

What is AIMP?

- The American Indian Math Project is an afterschool program at Anishinabe Academy that serves 5th-8th graders
- A partnership of the Minneapolis Public Schools, Anishinabe Academy and the Division of Indian Work (DIW)
- Funded by the Minnesota Department of Education
- Focus is on culturally relevant curriculum



Goals Of the Program

- Increase math grades of students
- School connectedness
- Capacity of American Indian youth to become productive adults
- Engagement of parents in supporting students' learning

How Goals Are Met

- Provide students with 2 days of afterschool programming per week which includes:
 - Ojibwe Language
 - ATODP Cultural Prevention
 - Snack
 - Circle time
 - Math tutoring (MWM)
 - Culture based curriculum
 - Enrichment activities
 - Free time (computer/gym/crafts)

Typical Day in AIMP

Monday	Wednesday	Friday
Computer lab-Free time	Computer lab-Free time	Alternate between family night/field trip
Circle Time	Circle Time	Activity: 3-7pm
Snack and Visit	Snack and Visit	Take place around city
Language/Culture	Academics	Family-5-7pm @DIW
Academics	Enrichment	Meal, activity
Free Time	Free Time	
Bus Home	Bus Home	

Program Content



■ Three Key Components

- Afterschool programming 2 days a week
- Family Nights twice a month
- Recreational activities twice a month (Used as incentives for attendance and behavior)

AIMP Classroom Calendar

- Units/lessons based on Dakota/Ojibwe seasonal calendar
- We do include information from additional tribes
- Example: Navajo Rug Symmetry
- Example: “To Honor & Comfort: Native Quilting Traditions”

2009-2010 Calendar

- Wild Rice (Ecology, harvest yields, data analysis)
- Orienteering & Land Mapping (measurement, conversion, biomes)
- Berries & Feasts (fractions, graphing data)
- Snow Snakes
- Travois/Plains horse culture
- Maple Syrup
- Archery
- Rockets
- Birchbark canoes/paddle design and symmetry
- Bicycle repair

2010-2011 Calendar

Balsa Airplanes

Corn, genetically modified foods

Dice/Probability games

Mousetrap cars

Create your own boardgames

Nasa-space game

Snowsnakes

Bacteria cultures

Maple syrup

Planting

Birds of Prey

Curriculum

Activity/ Lesson	Cultural Focal Points	Math/Science Focal Points
Classroom Quilt	Study importance of buffalo hides in Dakota ceremonies Study transition from hides to star quilts Creation of classroom quilt	Geometry: 2-d shapes, reflection and rotational symmetry Create 3-d object from 2-d representation Measurement: perimeter, area, select and apply appropriate standard units to measure and create quilt square
Tobacco Pouch & Beading	Tobacco as a first medicine Traditional use and contemporary abuse of tobacco Symmetry and beadwork patterns of Woodland Indians Creation of Pattern Beading lessons	Coordinate graphing systems Cartesian coordinates Math vocabulary Coordinate graphing on a virtual bead loom Symmetry: reflection rotation & translation

**Indigenous
Star
Knowledge**

**Lakota Star Knowledge,
legends and connections
to celestial events, ancient
sky observatories**

**Number and operations, scientific
notation, AU, calculation of light
years**

Snow Snakes

The game of Snowsnake is a traditional Woodland First Nation winter sport. The Snowsnake, when thrown along a track, can travel up to a mile if conditions are ideal. Years ago, the snakes were thrown along roadways, or over frozen rivers, along fence rows or wherever there was an accumulation of snow. The track was introduced to the game about the turn of the century.

**Static vs. Dynamic Friction
Data analysis of snow snake
throws**

**Pre-wax & post-wax
Mean, median, range, etc.**

**Wild Rice
Ecology**

**Importance of Wild Rice in
Ojibwe culture
Traditional harvesting
techniques
Contemporary issues: gm,
loss of habitat**

**Ecology of wild rice, lifecycle
Harvest monitoring
Experiments (paddy rice)
Understanding volume vs mass
Precook & postcook weight**