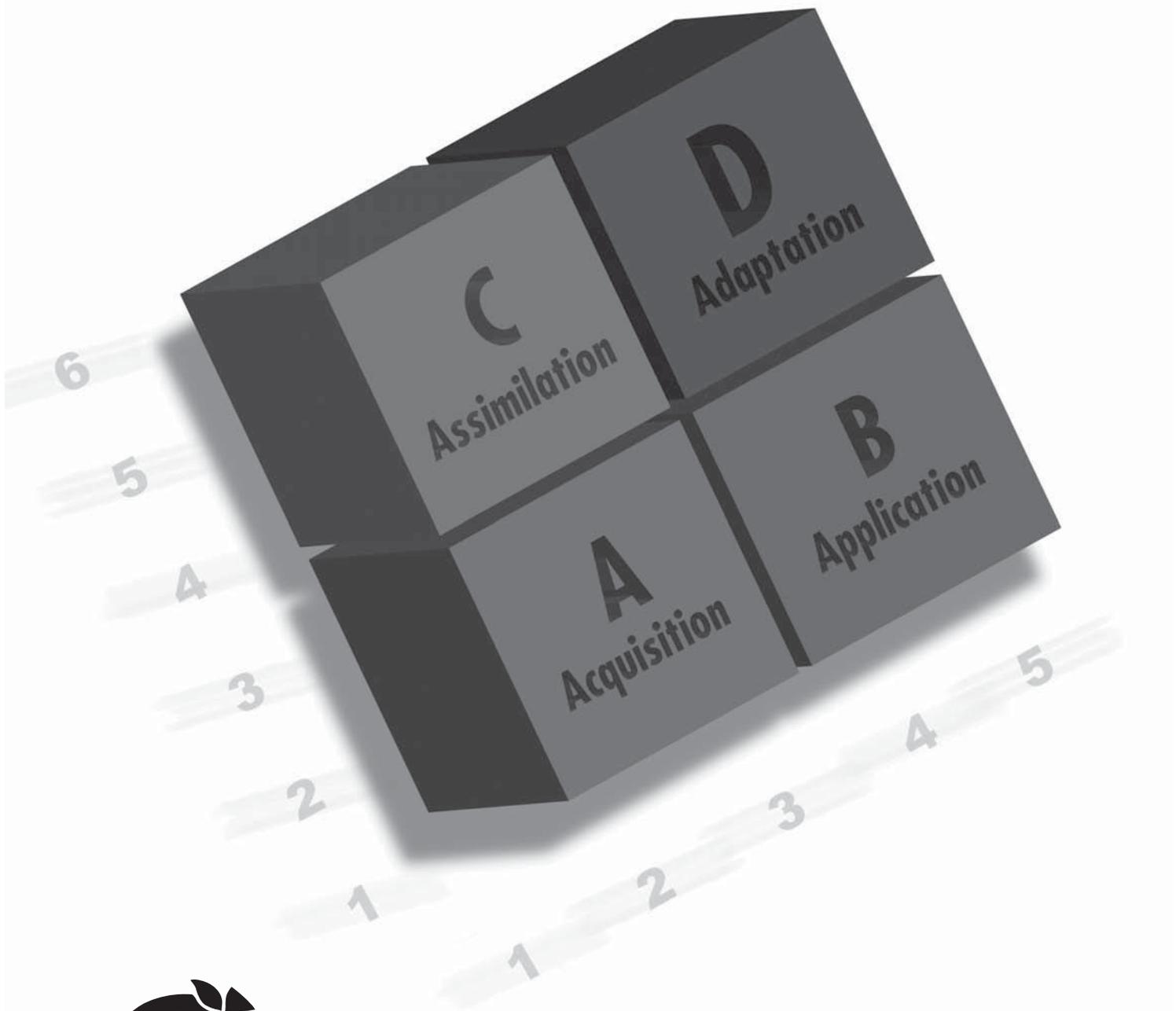


# Rigor and Relevance Handbook Second Edition



**International Center** [www.LeaderEd.com](http://www.LeaderEd.com)  
**for Leadership in Education**

## Acknowledgments

The International Center for Leadership in Education wishes to thank  
the author of this handbook:

Richard D. Jones, Ph.D.

Excepting those portions intended for classroom or training use, no part of this publication may be reproduced in whole or in part, or stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without written permission of the publisher. For information regarding permission, write to International Center for Leadership in Education. The International Center for Leadership in Education grants the purchaser of this publication permission to reproduce those pages intended for use in classrooms or training. Notice of copyright must appear on all copies of copyrighted materials.

**Copyright © 2010 by International Center for Leadership in Education, Inc.**

**All rights reserved.**

Published by International Center for Leadership in Education, Inc.

Printed in the U.S.A.

ISBN 1-935300-20-2

This handbook is a companion to the professional development resource kit, *Using the Rigor/Relevance Framework® for Planning and Instruction*, which contains a complete discussion of rigor and relevance, professional development activities, a DVD introducing the Rigor/Relevance Framework, and a CD with tools and handouts.



**International Center for Leadership in Education, Inc.**

1587 Route 146 • Rexford, New York 12148

(518) 399-2776 • fax (518) 399-7607  
www.LeaderEd.com • info@LeaderEd.com

# Contents

Foreword .....	v
Introduction.....	vii
<b>I. Rigor/Relevance Framework</b>	
Introducing the Rigor/Relevance Framework .....	1
Rigor and Relevance in the Classroom .....	13
Implementing the Rigor/Relevance Framework .....	37
References .....	43
<b>2. Planning Instruction</b>	
Backwards Design Approach .....	45
Instructional Planning Forms.....	61
References .....	74
<b>3. Enhancing Instructional Planning</b>	
Data-driven Instructional Planning .....	73
Using Instructional Technology.....	81
Interdisciplinary Instruction.....	85
Gold Seal Lessons .....	90
References .....	92
<b>4. Selecting and Developing Local Assessments</b>	
Types of Assessment .....	97
Designing Performance Assessments.....	100
Types of Scoring Guides .....	103
<b>5. Teaching for Rigor and Relevance</b>	
Instructional Strategies.....	111
Reading Strategies.....	117
Quadrant D Moments .....	120
Teaching for Student Engagement.....	122
<b>6. Improving Instruction Through Rigor and Relevance</b>	
Reflective Practice.....	125
Internet Resources for Teaching Ideas on Rigor and Relevance .....	125
Peer Review .....	131
Action Research .....	140
Personal Improvement Plans .....	143

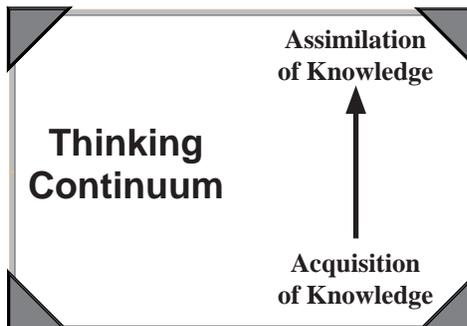
# Chapter 1

## Rigor/Relevance Framework



### Introducing the Rigor/Relevance Framework

The Rigor/Relevance Framework® is a tool developed by the International Center for Leadership in Education to examine curriculum, instruction, and assessment. The Rigor/Relevance Framework is based on the two dimensions of higher standards and student achievement.

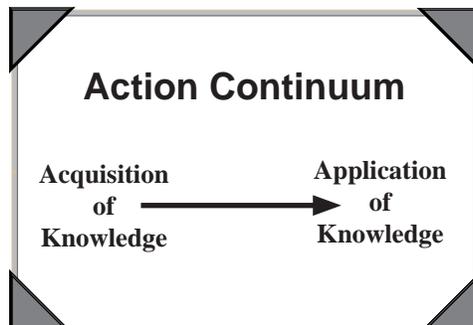


First, a continuum of knowledge describes the increasingly complex ways in which we think. This Knowledge Taxonomy is based on the six levels of Bloom’s Taxonomy: (1) knowledge/awareness, (2) comprehension, (3) application, (4) analysis, (5) synthesis, and (6) evaluation.

Bloom, B.S., *et al. Taxonomy of Educational Objectives*

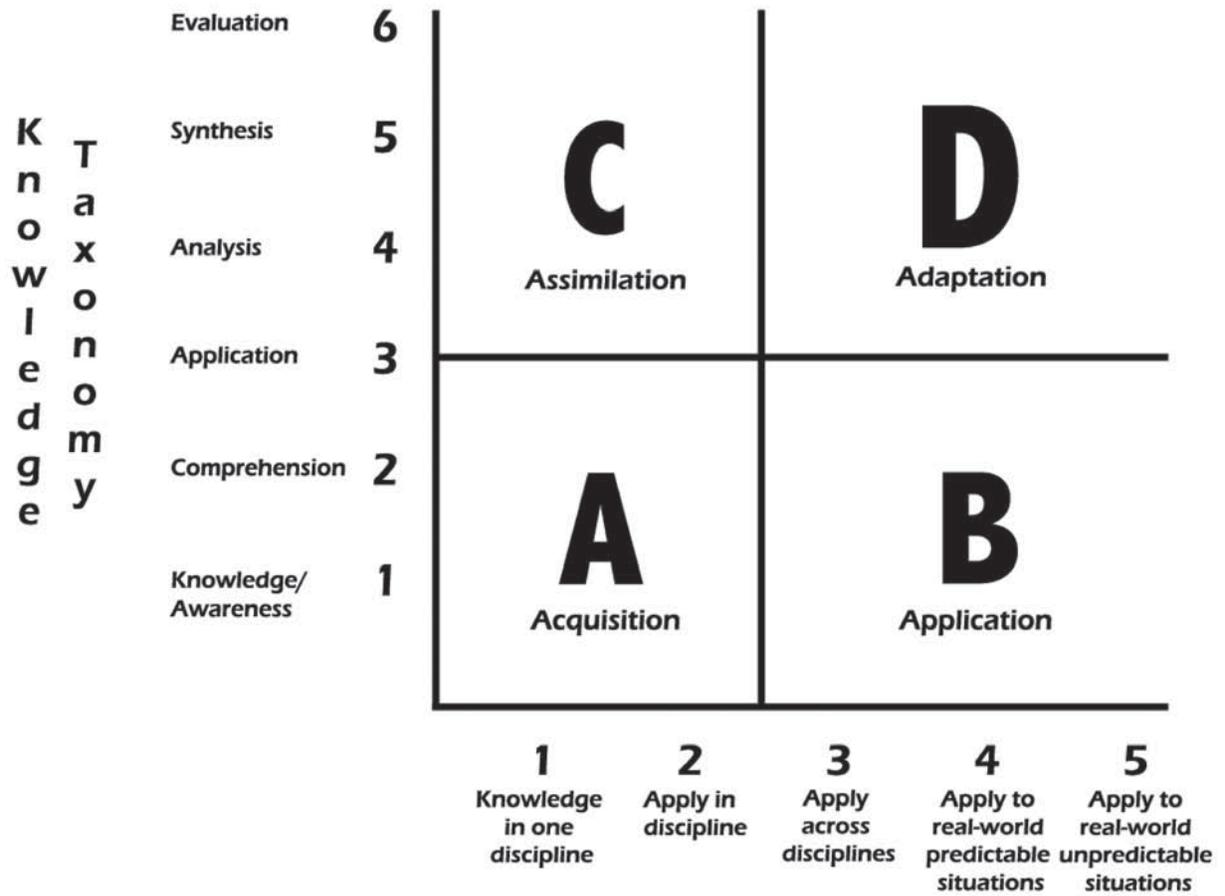
The low end of this continuum involves acquiring knowledge and being able to recall or locate that knowledge in a simple manner. Just as a computer completes a word search in a word processing program, a competent person at this level can scan thousands of bits of information in the brain to locate that desired knowledge.

The high end of the Knowledge Taxonomy labels more complex ways in which individuals use knowledge. At this level, knowledge is fully integrated into one’s mind, and individuals can do much more than locate information — they can take several pieces of knowledge and combine them in both logical and creative ways. Assimilation of knowledge is a good way to describe this high level of the thinking continuum. Assimilation is often referred to as a higher order thinking skill: at this level, the student can solve multi-step problems, create unique work, and devise solutions.



The second continuum, created by Willard Daggett, is known as the Application Model. The five levels of this continuum are: (1) knowledge in one discipline, (2) apply in discipline, (3) apply across disciplines, (4) apply to real-world predictable situations, and (5) apply to real-world unpredictable situations. The Application Model describes

## Rigor/Relevance Framework®



### Application Model

# Rigor and Relevance in Curriculum/Instruction/Assessment Checklist

## Instructional Activities

### Quadrant A – Acquisition (Low Rigor/Low Relevance)

- Yes  No use verbs synonymous with recall and understanding
- Yes  No call for the explanation of knowledge or skill and not application
- Yes  No focus is primarily on the teacher
- Yes  No require all students to complete the same work, usually at same time and speed

### Quadrant B – Application (Low Rigor/High Relevance)

- Yes  No use verbs synonymous with recall, understanding, or application
- Yes  No call for the application of knowledge to real-world problems
- Yes  No allow students to work at independent speed
- Yes  No require all students to complete the same work

### Quadrant C – Assimilation (High Rigor/Low Relevance)

- Yes  No use verbs synonymous with analysis, synthesis, or evaluation
- Yes  No call for explanation of knowledge or skill, but not real-world application
- Yes  No focus primarily on the student
- Yes  No require original student work

### Quadrant D – Adaptation (High Rigor/High Relevance)

- Yes  No use verbs synonymous with analysis, synthesis, or evaluation
- Yes  No call for the application of knowledge to real-world problems
- Yes  No require original student work
- Yes  No are complex tasks requiring students to work independently of the teacher

## Learning Experiences in the Rigor/Relevance Framework

**English  
Language Arts**

**Elementary  
Examples**

**Quadrant C Assimilation**

**Quadrant D Adaptation**

**6**

- Give and seek constructive feedback in order to improve writing.
- Compare similar words to describe objects.
- Develop a WebQuest on learning language skills.
- Brainstorm as many words as possible to describe an object.
- Create and decipher coded messages.
- Describe mystery objects to partners to strengthen use of descriptions.
- Create word puzzles.

- Create new words to describe phenomena or objects.
- Publish a brochure.
- Design and create objects related to a children's book.
- Plan a family vacation.
- Research an issue and write a letter to the school board, elected official, or local newspaper.

**5**

**4**

**3**

**Quadrant A Acquisition**

**Quadrant B Application**

**2**

- Create a drawing, picture, sign, or other graphic to represent a word or concept.
- Put words together in sentence format.
- Retell stories.
- Respond to oral directions.
- Participate in word games.
- Develop outlines from a nonfiction presentation.
- Memorize spelling words.
- Create a list of commonly misspelled words.

- Use job-related tools or clothing to stimulate writing and drawing about a career.
- Read and share content of local newspaper.
- Present a story through a computer graphics application.
- Communicate with e-mail pals in another country.
- Search newspapers for abbreviations and acronyms.
- Write factual stories about personal experiences.
- Role-play stories.
- Write a poem about yourself.

**1**

**1**

**2**

**3**

**4**

**5**

# Learning Experiences in the Rigor/Relevance Framework

**Mathematics**

**Middle Level Examples**

**Quadrant C Assimilation**

**Quadrant D Adaptation**

**6**

- Measure interior angles of polygons and discover the relationship between number of sides and sum of angles.

- Hold a competition to determine when using a calculator or doing mental math is most efficient.

**5**

- Graph the perimeters and areas of squares of different sizes.
- Express probabilities as fractions, percents, or decimals.
- Evaluate equivalency and relationship of decimal and fractions.

- Obtain historical data about local weather to estimate amount of snow, rain, or sun during a given season of the current year.
- Use graphing calculators and computer spreadsheets to organize and analyze data.

**4**

- Determine the largest area for a fixed perimeter.
- Fill in missing numbers for ordered pairs for an algebraic function.
- Evaluate objects for similarity and congruence.

- Test consumer products, such as absorbency of the paper towels, devise a scale, and illustrate data graphically.
- Plan a large school event and calculate resources (food, decorations, etc.) needed and costs.

**3**

**Quadrant A Acquisition**

**Quadrant B Application**

**2**

- Select computational operation to solve word problems
- Calculate volume of regular solids.
- Measure angles with a protractor.
- Find and measure the sides and angles of a right triangle using the Pythagorean theorem and trigonometric ratios.

- Make a scale drawing of the classroom.
- Calculate percents of daily requirements met through a typical school lunch.
- Calculate potential combinations of a group of variables, such as wardrobe components, and estimate the probability of any one combination being picked at random.

**1**

- Organize and display collected data, using tables, charts, or graphs.
- Use basic properties of equality to solve equations with one variable.
- Plot the coordinates for quadrilaterals on a grid.

- Calculate percentages of advertising in a newspaper.
- Play a simulated baseball game and calculate statistics.
- Calculate paint needed for a summer business painting houses.

**1**

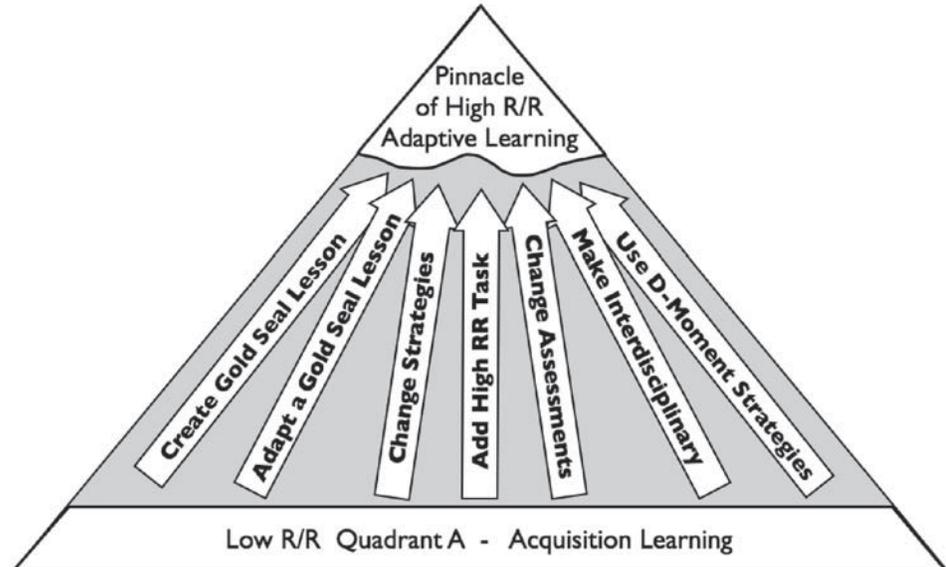
**2**

**3**

**4**

**5**

## Routes to High Rigor and Relevance



can increase rigor and relevance is to adapt a Gold Seal Lesson to their particular instructional setting. Teachers can browse a grade level, subject, or set of standards to find a lesson idea from another teacher that will fit their instructional situation. Each Gold Seal Lesson provides a clear performance task and assessment that can be used to begin the development of the unit of instruction.

### Add a High Rigor and High Relevance Performance Task

A carefully constructed performance task will naturally lead teachers to raise the rigor and relevance of instruction and thus will increase student achievement.

Most teachers will modify existing lessons to increase the level of rigor and relevance. An excellent way to begin raising rigor and relevance is to consider the instructional outcomes or standards for a particular unit of instruction and then design a high rigor and high relevance performance task as the culminating activity for students to demonstrate their learning. This begins the backwards design approach in which teachers clearly focus on the high rigor and high relevance conclusion of the lesson. A carefully constructed performance task will naturally lead teachers to raise the rigor and relevance of instruction and thus will increase student achievement.

### **Change Instructional Strategies**

Teachers have many choices among the instructional strategies they use in a particular lesson. Some strategies such as a lecture and a worksheet are highly correlated with low rigor and low relevance, while other strategies such as a project design, problem-based learning, and a student presentation are highly correlated with high rigor and high relevance. As teachers select strategies, they can increase the level of rigor and relevance by using strategies that are more and more correlated with high rigor and high relevance. Correlation of instructional strategies with rigor and relevance are in Chapter 5.

### **Change Assessments**

The type of assessment a teacher chooses to use determines student achievement and influences the level of rigor and relevance. Often a simple way to begin to raise the level of rigor and relevance is to use a more complex form of assessment that does more than simply ask students to recall answers. Rather, the assessment challenges students to think and more fully explain and demonstrate their knowledge.

### **Make Instruction Interdisciplinary**

A natural step on the route toward high rigor and high relevance is for teachers to move beyond the boundaries of one instructional area. Typically, secondary instruction is very focused on one instructional area; even elementary level teachers tend to focus on one instructional strand. As teachers work to increase the relevance of instruction, the boundaries disappear between typical disciplines. Another approach to increasing rigor and relevance is to combine learning standards from several different disciplines into a single learning experience. An excellent strategy for making instruction more interdisciplinary is for teachers in the arts and career and technical education to integrate a number of academic areas within their instruction. This practice is very consistent with increasing the level of rigor and relevance.

### **Use D-Moment Strategies**

Some teachers have the misconception that rigor and relevance include long extended projects that consume considerable instructional time. Once teachers understand the Rigor/Relevance Framework, they can

The D-Moments are further explained in Chapter 5.

## Examples of Student Work for Real-World Instruction

- Advertisement
- Audiotape
- Autobiography
- Banner
- Biography
- Brochure
- Business
- Cartoon
- Chart
- Children's book
- Coat of arms
- Collection
- Community service
- Composition
- Constitution
- Construction
- Contract
- Correspondence
- Crossword puzzle
- Debate
- Defense
- Demonstration
- Design
- Diagram
- Diorama
- Discussion
- Display
- Dramatization
- Drawing
- Editorial
- Essay
- Eulogy
- Evaluation
- Exhibit
- Experiment
- Fable
- Family tree
- Field guide
- Flag
- Game
- Graph
- Icon
- Interview
- Invention
- Joke
- Journal
- Letter
- Log
- Machine
- Magazine
- Manufacturing process
- Map
- Memo
- Memoir
- Mnemonic
- Model
- Mosaic
- Mural
- News report
- Newspaper
- Oral history
- Oral report
- Painting
- Petition
- Photo album
- Play
- Poem
- Poster
- Production process
- Proposal
- Puppets
- Questionnaire
- Questions
- Rap
- Relief map
- Research report
- Resume
- Rules
- Scale model
- Scrapbook
- Script
- Sculpture
- Shadow box
- Sketch
- Skit
- Slide show
- Software application
- Solution
- Song
- Speech
- Story
- Survey
- Taxonomy
- Teach a lesson
- Test
- Theory
- Time capsule
- Totem pole
- Videotape
- Website

# Chapter 3

## Enhancing Instructional Planning

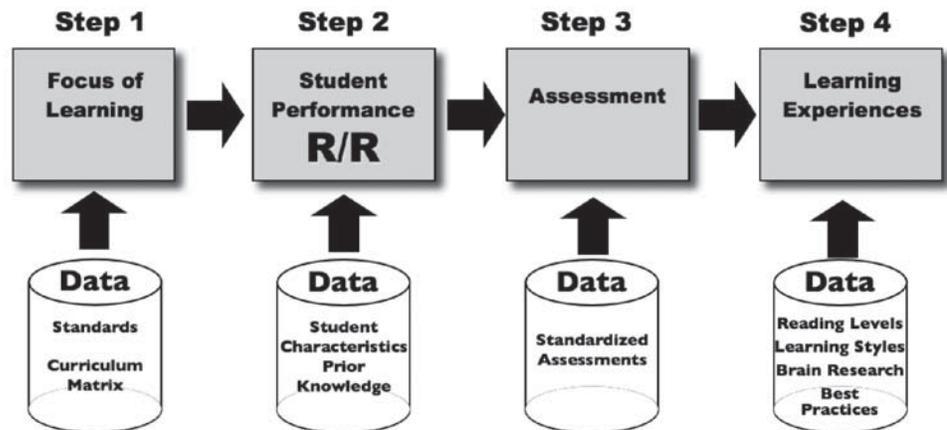


### Data-driven Instructional Planning

Instructional planning is most effective when teachers use both objective data and their own experience. In an era of increased accountability, teachers must use data to drive their decisions. The following chart shows the important data sources for use in each of the steps of the rigor/relevance planning process.

### Rigor/Relevance Instructional Planning Steps

#### *Data-Driven Instructional Planning*



#### Data Sources for Step 1

##### Standards Data

Teachers must focus on the “right” student learning. Schools have become standards-driven over the last two decades, using external standards

## Instructional Strategies and the Rigor/Relevance Framework

	Quadrant A Acquisition	Quadrant B Application	Quadrant C Assimilation	Quadrant D Adaptation
Artistic expression	★★	★★	★★★	★★★★
Brainstorming	★★	★	★★★	★★★★
Compare and contrast	★★	★	★★★	★★
Cooperative learning	★★	★★★★	★★	★★★★
Demonstration	★	★★★★	★	★★
Digital media production	★★	★★★★	★★	★★★★
Feedback and reflection	★★	★★	★★★	★★★★
Games	★★★★	★★	★	★
Guided practice	★★★★	★★	★★	★
Inquiry	★	★★	★★★	★★★★
Instructional technology — any time	★★	★★	★★★	★★★★
Instructional technology — real time	★★	★★★★	★★	★★
Instructional technology — independent learning	★★	★★★★	★★★	★★★★
Learning centers	★★★★	★★★★	★★	★★
Lecture	★★★★	★	★★	★
Logical and independent thinking	★★	★★	★★★	★★★★
Manipulatives and models	★★★★	★★★★	★★★	★★
Memorization	★★★★	★★	★★	★
Note-taking/graphic	★★	★★	★★	★★
Physical movement	★★	★★★★	★★	★★
Play	★	★★	★★★	★★★★
Presentations/exhibitions	★	★★	★★	★★★★
Problem-based learning	★★	★★★★	★★	★★★★
Project design	★	★★★★	★	★★★★
Research	★★	★	★★★	★★★★
Service learning	★	★★★★	★★	★★★★
Simulation/role playing	★★	★★★★	★★	★★★★
Socratic seminar	★	★	★★★	★★★★
Storytelling	★★	★★★★	★★★	★★★★
Summarizing	★★	★★	★★★	★★
Teacher questions	★★	★	★★★	★★★★
Teaching others	★★	★★★★	★★	★★★★
Test preparation	★★★★	★★	★	★
Video	★★	★★★★	★★	★★
Work-based learning	★★	★★★★	★★	★★★★
Writing to learn	★★	★★	★★★	★★★★

# Tips for Using Rigor, Relevance and Relationships to Improve Student Achievement

By Raymond J. McNulty|Russell J. Quaglia

**American Association of School Administrators** (<http://www.education.com/partner/articles/aasa/>)

Closing the achievement gap between groups of students on standardized tests has become a familiar imperative for many educators and politicians. Yet how can students meet high academic standards if they don't believe in their ability to do so? How can they learn if they aren't academically engaged? How can they set and reach academic goals if they don't see the relevance of learning to their lives?

These are some of the key questions addressed through a five-year research initiative involving 75 high schools in 10 states. The initiative, known as Models, Networks and Policies to Support and Sustain Rigor and Relevance for All Students, is led by the International Center for Leadership in Education, which has enlisted the expertise of the Quaglia Institute for Student Aspirations.

These questions came up once again as we observed a teacher in action with his 9th grade Algebra 1 class. He seemed oblivious to the blank stares and doodling of most students because he was so focused on the select group of students in front of him. These students were responding in quiz-show fashion to his every question. This went on for almost 90 minutes.

The teacher was knowledgeable about the subject and clearly engaged with his small group of students. As for the other students, however, it was as if they were not there, and this was a day with visitors present.

Even more troubling was that the teacher made little eye contact with most of the class. After the visit, we asked about the nonparticipants, and he responded that if the students aren't motivated in class, he was not going to waste time on them. He didn't even know their names. "I've got a number of students who come here every day ready to learn, and I will not compromise their eagerness to learn," he said.

In another class down the hall, we observed a teacher who knew everyone by name. The students and teacher joked and chatted about current events and their favorite movies and sports teams. This, too, was an Algebra 1 class, but we saw no rigor and little relevance to algebra. Many students seemed to enjoy the class, while others seemed concerned about whether they were going to learn something about the subject they were supposed to be studying. This teacher knew how to build relationships with students but did not use this skill to elicit strong academic performances from them.

One class lacked the relationship aspect of the learning process, the other was devoid of rigor, and both classes missed the mark on relevance. Yet these elements — rigor, relevance and relationships — together provide the hallmark for education today. The three are integrally connected; if one is missing in our teaching practices, we are not doing our best to prepare students for success in school and in life.

## A Useful Framework

To ensure the inclusion of both rigor and relevance, the International Center created the Rigor/Relevance Framework™ in the early 1990s for teachers to use to examine curriculum and plan instruction and assessment. The framework consists of four quadrants that reflect these two dimensions of higher standards and student achievement.

First there is the “knowledge taxonomy,” which describes the increasingly complex ways in which we think. It is based on the six levels of Bloom’s Taxonomy: knowledge/awareness, comprehension, application, analysis, synthesis and evaluation.

The second dimension is the Application Model developed by the International Center, which describes five levels of relevant learning: knowledge in one discipline, apply knowledge in discipline, apply across disciplines, apply to real-world predictable situations and apply to real-world unpredictable situations. Relevant learning is interdisciplinary and contextual. It requires students to apply core knowledge, concepts or skills to solve real-world problems.

In Quadrant A (Acquisition), students learn and store bits of knowledge and information. Quadrant B (Application) requires students to use their acquired knowledge to solve practical problems. In Quadrant C (Assimilation), students extend their acquired knowledge to use it automatically and routinely to analyze problems and create unique solutions. When working in Quadrant D (Adaptation), students have the competence to think in complex ways and apply their knowledge and skills when confronting perplexing unknowns and creating solutions. One way to think about this framework in day-to-day instruction is in terms of the roles that teachers and students play.

When instruction and expected student learning is in Quadrant A, the focus is on “teacher work.” Teachers expend energy to transmit content through learning activities, worksheets and other assignments. The student is often a passive learner.

When student expectation moves to Quadrant B, the emphasis is on the student doing real-world tasks. This student work is often more complicated than Quadrant A work and requires more time. Learning in Quadrant B is best described as “student work” because students are doing extensive real-world tasks.

Learning in Quadrant C is best described as “student think.” In this quadrant, students are expected to think in complex ways — to analyze, compare, create and evaluate.

Quadrant D activity can be characterized as “student think and work.” Learning in Quadrant D is demanding and requires students to apply their thinking and knowledge in complex ways to solve difficult problems. Roles shift from teacher-centered instruction in quadrants A and C to student-centered instruction in quadrants B and D. In these quadrants, teachers still work hard, but their role is more as a coach or facilitator of learning.

Good instruction is not a choice of a single quadrant but a balance. It may not be necessary for all students to achieve mastery of content in Quadrant A before proceeding to Quadrant B, for example. Some students may learn a concept better in Quadrant B when they see its application in a realworld situation. But no matter what the grade level, students require Quadrant B and D skills if they are to become lifelong learners, problem solvers and decision makers.

In essence, students need to know what to do when they do not know what to do. Our framework provides a structure to enable schools to move all students toward that goal.

Delano High School in Delano, Minn., is a school that has stretched beyond traditional limits to increase rigor and relevance throughout its curriculum. Through its College in the Schools program, the school partners with three Minnesota universities to offer 48 college credits to students during the junior and senior years. Courses such as English composition, Western civilization, calculus, chemistry, Spanish and psychology are offered. High school teachers teach the courses with college professors periodically visiting to instruct classes.

While this program serves the needs of the top 25 percent of students, the goal at Delano High School is for every student to experience some college or post-high school coursework prior to graduation. The Middle College Model was created to serve the needs of the middle two quartiles of students. A partnership with nearby Rasmussen College allows students to earn a high school diploma as well as an associate degree in criminal justice, business, accounting or information technology upon graduation from Delano.

Rex Putnam High School in Milwaukie, Ore., also encourages its students to make the most of their potential and to pursue personal goals and passions. The well-designed instructional program offers a mix of core academic and elective courses. Putnam ensures its education programs are relevant by offering a career development curriculum and a required career pathways program. From six available pathways, each student selects a focused program of study. This becomes the basis of a personal education plan that includes electives, career-related experiences and a culminating senior seminar experience.

## **Vital Relationships**

While we have heard for some time the call for rigor and relevance, now education leaders are adding the third R for relationships. Schools across the country are realizing that rigor and relevance develop most naturally when they are cultivated on firm grounding in relationships.

Creating an appropriate environment for learning begins with establishing ground rules that include many of the aspects of quality teaching, such as respect, responsibility, honesty, civility and tolerance. Only after these values are established with students in the classroom can real learning based on the other two essential R's, rigor and relevance, begin to accelerate.

Relationships do not become a new standard or replace rigor and relevance. They are a way to improve learning. The recent work of the International Center has examined some of the most successful high schools in the country — schools that have the challenges of poverty, mobility and diversity but still have high rates of student success.

In these schools, relationships among students and staff are deliberately nurtured and a key reason for student success. Students believe the staff genuinely cares about them and encourages them to achieve at high levels. If there is not a high level of positive relationships, students will not respond to higher expectations.

In business magazines' published lists of the "best companies to work for," the recognized businesses usually offer something beyond financial stability to employees — a pleasing and compelling environment and a supportive atmosphere. Employees generally are encouraged to be innovative and feel connected to the goals, mission and values of the organization. These are important factors to consider as we work to close the academic achievement gap.

Many school improvement agendas focus on a new instructional strategy or curriculum, but the work to bring all students to high achievement levels is more complex than that. It involves establishing the right culture to grow the minds of students and to enrich the involvement and innovation of school leaders and staff.

Reaching out to one student at a time is the underlying principle at the Metropolitan Regional Career and Technical Center in Providence, R.I. Every student's individual learning plan is a personal and academic summary of interests, strengths and needs. This personalized curriculum, along with a strong coaching model, provides the impetus for high engagement and achievement.

There are no teachers at The Met, only "advisers" who meet with students daily and follow their assigned cohorts over four years of high school. The adviser redefines the role of teacher into something much closer to a personal trainer or mentor. A personal learning plan for each student is developed by a learning team, which consists of the student, adviser, parent/guardian and internship mentor. Student work is in the form of individual projects, which grow out of personal interests and

the needs of mentors and internship sites. Unlike traditional schoolwork, the work done by Met students results in real products or consequences that matter to a larger audience in the Providence community.

We must not underestimate the sheer power of relationships in making our schools more effective. Do the students consider school to be a good place to be? Do they have a sense of belonging? Do they feel at least a few adults are interested in their success and well-being? Do they feel safe? Do they feel recognized as individuals?

## **Student Perspectives**

The Quaglia Institute for Student Aspirations has focused on many relationship-based questions in its extensive My Voice© Student Aspirations Survey. The survey helps educators determine objectively the level of student engagement in their schools.

The International Center has incorporated the administration of the survey in its ongoing high school initiative to identify and analyze the nation's most successful practices and policies. During 2005-06, more than 65,500 students in the initiative completed the survey, along with more than 100,000 other students representing 329 schools and 18 states. The students were asked to respond to questions about the conditions that affect their aspirations.

The good news is that most students indicated they want to get good grades, and they understand what schools expect of them in terms of academic achievement and the significance of testing. Yet while most of the students surveyed want to do well, many do not put forth the effort needed to achieve to their fullest potential. Close to 20 percent of those surveyed give up when they encounter difficult schoolwork. Only 60 percent reported they try their best in school, and the same percentage said teachers recognize them when they try their best. The gap between wanting to achieve and persevering to meet that goal must be examined, as must the role teachers play in recognizing effort and perseverance.

The data clearly show a general lack of student self-worth, limited engagement in the learning process and an absence of personal purpose. It seems clear, if we intend to close the achievement gap by concentrating solely on academic coursework, only short-term success will likely result because students aren't engaged.

Thus there are really two gaps in our education system. In addition to the achievement gap, there is a participation gap, which is characterized by students who feel unwelcome, disconnected and lost in our schools.

## **Participation Gap**

The participation gap, defined as the difference between students who are meaningfully connected to their learning and those who are not, must be eliminated for student achievement to rise. It is not enough to strengthen curriculum offerings and test preparation strategies. If students are to enjoy greater academic success, they must believe in themselves, be excited about their learning and see the link between what they learn today and who they want to become tomorrow.

When these pieces are in place, students are more likely to participate in the learning process. And when they participate, they are more likely to achieve.

Based on the My Voice survey results, the Quaglia Institute determined that increasing student participation depends on three key components of the student experience — self-worth, active engagement and purpose:

Help students develop a sense of self-worth.

For students to increase their participation in the learning process, they must have a sense of

self-worth. They are then more likely to persevere through difficult tasks and take the steps needed to reach their goals.

Students must have a sense of belonging. They must feel they are part of the school community while being appreciated for their uniqueness as individuals. They must have a hero, someone they can look up to, respect and learn from. Students also must experience a sense of accomplishment. They must be recognized for effort, perseverance and citizenship as well as for high grades and good test scores.

Foster students' active engagement in learning.

The participation gap also will begin to close when students are actively engaged in relevant learning. In this way, learning becomes important in and of itself. When they are actively engaged, students become so involved in their own learning they lose track of time and space. At the end of a lesson they wonder, "Where did that time go?"

Encourage a sense of purpose.

A sense of purpose involves being responsible and accountable for choices, behaviors and actions. To develop these traits, students must have leadership roles in schools that provide a real sense of responsibility. Schools must challenge students to think about who they want to become as well as what they want to be.

When students have all three components, they are more likely to show marked improvements in academic achievement, social awareness and positive contributions to their school community. Only when all students are deeply connected to their learning will the larger goal of narrowing the achievement gap be met.

## **Learning Criteria**

In 2005, the International Center and the Council of Chief State School Officers embarked on the five-year initiative to identify and analyze the nation's most successful high school practices and policies. During this ongoing research, funded by the Bill & Melinda Gates Foundation, the International Center has examined some of the best schools in the country that have the challenges of poverty, mobility and diversity but still have high rates of student success.

The International Center developed its Learning Criteria to Support Rigor, Relevance and Relationships to assist in this examination. Arranged into four data categories, the set of criteria helps education leaders determine the success of their schools in preparing students for current assessments and for future roles and responsibilities.

Regardless of its focus, a school should have data indicators in four categories.

**Core Academic Learning:** achievement in English language arts, math, science and others as identified by the school.

**Stretch Learning:** demonstration of rigorous and relevant learning beyond minimum requirements, such as participation in higher-level courses.

**Student Engagement:** the extent to which students are motivated and committed to learning, have a sense of belonging and accomplishment and have relationships with adults, peers and parents who support learning.

**Personal Skill Development:** measures of personal, social, service and leadership skills and demonstrations of positive behaviors and attitudes.

The destination for education has to be rigor, relevance and relationships if we want to prepare

students for college, work and life in the 21st century. Getting to that destination requires school staff to work collaboratively toward common goals through analyzing data, adopting best practices, taking risks and embracing change.