

# K-12 Initiative to Improve Math & Science

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**Watertown Public Schools  
STEM Summit IV  
Working with Data  
Oct. 17, 2007**

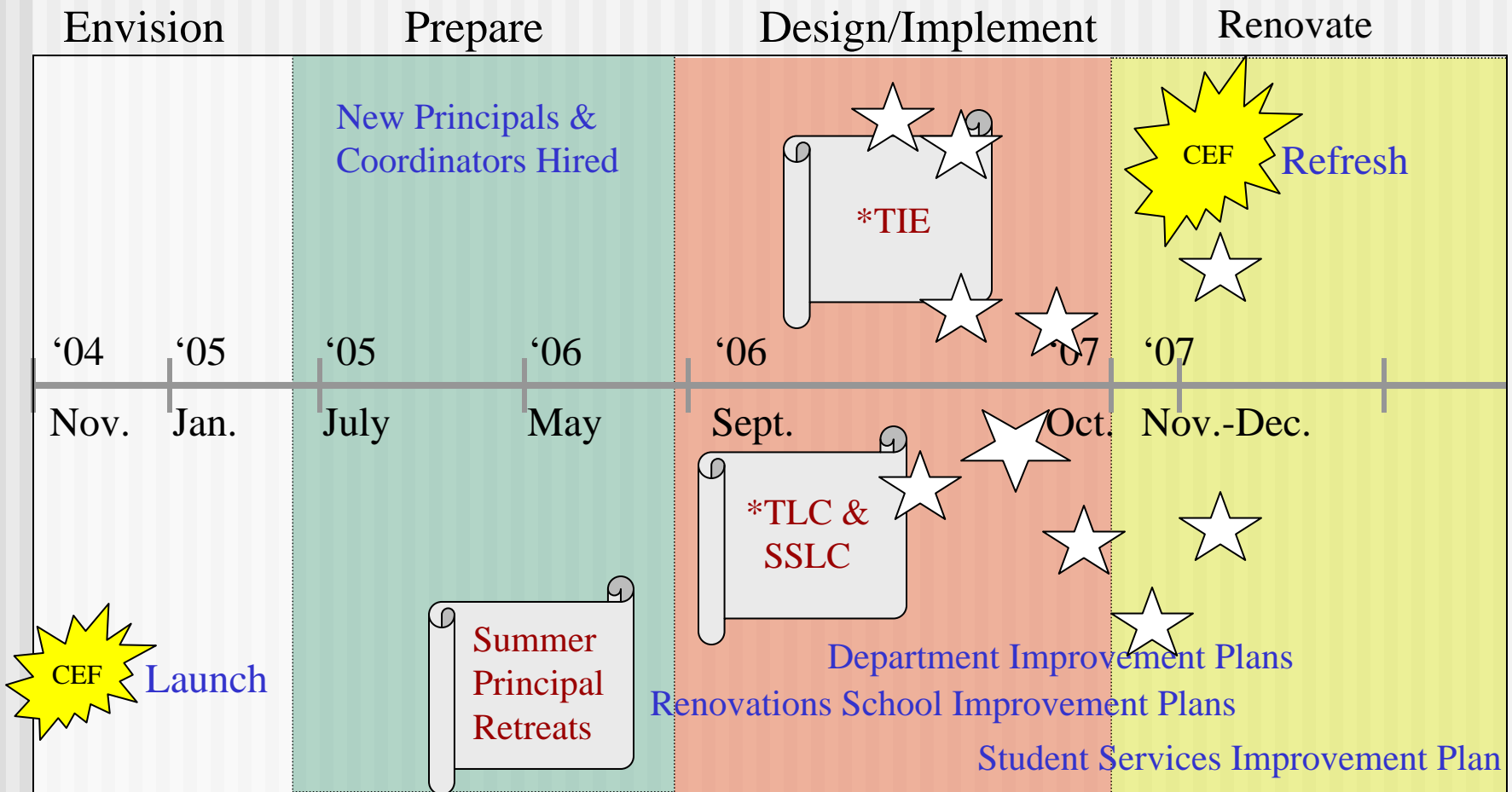
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# Watertown STEM Story

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- I. Strategic Planning
  - I. Phases
  - II. Vision
- II. Standard Data
- III. Initiatives
  - I. Leadership & Administrative Support
  - II. Curriculum Applications
  - III. Assessment

# Strategic Planning Phases



\*CEF= Community Education Forum TLC = Teaching & Learning Council SSLC = Student Services Leadership Council

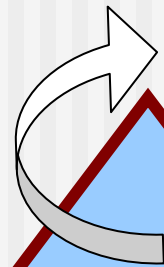
# Strategic Planning Framework

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Goal: (District alignment)				
Supporting Objectives	Strategies & Actions <i>(Resources/ Funding)</i>	Responsibility	Measures & Milestones	Status (Timeline)

**Teaching & Learning  
Technology Hierarchy**

**Learning Results**



**Assessment**

**Curriculum  
Application**

**Communication  
& Collaboration**

**Leadership & Administrative Support**

**Technical Services & Data Management**

**Network Infrastructure & Hardware**



**Students**



**Faculty/Staff**



**Community**

# Standard Data

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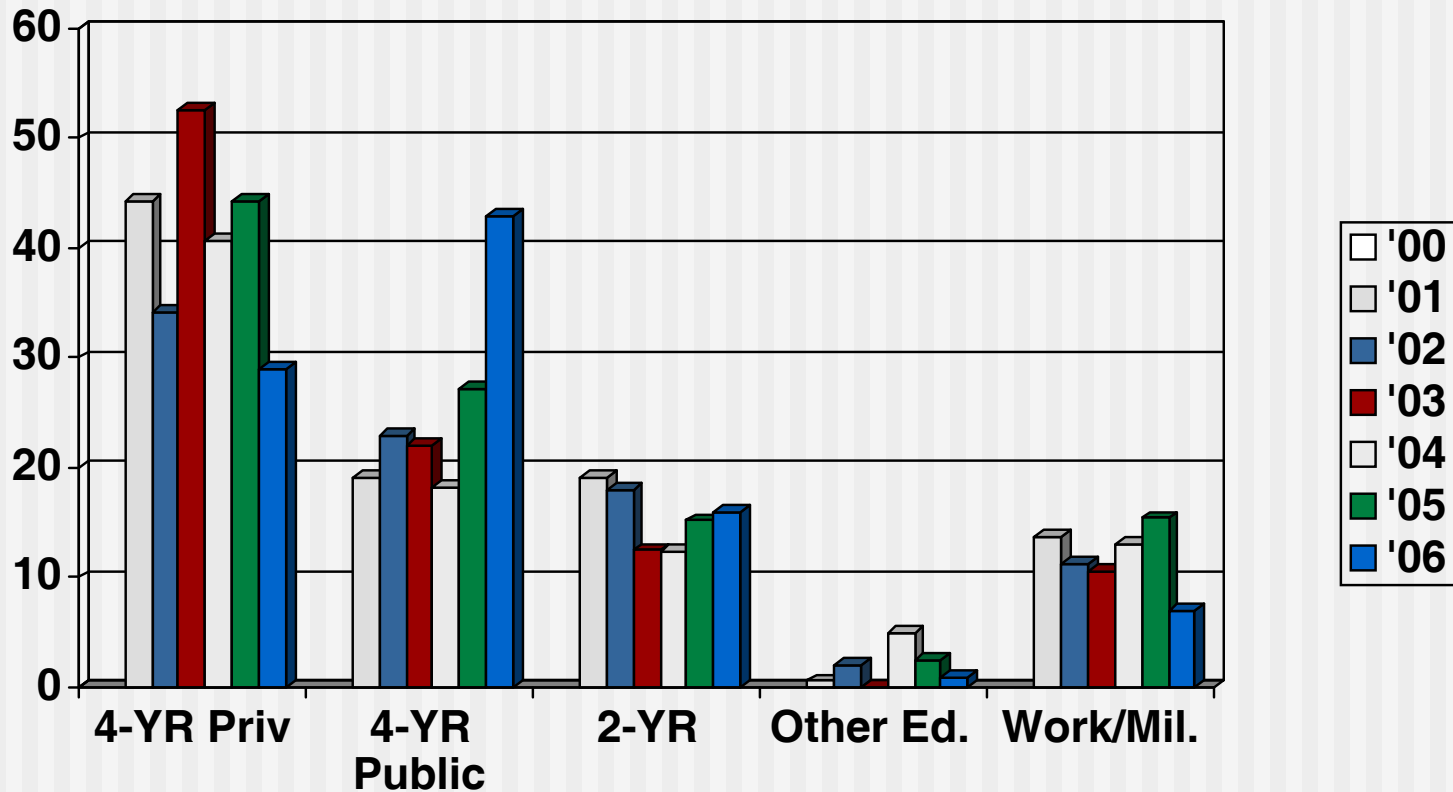
## TEST SCORES

- MCAS Results by Grade and Subject
- MCAS Results by School
- Proficiency vs State
- PSAT Scores
- SAT Scores
- ACT Scores
- AP Scores

## POST HIGH SCHOOL PLANS

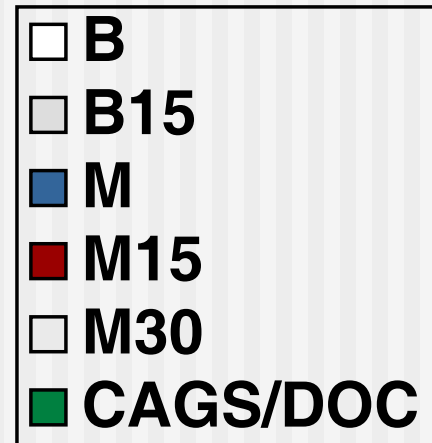
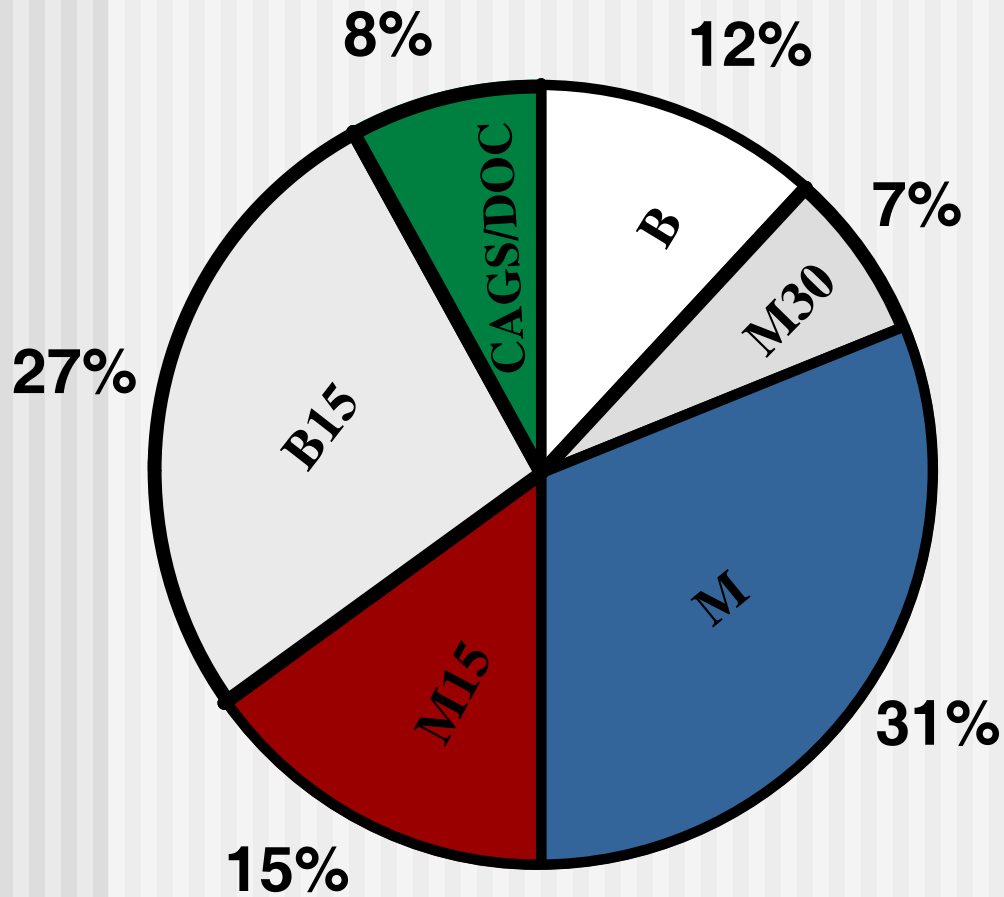
## HIRING PRACTICES

# Plans of High School Graduates



# Teacher Degrees

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# Leadership & Administrative Support

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## INITIATIVES

- Teacher Hiring Practices
- Renovated Induction & Mentoring Program
- Administrator Supervision & Evaluation
- Teacher Supervision & Evaluation
- Professional Development
- Principal, Curriculum Coordinator and Mentor Laptops

# Curriculum Application

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## INITIATIVES

### ■ Elementary Schools

- K-5 Math Task Force
- New K-5 math curriculum
- Prek-3 Reading Task Force
- Grade 4-5 Science Task Force
- Engineering is Elementary
- Classroom computers, some laptops

### ■ Middle School

- Program review of middle school math & science
- GIZMOS in math & science + PD
- Technical Education/Robotics
- New classroom laptops, computer lab, laptop carts

# Curriculum Application

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## INITIATIVES

### ■ High School

- Robotics Club/Course
- Virtual High School
- 9<sup>th</sup> grade science and math curriculum modification
- GIZMOS in math & science + PD
- New labs/laptop carts for math, social studies, English

### ■ District

- Professional Development is “Technology In Practice”
- TeacherWebs
- T3 installed, improved wireless networks
- First Class upgraded and used more for collaboration
- Technology Advisory = Innovative Education

# Assessment

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## INITIATIVES

- High School Data Team
- Professional Development Focus
- K-5 Standards-Based Report Card online
- Strategic Planning focus on Measures & Milestones