Rigor, RELEVANCE and **Relationships**

Three passwords that unlock the door for engaged high school students to learn at appropriate levels

BY RAYMOND J. MCNULTY AND
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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 the majority 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™ (see page XX) 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

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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 apply core knowledge, concepts or skills to solve real-world problems.

The Personalization of Creative High School Scheduling

BY RONALD L. FRIEDMAN

Lucas arrived faithfully on the high school bus at 8 a.m., only to become a lost 9th grader daily among his high school peers. Lacking the requisite entry-level high school social skills, Lucas never connected with his classmates. A physical blemish didn't help. His high IQ and other top standardized-exam indicators he'd earned didn't mitigate his inability to navigate the typical high school world of blocks of scheduled time.

Lucas just could not regularly get from point X to point Y when the predictable bell rang, and when he did go to class, he couldn't deal with producing output on demand or within a defined time.

In a typical, well-intentioned high school, safety nets would kick in. Personalized failure warning notices would spew forth by the computerized systems of which we're all now so proud. "Lucas must get to class on time," "Lucas isn't working up to potential," ad nauseaum. Parent involvement, counseling, perhaps a special education referral. Predictable interventions all too often leading to predictable non-results.

Dare to Differ

At the William A. Shine-Great Neck South High School in Great Neck, N.Y., our high school guidance department, faculty and administration quickly went to work in response, but in a novel way. The counselor and teachers created an environment Lucas needed, rather than trying to "fix Lucas" by fitting him into various well-intentioned and valuable but off-target (for Lucas) programs and structures.

The principal approved and facilitated some complexities — a partnership with a local university with weekly classes; a professor who was willing to work with Lucas at Lucas's home. Lucas's great art talent was leveraged and credited, thanks to our culture and another teacher who worked with him at home. Staff evolved a detailed art education plan that worked for Lucas and far exceeded state and local standards.

Lucas came back to school daily, thriving after school immersed in the yearbook and the school's literary magazine. He spent part of his senior year at another top-

Caption

ranked university, in non-matriculated courses both the school district and the university could credit. Lucas graduated and continued his studies successfully at this top university.

Ellen, a tennis player, needed to spend six weeks in Central and South America, going for a prestigious international ranking. She received assignments and did her work via e-mail. Another tennis player, Ed, needed even more time away. We worked out courses for him through a national home schooling association and a university offering online courses, all under staff auspices and evaluation. The Hughes sisters, Sarah and Emily, both Olympic figure skaters and products of Great Neck North High School, similarly needed and received creative accommodations to allow for the rigors of their professional schedules while maintaining a real involvement in their home school.

Support From Atop

In the Great Neck Public Schools, our two high schools number about 1,300 and 800 students. Many of our high school students are similar to Lucas, Ellen, Ed, Sarah and Emily. We live the admittedly over-used aphorism "every kid is special" by developing an individualized education plan for virtually every child.

People ask me, "Do we have tracking?" to which I answer, "Yes, and we have 2,100

tracks!" But top-level support, encouragement and nurturing are necessary if the flexibility and creativity needed at the school building level is to take hold and become the norm.

In 2005, our board of education recognized the unique ways in which we already were pushing the personalization envelope by adopting a board policy titled "Special Instructional Arrangements." Policy 4329 codified the creativity we were proud of and structured it with educational, legal and financial safeguards. We had no template when we created the policy; we worked with staff and our attorney to figure it out.

The policy is available on our website (www.greatneck.k12.ny.us). Work with your board to develop a similar policy to both guide and protect.

As superintendent, I must take the lead, working with the school board to have it embrace individualization in more creative ways, to scrutinize the budget to provide staff development funds. I need to ensure the building staff — counselors, administrators, department heads and teachers — inform decision making every step of the way.

I have to take the lead in creating the supportive environment and finding the resources, but school staff must embrace the concept and develop the options and details.

Caveats, Cautions

Surmounting the safety of traditional rigidity

and carefully honed walls that are dear to American high schools carries an element of risk and concomitant responsibility. Several stakeholders are affected.

The principal and faculty: Principals generally have a great deal of latitude in approving special arrangements and granting credits. But if they do so unilaterally, especially in a school with an astute and extraordinary faculty, morale among the faculty will be jeopardized and their support for the principal won't materialize. Having faculty on board is a must.

The critical need is this — a culture wherein the entire staff looks creatively at unusual, individualized variations of scheduling and then celebrates its successes. Run each plan through academic departments to ensure adequate checks and balances on what guidance counselors, the principal and others construct. The academic quality and reputation of our high schools is sacrosanct so the "creativity" must be good.

The union: The school community must be a caring and supportive place or staff won't take the risks involved in using broadly diverse resources to meet students' needs. But if staff and the union perceive that teachers are treated in the same manner and with the same care and concern as we are expressing with regard to students, the union will likely be on board. Be as flexible and creative with faculty as you are with your students. See through walls. As long as an idea makes educational sense and emotional sense and is legal, find a way to do it.

Parents: Parents talk to each other! First impressions are important. Stress "can do" rather than restrictive rules at the outset, with the first parent letters and other documents provided to incoming 9th-graders' parents. Tone is important; openness and willingness start from the words, smiles and body language of key staff early on. If you're not open, parents won't ask for help and won't visualize options.

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Rigor/Relevance Framework™
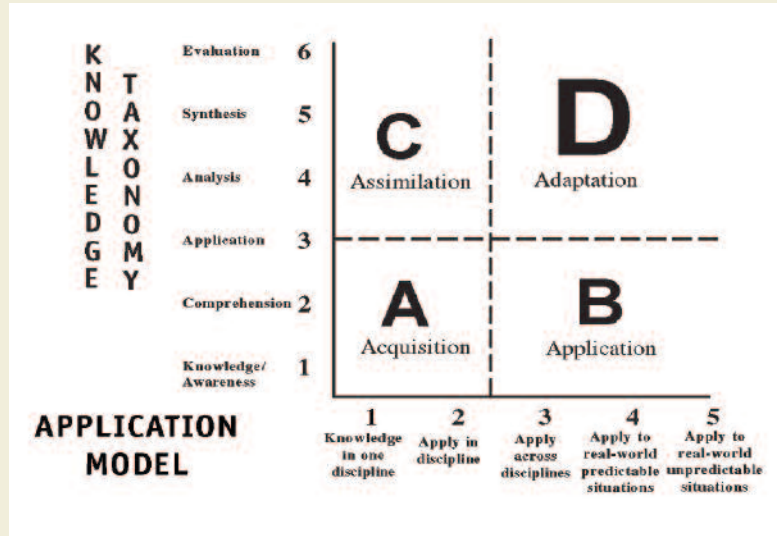
Source: *International Center for Leadership in Education*

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 Quadrant A to student-centered instruction in quadrants B, C 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 real-world 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. (See related story, page XX.)

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, which 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 relation-
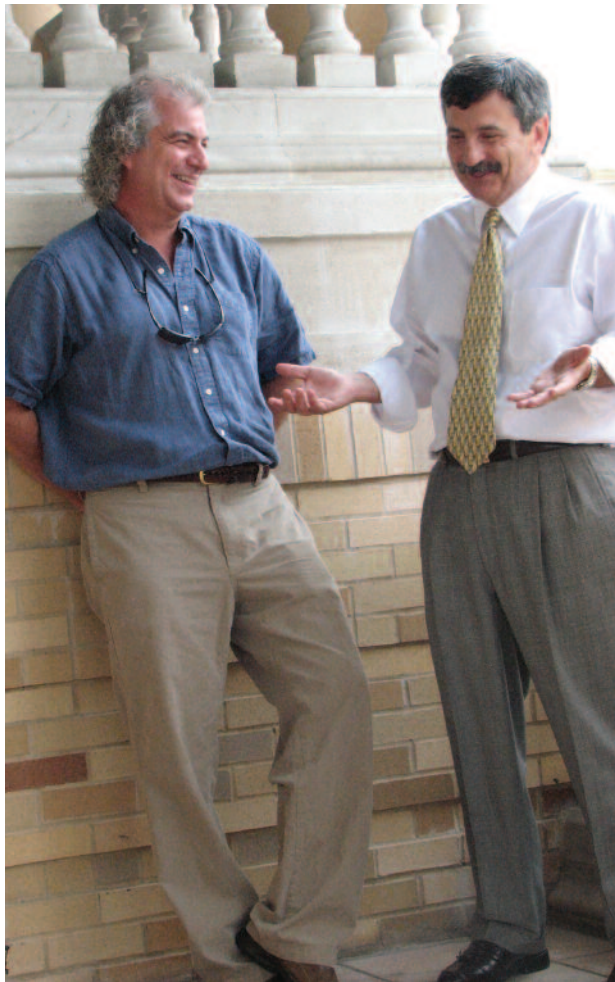
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ships.

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, stu-

dents 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 (see related story, page xx). The findings were analyzed in a national report.

The good news is that the majority of 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 shows a general lack of student self-worth, limited engagement in their 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 fully 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

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8 Conditions That Make a Difference

If schools want to know how they are faring in providing quality education, perhaps they should turn to the most direct source for some answers — their students.

This is the direction taken by the Quaglia Institute for Student Aspirations, which has done extensive research in this area. The institute has developed the My Voice(c) Student Aspiration Survey, which assesses student opinions by asking them to respond to a series of statements about their learning environment.

The survey was created to measure the institute's 8 Conditions That Make a Difference,(r) which contribute to better student achievement. The conditions are as follows:

▶ *Belonging* means that a student is a valued member of a community while still maintaining his or her uniqueness.

▶ *Heroes* are people with whom a student can connect. They have a positive influence and listen and value students' ideas.

▶ *Sense of Accomplishment* is based on being recognized for different types of success, including hard work and being a good person.

▶ *Fun and Excitement* as a condition means students are inspired. Students are actively engaged and emotionally involved in their schoolwork.

▶ *Curiosity and Creativity* become evident when students ask "why" or "why not" about the world around them.

▶ *Spirit of Adventure* is experienced when students tackle something new without the fear of failure or pressure of success.

▶ *Leadership and Responsibility* happens when students can make decisions and accept responsibility for their actions.

▶ *Confidence to Take Action* is the extent to which students believe in themselves and are encouraged to dream about their future, while being motivated to set goals in the present.

As a result of the My Voice survey, schools such as Tahoma High School in Covington, Wash., have made relationship building a significant part of the curriculum.

"When we looked at the data from the survey, we quickly realized that we had a lot of work to do on the relationship side of being a great school," says Tahoma Principal Terry Duty. "The data was undeniable — half of our students didn't feel like they belonged or had a connection to school."

The school now has an advisory program in which teachers, counselors, librarians, paraprofessionals, the principal and other staff members are assigned to 15 students in grades 10-12. The groups meet once a week for 30 minutes to talk about life, choices and growing up. Discussions range from building self-confidence and evaluating one's ethical behavior to report cards and current events.

— Ray McNulty and Russell Quaglia

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 Melinda & Bill 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 framework 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. ■

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Rigorous Climbing at Kennesaw Mountain

Kennesaw Mountain High School in Kennesaw, Ga., is one of a number of schools that build their curricula around the International Center's Rigor/Relevance Framework(tm) to achieve academic excellence. The high school of 3,100 students serves a national model of how to hold high expectations for all students and meet individual student needs within a large school.

Through professional development activities, teachers have a clear understanding of how to achieve rigor and relevance using the framework. They work in collaborative groups to create high rigor/high relevance activities and alternative assessments in Quadrant D in which students are expected to show insight by applying what they have learned to other situations and circumstances.

Students also are expected to analyze materials effectively, both orally and in writing. Through the use of the framework, students and teachers speak the same language in identifying effective classroom instruction and assessment.

One example of an engaging activity that incorporates Quadrant D learning is a team-taught technology and English class in which groups of students each select a technology and project how it may change in the future. They then identify what breakthroughs are required for the "new" technology to become a reality as well as describe the positive and negative consequences on society.

This year, the school's goal was to challenge each teacher to develop a Quadrant D lesson to share not only within the department, but also across disciplines.

"The culminating activity, an American Idol type contest, allowed teachers to share best practices across the curriculum," said Principal Susan Gunderman. "This was a positive way to infuse the Rigor/Relevance Framework throughout our entire curriculum, and our teachers had fun in the process. The real winners of the contest, as we all know, were our students, who will benefit from lessons in all courses that encourage them to apply what they have learned to real world scenarios."

— Ray McNulty and Russell Quaglia