More students persisting and completing educational goals?
   b. Supporting overall student, faculty and staff success in meeting UAA's mission?
   c. Impacts to UAA's reputation, and ability to attract and retain students and/or external support?

ANSEP has developed a sequential education model that provides a continuous string of components beginning with students in fifth grade (Middle School Academy) and continues on through high school (Acceleration Academy and Summer Bridge components), into various undergraduate and graduate degree programs (University and Graduate Success) through to the PhD (Grow Our Own PhD). We have arrived at this model after 25 years of research and with the knowledge that a fragmented approach which focuses on one academic level is not adequate to deal with the scope of the problem and ultimately falls short. This year ANSEP will engage over 600 new middle school students in residential Middle School Academies on our campus, 300 high school students and approximately 250 university students. There are far more high school age students who want to participate but the current lack of funding precludes it.

ANSEP student engagement and enrollment figures have increased over the past four years across all ANSEP components due to base budget match investments (fund 1) by UAA which are stipulated in grant agreements. The grants require fund 1 increases intended to institutionalize the external investment.

The funds have allowed ANSEP to secure a number of additional large external grants that include match requirements we are able to meet because of the investments. A reduction in ANSEP fund 1 support and subsequent diminishment in one or more of ANSEP's core functions will negatively impact ANSEP student enrollment and persistence, reduce external support (including revenues to both ANSEP and UAA), and diminish UAA's reputation.

From a financial perspective, the immediate impact resulting from a reduction in ANSEP fund 1 support would be the loss of multiple ANSEP grants. Over the past two years, ANSEP secured large multi-year grants from the Rasmuson Foundation, National Fish and Wildlife Foundation, and the Alfred P. Sloan Foundation. For every $1 we lose in fund 1 support from UAA, ANSEP will lose an additional $1.50 in external funding or $2.50 total. Because we spend much of our funding here at the university, these revenue losses will extend to UAA Housing, UAA Dining and Conference Services, UAA College of Arts and Sciences, UAA College of Engineering, and UAA Community & Technical College. This year ANSEP is on track to pay nearly $2 million to the referenced UAA entities in housing fees, catering fees, lease fees, faculty costs, and student tuition and fees.

From a student perspective, a reduction in ANSEP fund 1 support, and elimination of the related external funding, would reduce Acceleration Academy student enrollment. This will effectively kill Alaska's best shot at effecting systemic change in K12, and in reducing the amount of remediation we do here at the university, and in improving the time to degree for our students. ANSEP Middle School Academy will also be negatively impacted because the power of ANSEP resides in the sequential education model. One component feeds into the next. Older students help and mentor

younger students. We would expect that the school districts would stop paying for their students to come to the Middle School components without a follow on component in the sequence. ANSEP University students will leave because of the loss of scholarship funding provided by the matching grants.

All of this will have a negative impact on UAA's mission and strategic priorities, and a negative effect on UAA's reputation in the community, particularly among major funders and donors.

3) Identify measures and targets used to monitor the impact of functions on each of the above (not all elements may be relevant for your unit, only address relevant items).

Our growth and success is fueled by a continuous improvement process with qualitative and quantitative research analytics at its core. We track data relating to grades, academic progress toward degree, summer internship performance, and participation in our various programmatic components. This information informs programmatic decisions and allows us to assess the cost effectiveness of everything we do.

For our Middle School Academy components, our principal measurable objective is the rate at which our students successfully complete Algebra 1 by eighth grade graduation. The Urban Institute found an algebra 1 success rate among these students above 70%. The national average is 26%.

For our Acceleration Academy components, we use two metrics as measures of success: credit completion rates and percentage of students who advance one full level in math or science each summer.

Since 2015, Acceleration Academy students have completed 5,435 university credits at an 87% credit completion rate. Among our Anchorage and Mat Su Acceleration students, our 2019 cohort achieved the rate of 79% advancing one level or more in math or science.

For Summer Bridge our principal measurable objective is the rate at which our Summer Bridge students successfully transition to a B.S. degree program at the University of Alaska. Our 2019 cohort exceeded our historical average with 94% of the cohort successfully transitioning to a science or engineering B.S. degree program at the University of Alaska.

4) What improvements have been achieved over the last five years?

- In 2019, we completed the development of a new ANSEP Analytics tool to track the academic, social, and professional development of each ANSEP student. We track data relating to grades, academic progress toward degree, summer internship performance, and participation in our various programmatic components.
- In 2019, we brought online the Acceleration Building (formerly the University Lake Annex Building). ANSEP spent $2.5 million to remodel the building, which now houses the ANSEP Acceleration Academy component. This investment is aimed at demonstrating the efficacy of the Acceleration approach so that we can effect a systemic change in the system.

- Beginning summer 2018, ANSEP Summer Bridge students no longer needed to take summer math or science courses. Prior to 2018, the courses were needed to ensure that ANSEP students were college ready. This achievement is additional evidence that the work we are doing in Acceleration Academy is paying off.
- Over the past five years, ANSEP Middle School Academy components have grown significantly – from 540 students in 2015, to 769 students in 2020.
- ANSEP Acceleration Academy components student enrollment has also grown over the past several years – from 115 students in 2015, to 160 students in 2019.

5) What efforts have your unit made to improve efficiencies and reduce costs? What was the result?
   - ANSEP has evolved rapidly in the last 5 years with the expansion of Middle School Academy and Acceleration Academy. We operate using a continuous improvement model and focus on enhancing those activities that generate the most value for our students and the state, then quickly eliminate any waste activities. The work we are doing is moving students from eighth grade to a BS degree in six years or less. This saves the state at least $25,000 per student. So at scale, 100 students saves the state $2.5 million and 1,000 students saves $25 million. Families save $50,000 when their student graduates in 6 years. It is important to note that within the Anchorage School District, the cost per student-year is approximately $14,000 per student when combining funds from the base student allocation and local tax revenue. The Acceleration Academy operates for approximately $7,000 per student-year. Additionally, the UA Transcript Study of 15,000 students for the period of 2006 through 2015 found that 60% of students that enroll in the University of Alaska required a remedial course and 70% of those had taken a course in high school that should have meant they did not need remediation. Further, the students on the average were on the honor roll. ANSEP Acceleration Academy students do not need remediation.

6) List and briefly describe any current or proposed Board of Regents Policy, State or Federal mandates, or laws that require the continuation of your core function(s).

Not applicable.

7) Potential cuts: Please describe any function reductions or eliminations that are feasible without significantly affecting UAA's mission fulfillment or its compliance mandates? Are any functions within your unit are duplicated elsewhere at UAA? Is there an opportunity for efficiency to be created by partnering or combining functions? Please describe the opportunities you identify within your unit and include the approximate dollar values and savings that would result.

ANSEP's core functions are not performed anywhere else at UAA. The thrust of our work is to improve the quality of education while reducing costs for the state and families. The ANSEP sequential model serves as an example for the nation. ANSEP's transformational potential has been recognized by President of the United States George W. Bush, the National Science Foundation, the National Academies of Science, Engineering and Medicine, the Harvard Kennedy School, U.S. Department of Interior, U.S. Department of Energy, the National Action Council for Minorities in Engineering (NACME), the Alaska Federation of Natives (AFN), the Alaska State Legislature, and our external partner organizations through annual funding as well as funding for the ANSEP Building and the Dr. Herbert P. Schroeder endowed chair for ANSEP. External partner organizations have provided more than $75 million to support our work since 1995. We are determined to transform the system so that ANSEP opportunities are available for every student in the state, regardless of ethnicity.