Dropout Prevention
The First Step in Delinquency Prevention

Edward M. Lambert Jr.
Executive Director

The Urban Initiative
University of Massachusetts Dartmouth

First National Satellite of the
National Dropout Prevention Center
Clemson University
About the UMass Dartmouth Urban Initiative

- Established by Chancellor Jean MacCormack to expand the University’s role in efforts to improve the quality of life in urban areas throughout the region and state

- Rooted in the philosophy that a region’s growth and prosperity is dependent upon the health of its cities

- Established in response to the challenge issued by MassINC in its Gateway Cities Report that the UMass System should make urban revitalization a core part of its mission
Dropout Prevention in the SouthCoast
Choosing a New Path to Economic Prosperity

- Research Report published by the Urban Initiative in April of 2009
- Sponsored by the SouthCoast Development Partnership as a result of a realization that low educational attainment and high dropout rates are significant obstacles to economic growth in the region
UMD Urban Initiative Affiliation with the National Dropout Prevention Center at Clemson University

- Working through the Urban Initiative and its staff, UMass Dartmouth has become the first national affiliate organization of the National Dropout Prevention Center/Network

- The affiliation will allow the NDPC/N to expand its national role and capacity while allowing UMass Dartmouth to become more active in efforts to reduce dropout rates and enhance educational attainment in the region and beyond.

- As a part of the agreement the Urban Initiative will become engaged in the projects of the National Dropout Prevention Center/Network and serve as a collaborator in its national efforts to reduce dropout

- The NDPC/N will likewise become engaged in the work of the Urban Initiative as it relates to urban education and dropout prevention by providing tools and support that will allow the University and the Urban Initiative to bring the NDPC/N’s resources and expertise to bear for the benefit of our region
The National Dropout Prevention Center at Clemson University

- Established in 1986, it has grown to become a well-established national resource for sharing solutions for student success
- Serves as a clearinghouse on issues related to dropout prevention and to offer strategies designed to increase the graduation rate
- Serves as a research center and resource network for practitioners, researchers, and policy makers to reshape school and community environments to meet the needs of youth in at-risk situations
- Has achieved a growing focus on students with disabilities to ensure they receive the quality education and services necessary to succeed academically and graduate.
- It serves as a national resource for sharing solutions and promoting student success through active research projects, publications, and a variety of professional development activities
- Conducts third-party evaluations and Program Assessment and Reviews that help schools develop the capacity for self-directed, continuous school improvement with an emphasis on improving student academic achievement and increasing the graduation rate.
Presentation Overview

I. Understanding the Dropout Problem and its Economic & Social Impact

II. Strategies That Work

III. Trends and Tips

IV. The Juvenile Justice Context

V. Conditions of Success
 Dropout Prevention  
Everyone’s Responsibility

“Youth are kept out of the system by encouraging COMMUNITY OWNERSHIP of delinquency problems.”

- Juvenile Justice Task Force Report
## Dropout Prevention
### A National Issue

#### Background Characteristics

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>Dropout Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>White, non-Hispanic</td>
<td>7.3%</td>
</tr>
<tr>
<td>Black, non-Hispanic</td>
<td>10.9%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>27.0%</td>
</tr>
<tr>
<td>Hispanic, immigrant</td>
<td>44.2%</td>
</tr>
<tr>
<td>Asian/Pacific Islander</td>
<td>3.8%</td>
</tr>
<tr>
<td>Native American Dropout</td>
<td>57.0%</td>
</tr>
</tbody>
</table>

## Dropout Rates Among Socioeconomic Levels

<table>
<thead>
<tr>
<th>Family Income Level</th>
<th>Dropout Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quintile 1</td>
<td>38%</td>
</tr>
<tr>
<td>Quintile 2</td>
<td>22%</td>
</tr>
<tr>
<td>Quintile 3</td>
<td>15%</td>
</tr>
<tr>
<td>Quintile 4/5</td>
<td>8%</td>
</tr>
</tbody>
</table>

*(Jobs for the Future, 2006)*
Top Five Reasons for Dropping Out: Ages 16-25

1. Classes were not interesting 47%
2. Missed too many school days 43%
3. Friends not interested in school 42%
4. Excess freedom/too few life rules 38%
5. Failing school 35%

(Rotermund, California Dropout Research Project, Statistical Brief Number 2, May 2007)
Grade Retention and School Dropout

• Retention of one grade – increases risk by 40%

• Retention of two grades – increases risk by 90%
Diversity of Influences/Factors Contributing to School Dropouts

- Behavior
- Nutrition
- Zero tolerance
Barriers and Risks for Girls

• Pregnancy and family responsibilities
  ✓ 33% of dropouts are pregnant before exiting

• Attendance rates
  ✓ 9% more girls than boys cite attendance as a factor

• Academics
  ✓ African American, Hispanics & Native Amer./Alaskan Natives drop out at a higher rate than males or Caucasians

• Discipline
  ✓ 12th grade Hispanic females’ dropout rate skyrockets

• Family structure and rules

(When Girls Don’t Graduate, We All Fail, 2007)
Research Domain Factors

- Individual
- Family
- School
- Community
What key indicator is the best predictor of a school dropout?

- Attendance
- Reading Level
- Free and reduced lunch
- Academic achievement
- Discipline referrals
## Risk Factors by School Levels

<table>
<thead>
<tr>
<th>Individual Factors</th>
<th>Elem.</th>
<th>Middle</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Has a learning disability or emotional disturbance</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>High number of work hours</td>
<td>✔</td>
<td>✔</td>
<td>✔ *</td>
</tr>
<tr>
<td>Parenthood</td>
<td>✔</td>
<td>✔</td>
<td>✔ *</td>
</tr>
<tr>
<td>High-risk peer group</td>
<td>✔ *</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>High-risk social behavior</td>
<td>✔ *</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Highly socially active outside of school</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Low achievement</td>
<td>✔ *</td>
<td>✔ *</td>
<td>✔ *</td>
</tr>
<tr>
<td>Retention/overage for grade</td>
<td>✔ *</td>
<td>✔ *</td>
<td>✔ *</td>
</tr>
<tr>
<td>Poor attendance</td>
<td>✔ *</td>
<td>✔ *</td>
<td>✔ *</td>
</tr>
<tr>
<td>Low educational expectations</td>
<td>✔ *</td>
<td>✔</td>
<td>✔ *</td>
</tr>
<tr>
<td>Lack of effort</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Low commitment to school</td>
<td>✔</td>
<td>✔</td>
<td>✔ *</td>
</tr>
<tr>
<td>No extracurricular participation</td>
<td>✔</td>
<td>✔</td>
<td>✔ *</td>
</tr>
<tr>
<td>Misbehavior</td>
<td>✔</td>
<td>✔</td>
<td>✔ *</td>
</tr>
<tr>
<td>Early aggression</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
</tbody>
</table>
## Risk Factors by School Levels

<table>
<thead>
<tr>
<th>Family Factors</th>
<th>Elem.</th>
<th>Middle</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low socioeconomic status</td>
<td>✓ *</td>
<td>✓ *</td>
<td>✓ *</td>
</tr>
<tr>
<td>High family mobility</td>
<td>✓</td>
<td></td>
<td>✓ *</td>
</tr>
<tr>
<td>Low education level of parents</td>
<td>✓</td>
<td>✓</td>
<td>✓ *</td>
</tr>
<tr>
<td>Large number of siblings</td>
<td>✓</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Not living with both natural parents</td>
<td>✓</td>
<td>✓</td>
<td>✓ *</td>
</tr>
<tr>
<td>Family disruption</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low educational expectations</td>
<td></td>
<td>✓ *</td>
<td></td>
</tr>
<tr>
<td>Sibling(s) has dropped out</td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Low contact with school</td>
<td>✓ *</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Lack of conversations about school</td>
<td>✓ *</td>
<td></td>
<td>✓</td>
</tr>
</tbody>
</table>

**Key:** ✓ One (1) research study  
 ✓ * Two (2) or more research studies
Risk Factors Supported Across All School Levels

- Low achievement
- Retention/overage for grade
- Poor attendance
- Low family socioeconomic status
What Really Matters?

Attendance Affects Graduation

(The Consortium on Chicago School Research at the University of Chicago, 2007)
What Really Matters?

Grades Affect Graduation

Average Freshman Grades
Rounded to the nearest 0.5

(The Consortium on Chicago School Research at the University of Chicago)
Choices Are
NEVER
This Obvious
While no one factor (or even several factors) puts students at risk, combinations of factors can help identify potential dropouts.
Economic & Social Impact

- Earn less
- Contribute less federal, state, & local taxes
- More likely to rely on public healthcare
- More likely to utilize welfare services
- More likely to be involved in the criminal justice system

(Rotermund, California Dropout Research Project, Statistical Brief 5, September 2007)
High School Dropouts Earn Less than Graduates

- High school dropouts earn approximately $9,500 less per year than a high school graduate.
- Dropouts earn about $260,000 less over a lifetime.
- Dropouts from the class of 2007 represent a loss of $329 billion in potential income over their lifetime.

(Alliance for Excellent Education: “The High Cost of High School Dropouts.”)
(USA Today: “High School Dropouts Cost Country Billions.”)
High School Dropouts Contribute Less to Federal, State, and Local Taxes

- High school dropouts contribute $60,000 less in taxes over their lifetime
- Annual losses exceed $50 billion in federal and state income taxes

(USA Today: “High School Dropouts Cost Country Billions.”)
High School Dropouts Are More Likely to Rely on Public Healthcare

• High school dropouts are more likely to rely on the government for provision of healthcare services

• Health-related losses for the 600,000 dropouts in 2004 totaled $58 billion

• The US could save more than $17 billion annually in Medicaid and healthcare costs for the uninsured by graduating all students

(Alliance for Excellent Education: “The High Cost of High School Dropouts.”)  
(USA Today: “High School Dropouts Cost Country Billions.”)
High School Dropouts Are More Likely to Utilize Welfare Services

- Of the 1.2 million single mothers on TANF in 2002, over 500,000 were high school dropouts.

- The U.S. could save between $7.9 billion and $10.8 billion annually by improving educational attainment among recipients of TANF.

(Garfinkel, et al.: “Public Assistance Programs - How much could be saved with improved education?)
(USA Today: “High School Dropouts Cost Country Billions.”)
High School Dropouts Are More Likely to Become Involved in the Criminal Justice System
High School Dropouts Are More Likely to Become Involved in the Criminal Justice System

- High School Dropouts are 3.5 times more likely to get arrested
- They are 8 more times to be incarcerated
- 68% of state prison inmates do not have a High School Diploma
An Ounce of Prevention...

- Staying in school longer reduces the likelihood of a youngster turning to crime, and graduating high school has a dramatic impact.
  - A recent study suggests that a 10 percentage point increase in graduation rates would result in a 20 percent reduction in murder and assault rates.

- A recent report estimates that a 10 percent increase in male graduation rates in Maine would result in an annual savings of $29 million to the state, $6 million of which would be realized in annual crime-related savings.  

1. Fight Crime: Invest in Kids Maine - “Schools or the Streets: Crime and Maine’s Dropout Crisis”
Cycle of Disengagement

How & When do we intervene?
15 Strategies that Help Prevent Students from Dropping Out
Dropout Prevention
Everyone’s Responsibility

Systemic Renewal

Learning
- Early Interventions
- School-Community Collaboration
- Instructional Practices
- Basic Core Strategies

Systemic Renewal
Systemic Renewal
Systemic Renewal
A School and Community Perspective

- Systemic renewal
- School and community collaboration
- Safe learning environments
Systemic Renewal

What is systemic renewal?

- Continuous, critical inquiry into current practices
- Identifying needed educational improvements
- Removing organizational barriers
- Providing a system structure that supports change  (Schwartzbeck, 2002)
What School Policy Is Responsible for Pushing More Students Out of School?

- Truancy
- Homework
- Retention
- Suspensions
- Zero Tolerance
Systemic Renewal

- Policies
- Populations
- Personnel
- Programs
- Practices
- Partners
- Pennies
Collaboration is defined in many ways:

Through *programs and services*:

- School-to-work
- Integrated Services
- Extended learning
- Public-private partnership

(Boyd, Brown, & Hara, 1999)
Creating Safe Learning Environments

A safe learning environment:

• Provides a warm and welcoming atmosphere that fosters a spirit of acceptance and caring

• Is free of intimidation, violence, and fear

• Clearly communicates behavior expectations consistently enforced and fairly applied
Creating Safe Learning Environments

A comprehensive plan includes:

- A caring, cooperative, cohesive culture with respect for diversity
- Character education coupled with a fair discipline program
- A conflict resolution curriculum, anger management techniques, bullying prevention, and peer mediation
Systemic Renewal

Learning

School-Community Collaboration

Early Interventions

Gate

Environments

Systemic Renewal

Dropout Prevention

Everyone’s Problem
Early Interventions

- Early Childhood Education
- Early Literacy Development
- Family Engagement
Impact of Early Childhood Education…

*Perry Preschool Study* – High-quality Head Start programs

- Decreased level of school dropouts
- Lowered truancy
- Reduced teen pregnancy
- Lessened need to be in special education

(Barnett, 1995)
Early Childhood Education

_One dollar_ invested in high-quality early childhood education programs by policy makers results in a return of _thirteen dollars_ in preventative costs associated with incarceration, truancy, school dropout, and teen pregnancy.

(Belfield et al. _The Journal of Human Resources_, 2006)
Early Literacy Development

Research

• At-risk students who have a strong reading teacher for two consecutive years can be successful readers. (Wren, 2003)

• Reading aloud to children is the single most important activity for building the knowledge required for success in reading. (Armbruster, Lehr, & Osborn, 2002)
Early Literacy Development

Closing the Gap at the 3rd Grade Reading Level

• Quality program and start early
• Use child's affinity for technology
• Use data to drive instruction
• Extra support of disadvantaged
• Engage entire community

*(Education Week, p 23, R. Lauer, May 7, 2008)*
Family Engagement

When families are engaged in children’s learning, students are more likely to:

• Attend school regularly
• Display more positive attitudes about school
• Graduate from high school and enroll in postsecondary programs
• Refrain from destructive activities such as alcohol use and violence

(Henderson & Mapp, 2003)
Dropping out of school is the result of a long process of disengagement that may begin before a child enters school.
Systemic Renewal

 Dropout Prevention
 Everyone’s Problem

 Early Interventions
 School-Community Collaboration
 Basic Core Strategies

 Learning
 Environment
Basic Core Strategies

- Mentoring
- Service-Learning
- Alternative Schooling
- After-School Program Experiences
Mentoring is ...

A caring and supportive relationship between a mentor and mentee that is based on trust.
Mentoring has many formats …

**Traditional:** One adult with one student

**Peer:** One older youth with a younger youth

**Group/Team:** One or more adults with several youth

**Telementoring:** One adult with one youth using the Internet
Service-Learning

Service-learning programs involve students doing meaningful service—usually a project they select based on real community need—linked to academic and personal learning.

(Shumer & Duckenfield, 2004)
Service-Learning

Essential Elements of Good Service-Learning Programs...

• Is integrated into the curriculum
• Is utilizing active learning
• Is interesting and exciting
• Is connected to community
Traditional schools can no longer meet the diverse needs of every student.

Alternative Education is a perspective, not a procedure or program.
Alternative School Elements

- Maximum Teacher/Student Ratio of 1:10
- Small student base not exceeding 250
- Caring faculty and ongoing staff development
- High expectations from school staff
- Flexible school schedule with community involvement and support
- Heavy emphasis on credit recovery and catching up
After-School Program Experiences

Students involved in after-school programs are three times as likely to continue their education and receive an award or honor at graduation.

(Newman, Fox, Flynn, and Christeson, 2000)
After-School Program Experiences

Components of Successful Programs

• Academic focus
• Enrichment and accelerated learning
• Supervised recreation
• Community service
• Collaboration and partnerships
• Active family involvement
Dropout Prevention Everyone’s Problem

Systemic Renewal

Learning

Early Interventions

Basic Core Strategies

School-Community Collaboration

Instructional Practices

Systemic Renewal
Making the Most of Instruction

- Professional development
- Active learning
- Educational technology
- Individualized instruction
- Career and technical education
The single largest factor affecting the academic growth of students is the difference in the effectiveness of individual classroom teachers.

(Tennessee Value-Added Assessment System, Sanders, 1998)
Effective Professional Development Strategies….

- Sustained, rather than one-shot presentations (Garet, Porter, Desimone, Birman, & Kwang, 2001)
- Tied to student achievement and school improvement goals (U.S. Department of Education, 2003)
- Focused on deepening teachers’ content knowledge and pedagogical skills (Sparks, 2002)
Active Learning

... Teaching and learning strategies that engage students by providing opportunities for students to listen, speak, write, construct, and reflect as they solve problems, perform new skills, and work in teams.
Active Learning

Differentiated Learning Strategies:

• Cooperative learning
• Multiple intelligences/learning styles
• Project-based learning
Educational Technology

Research on the Use of Technology in Schools...

- Is a positive influence on students at risk of failure (Day, 2002)
- Teaches “real-world applications” to help students succeed outside the classroom
- Increases student motivation, raises the success rate of students performing complex tasks, and changes classroom roles and organization (Means, 1997)
Educational Technology

Best Practices

• Activities are student-centered, not teacher-controlled

• Technology is integrated into the curriculum, not an add-on or reward

• Engaged learning that helps students acquire critical thinking and problem-solving skills (Schmitz, Prescott, & Hunt, 1996)
Individualized Instruction

Encourages the learner to be the producer of knowledge with...

- Problem-based learning and reciprocal teaching
- Peer tutoring
- Cooperative learning
- Journaling
- Hands-on projects
- Role playing and simulations
**Major Components**

- **Individualizing learning**: to recognize and build upon each child's unique past experiences and prior knowledge

- **Individualizing motivation**: to recognize and use the keys to a child's interests, goals, and confidence

(Keefe & Jenkings, 2000)
Career and Technical Education (CTE) includes a wide array of career-based instruction

- K-12 career education
- A comprehensive guidance program
- School- and work-based experiences
- Internships and apprenticeships
Effective Career-Technical Education

Multiple Pathways

Career academies enhance motivation and enjoyment which result in:

- Increased attendance
- Better grades
- Fewer failed courses
- Lower dropout rates
- Better college entrance rates
- A positive attitude toward school
- Increased planning for the future

(Grubb & Stern, *Making the Most of Career-Technical Education: Options for Calif.*, 2007)
National Trends and Tips

• **Alternative Schooling and Recovery Programs**
  - Virtual credit recovery
  - Private contract schools

• **Attendance and Truancy Reduction Program**
  - Aggressive attendance programs by school districts and communities
  - Court-based programs aligned with school efforts

• **Increased Role of “Counselors”**
  - Graduation coaches (GA)
  - Guidance technicians (St. Paul, MN)
National Trends and Tips

• **Individualized Learning Plans**
  - Individual Graduation Plan (South Carolina)
  - Six-Year Plan (St. Paul, MN)

• **Smaller Learning Communities**
  - Ninth grade academies
  - Smaller “houses” within high schools

• **Transition Programs**
  - Formal programs between 8th and 9th grades
  - Transition counselors throughout multiple grade levels
The Juvenile Justice Task Force is on the right track

In fact, several of its goals/recommendations fit well within the context of the NDPC’s 15 Dropout Prevention Strategies
GOAL #1: Establish by 2010, a statewide goal of 90% high school graduation rate by 2016

- Systemic Renewal
GOAL #1: Establish by 2010, a statewide goal of 90% high school graduation rate by 2016

• High Expectation
  • Q: Is there accountability?

• Examine raising mandatory age to 18
  • Q: Commensurate commitment to programs?

• Requiring local dropout prevention plans
  • Q: Funding?
GOAL #2: By 2011, implement uniform statewide suspension, expulsion, zero tolerance, and truancy policies

- Systemic Renewal
- Safe Learning Environments
GOAL #2: By 2011, implement uniform statewide suspension, expulsion, zero tolerance, and truancy policies

• Policy Review
  • Q: Uniformly good or bad?

• Dropouts / Push-outs
  • Q: What is the incentive to deal with difficult students:

• Courts are well-positioned to help with truancy
GOAL #3: Ensure that all children in Maine have access to early childhood education and proven prevention strategies

- Early Childhood Education
- Early Literacy Development
GOAL #3: Ensure that all children in Maine have access to early childhood education and proven prevention strategies

• Best long-term strategy for at-risk youth
Studies have found that children attending high-quality pre-kindergarten programs are less likely to commit crimes as adults.

Head Start graduates are 8.5 percent less likely to be arrested or charged with a crime than their siblings who did not attend preschool programs.

The Perry Preschool Program produced the following results:

- Children who attended were more likely to graduate from high school
- At age 40, individuals who did not participate were twice as likely to have been arrested for violent crimes
- Attendants were less likely to abuse illegal drugs
- Children left out were four times more likely to be arrested for drug felonies and seven times more likely to be arrested for possessing dangerous drugs
GOAL #3: Ensure that all children in Maine have access to early childhood education and proven prevention strategies

• Best long-term strategy for at-risk youth
  • Q: Funding? Targeting?

• Childhood health/nutrition vital
GOAL #4: Work with the Department of Education in 2010 to formulate a plan that will create multiple pathways for educating children and youth

• Active learning
• Educational Technology
• Individualized Instruction
• Alternative Schooling
• Professional Development
GOAL #4: Work with the Department of Education in 2010 to formulate a plan that will create multiple pathways for educating children and youth

- Individual Plans / Non-Traditional
- Q: Focus on Career Pathways?
CONDITIONS OF SUCCESS

• Public engagement / A community responsibility
• Funding / Targeting
• Overall adult educational attainment
• Collaboration
• Data gathering / Tracking of students
• A commitment to systemic renewal
• Early identification / Dropout Early Warning Systems
Cycle of Disengagement

When do we intervene?
Relative to the Dropout Issue, Start With the Whats......

• What data sets should we review?
• What populations should we focus on first?
• What policies tend to push kids out of school?
• What critical checkpoints should be the highest priority?
• What current “safety net” programs have marginal impact?
What if.....

We could provide you with a predictive coefficient that would:

- Identify individual students likely to drop out
- Identify cohorts or groups of students likely to drop out
- Identify grade levels where students begin to have problems
- Identify schools where students are more likely to have problems
- Identify teachers who are not as effective as they could be
PAR Advantage
A School and Community Approach

Dropout Early Warning System
(DEWS)

Predictive Risk Index Assessment System
(PRIAS)
# Risk Factors for School 2

## Third Update

<table>
<thead>
<tr>
<th>ID</th>
<th>Risk 1</th>
<th>Risk 2</th>
<th>Risk 3</th>
<th>Gender</th>
<th>Ethnicity</th>
<th>F/R L1</th>
<th>F/R L2</th>
<th>F/R L3</th>
<th>Sped 1</th>
<th>Sped 2</th>
<th>Sped 3</th>
<th>GPA 1</th>
<th>GPA 2</th>
<th>GPA 3</th>
<th>%Abs 1</th>
<th>%Abs 2</th>
<th>%Abs 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>960010000359</td>
<td>0.99638</td>
<td>0.94656</td>
<td>0.89674</td>
<td>0.12</td>
<td>-0.06</td>
<td>-0.83</td>
<td>-0.73</td>
<td>-0.75</td>
<td>-0.068</td>
<td>-0.07</td>
<td>-0.06</td>
<td>0.33</td>
<td>0.314</td>
<td>0.3</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>960000160308</td>
<td>0.81128</td>
<td>0.77072</td>
<td>0.73015</td>
<td>0.12</td>
<td>-0.06</td>
<td>0.3</td>
<td>0.29</td>
<td>0.27</td>
<td>-0.068</td>
<td>-0.07</td>
<td>-0.06</td>
<td>1.48</td>
<td>1.41</td>
<td>1.34</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>960010003538</td>
<td>0.68989</td>
<td>0.65539</td>
<td>0.6209</td>
<td>-0.13</td>
<td>1.72</td>
<td>0.3</td>
<td>0.29</td>
<td>0.27</td>
<td>-0.068</td>
<td>-0.07</td>
<td>-0.06</td>
<td>1.1</td>
<td>1.042</td>
<td>0.99</td>
<td>0.792</td>
<td>0.753</td>
<td>0.713</td>
</tr>
<tr>
<td>960010003926</td>
<td>0.50114</td>
<td>0.47608</td>
<td>0.45102</td>
<td>-0.13</td>
<td>-0.06</td>
<td>0.3</td>
<td>0.29</td>
<td>0.27</td>
<td>0.996</td>
<td>0.946</td>
<td>0.897</td>
<td>1.26</td>
<td>1.192</td>
<td>1.13</td>
<td>0.821</td>
<td>0.78</td>
<td>0.739</td>
</tr>
</tbody>
</table>
Risk Factors for Selected Student

Index = 0.38538
Monitoring Student Intervention

Edit Intervention

Intervention

Responsible Person

10/19/2009   10/19/2009
Monitoring School-Wide Intervention

Risk by Intervention
District 1 Grade 8

Risk Factor Value
PAR Advantage--A Systemic Approach to Increase Graduation Rates

I
Data
Discovery/Mapping/Mining
Predictive Analytic Models

II
School and Community
Climate Assessment

III
Utilization of Data to Identify Needs
Intervention Strategies and Programs

IV
Implement Solutions
Monitoring and Evaluations
PRIIAS/DEWS Model

School Information Sources

Local School or District (LEA)
- Attendance
- Truancy
- Grade Point Average
- Student Achievement Test
- Credits
- Suspensions & Expulsions
- Enrollment
- Withdrawal & Transfer
- Retention

Data Discovery & Mapping
24x7 Data Movement
Dropout Monitoring

Disparate Data
- Excel Spreadsheets
- MSFT Access
- Oracle
- Sybase
- Flat Files

Horizontal LEA Predictive Analytics

Vertical SEA Reporting & Analytics (SIF Compatible)
Using PAR-Advantage

• You have all the data.

• You know where the problems are.
  ✓ You know which individual students need help
  ✓ You know which groups of students need help
  ✓ You know which schools need help
  ✓ You know which teachers need help
Data-Driven Decisions

School Staff

- Classroom Teachers
- School Counselors
- School Resource Officers
- Truant Officers
- School Principals
- District Office Staff

Risk Management Portal

Data-Driven Decisions
Varied Types of Data-Driven Decisions

**Targeted Interventions**

- Case Management
- Student/Family
- Instructional Strategies
- Attendance Incentives
- Tutoring Assistance
- IEPs/IGPs
- Teacher Assignments
- Staff Development
- Behavioral Modifications
- NDPC
- 15 Effective Strategies Model Programs
Using PAR Advantage to Develop Schoolwide Interventions

Results of the English Language Assessment (ELA) for a subset of 3rd – 8th graders in a South Carolina school district for seven consecutive years.

<table>
<thead>
<tr>
<th>Grade</th>
<th>Number of students at each level</th>
<th>Percentage Change from previous grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade 3</td>
<td>909 2074 2533 355 210</td>
<td>41.8% 26.9% -26.9% -60.8% 3.3%</td>
</tr>
<tr>
<td>Grade 4</td>
<td>1289 2695 1851 139 217</td>
<td>40.0% 12.8% -30.4% -58.3% -13.8%</td>
</tr>
<tr>
<td>Grade 5</td>
<td>1805 3041 1289 58 187</td>
<td>30.5% -8.6% 22.1% 308.6% 25.7%</td>
</tr>
<tr>
<td>Grade 6</td>
<td>2356 2778 1574 237 235</td>
<td>3.5% 13.2% -17.5% -30.4% 77.0%</td>
</tr>
<tr>
<td>Grade 7</td>
<td>2439 3145 1299 165 416</td>
<td>-0.1% -4.5% -6.7% 27.3% 25.7%</td>
</tr>
</tbody>
</table>

The number of students scoring “0” or far below grade level increases between 3rd and 8th grade, while the students reaching proficiency declined, indicating the urgent need for a schoolwide intervention to improve student literacy.

0 = Below Basic
1 = Basic
2 = Proficient
3 = Advanced
NA = Not Available
Develop a Schoolwide Intervention Plan

Implement risk assessment framework to examine risk and protective factors to determine the most effective intervention plan.

<table>
<thead>
<tr>
<th>Focus of Identification</th>
<th>Specific Needs Strategies</th>
<th>Levels of Need</th>
<th>Intervention Strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade Level</td>
<td>9th Grade Reading Transition</td>
<td>High High</td>
<td>Freshman Academies Adult/Peer Mentors</td>
</tr>
<tr>
<td>School Level</td>
<td>Discipline Attendance Bullying</td>
<td>Low Medium High</td>
<td>Conflict Resolution Youth Court Olweus Bullying Program</td>
</tr>
<tr>
<td>District Pattern</td>
<td>Suspensions Truancy Retentions</td>
<td>Medium Medium High</td>
<td>Alternative Schools Family Court Partnerships Review Policies</td>
</tr>
</tbody>
</table>
Varied Types of Data-Driven Decisions

**Schoolwide Interventions**

- Classroom Instructional Teams
- Classroom Management
- Curriculum Revisions
- Grade Assignments
- Attendance-Tardy Policies
- Staff Assignments
- Student-Staff Ratios
- Retention Policies

NDPC

15 Effective Strategies Model Programs
Using school- and community-related risk factors to predict which students are most likely to drop out of school.
Data-Driven Decisions

Community Groups

Social Services

Law Enforcement

Family Courts

Juvenile Justice

Health Services

Youth Service Providers

Risk Management Portal

Community Groups include Social Services, Law Enforcement, Family Courts, Juvenile Justice, Health Services, and Youth Service Providers. These groups collaborate through a Risk Management Portal to make data-driven decisions.
**Value-Added Assessment (VAA)** is a statistical technique that uses student achievement data over time to predict gains in achievement and progress. VAA measures the effect a school or teacher has on student academic performance over the course of a school year.

**Achievement** is the standard used by NCLB/AYP to compare school performance based on a comparison of the current year’s vs. the previous year’s reading or math tests.

**Progress** is the measured academic gain a student makes over a period of time.

“High-quality teachers are critical to accelerating student achievement. VAA provides teachers and principals with the resources to grow individually and collectively as a school, ultimately benefiting our students.” Arne Duncan U.S. Secretary of Education
Value-Added Assessment by School and Risk Group

Targeted Progress is 100 point gain on each score. Math curriculum is identical for all classes in report.
Value-Added Assessment by Risk Group/Teacher Effectiveness

Value-added assessment measures growth and answers the question:

How much value did the school staff add to the students who live in its community?
Added-Advantage of NDPC

✓ Technical Assistance (PAR Advantage)
✓ Fifteen Strategies
✓ Model Programs
✓ Proven Practices
✓ National Outreach/Connections
Cycle of Disengagement

How & When do we intervene?
Graduation 2006
“Reducing dropout rates is not a problem to be solved solely by the region’s school districts but rather, a crisis that we must all take ownership of and resolve.”

- Dropout Prevention in the South Coast by the UMass Dartmouth Urban Initiative