Children Come First: A Strategic Pan for High School Improvement Dr. Michael Kuchar, Superintendent of Schools Dr. Frank Auriemma, Director of EE4NJ Presentation can be found on www.bergenfield.org


857 empty desks = number of dropouts from American schools every hour of every day


## AMERICA'S PROMISE



1588 dropouts already today
1 student every 26 seconds

END THE DROPOUT CRISIS

## We all have to take responsibility to create positive change!



## Dr.Allan Odden

## University of Wisconsin

- "The problem isn't funding, it is having the will and persistence to fix the system."


## We Know How to Turn Schools Around By Allan R. Odden

- Allan R. Odden, a professor of educational leadership and policy analysis at the University of Wisconsin-Madison, is a co-director of Strategic Management of Human Capital, a project of the Consortium for Policy Research in Education (CPRE).


## Bibliography

- Odden, A.R.(2009). We Know How to turn Around Schools. Education Week, 29(14), 22-23. Issue 14, Pages 22-23
- Odden, Allan (2011). Strategic Management of Human Capital in Education. New York, NY: Routledge. ISBN [[Special:BookSources/978-0-414-88666-6|978-0-414-88666-6]].
- Odden, Allan (2009). Ten Strategies for Doubling Student Performance. Thousand Oaks, Calif: Corwin Press. ISBN 978-1-4129-7148-5.
- Odden, Allan; Archibald, Sarah (2009). Doubling Student Performance .... and finding the resources to do it. Thousand Oaks, Calif: Corwin Press. ISBN 978-1-4129-6963-5.
- Odden, Allan; Wallace, Marc (2007). How to Create World Class Teacher Compensation. St. Paul, MN: Freeload Press. ISBN 1-930789-03-3.
- Odden, Allan; Lawrence O Picus (2007). School Finance: A Policy Perspective, 4th Edition. McGrawHill Humanities/Social Sciences/Languages. ISBN 0-07-352592-8.
- Odden, Allan; Kelley, Carolyn (2002). Paying teachers for what they know and do: new and smarter compensation strategies to improve schools, 2nd Edition. Thousand Oaks, Calif: Corwin Press. ISBN 0-7619-7888-7.
- Odden, Allan; Archibald, Sarah (2001). Reallocating resources: how to boost student achiev


## Odden Step 1

- The first step is to create a sense of urgency. Such heightened awareness of problems and their impact emerges when teachers and administrators analyze state studentperformance data together and become more informed about the academic effectiveness of their school and district.


## Odden Step 2

- The next step is setting ambitious-some might call them eye-popping-goals: to double student performance on state tests, to double the percentage of students scoring at advanced levels, to make sure that no student performs below the basic level at the end of 3rd grade, and that all students leave that grade reading on level. Whatever they are, these goals should go far beyond "adequate yearly progress."


## Odden Step 3

- The next step for turnaround schools is to throw out the old curriculum and adopt new textbooks, create new curriculum programs, and start to build, over time, a common understanding of effective instruction. Districts that move the student-achievement dial by large amounts have a systemic view of curriculum and focus intensely on instructional practices shown to work-and they require all of their teachers to use them.


## Odden Step 4

- The fourth strategy is to move beyond a concentration on state tests and use a battery of assessments, including formative and diagnostic assessments, common end-of-curriculum-unit assessments, and benchmark assessments. Formative and diagnostic assessments hone instructional strategies before each curriculum unit begins. End-of-unit assessments not only measure what students have learned, but also compare the effects teachers have had across classrooms.


## Odden Step 5

- Step five is creating and implementing an intensive and ongoing professional-development program. The best districts and schools form collaborative teacher teams-professional learning communities-that meet often, make use of student data, and work with school-based coaches to improve curriculum and instruction. These schools and districts also include intensive summer institutes in their professionaldevelopment plans, to allow teachers opportunities to gain new knowledge.


## Step One- Using Data to paint a picture of your reality

"Everyone thinks of changing the world, but no one thinks of changing himself."


Leo Tolstoy

## Open Enrollment AP Courses

Total AP Courses


## \% of Total AP Students with Score 3+



## 4 Year College Attendance Rate



## Dropout Data

## Bergenfield High School Dropouts

sұuәpmis fo 」əquin


## Top Five Reasons Dropouts Identify as Major Factors For Leaving School



Source: 2006 Civic Enterprises, The Silent Epidemic

## Typically, school data are analyzed to...

- Provide students with feedback on their performance
- Measure program success and effectiveness
- Make sure students do not "fall through the cracks"
- Meet state and federal requirements
- Promote accountability


## How does our school use data?

## How does our school use data?

|  | Questions About Where We Are | Data We Have on Hand | Data We Need to Collect |
| :---: | :---: | :---: | :---: |
| 号 | Is the same cohort of students improving in math achievement from year to year? | Grades 3-8 state test; Benchmark tests | Test scores from year to year on same cohort |

## How does our school use data?

|  | Questions About Where We Are | Data We Have on Hand | Data We Need to Collect |
| :---: | :---: | :---: | :---: |
|  | At what grade level does parent involvement start to decrease? Why do some parents stay involved? | Rosters of parent attendance at parent/ teacher conferences in grades K8 | Year-to-year comparison of rosters; <br> Parent perceptions of conferences at critical junctures |

## But remember...

- Data collection just to be collecting data will serve no real purpose and will waste valuable time and energy.
- Data collection needs to be thoughtful and intentional and connected to school goals and objectives.
- Data must be analyzed to have meaning and be used.


## Impact of the $9^{\text {th }}$ Grade Academy

9th Grade Academy Multiple Failure Rate


## ce

## Focus on Evidence


Figure 2.1
Focusing the Data


Random
Acts of Improvement


Focused Improvement

## Decrease dropouts from 63 to Zer

9th Grade Academy- Middle School Teaming
Reading Intervention- Accelerated Reader
Alternative High School which was truly alternative and not a "dumping ground."
Credit Recovery Program both in seat and Computer based (Accellus Porgram)
Mentorship of Adult with students- partnered with Big Brother Big Sister of Northern NJ

## Odden Step 2

- The next step is setting ambitious-some might call them eye-popping-goals: to double student performance on state tests, to double the percentage of students scoring at advanced levels, to make sure that no student performs below the basic level at the end of 3rd grade, and that all students leave that grade reading on level. Whatever they are, these goals should go far beyond "adequate yearly progress."

1 Goal: High School-80\% of Students take 1 AP exam with a minimum score of 3

- 1 Add more AP Courses that diversify interest such as Psychology, Music, Art etc.
- 2 Technology professional development will provide teachers w/tools to assist in raising student achievement
- 3 Make professional development effective, systematic, measureable, meaningful
- 4 Increase acceptance to 4 yr. college: financial aid night (bilingual) parent/student Naviance conference, Naviance reports


## 2 Goal: High School - 80\% of Students obtain a score of 1500 on the SAT

23 Increase communication among families, counselors and teachers to increase achievement
24 Technology professional development will provide teachers $\mathbf{w}$ /tools to assist in raising student achievement 25 Make professional development effective, systematic, measureable, meaningful
26 Provide common planning time to analyze test data and student achievement. Data analysis: NWEA, Star Literacy and Math, state testing early on and PSAT, SAT
27 Increase acceptance to 4 yr. college: financial aid night (bilingual) parent/student Naviance conference, Naviance reports

## 3 Goal: High School - 80\% of seniors take Calculus

36 Increase communication among families, counselors and teachers to increase achievement 37 Technology professional development will provide teachers w/tools to assist in raising student achievement
38 Make professional development effective, systematic, measureable, meaningful 39 Math Rigor and support start Kindergarten and continues through $12^{\text {th }}$ grade
40 Use data to drive instruction 41 Data analysis: NWEA, Star Literacy and Math, state testing 42 Quarterly benchmarks in all subjects

4 Goal: High School - 80\% of sophomores complete Algebra 2 with a B or better

50 Increase parent/student use of website, infinite campus, Homework Now 51 Increase communication among families, counselors and teachers to increase achievement 52 Technology professional development will provide teachers w/tools to assist in raising student achievement 53 Make professional development
effective, systematic, measureable, meaningful 54 Provide common planning time to analyze test data and student achievement

## 5 Goal: High School - 80\% of seniors have 3 years of World Language

70 Offer more Language options to reflect the $21^{\text {st }}$ Century Work Skills such as Chinese. 71 Variety of language offerings elementary and middle school. $\quad 72$ Increase communication among families, counselors and teachers to reduce failure 73 Technology professional development will provide teachers w/tools to assist in raising student achievement

6 Goal: High School - 80\% of students pass the Algebra 1, Algebra 2, and Biology State Tests

86 Schedule specials to lessen interference in instructional time 87 Bringing more kids to the mainstream 88 Increase communication among families, counselors and teachers to increase achievement 89 Technology professional development will provide teachers w/tools to assist in raising student achievement

## 7 Goal: $8^{\text {th }}$ Grade - 80\% take Algebra

108 Bringing more kids to the mainstream

8 Goal: $\mathbf{8}^{\text {th }}$ Grade - $50 \%$ are in the Advances Proficient range on NJASK LA

127 Schedule specials to lessen interference in instructional time 128 Bringing more kids to the mainstream 129 Increase communication among families, counselors and teachers to enhance success 130 New teacher monthly meetings @ RWB on best practices 131 RWB regular walk-throughs to focus on and improve instruction

## 9 Goal: $8^{\text {th }}$ Grade - 50\% are in the Advanced Proficient range on NJASK Math

152 Schedule specials to lessen interference in instructional time 153 Bringing more kids to the mainstream 154 Increase communication among families, counselors and teachers to reduce failure 155 New teacher monthly meetings @ RWB 156 RWB regular walk-throughs to focus on and improve instruction

## Goal: $5^{\text {th }}$ Grade - 35\% are in the

 Advanced Proficient range on NJASK 5$5^{\text {th }}$ grade teaming Increase instructional time in elementary schools Standardize instructional time for major content areas in elementary school Bringing more kids to the mainstream Increase communication among families, counselors and teachers to reduce failure Technology professional development will provide teachers w/tools to assist in raising student achievement

## 11 Goal: $5^{\text {th }}$ Grade - 35\% are in the Advanced Proficient range on NJASK Math

$2055^{\text {th }}$ grade teaming 206 Increase instructional time in elementary schools on math 207 Standardize instructional time for major content areas in elementary school 208 Bringing more kids to the mainstream and increased rigor 209 Increase communication among families, counselors and teachers to reduce failure 210 Technology professional development will provide teachers w/tools to assist in raising student achievement 211 Make professional development effective, systematic, measureable, meaningful 212 Provide common planning time to analyze test data and student achievement

12 Goal: $3^{\text {rd }}$ Grade $-35 \%$ are in the Advanced Proficient range on NJASK LA

228 Increase instructional time in elementary schools 229 Standardize instructional time for major content areas in elementary school 230 Bringing more kids to the mainstream 231 Increase communication among families, counselors and teachers to reduce failure 232 Technology professional development will provide teachers w/tools to assist in raising student achievement

13 Goal: $3^{\text {rd }}$ Grade - 75\% are in the Advanced Proficient range on NJASK Math

254 Increase instructional time in elementary schools 255 Standardize instructional time for major content areas in elementary school 256 Bringing more kids to the mainstream 257 Increase communication among families, counselors and teachers to reduce failure 258 Technology professional development will provide teachers w/tools to assist in raising student achievement 259 Make professional development effective, systematic, measureable, meaningful

## 14 Goal: 95\% of all Kindergarten students will

 achieve a minimum score of 600 as measured
## by the Star Early Literacy Program.

278 Provide Multi-Sensory Program as well as all available resources for low achieving students to provide learning foundation of high academics 279 Technology professional development will provide teachers w/tools to assist in raising student achievement 280 Star Literacy programs and other technologies to provide advancement of learning 281 Expand leveled reader programs and inventory of books 282 Kindergarten curriculum to increase skills as well as a full day program to increase time on task

## Odden Step 3

- The next step for turnaround schools is to throw out the old curriculum and adopt new textbooks, create new curriculum programs, and start to build, over time, a common understanding of effective instruction. Districts that move the studentachievement dial by large amounts have a systemic view of curriculum and focus intensely on instructional practices shown to work-and they require all of their teachers to use them.


## Step 3 Effective Programs

- Alternative School
- $9^{\text {th }}$ grade academy
- Credit recovery
- Teacher Effectiveness
- Administrator Efficacy Evaluations


## ce

## Focus on Evidence


Figure 2.1
Focusing the Data


Random
Acts of Improvement


Focused Improvement

# Excellent Educators for New Jersey (EE4NJ) 

Bergenfield Public School District

## Widget Effect

9/1/12 Chicago Public Schools on strike Major issue: Teacher evaluation 2010-65\% of Chicago Public School students graduated HS.
2010- Less than $0.3 \%$ of all teachers received an unsatisfactory rating


Our focus must not be on the one or two underperforming teachers, rather the wide range of mediocrity- not due to laziness or lack of effort on part of teacher, but rather a lack of support, direction, and technical skill.

Linking Student Achievement to Teacher Practice

- More than two decades of research findings are unequivocal about the critical connection between teacher effectiveness and student learning. The research shows that student achievement is strongly related to teacher quality; highly skilled teachers produce improved student results.


# About the EE4NJ Pilot Program 

NJ is the $27^{\text {th }}$ State to take on the teacher evaluation reform initiative.

## University of Washington Study

Begun in 2007, the University of Washington has used a 5D Assessment to conduct research on 2,000+ instructional leaders;
The study is aimed at locating areas of strength and weakness amongst school leaders tasked with evaluating staff members.

## University of Washingtolf Study, continued

A rubric with five dimensions and thirteen sub-dimensions was created; Initial challenge was defining what it means to be a "high quality" teacher; Levels of expertise in instructional leadership include novice, emerging, developing, and expert.

## Cumulative Dimension Averages

2,207 participants; 42 school districts


## Cumulative Sub-Dimension

## Averages

## 2,207 participants; 42 school districts



## Teacher Effectiveness Evaluation System

## Teacher Evaluation 100\%

> Student Achievement (outputs of learning) $\mathbf{5 0 \%}$ of total evaluation

## Measures of Student Achievement

 include:- Student achievement on stateapproved assessments or performancebased evaluations, representing 35\%45\% of the evaluation; and
-State-approved school-wide performance measure, representing 5\% of the evaluation.
-Districts have the option of also including additional performance measures.


## Teacher Practice (inputs associated with learning) $50 \%$ of total evaluation

## Measures of Teacher Practice include:

-Use of a state-approved teacher practice evaluation framework and measurement tools to collect and review evidence of teacher practice, including classroom observation as a major
component, representing 25\%-47.5\%;
and
-At least one additional tool to assess
teacher practice, representing 2.5\%-25\%.

## 50\% Teacher Practice

- Use of a state-approved teacher practice evaluation framework and measurement tools to collect and review evidence of teacher practice, including:
- Classroom observation as a major component.
- At least one additional tool to assess teacher practice.
- Bergenfield chose the Charlotte Danielson Framework for Teaching, while the District Evaluation Pilot Advisory Committee is working with NJDOE to select the additional tool.


## 50\% Student Achievement

- Measures of student achievement include:
- Student growth on state-approved assessments or performance-based evaluations.
- State-approved school-wide performance measure.
- Districts have the option of also including additional performance measures.
- Bergenfield may use aggregated growth of subgroups, utilizing
SAT, ACT, AP, N.W.E.A, Renaissance Learning, and/or writing portfolios.


## Valid Observation Criteerie

## Low-oinference Date

Evidence

# Systematic <br> Classroom Observation 

A Objectivity

# Danielson Model Two key points to the model: 

Ensuring teacher quality, \&
Promoting professional development

## Odden Step 4

- The fourth strategy is to move beyond a concentration on state tests and use a battery of assessments, including formative and diagnostic assessments, common end-of-curriculum-unit assessments, and benchmark assessments. Formative and diagnostic assessments hone instructional strategies before each curriculum unit begins. End-of-unit assessments not only measure what students have learned, but also compare the effects teachers have had across classrooms.


## Evaluation Data Collection and Management

- Data has never used more heavily in the history of Bergenfield Public School District.
- Data is linked to teachers, allowing principals and department chairs to review the scores of different classrooms
- BPSD has continuously measured progress using real data to shape classroom learning.
- By using this performance management system, the district will streamline the evaluation process while at the same time enhancing its rigor.
- The District is focused on Student Growth vs Proficiency


## District Mantra

## "If it is not measured, it will not be accomplished." <br> Dr. Michael Osnato

## Formative Assessments

## Renaissance Learning



- State-aligned computerized adaptive assessments that provide accurate, useful information about student achievement and growth
- Tailored reports give educators information to guide decisions
- Ren Learn classroom resources help teachers directly apply assessment results to instructional planning


## Renaissance Learning

- For 2011-2012, the district decided to gather even more data, as the district will be expanding use of Renaissance Learning products to assess reading, math and early literacy. Grades 1-11 will all have formative assessments.
- These brief assessments have been proven to be extremely accurate and will provide even more flexibility within the classroom.


## STAR Reading <br> ENTERPRISE

STAR Math
ENTERPRISE

FIVE DOMAINS
(Standards Based)

1. Word Knowledge \& Skills
2. Comprehension Strategies and Constructing Meaning
3. Analyzing Literary Text
4. Understanding

Author's Craft
5. Analyzing Argument and Evaluating Text

36 Skills / 400 Grade-Level Skills

## THREE DOMAINS

(Standards Based)

1. Word Knowledge and Skills
2. Comprehension Strategies and Constructing Meaning
3. Numbers and Operations

10 Sub-domains 41 Skill Sets / 145 SKILLS

FOUR DOMAINS (Standards Based)

1. Numbers and Operations
2. Algebra
3. Geometry and Measurement
4. Data

Analysis, Statistics and Probability

54 Skill Sets / 550 SKILLS


Class: HR101 Beeman
Grade: 4
Teacher: Beeman, Alice
Practical and





Universal Screening Based on State Test


Progress Monitoring


Year-to-year Longitudinal Progress


Predict State Test Proficiency


Support for Differentiated Instruction


Learning
Progressions
Instructional
Resources


Learning to
Read
Dashboard

Report Options
Reporting Parameter Group: All Demographics [Default]
Grade: 3

## Which students aren't reaching benchmark?

State Screening Report


Students

| Categories / Levels | Current Benchmark | Number | Percent | Benchmark <br> At Time of State Test |
| :---: | :---: | :---: | :---: | :---: |
| Proficient <br> Advanced Proficient Proficient | At/Above 615 SS <br> At/Above 319 SS | $\begin{array}{r} 2 \\ 23 \end{array}$ | $\begin{array}{r} 5 \% \\ 62 \% \end{array}$ | At/Above 677 SS At/Above 414 SS |
| Category Total |  | 25 | 68\% |  |
| Less Than Proficient Partially Proficient | Below 318 SS | 12 | 32\% | Below 414 SS |
| Category Total |  | 12 | 32\% |  |

## How can I best target instruction?

## Instructional Grouping

| $\frac{1}{1}$ STAR Math |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Home > Reports > Instructional Planning |  |  |  |  |  |
| Instructional Report Groupings Change groupings as desired |  |  |  |  |  |
| School: Franklin Elementary School <br> Report: Instructional Planning - Class Report |  |  |  |  |  |
| Class or Group | Grade 5, Class A, 2010-2011 |  | $v$ |  |  |
| Benchmark | Colorado CSAP |  | Legend |  |  |
| Testing End Date | 9/13/2010 <br> (includes STAR Math Enterprise Test scores up to 30 days before this date) |  |  |  |  |
| $\square$ Reset students into default groups |  |  |  |  |  |
| Update |  |  |  |  |  |
| Cancel Pr | ew Report Next > |  |  |  |  |
| Student | Scaled Score / Percentile Rank | Instructional Groups: |  | $3 \vee$ |  |
|  |  | 1 | 2 | 3 | Unassigned |
| Larry Duffy | - 809 SS / 95 PR | - | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| Holly Young | - 791 SS / 93 PR | ( | 0 | $\bigcirc$ | $\bigcirc$ |
| Patrick Black | - 769 SS / 89 PR | - | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| Jack Bond | - 766 SS / 88 PR | - | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| Christy Mann | - 754 SS / 85 PR | ( | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| Marco Mendez | - $740 \mathrm{SS} / 80 \mathrm{PR}$ | - | 0 | $\bigcirc$ | $\bigcirc$ |
| Dale Ayala | - 730 SS / 76 PR | $\bigcirc$ | - | $\bigcirc$ | $\bigcirc$ |
| Cody Hull | - 716 SS / 70 PR | $\bigcirc$ | - | $\bigcirc$ | $\bigcirc$ |
| Renee Frank | - 702 SS / 64 PR | $\bigcirc$ | (-) | $\bigcirc$ | $\bigcirc$ |
| Alfonso Barber | - 690 SS / 59 PR | $\bigcirc$ | (-) | $\bigcirc$ | $\bigcirc$ |
| Stanley Morse | - 663 SS/46 PR | $\bigcirc$ | (-) | $\bigcirc$ | $\bigcirc$ |
| Charlotte Lane | E $644 \mathrm{SS} / 38 \mathrm{PR}$ | $\bigcirc$ | (-) | $\bigcirc$ | $\bigcirc$ |
| Audrey Langley | $\square 625$ SS / 30 PR | $\bigcirc$ | $\bigcirc$ | - | $\bigcirc$ |
| Sabrina Brewer | $\square 605$ SS / 24 PR | $\bigcirc$ | $\bigcirc$ | - | $\bigcirc$ |
| Erika Blackwell | $\square 588$ SS / 19 PR | $\bigcirc$ | $\bigcirc$ | - | $\bigcirc$ |
| Angelo Ray | $\square 578$ SS / 16 PR | $\bigcirc$ | $\bigcirc$ | - | $\bigcirc$ |
| Drew Battle | $\square 566$ SS / 14 PR | $\bigcirc$ | $\bigcirc$ | - | $\bigcirc$ |
| Josephine Lang | $\square 555$ SS / 11 PR | $\bigcirc$ | $\bigcirc$ | - | $\bigcirc$ |
| Lisa Holman | $\square 551 \mathrm{SS} / 11 \mathrm{PR}$ | $\bigcirc$ | $\bigcirc$ | - | $\bigcirc$ |
| Brittany Owen | $\square 537 \mathrm{SS} / 8 \mathrm{PR}$ | $\bigcirc$ | $\bigcirc$ | - | $\bigcirc$ |
| Brandon Poole | $\square 521 \mathrm{SS} / 7 \mathrm{PR}$ | $\bigcirc$ | $\bigcirc$ | - | $\bigcirc$ |
| Mattie Simmons | $\square 501 \mathrm{SS} / 5 \mathrm{PR}$ | $\bigcirc$ | 0 | - | $\bigcirc$ |
| Gabriel Mcbride | - 460 SS / 2 PR | $\bigcirc$ | $\bigcirc$ | - | $\bigcirc$ |

## What are my students ready to learn next?

Instructional Planning Report

Instructional Planning Report

STAR Math Enterprise Test Results
Teat Date: 09/13/2010
Current SS (Scaled Score): 602
Projected SS for 05/10/11: 634

Ngebra Readness: Lisa has not yet met the end of year a gebra readiness grade level expectations for grade 4 .
Lisa's Current Performance


## Skills to Learn

Skils ilsted below are suggested akila Lea should work on based on her last STAR Math Enterprise Teat These skila should be chal enging, but not too dificult for Lisa. Combine this information wath your own knowiedge of the student and use your professiona judgment when deaigning an instructiona program.

## Numbers and Operations

Lles understands larger numbers, including place value, and knows bask mutipicaton facts. Lias should practice mutiplying mult-dglt numbera. Lisa ahould continue practing mutsplication and divalon focts untll automaticty la achieved.

## 3kllis to Leam

1. C). Mutply a 3 - or 4 -dgl whole number by a 1 -digl whole number
2. e. Multply a 2 -digit whole number by a 2 -digit whole number
3. Mutiply a 3 -dgit whole number by a 2 -digt whole number
4. Mutply tree 1 - and 2 -digit whole numbers
5. C. WP: Muttily a mut-digit whole number by a 1 -digl whole number

## Algebra

Isa has a beginning underztanding of numeric expreszions and equasions. Usa ahould practice idersting and ertending growing and repeating number, nonnumeric, and plctorial patherna:

## skille to Leam

1. C). Idenitify a misaing term in a mutiplication or a diviaion number pattem
2. Extend a growing pictorial or nonnumeric pattem
3. C. Identity a misaing figure in a growing pictorial or nonnumenc pattem
4. C. Idertity a misaing flaure in a repeating pictorial or nonnumeric pattem
5. C. Generate a tabie of paired numbers based on a ruie

## Geometry and Measurement

Lisa has an understanding of shapes, Ines, and angles. Usa should practice conversions of customary and metric units ueing whole numbers

## skllis to Leam

1. Convert between cuatomary unts of capacity using whole numbers

2 . Corvert between customary unts of weight uing whole numbers
3. Convert between metric units of capacty uaing whole number
C. Designates a core shal. Core silib idently the moat citical silis to leem at each grade level.

## Where can I find instructional resources for the skills I need to teach?

## Learning Progressions



41 Accelerated Math - Base Prompt - Microsoft Internet Explorer

- 回

Objective 96
View: Example $1 \vee$
Print or Save
WP: SOLVE A PROBLEM INVOLVING THE VOLUME OF A GEOMETRIC SOLID
problem
A plastic container is in the shape of a rectangular prism. Its base has an area of 40
square ind square inches. Its height is 1. inches. . Twice, the ppastic container is in filed to the top with
water and emptied into a fish tank. The fish tank has a base that is 22 inches by 12
 inches, and it has a he
fish tank to the top?


STEP 1
Calculate the volume of the plastic container
$v=i w h$
$-40 \mathrm{in}^{2} \times 10 \mathrm{in}$.
$=400 \mathrm{in}^{3}$
STEP 2
Ind the volume when the plastic container is filled twice. $400 \mathrm{in}^{3} \times 2=800 \mathrm{in}^{3}$

STEP 3
Calculate the volume of the fish tank

[^0]WP: Solve a problem involving the volume of a geometric solid

1. A plastic container is in the shape of a rectangular prism. Its base has an area of 30 square inches. Its height is 7 inches. The plastic container is filled to the top with water and emptied into a fish tank. The fish tank has a base that is 21 inches by 9 inches, and it has a height of 13 inches. How many times in all would the plastic container have to be filled and emptied into the fish tank to fill the tank to the top?

[A] 12
[B] 81
[C] 11

## How well are my students responding to intervention?

Student Progress Monitoring Report (Tully)



Place:
STAR Readingm Performance Report
1 of 3
Printed Thursday. March 18, 2009 2:47:13 PM
District Renaissance District
Last Consolidated: 3/18/2009 12:01 AM
Report Options
Report Options
Reporting Parameter Group: All Demographics [Default]
Reporting Level: District
Group By: School
East Elementary

| Grade | Student Performance Outlook ${ }^{\text {² }}$ <br> On the March 2010 State Reading Accountability Assessment |  |  |  |  |  |  |  |  |  | STAR ReadingParticipation$09 / 02 / 2009-03 / 18 / 2010$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Less Than Proficient |  |  |  | Proficient |  |  |  |  |  |  |  |  |  |
|  | Academ | Waming | Approaches | tandards | Meets S | dards | Exceeds | ndards | Exem |  | Test |  | Not Tes |  |
|  | Total | \% | Total | \% | Total | \% | Total | \% | Total | \% | Total | \% | Total | \% |
| 3 | 94 | 16 | 135 | 24 | 131 | 23 | 130 | 22 | 89 | 15 | 579 | 95 | 32 | 5 |
| 4 | 98 | 19 | 72 | 14 | 121 | 23 | 124 | 24 | 105 | 20 | 520 | 94 | 35 | 6 |
| 5 | 119 | 20 | 117 | 19 | 131 | 22 | 106 | 17 | 130 | 22 | 603 | 97 | 21 | 3 |
| 6 | 117 | 23 | 72 | 14 | 93 | 18 | 129 | 25 | 105 | 20 | 516 | 94 | 33 | 6 |
| Summary | 428 | 19 | 396 | 18 | 476 | 22 | 489 | 22 | 429 | 18 | 2,218 | 95 | 121 | 5 |

## North Elementary

| Grade | Student Performance Outlook <br> On the March 2010 State Reading Accountability Assessment |  |  |  |  |  |  |  |  |  | $\begin{aligned} & \text { STAR Reading } \\ & \text { Participation } \\ & 09 / 02 / 2009-03 / 18 / 2010 \end{aligned}$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Less Than Proficient |  |  |  | Proficient |  |  |  |  |  |  |  |  |  |
|  | Acaden | Waming | Approache | tandards | Meets Standards |  | Exceeds Standards |  | Exemplary |  | Tested |  | Not Tested |  |
|  | Total | \% | Total | \% | Total | \% | Total | \% | Total | \% | Total | \% | Total | \% |
| 3 | 73 | 15 | 92 | 18 | 107 | 22 | 92 | 18 | 135 | 27 | 499 | 97 | 17 | 3 |
| 4 | 73 | 14 | 96 | 19 | 110 | 22 | 133 | 26 | 97 | 19 | 509 | 95 | 26 | 5 |
| 5 | 90 | 17 | 87 | 16 | 103 | 20 | 133 | 25 | 115 | 22 | 528 | 95 | 26 | 5 |
| 6 | 109 | 23 | 135 | 29 | 73 | 16 | 78 | 17 | 70 | 15 | 465 | 96 | 20 | 4 |
| Summary | 345 | 17 | 410 | 20 | 393 | 20 | 436 | 22 | 417 | 21 | 2,001 | 96 | 89 | 4 |

## Are my students mastering State Standards?

State Standards Report Math

Baxter, Alicia
ID: BAXTA
Class: G4 (Andrews)
Grade: 4
Teacher: Andrews, M.

Estimated Mastery of Common Core State Standards


## How STAR Math Estimates Mastery of State Standards

STAR Math provides an estimate of the student's mastery of standards by aligning them to the same 1400 -point difficulty scale used to report STAR scores. The Estimated Mastery Range identifies a band of scores where the student is just below or above mastery. Monitor students in this range to confirm their understanding of the standard.
Est. Mastery Levels for Standards in Grade 4
$\square$ Above Est. Mastery Range
$\square$ Est. Mastery Range
$\square$ Below Est. Mastery Range

STAR Math Test Results

- 4 Current Scaled Score: 670

Test Date: 9/9/2010 End of Year: 6/10/2011

Percentile Rank: 76
Grade Equivalent: 4.9
Based on research, 75\% of students at this student's level will achieve this much growth.

Above Estimated Mastery Range on Current Test
CC 4.OA.C3 Generate and analyze patterns.
CC 4.NBT.C1 Generalize place value understanding for multi-digit whole numbers.
$\square$ Within Estimated Mastery Range on Current Test
CC 4.OA.C2 Gain familiarity with factors and multiples.
CC 4.NBT.C2 Use place value understanding and properties of operations to perform multi-digit arithmetic.

## Are my students growing from year to year?

Longitudinal Reporting


## This really works

- Bergenfield has 5 Elementary Schools, 1 Middle School and 1 High School. All 7 Schools qualify for Title One Funds as over $40 \%$ of all students qualify for free and reduced lunch. More than $70 \%$ of the student population is in a minority sub-group as defined by NCLB. Bergenfield is not a privileged community.


## Odden Step 5

- Step five is creating and implementing an intensive and ongoing professional-development program. The best districts and schools form collaborative teacher teams-professional learning communities-that meet often, make use of student data, and work with school-based coaches to improve curriculum and instruction. These schools and districts also include intensive summer institutes in their professionaldevelopment plans, to allow teachers opportunities to gain new knowledge.


## Bergenfield's Outcomes

Based on evidence our observations have become a treasure hunt versus

## Versus a witch hunt

## Let's get rid of our most expensive teacher???



## Administrator-Teacher Discourse

Of all the approaches available to educators to promote teacher learning, the most powerful is that of professional conversation.

Talk About Teaching!

Charlotte Danielson
2009, Corwin Press

## Utilize our own Human Capital to help each other

- One $5^{\text {th }}$ grade teacher had $90 \%$ of her students Advanced Proficient in Math for 3 years in a row when district average was 20\%
- Best practices are identified and shared within building and within district through a Best Practice Wiki
- Identify students by individual skill versus wide range of support
- Give parents access to Ren Learn and NWEA for skill support
- Involve all staff in process. It is not the programs that are effective, it is the people who use the programs. Expansive Leadership. Utilize the experts in you buildings- the teachers.
- Administrators must be honest and committed to continuous growth of the teacher. If everything is always great, are we not really just infantilizing the teacher? We all can and must keep growing.


## Utilize our own Human Capital to help each other

- Added math coaches
- Changed the roles of Reading Specialists to Literacy Coaches
- Redefined how Basic Skills, ESL, Special Education services are delivered to be truly inclusive
- Created Extended Day Program and Summer School for added enrichment


# The data speaks volumes 

## Most Improved High School

## NewJersey

## Making up Ground in BERGENFIELD

School officials in Bergenfield, a new arrivals from Italy and Ireland. To- 1,250 students is 30 percent Filipino, 30 working-class, largely immigrant community tucked among the wealthier boroughs of Bergen County, have been striving for years to improve academic performance at the high school. That hard work seems to be paying off.

Bergenfield High School was the fastest rising school in this year's New Jersey Monthly survey of the Top High Schools, jumping nearly 100 spots, from 234 to 136.
"We've been breaking our backs," says Bergenfield schools superintendent Michael Kuchar. "We've really revolutionized the place."

Originally settled by Swedish and Dutch immigrants, Bergenfield later attracted

## Top 10 Most Improved High Schools

| $\begin{aligned} & 2010 \\ & \text { Rank } \end{aligned}$ | 2008 Rank | $\begin{gathered} \text { 2.-year } \\ \text { chnt } \\ \text { change } \end{gathered}$ | High School | County |
| :---: | :---: | :---: | :---: | :---: |
| 136 | 234 | 98 | Bergenfield | Bergen |
| 163 | 245 | 82 | Liberty (Jersey City) | Hudson |
| 117 | 196 | 79 | Creative and Performing Arts (Camden) | Camden |
| 221 | 292 | 71 | Cicely Tyson Performing Arts (East Orange) | Essex |
| 217 | 287 | 70 | Hillside | Union |
| 113 | 178 | 65 | David Brearley (Kenilworth) | Union |
| 141 | 198 | 57 | North Arlington | Bergen |
| 106 | 162 | 56 | Dumont | Bergen |
| 110 | 166 | 56 | Dunellen | Middlesex |
| 138 | 194 | 56 | North Warren Regional (Blairstown) | Warren |

day, the town of 25,600 residents is mainly percent Hispanic, and about 30 percent home to families with children who are on white, says Kuchar. "Their parents want their way to being first-generation college the best for their children," he says. "They students. The high school's population of want them to have a part of the American
dream."

Despite bigcuts in state aid and an increase in enrollment, Bergenfield High School has managed to reduce class size, achievebetter testscores, have fewer kids drop out, and send more students to four-year colleges since the last survey, published in 2008.

How did they do it?
Over the past few years, school officials have focused intensely on academic achievement, creating pro-
(Continued on page 79)

(Continued from page S6) grams that increase the rigor of course ork. They set up after-school clubs for has who struggied with homework. They started a ninth-grade academy that helps students with the transition from middle school to high school. They used mentors interested in engineering and math. They created partnerships with New Jersey colleges and universities that allow students to take courses for college credit. And they doubled the number of Advanced Placement classes.
$J i m$ Fasano, principal of Bergenfield High, says the school has worked hard toget students interested in going to college, busAnd they created an alternative high shool within the school system, where students are placed if they are at risk of dropping out or have fallen behind. There, they receive individualized attention in a small-class setting. Students from nearby schools are also sent there to help offset the cost.
"We've had twelve students graduate from high school this year that were in
line to drop out," says miracle."
Like many other towns in the state, Bergenfield had a tough year financially. The school district lost 51.6 million in state aid last year and another $\$ 2.88$ million under the Christie budget for the new school year.
Despite that, Bergenfield has not had

LESS IS MORE: Despite an increaso in nedillment, Bergonfiold High School has
neduced class size.
larger any teachers-in part because of large number of retirements. According o Kuchar, there were seven teacher rescribes as "trenendous breakgen" How" ver, he says the district was able to replace four of those teachers, and fifteen existing teachers will make up for some of the remaining gap by teaching additional perids under a "generous settlement" with the teachers' union. Further, the district has cut the number of administrators and consolidated some positions. For instance, in Kuchar will serve as directorn of guidance at the high school this year-at no extra salary. Lastyear, when Fasano was named prin. cipal, his previous position as assistant high school principal was eliminated, leaving only one assistant principal where in past Sears there had been two.
Shifting resources also enabled the high school to reduce average class size y turning hasi-skills teechers into classroom teachers.
"Our motto is, 'children come first,' and that translates into classrooms come hirst," says Kuchar, who is in his sixth year as superintendent and was previously the high school principal for four years. "We put all our time, money, and resources in
to where it hits most-the classroom."

# Bloomberg Businessweek: $2^{\text {nd }}$ best place to raise kids in NJ <br> Bloomberg Businessweek <br> <br> Available on the iPad 

 <br> <br> Available on the iPad}

Prevent teen driving deaths.
Support the STANDUP Act.

The Best Places to Raise Your Kids 2011
31 of 51 (8) (ㄷ)


Best place to raise kids in New Jersey: Ridgefield Park
Nearby city: New York
Population: 10,675
Median family income: $\$ 84,544$
Runner-up: Bergenfield

## 100 Best Communities for Young People

- Only
community in
New Jersey to be selected in 2012



## Questions

# Our presentation can be found on www.bergenfield.org 

Contact info: mkuchar@bergenfield.org fauriemma@bergenfield.org


[^0]:    Ti Objective 96 - Microsoft Internet Explores

