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The Single Greatest Effect on Student Achievement Is
The Effectiveness of The Teacher

Here They Come, the Next Generation of Teachers

The teachers we hire today will become the teachers for the next generation. Their success will determine the success of an entire generation of students.

The average age of teachers is 52.5 and over a million will retire in the next ten years. In their place will come, and many are here already, the Generation Y or Millennials, born between 1977 to 1986, a potential workforce of 40 million. Unlike the baby boomers and Generation X, who were independent and entrepreneurial (They gave us Dell, Yahoo, and Google.), Gen Yers are socially adept at working in groups or teams and are avid users of online social networking, such as MySpace and FaceBook. A learning community is their forte, thus to work collaboratively in a group is second nature to them.

Gen Y teachers are products of a global economy, a connected, collaborative environment that technology has allowed them to network in. They are knowledge workers with ubiquitous access to powerful laptops and 21st century technology and digital resources.

We can describe Gen Yers in four positive ways:
1. A generation that is confident, self-sufficient, and achievement oriented
2. A generation that is the most education-minded in history
3. A generation paving the way to a more open, tolerant society
4. A socially conscious generation leading a new wave of volunteerism

They exude confidence, informality, have high expectations, and are accomplishment oriented. With their tech-savvy skills, they are poised to be lifelong learners. Add their ability to be great team players and the future looks extremely promising in their hands.

Gen Ys Learn Best by Collaboration

Gen Ys live in a global society where everyone is on the same, flat playing field sharing information and solutions to produce outcomes. Gen Ys are output oriented, success oriented, achievement oriented, and thus student achievement oriented. They are devoted to helping their students learn more because they are oriented to producing outcomes and we can nurture that skill by allowing them to produce results in groups.

Giving each new Gen Y teacher a mentor on a one-to-one relationship is contrary to a generation of teachers who learn and produce in a group environment. They can inquire and think circles around us when it comes to collecting data, finding resources, thinking deeply, problem solving, reflecting, and inquiring.

Surround Gen Y teachers with a community of creative thinkers and the solutions will abound everywhere. They are a generation of great team players and by channeling their talent for working together we will see improved student learning. Education is a

A COMPANION ARTICLE to this commentary called “Teachers: The Next Generation” can be found at this website www.teachers.net.

Look for the article dated April 11, 2007, under Published Papers.
collaborative endeavor. No one individual has all the answers. We depend on each other for the creative solutions to our problems and the collective inspiration to design lessons that will improve student learning.

**Gen Yers like structure** and will want schools to give them clear rules and procedures to follow. They need to clearly see the value of their work. They want their work to be relevant, have impact, and offer them a diversity of experiences.

Gen Y teachers want to be involved in a collaborative way. Induction programs provide that connection, because they are structured around a learning community where new and veteran teachers treat each other with respect and all contributions are valued.

**Gen Yers are receptive to the wisdom of older, seasoned teachers.** They crave the guidance of knowledgeable, confident administrators and co-workers. They also want their valuable contributions appreciated—they want their ideas to be heard by expert listeners. Gen Yers are not only outside-the-box thinkers; they are innovative over-the-wall doers who won’t settle for one-size-fits-all thinking.

This next generation of teachers is the most intelligent, talented, competitive (and compulsive) group this country has seen. It’s a Renaissance generation with much potential if we put the future in their care. They are more interesting, more confident, less hidebound and uptight, better educated, more creative, and even unafraid. The grandeur of the future is in their capable hands.

**We Know How To Improve Student Achievement!**

1. It’s with trained teachers who are effective and
2. It’s with a staff that works together, administrators and teachers, with a laser focus on student achievement.

Over 200 studies (*What Matters Most, 1996*) have said that the most significant factor in improving student learning is with a knowledgeable and skillful teacher. It’s the teacher. We know this. We’ve known it for years, but we will not implement the obvious. It’s the teacher!

**We have known the following about teachers for decades:**

- Teacher expertise accounts for more difference in student performance—40 percent—than any other factor. *Ferguson (2001)*
- Students who have several effective teachers in a row make dramatic achievement gains, while those who have even two ineffective teachers in a row lose significant ground. *Sack (1999)*
- Based on research in Texas, the importance of having an effective teacher instead of an average teacher for four or five years in a row could essentially close the gap in math performance between students from low-income and high-income households. *Hanushek, Kain, and Rivkin (2001)*
- The difference in teacher effectiveness is the single largest factor affecting academic growth of populations of students. *Sanders (2000)*
- The differences in impact by the most effective teachers, the top one-sixth of teachers, can be 9 months or more, essentially a full year of learning. *Rowen, Correnti, and Miller (2002)*
The achievement gap facing poor and minority students is due not to poverty or family conditions, but to systematic differences in teacher quality. A student who is taught by an ineffective teacher for two years in a row can never recover the learning lost during those years. As a teacher’s effectiveness increases, the first group to benefit from this improvement is the lower achieving students.

We know the following about administrators:

- **Superintendents.** There is a direct link between superintendent leadership and student achievement. A Mid-continent Research for Education and Learning (McREL) report finds that superintendents positively influence student achievement, especially when they keep their districts focused on teaching and learning. “School District Leadership that Works: The Effect of Superintendent Leadership on Student Achievement.” (2006)

- **Principals.** In a study of 30 years of research, McREL also found that principals who concentrate on the right practices (they list 21 leadership characteristics) can elevate a school scoring in the 50th percentile up another 10 to 19 percentile points. “Balanced Leadership: What 30 years of research tells us about the effect of leadership on student achievement.” (2003)

The effective administrator creates a culture where the focus is on how teachers instruct and how students learn, not on programs, structures, fads, and ideologies. (See Annenberg, Ferguson and Elmore to follow.)

We know the following about schools:

- **Comprehensive Induction.** Mentors are an important factor in providing support for new teachers, but mentoring is not enough. Comprehensive induction proves most effective at training and keeping good teachers in the classroom. *Teacher Attrition: A Costly Loss …. Alliance for Excellent Education* (2005)

- **They Beat the Odds.** Success has little to do with money, class sizes, fancy reading programs, parent involvement, or tutoring. These can be found at both good and bad schools. The schools that beat the odds
  
  1. Assessed and re-assessed how the students are learning.
  2. They used the assessment results to teach and reteach.
  3. They did not stop until they found a way for every student to grasp the lesson. *Why Some Schools with Latino Children Beat the Odds…and Others Don’t. The Center for the Future of Arizona* (2006)

Grade level teams using carefully developed curriculum consistently get better results than collections of individual teachers using an eclectic collection of curriculum no matter how gifted they are individually.

**The Only Factor That Increases Student Achievement**

Attributed to John Goodlad, a UCLA study reviewed 40 years of educational innovations and did not find a single innovation that increased student achievement. *The only factor that increased student achievement was the significance of a teacher.*
In 1991, Ron Ferguson of Harvard reported: A large scale study found that every additional dollar spent on raising teacher quality netted greater student achievement gains than did any other use of school resources. Ferguson, R. “Paying for Public Education.” Harvard Journal on Legislation

Two years later, in 1993, to show you how we ignore the research, Walter Annenberg gave the schools $500 million to improve student achievement and called it The Annenberg Challenge. So,

- Boston tried whole-school change
- Chicago tried small learning communities
- Houston tried class size reduction
- Los Angeles tried improving literacy
- New York tried creating small schools of choice
- Philadelphia tried citywide learning standards

In 1998 the Annenberg Foundation reported that the work that delivered the best return on student learning was the money invested in giving teachers SUSTAINED opportunities to improve their classroom skills. It’s the teacher! It’s not programs, fads, or ideologies.

Richard Elmore of Harvard says, “To improve student learning, you do not change the structure (i.e., block scheduling, smaller class size, small school size, etc.), you change the instructional practices of the teachers. The schools that seem to do best are those that have a clear idea of what kind of instructional practice they want to produce, and then design a structure to go with it.”

It is the teachers and their instructional practices, not curriculum programs or a change in the school structure that improves student learning.

Good instruction is 15 to 20 times more powerful than family background and income, race, gender, and other explanatory variables. Hershberg (2005)

For instance, the Homewood-Flossmoor High School District (three times US Dept of Education Excellence Award) uses the following professional development plan:

- What are our student educational goals? – What are our actual student performances? = What are our student gaps?
- What staff skills are needed to close student gaps? – What are our actual staff skills? = Our professional development needs

The structure Homewood-Flossmoor uses is rare. An Educational Testing Service report in 2003 said that most professional development programs in the United States often are sporadic, incoherent in nature, lack alignment, and have no adequate follow-up procedure.

Teachers, Not Programs, Produce Student Achievement

Programs do not produce achievement; teachers produce student achievement. The major difference between successful and unsuccessful schools is that:

- Unsuccessful schools stress programs. They spend millions of dollars adopting programs, fads-of-the-year, in constant pursuit of the quick fix on the white horse.
- Successful schools stress practices. They wisely invest in their teachers and the effectiveness of their teachers. They don’t teach programs; they teach basic,
traditional academic content—and they work at improving the instructional practices of their teachers, because instructional skill is a major factor in improving student achievement.

**Monies are much better spent training and developing teachers than in buying one program after another.** Educational leaders know that what matters is whether schools can offer their neediest students good teachers trained in effective strategies to teach strong academic knowledge and skills.

**The ineffective teacher** affects little, if any growth in students. **The effective teacher,** even in an ineffective school, produces improved student learning and increased student achievement.

A study of the Denver Public Schools found that teachers accounted for more than twice the total variation in student test score change than did the schools. *Meyer (2001)*

Imagine your child is at the 50th percentile and you place your child in one of the following situations. After two years, Robert Marzano’s research says the following will happen to your child:

<table>
<thead>
<tr>
<th>School and Teacher</th>
<th>Percentile After Two Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ineffective school and Ineffective teacher</td>
<td>3rd</td>
</tr>
<tr>
<td><strong>Effective school</strong> and Ineffective teacher</td>
<td>37th</td>
</tr>
<tr>
<td>Average school and Average teacher</td>
<td>50th</td>
</tr>
<tr>
<td>Ineffective school and <strong>Effective teacher</strong></td>
<td>63rd</td>
</tr>
<tr>
<td>Effective school and Average teacher</td>
<td>78th</td>
</tr>
<tr>
<td><strong>Effective school</strong> and <strong>Effective teacher</strong></td>
<td>96th</td>
</tr>
</tbody>
</table>


All you need is an average school with average teachers. Then, if you can just tweak the percentile growth each year, there will be monumental student improvement over the years. See previous McREL research on how an effective principal can raise the percentile growth of a school.

Therefore, quality teaching is the most critical means by which to IMPROVE STUDENT ACHIEVEMENT or close achievement gaps.

So, if we know that teacher quality is directly proportional to student success, why don’t we get it?

It’s because the great majority of policy makers, school board members, and administrators believe that student success comes from installing programs, fads, and ideologies, such as: smaller school size, smaller class size, block scheduling, mentoring
for inquiry, million dollar reading programs, project-based instruction, school uniforms, single-gender schools and hundreds of other “flavors-of-the-month.”

The Greatest Asset of a School

Peter Drucker the famed business guru says that if you ask any business person to name their greatest asset, they will tell you it’s their PEOPLE. An asset is like money or property that you invest in to make it grow into greater assets. That's why businesses spend $53 billion dollars each year training their people, their assets, to make them worth more and more to a company. Thus, they consider their people their human capital. The better their people, their assets, the more successful the company.

Training = employee engagement = productivity

However, ask a school administrator or policy maker to name their greatest asset and they will often tell you it's money or programs. Rarely do you ever hear anyone say, their teachers—yet the research says over and over again: Teaching quality is the most critical factor by which to improve student achievement or close the achievement gap. Therefore, take your asset (your teachers), improve their instructional practices, and you will have effective schools!

Ask the fire chief, the store manager, or hospital executive what they do with new employees. Ask the baseball manager, construction foreman, or senior partner in a law firm, what they do with new employees. They will tell you that all employees are trained. And the training continues until the employee leaves.

Now, ask a school administrator what they do with a new teacher. Some do nothing. Most will tell you that they will assign a mentor to the new teacher.

The mentor may not have been trained, may not teach at the same grade level or academic subject. The mentor mentors, one-on-one, in isolation, with no coherence or collaboration to any state/district/school curriculum, plan, goals, standards or student outcomes. Also, the relationship may lack any structure, is not monitored, and has no adequate follow-up procedure.

Mentors are very important. The issue is when the new teacher is just given a mentor.

There is absolutely no research to support the fact that giving a new teacher a mentor only will result is producing an effective teacher. See “Valuable References” at the end.

The North Carolina Teaching Fellows Commission says, “Giving a teacher a mentor only is a convenient and unconsciously foolish way for an administrator to divorce himself or herself from the leadership required to bring a beginning teacher up to professional maturity level.” The same Commission also found that principals and new teachers rated mentors the least effective way to help new teachers. One out of four new teachers claimed that they received either “poor” or “no support” from their mentors. Simply assigning a mentor does little to remedy the situation of new teachers becoming discouraged and leaving the profession. A Profession in Jeopardy: Why Teachers Leave and What We Can Do About It. The Public School Forum of North Carolina

Duke University Study. Sharon Feiman-Nemser of Brandeis University reported in 1996 that her review of 20 years of claims about mentoring revealed few studies that show the success of mentoring. Twenty years later, in 2006, Susan Wynn of Duke University found that treating only a single aspect of induction, such as mentoring, is unlikely to have a long-term positive effect on teacher retention.
Additionally, in the past 40 years many others have come to the same conclusion including Richard Ingersoll. He says that the most effective professional development for new teachers requires a comprehensive induction program consisting of a collection of integrated activates and strategies, one of which would be mentoring.


A mentor, in and of itself, has no purpose, goal, or agenda for student achievement. The technique is not sustainable or replicable and there is little administrative support or involvement. After a year of one-to-one mentoring, the new teacher retreats to the practice of stand-alone teaching in an isolated classroom. Just to give a new teacher a mentor alone is a waste of time and money.

In 2000, less than 1 percent of beginning teachers received comprehensive induction. Smith and Ingersoll (2004) Yet, 100% of pilots, firefighters, nurses and most all other employees receive comprehensive training.

New teachers are being recruited by the thousands, but few if any support systems are being put into place to allow their successful transition into the classroom. Here are some startling facts on why new teachers fail.

- Few teachers began teaching with a clear, operational curriculum in hand and even fewer received curricula that aligned with state standards. Kauffman et al (2002)
- 56% of new teachers reported that no extra assistance was available to them as new teachers. Kardos and Liu (2003)
- While 87% of the new teachers in a particular state said they had a mentor, only 17% said their mentors ever observed them teach. Kardos and Liu (2003)

And when new teachers fail, the school fails because it is the teacher that is the most important factor in producing student achievement.

Once on the job, all beginning teachers must learn to teach to established standards, evaluate the effects of their instruction on student performance, use student achievement data for planning and curriculum, tailor instruction to address specific learning needs, and learn how to thrive in the culture of the school. This kind of learning can only happen in a comprehensive induction program.

The Hallmark of an Effective School or District

The hallmark of an effective school or district is that they have extensive and continuous professional training for their teachers, their human capital.

A study of seven urban districts reported that “the only reform effort that clearly resulted in student achievement gains had

- clear instructional expectations,
- supported by extensive professional development,
- over a period of several years.”

The bottom line: Trained teachers are effective teachers. Districts that provide structured, sustained training for their teachers achieve what every school district seeks to achieve—improved student learning.
It is much better to train a teacher and lose that teacher than to not train a teacher and keep that teacher.

Begin the training with every new teacher who joins the staff with a comprehensive, coherent, and sustained new teacher induction program—not a mentoring program. **Induction goes beyond mentoring** to provide an extensive framework of support, professional development, and standards-based assessments and evaluations. *The Center for Teacher Quality (December 2004)*

Where is your school or district on new teacher support?

- **1980s** – We provided mentors for new teacher survival.
- **1990s** – We started induction programs for teacher retention.
- **2000s** – We now have comprehensive induction programs that teach for teacher skills.

Most all states and many districts have specified teacher skills they expect teachers to master. The most effective school districts have a comprehensive induction program and a sustained professional development program that teaches these required skills. Many do this before tenure is granted.

**What Is Comprehensive Induction?**

Induction is a comprehensive, coherent, sustained process designed to train and acculturate new teachers to the academic standards and vision of the district.

1. **Comprehensive.** There is a structure to the program consisting of many activities/components and many people who are involved.
2. **Coherent.** The various components, activities and people are logically connected to each other.
3. **Sustained.** The comprehensive and coherent program continues for many years.

Smith and Ingersoll (2004) have determined the percentage turnover of beginning teachers, according to the amount of induction support they received.

<table>
<thead>
<tr>
<th>A Teacher Who Receives</th>
<th>Leaves After 1 Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>No induction</td>
<td>41 percent</td>
</tr>
<tr>
<td>One component (mentoring)</td>
<td>39 percent</td>
</tr>
<tr>
<td>Four components</td>
<td>27 percent</td>
</tr>
<tr>
<td>Seven components</td>
<td>18 percent</td>
</tr>
</tbody>
</table>

Therefore, a teacher who only receives the single component of mentoring has almost a 40 percent chance of leaving after one year.

**Some Components of Comprehensive Induction**

- Initial 4-5 days preschool workshops
- Continuum of professional development activities for 2 or more years
- A strong sense of administrative support with a campus coordinator
- A mentoring component utilizing trained mentors
- A structure for networking with new and veteran teachers
- Opportunities to visit demonstration classrooms
- A welcome center that provides help to settle into a new community
• A bus tour of the community, led by the superintendent
• A formative assessment process that helps the new teacher develop skills for student achievement

Comprehensive induction programs are structured to train teachers in the three characteristics of effective teachers:

1. They are extremely good CLASSROOM MANAGERS.
2. They know how to teach a lesson for student ACHIEVEMENT.
3. They have high EXPECTATIONS for student success.  
   *Wong and Wong, The First Days of School (2005)*

A study looked at 50 years of research and 11,000 pieces of data on student learning and determined that the #1 factor that most enhances student learning is classroom management.  *Wang, Haertel, and Walberg, “What Helps Students Learn?  The First Days of School, p. 82.  (2005)*


Comprehensive induction produces successful schools.

1. Successful schools have teachers who have effective classroom management skills so that teaching and learning takes place.
2. Effective schools and classrooms have consistent school wide procedures.
3. Effective administrators have a systematic, sustained staff development program that begins with new teacher induction.

**Isolation Is the Enemy of Student Achievement**

Every employee of most every company works in teams.  This is because teams produce results.  **People who work in isolation do not produce results.**  Yet, that is the way most schools are organized.  Collaboration is rare.  Worse yet, new teachers seldom see another classroom.  Isolation and lack of support further exacerbate the problems of beginning teachers.

Susan Moore Johnson of the Project on the Next Generation of Teachers at the Harvard Graduate School of Education says, “Our work suggests that schools would do better to rely less on one-on-one mentoring and, instead, develop school-wide structures that promote the frequent exchange of information and ideas among novice and veteran teachers.”  *Johnson and Birkeland (2003)*

What a school needs is a comprehensive, multi-year induction process designed to train and acculturate new teachers in the academic standards and vision of the district.

• There must be an organization or structure to an induction program consisting of many activities (Ingersoll says seven components) and many involved people.
• There must be a set of clear articulated goals based on a set of skills teachers are to master and a structured and nurturing system of professional development and support.

• There is a group that oversees the program and rigorously monitors it to be sure that it stays the course towards student learning.

97 Percent Regents Diplomas

The Islip Public Schools on Long Island, New York, have had an induction program for almost ten years. (Breaux and Wong, 2003) The result of their collaborative work can be seen in the number of students who earned a New York State Regent’s diploma. That’s correct—97 percent.

<table>
<thead>
<tr>
<th>School Year</th>
<th>Induction Year</th>
<th>Regents Diplomas Earned</th>
</tr>
</thead>
<tbody>
<tr>
<td>1992-1993</td>
<td>Pre-Induction</td>
<td>34 percent</td>
</tr>
<tr>
<td>1998-1999</td>
<td>Year 2</td>
<td>65 percent</td>
</tr>
<tr>
<td>2002-2003</td>
<td>Year 6</td>
<td>73 percent</td>
</tr>
<tr>
<td>2003-2004</td>
<td>Year 7</td>
<td>82 percent</td>
</tr>
<tr>
<td>2004-2005</td>
<td>Year 8</td>
<td>93 percent</td>
</tr>
<tr>
<td>2005-2006</td>
<td>Year 9</td>
<td>97 percent</td>
</tr>
</tbody>
</table>

Under the leadership of Assistant Superintendent Linda Lippman, the three year induction program features collaborative study group activities and networking. Study teams focus on skill-building strategies such as conducting parent conferences, managing classrooms, crafting lesson plans, and implementing cooperative discipline. The groups constantly work on team-building and problem solving techniques. They use model lessons and hold sharing sessions in which teachers learn from each other and build respect for one another. They teach the skills necessary to become an effective teacher before tenure is granted. Teacher turnover is negligible and new teachers are immediately ushered into a team-like culture.

Guskey and Huberman (1995) report that two teachers working together collaboratively raise their productively by 75 percent and the quality of their work by even more.

The millions of dollars spent on mentoring programs would be better spent on fostering collegial learning with existing teams of teachers and the next generation of new teachers, the Gen Ys who will easily acculturate into this type of learning environment.

The Most Effective Schools Have Collaborative Learners

In high-success schools in low-income areas, teachers and principals have built into their regular schedules time for teachers to intensively share each other’s work and work together.

The study mentioned on page 3 by the Center for the Future of Arizona recognized L. C. Kennedy School in the Creighton School District of Phoenix. The first grade team, consisting of Patricia Hicks, Karen Schnee, Julie Kunitada, and Jenny Lopez call themselves “experts in the trenches.” They teach English Language Learners (ELL) and their success, they say, “comes from evaluating test scores regularly, adapting our teaching to each student’s needs, and not giving up until they get it right.”
When a new teacher joined the staff, the other members of the team got her up to speed quickly by reviewing yearly objectives and discussing how to reach that goal. The teams at the school meet weekly and have created learning communities of teachers that tackle problems and issues. The first grade team members say, “Our team is flexible and pliable, stubborn, and persistent. We accept ownership of the children and believe that all children can learn. We never give up!”

By meeting regularly, discussing student needs, fostering collaboration, and harnessing collective intelligence, they helped Latino children beat the odds.

If all schools were truly learning communities, would we even need to talk about mentoring? “Induction Into Learning Communities.” National Commission on Teaching and America’s Future. p. 2. (2005)

Professionals do not work alone; they work in teams. When teachers meet in teams to focus on a problem, they become part of a team that will work with students who need their help. “Teachers should be in teams, working collaboratively around problems identified in their schools that are related to students,” says Kathleen Fulton, director of Reinventing Schools for the 21st Century for the National Commission on Teaching and America’s Future. Rivero (2006)

The Center for Teaching Quality says that in high performing schools, teachers are more likely to work toward a collegial approach to decision-making and are willing to share with one another the needed knowledge and skills to help their students reach high academic standards.

Collaboration is the most effective way for teachers to learn. Garet (2001) reports that professional development is most effective and teachers learn more in sustained teacher networks and study groups than with individual mentors. Schools will see improved student learning if they will harness the collective intelligence, creativity, and genius of their teachers in consistent teams and it will be easy with the next generation of Gen Y teachers.

Just think how much money we can save and how much more effective our teachers and schools can be if a new teacher joins an existing team of collaborative learners.

OMG. To the Y generation. You have the 411. Your mission and challenge is to work in groups to improve student achievement.

Valuable References

For more about comprehensive induction, please go to www.NewTeacher.com and read:

Jan. 11, 2006: "Significant Research and Readings on Comprehensive Induction"


Jan. 21, 2005: "What the World Can Teach Us About New Teacher Induction"

Sep. 14, 2005: "Induction into Learning Communities"
Mar. 30, 2004:  "Induction Programs That Keep New Teachers Teaching and Improving"


Nov. 3, 2003:  “Save Millions—Train and Support New Teachers"

Go to www.Teachers.net

At the end of Harry and Rosemary’s current column there is an archive of past articles.

May 2005—Improving Student Achievement Is Simple, Part 1
http://teachers.net/wong/MAY05/

June 2005—Improving Student Achievement Is Simple, Part 2
http://teachers.net/wong/JUN05/

Selected References


