

# STEM READY

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A model for College and Career Readiness for Rural Alaska Schools

Developed through support by Rasmuson and Gates foundations

Implemented through a partnership with Alaska Native Science and Engineering Program

# Who Are We?

- Lower Kuskokwim School District includes Bethel and 25 other schools in surrounding Yup'ik Eskimo villages spread across an area of tundra the size of West Virginia
- Bethel Regional High School [BRHS] is a 7-12 Secondary School



Bethel is the hub of this Yukon Kuskokwim Delta region - about 1/3 of high school students

- Grades 7-12
- Student Population-about 500
- Alaska Native- 82%
- Free/Reduced lunch- 60%
- Transient Rate- 28%

# Address Issue

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- Village schools are often unable to provide lab-based science classes and upper level math courses
- High achieving village students are completing all classes available to them prior to graduation
- Prior to this program option was Village or full 4-year boarding across state

# Focus of the Program

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Meet academic needs of students from surrounding village schools while allowing students and families to be closely connected to the rich cultural experience of the village.

Culturally Grounded +  
Academically Strong =  
Post Secondary Success

## Vision

- Students will realize their academic potential through activities that lead to [post-secondary goal setting](#) and the high-level [success in Math and Science](#) needed to [successful transition to the post-secondary education](#) needed to meet those goals.

# Early Results

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## Cohort 1-graduated 2012

\*did not have a junior semester at BRHS

9 total students

- 6 completed program
- All graduated high school

## Cohort 2- graduated 2013

8 total students

4 completed program

All graduated high school

- All completers tested into college math for ANSEP program
- All increased percentile rank on Nationally normed MAP test

## Cohort 3- graduated 2014

10 total students

7 completed program

All graduated from high school

- **6/7** increased percentile rank on Nationally normed MAP test
- **Average increase for those that increased in the first year of the program was 10%**
- Completed Pre-calculus or calculus + chemistry and physics
- **5/7** completed college math course at UAA through ANSEP as HS student



About a 65%  
College Going Rate  
Among Completers

# Current Cohorts- Increasing Results

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Cohort 4-will graduate 2015

15 students/ 10 returned

Currently in Pre-Calc or Calc

Cohort 5-will graduate 2016

19 Students

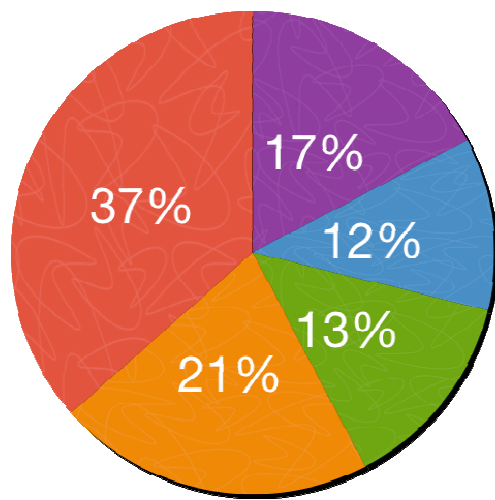


70% attrition rate  
65% college going rate  
95% math college ready rate

# Stem Ready Students- Where are they Now?

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■ college ■ grad-not ■ left program ■ 12th grade ■ 11th grade



Every Cohort has seen an increase in percentile

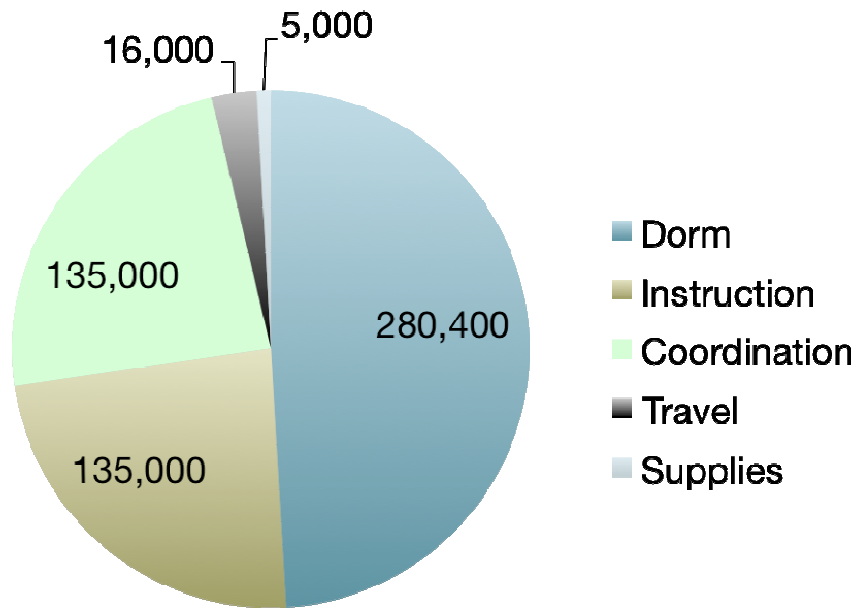
Average National Percentile Math

Cohort 1: 56%

Cohort 3: 79%

# Cost

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“Dorm” includes beds, food, and supervision

Dorm has beds for 40 Students

Model may serve up to 40 students each semester

Currently READY program is accomodating 30+ for fall semester with only 1-15 spring semester.

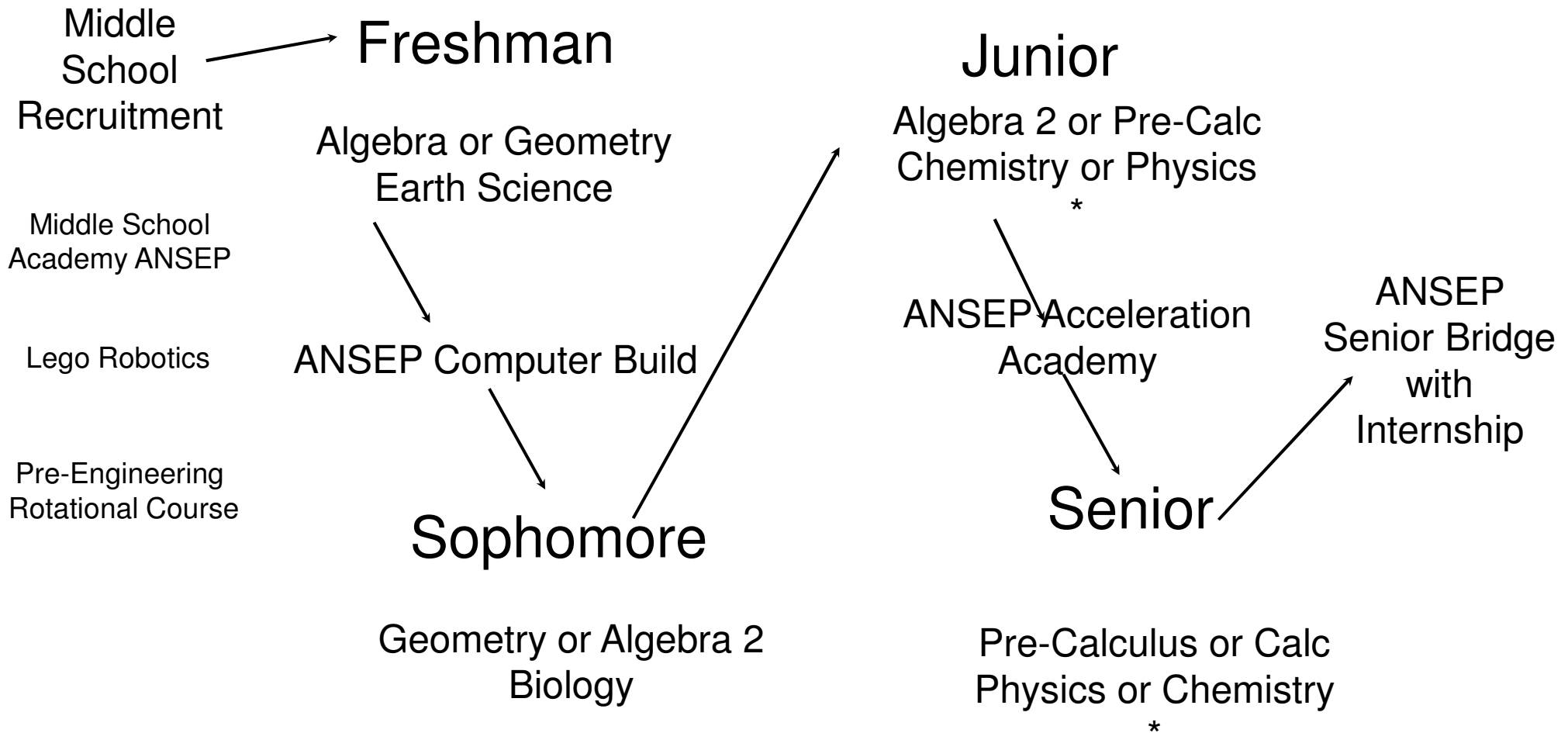
Spring semester dorms are dual used in Spring for other short term learning experiences:

- ACE academy
- Ejournalism
- Art Camp



# Description Flow Chart

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° \* Tentative planned courses- team will continue to investigate most appropriate STEM 101 courses

# Ready Model

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- Exploration activities in Middle School that communicate high expectations for traditional classwork
- Distance and site-based opportunities
- Selection process
- Semester in larger bridge setting Junior Year
- Partner/University experience
- Semester in larger bridge setting Senior Year
- University connection

