



ANSEP
ALASKA
NATIVE
SCIENCE &
ENGINEERING
PROGRAM

ANSEP students go from 8th grade to a
STEM BS degree in 5 years.

ANSEP.net

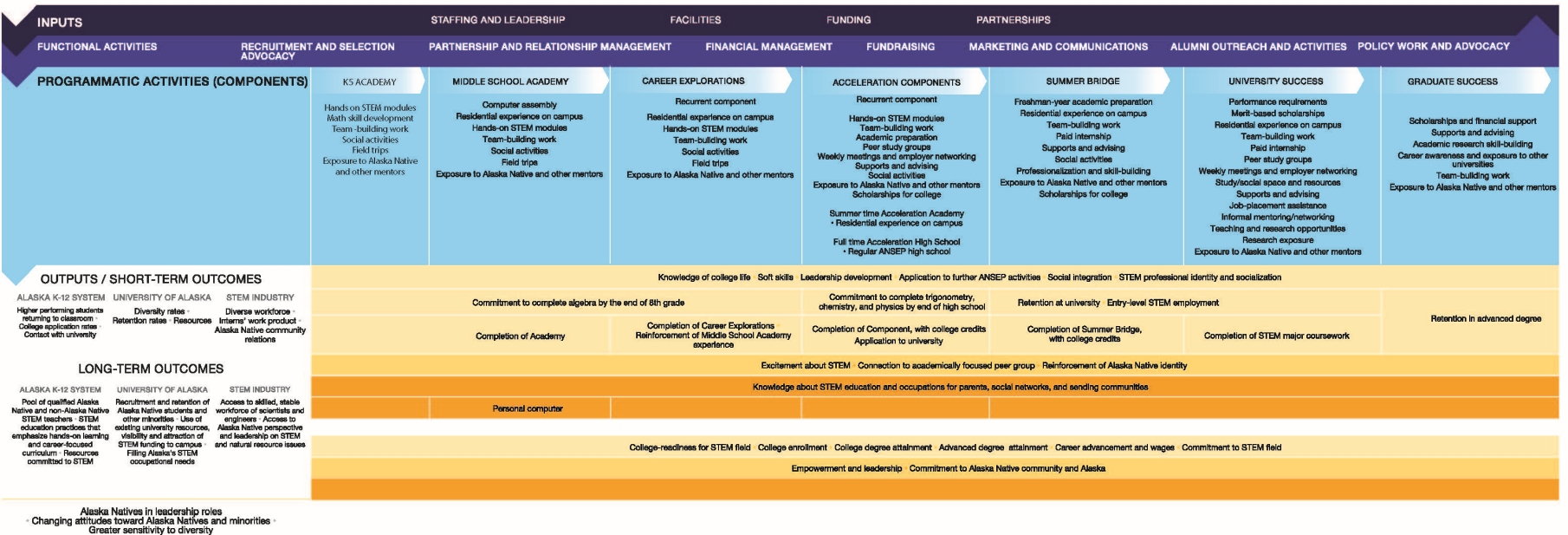




ALASKA NATIVE SCIENCE & ENGINEERING PROGRAM* (ANSEP) LOGIC MODEL

ASSESSING THE NEED

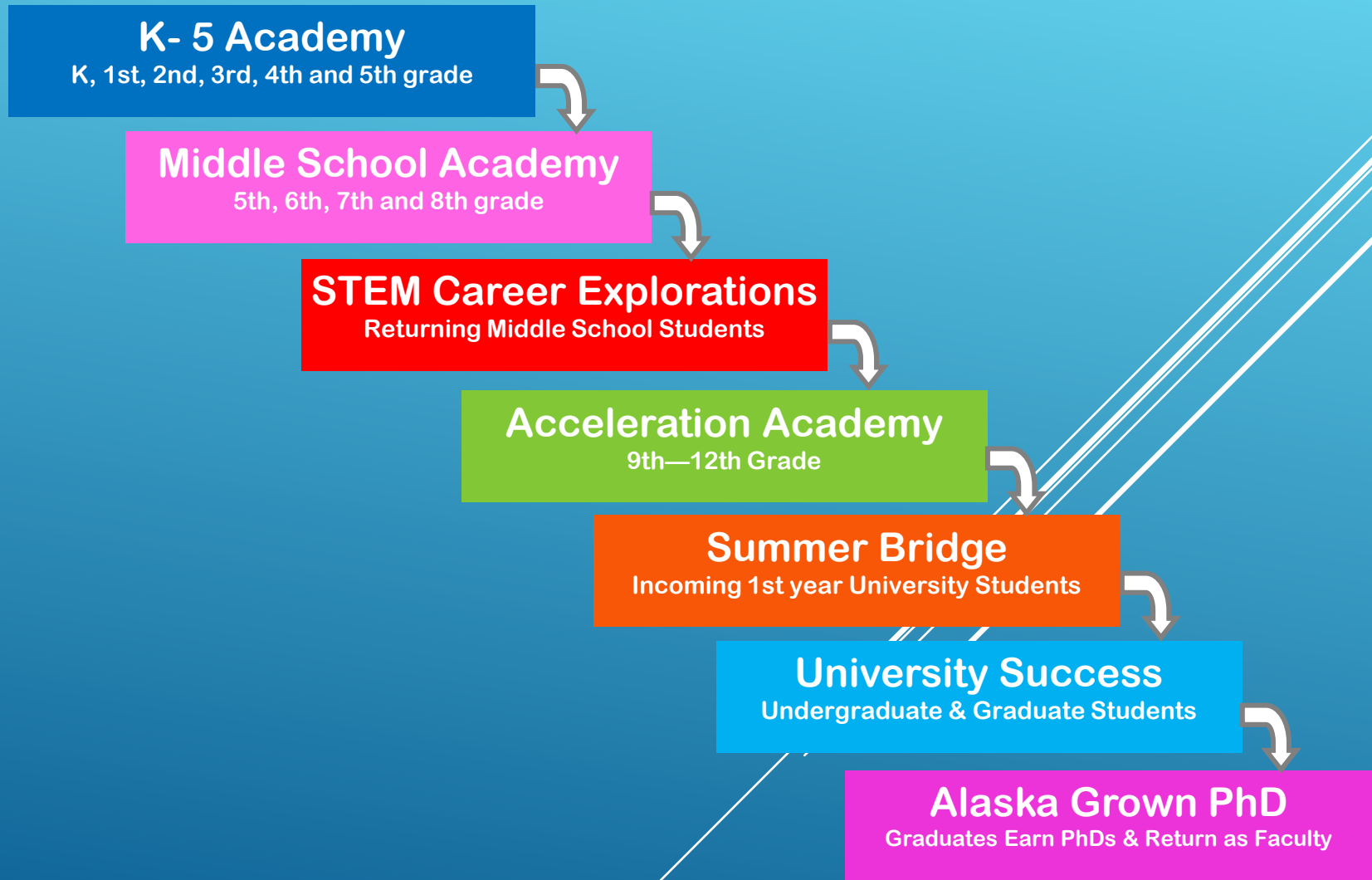
INSTITUTIONAL			STUDENTS	CONTEXT
ALASKA K-12 SYSTEM Teachers Curriculum Other resources	UNIVERSITY OF ALASKA Faculty and staff Student social and academic supports Research resources State STEM career preparation Student diversity and climate for Alaska Natives	STEM INDUSTRY STEM workforce Interaction with Alaska Native communities Staff diversity and climate for Alaska Natives	Preparation for and awareness of STEM educational and career pathways Motivation and commitment to STEM Family and community resources	Economic conditions and labor market - Policy and budget climate (K-12 system, University system, and federal, state, and local/village) - Historical and social conditions for Alaska Natives



*Adapted from Urban Institute (2015). Evaluation of the Alaska Native Science & Engineering Program (ANSEP), Research Report, Urban Institute, January 26, 2015.



ANSEP Components





ANSEP Components

K- 5 Academy

K, 1st, 2nd, 3rd, 4th and 5th grade





ANSEP Components

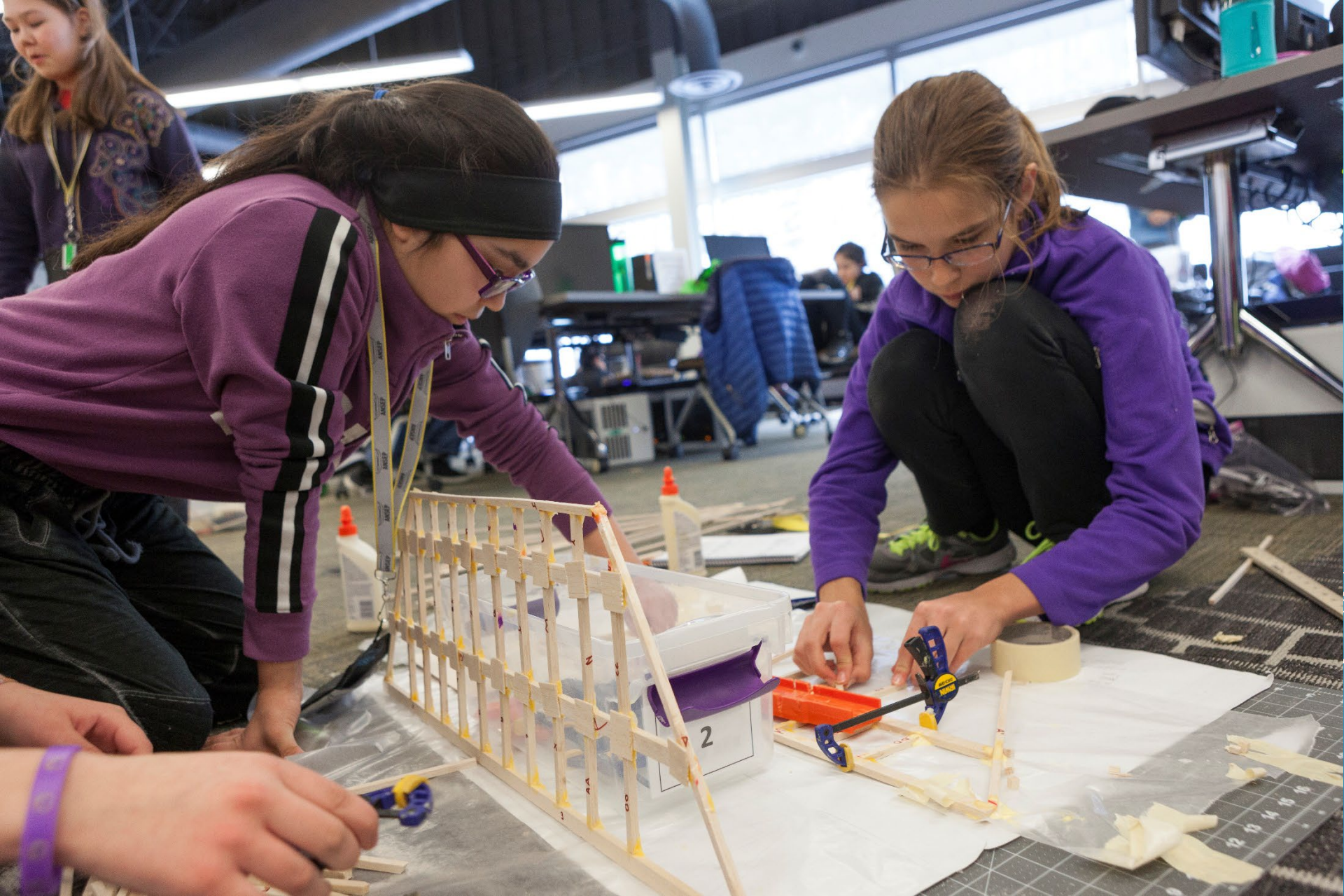
Middle School Academy
5th, 6th, 7th and 8th grade













ANSEP Components

STEM Career Explorations
Returning Middle School Students

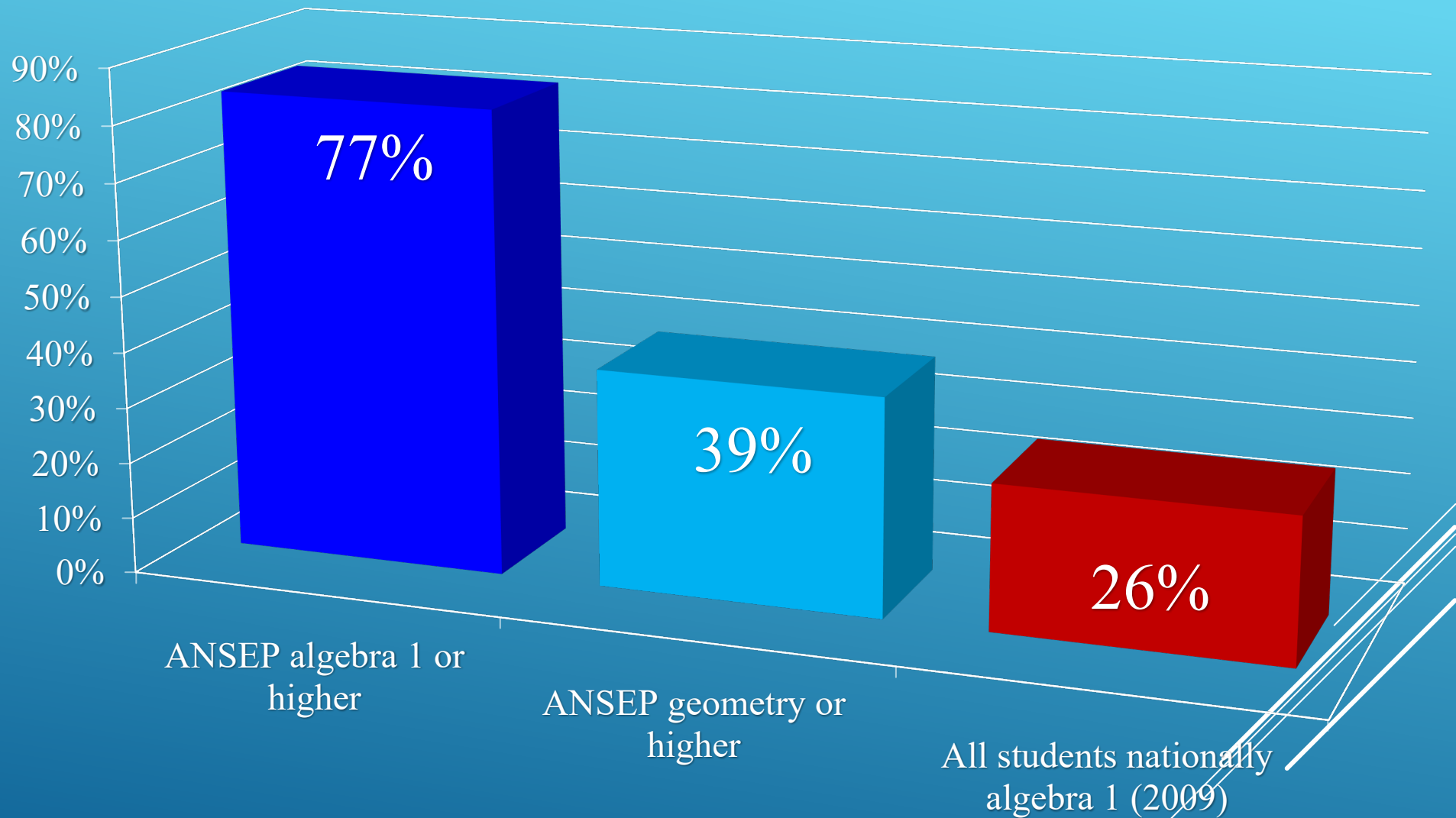








ANSEP 8th Grade Math Completion



ANSEP Components

Acceleration Academy
9th—12th Grade















ANSEP Components

Summer Bridge
Incoming 1st year University Students









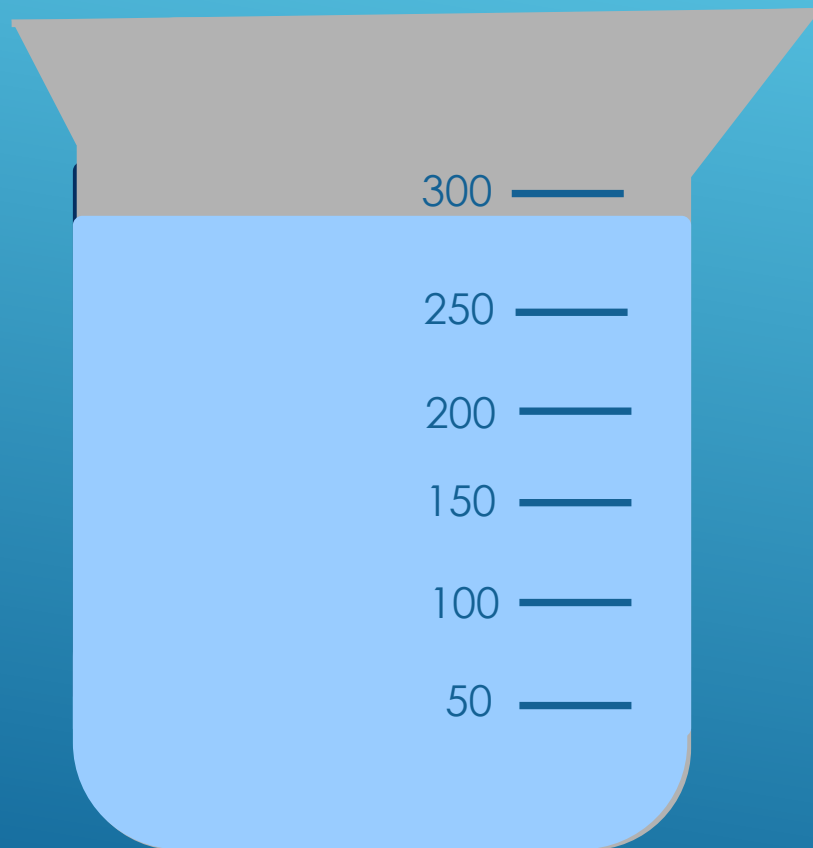






ANSEP Summer Bridge

*Building a Strong Foundation for
University and Professional Achievement*



Participants 1998 - 2014

95%

of students successfully
transition to science or
engineering BS degree
programs



ANSEP Components

University Success
Undergraduate & Graduate Students



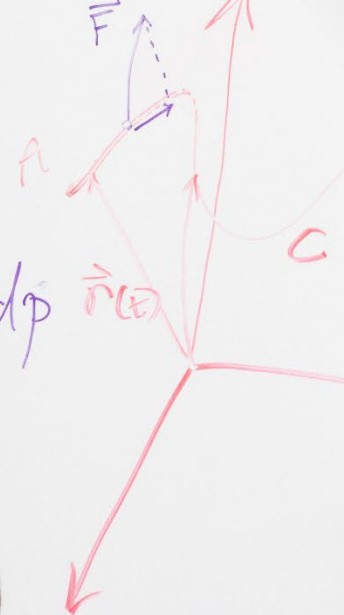


$$\langle Q, P \rangle \quad \vec{r}'(t) dt$$

$$\int_C \vec{F} \cdot d\vec{r} = \int_{t=a}^b \vec{F}(\vec{r}(t)) \cdot \vec{r}'(t) dt = \int \vec{F} \cdot \vec{T} dp$$

$$= Q_x - P_y$$

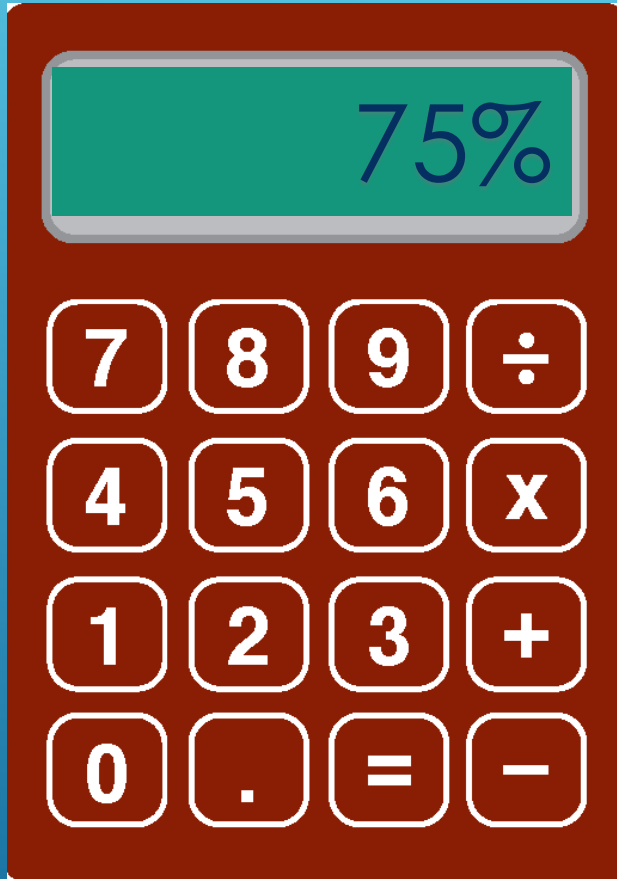
$$= \int Q_x + P_y$$







ANSEP University Success



Percentage of ANSEP students who have graduated or are currently enrolled

ANSEP Components

Grow Our Own PhD
Graduates Earn PhDs & Return as Faculty







ANSEP

ACCELERATION ACADEMY

Founding Partner: University of

Approximately 20 rising high school seniors will advance through a rigorous week of accelerated summer academic. While there, students enroll in two college-level courses.

- Intro to Engineering
- Intro to Biology
- Intro to Geology
- Chemistry
- Physics
- College Algebra
- Trigonometry
- Calculus I, II and III
- Differential Equations



95%
of students
advanced 1
or more in math
or science in
summer

Expected Cost to Government per UAA Baccalaureate Degree

Using the Fall 2013 University Cohort
\$289,000

ANSEP Acceleration High School
\$92,333





ANSEP

ALASKA
NATIVE
SCIENCE &
ENGINEERING
PROGRAM

