

# Mathematics Career Carnival: Integration of Content, Pedagogy, & Authentic Learning

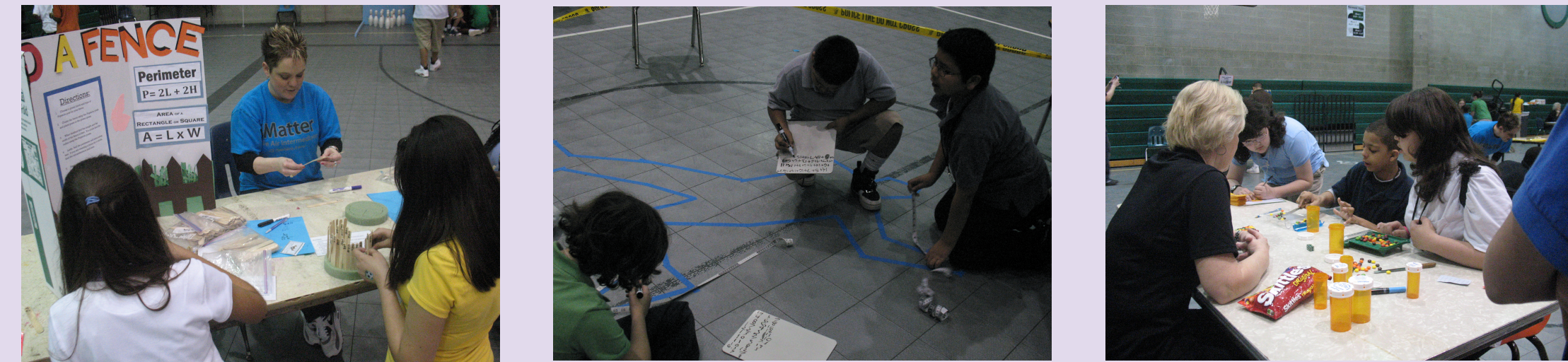


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## PROJECT FOCUS

This project is the result of the integration of online methods and field experience to give students a unique opportunity in field experience that we can control and assess rather than “assume” that mentors and placements around the state are modeling the way we believe mathematics should be taught and assessed.



## PARTICIPANTS

- SFASU STUDENTS
  - Non-Traditional Completers
  - Bachelor of Science in Interdisciplinary Studies with EC-6 Certification
  - Field Experience Assessed Online
  - Integration of Methodology & Field Experience
- NISD Brooks Quinn Jones Elementary
  - 2016 State STAAR Math Test Scores
    - 4<sup>th</sup> Grade – 45% pass rate
    - 5<sup>th</sup> Grade – 64% pass rate

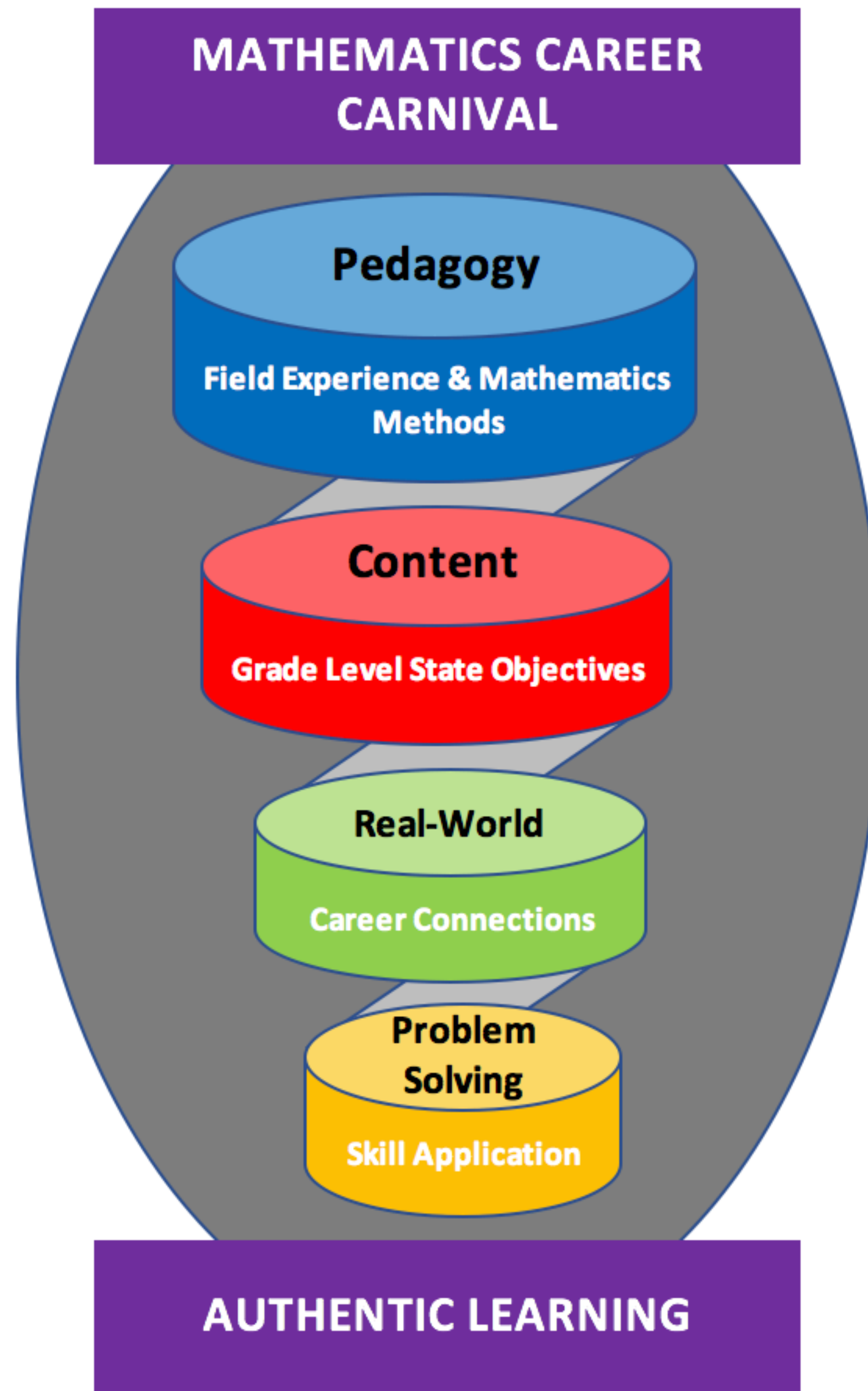


## MATHEMATICS CAREER CARNIVAL

- Real-World connections in the community to show the application of state mandated grade-level objectives.
  - Pharmacist – Subitizing; Librarian – Organizing; Using Decimals; Architect – Measuring Angles; Pipe Fitter – Fractions; Farmer/Rancher – Area & Perimeter
- Originated 2005
- Connecting Content to Real-World Skills
  - Increase understanding & mastery of state objectives
- Variety of settings
  - Whole School/Grade Level Classroom
  - Mathematics & All Content Area Carnivals
  - Elementary & Middle School
- Variety of Supervisory Levels
  - Classroom Teacher/Mathematics Coach/Professor



## MATHEMATICS CAREER CARNIVAL



## AUTHENTIC LEARNING

## INTEGRATION/PLANNING/PREPARATION

- Collaborated with BQJ Elementary School to assess mathematical needs
- SFASU Students:
  - Create a booth with a mathematical connection from targeted skills
  - Video proposal describing booth plan
    - Feedback provided by SFASU Instructors & BQJ Administration
  - Provide extension activities/assessment questions for classroom teachers
  - Implementation of booths during Carnival on BQJ campus



## SCHEDULE

TIME	ACTIVITY
7:00am – 8:00am	4 <sup>th</sup> Grade Booth Set-Up
8:30am – 9:30am	4 <sup>th</sup> Grade Carnival Walk-Through
9:00am – 11:00am	4 <sup>th</sup> Grade Mathematics Career Carnival
11:00am – 12:30pm	Tear Down/Lunch/Debrief/Set-Up 5 <sup>th</sup> Grade Carnival
12:30pm – 1:00pm	5 <sup>th</sup> Grade Carnival Walk-Through
1:00pm – 3:00pm	5 <sup>th</sup> Grade Mathematics Career Carnival
3:00pm – 4:00pm	Tear Down Carnival/Debrief

## FUTURE PROJECTS

- Spring 2017 – Raguette Elementary School, April 24
  - 40/42 pre-service teachers participating
- Fall 2017 – BQJ & Martinsville ISD
- SFASU Campus-Based Event



## RESULTS

- Carnival Participants responded through letter writing to Pre-Service Teachers
- 5<sup>th</sup> Grade preparing Spring carnival for 3<sup>rd</sup> grade BQJ students
- Added pre/post survey to collect data on perceptions of teaching mathematics