

It's About Time!

Teachers who effectively manage time give their students the best opportunity to learn and develop personal habits that lead to wise use of their time.

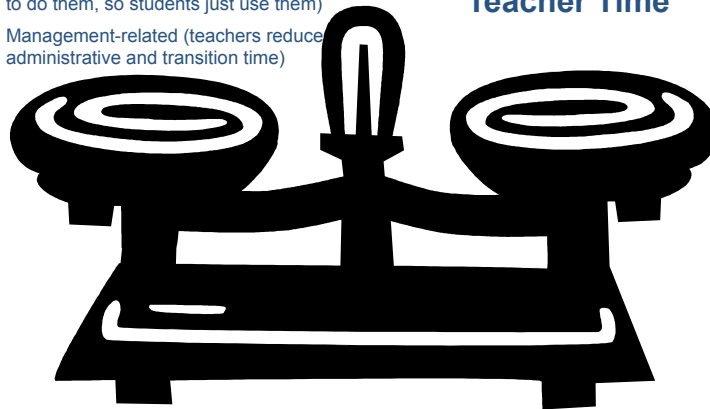
Joyce McLeod, Jan Fisher, and Ginny Hoover

The Key Elements of Classroom Management: Managing Time and Space, Student Behavior, and Instructional Strategies

Images of time abound around us, from a ticking clock to grains of sand in an hourglass. Time is an interesting factor in student learning as well. A recent study found that schools with less than a 10-percentile gap between groups of students used time more effectively than schools with larger gaps.¹ Furthermore, in schools with large achievement gaps, teachers spent more time on administrative tasks (24 more hours over the course of a year), whereas in the minimum-gap schools teachers provided more opportunities for student-led activities (58 more hours per year). How teachers and schools use their allocated time has important implications for the success of the students, teachers, and schools.

School Time³
Allocated Time (what is assigned during the school day)
Instructional Time (when the teacher is teaching)
Engaged Time (when students are involved)
Academic Learning Time (when students demonstrate learning)

Time Saver Routines⁴
Activity-related (students are trained to do a task on cue, such as move into groups)
Instructional-related (students are taught instructional strategies to use that, once learned, do not require explanations of how to do them, so students just use them)
Management-related (teachers reduce administrative and transition time)



Teacher Time

Time for Learning

So what makes effective teachers better at time management? As the graphic shows four kinds of *school time*³ and three types of *time savers*⁴ ideally balance with *teacher time*. *Teacher time* refers to teachers' personal time outside of the contract day. Effective teachers have learned strategies and routines, refined lessons, and judiciously allocate their time so that the demands of their profession balance with their lives outside of school. At times the balance tips one way or the other, but for the most part it stays level. These effective teachers are the ones represented by the graphic.

Article continues on page 2

Time for School

A little over a century ago, school calendars were dictated by the agricultural season, limiting the time available for school to just a few months a year. By comparison, today a minimum length of the school year of 180 days and 360 minutes of instructional time a day has become the norm. Some commercial curricula even specify how many minutes teachers and students should spend on a task. Yet, the reality is that quality time matters more than seat time. Effective teachers are better at time management than their less effective counterparts.²

Inside this issue of *Teacher Quality Digest*

- It's About Time** page 1
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Offers research about what teachers do with class time. One study focused on music teacher's use of time and the other one on a teacher implementing time-saving strategies. The practice section provides a tool for logging one's time use.
- Just Released Studies** page 7
Study on school librarians' impact on students' reading scores, a study on class time use, and on page 2 a study on alternative routes into teaching.
- Time to Close Out the School Year With Dynamic End-of-the-Year Lessons** back page
Provides ideas for where to find engaging lessons to finish out the school year.

Time for Teachers

If the graphic had shown that the school time side was heavily weighing down the scales, it could be due to several scenarios. Study after study has shown that teachers spend many non-contract hours working on school-related tasks.⁵ Some teachers seem to live, breathe, and eat education, working over and above their contract hours by putting in 65+ hours a week. In this case, the teacher has seceded part of his life to the school, which may be necessary for that teacher to be effective. Perhaps the teacher is new to the profession and struggling to address the complex demands of the job, in which case the tipped scale is usually temporary. But, teachers cannot sustain such a pace over the long term. Such a pace itself creates a lot of stress on the teacher, which is only compounded by the demands of the job.

A Canadian time-use study comparing teachers to business managers/administrators found that teachers are busier, experience more stress, yet enjoy their work more than the comparison group with a comparable level of education.⁶ What's more teachers reported feeling rushed and stressed in the performance of their work. On average, teachers spent 21 more minutes during a weekday and 59 more minutes during a weekend day at home working on work-related activities than did managers. Teachers may not have an accurate sense of how much time they are spending working out of school. Indeed, when teachers' estimates of their time use were compared to time diaries, researchers found that teachers underestimated their workload.⁷ The stress of teaching is high and the intrinsic rewards can be motivating; however, the challenge is to balance time.

When time use is discussed in relationship to the qualities of effective teachers, it refers to the use of *school time*. However, the *teacher's time* should not be ignored. With the majority of teachers being female, important gender differences come to light. "Generally research shows ... women spend more time than men on domestic work. Men also spend twice as much time as women on sports and hobbies."⁸ Given that male and female teachers in the study spent comparable amounts of time on school-related work, what they did with their teacher or personal time is noteworthy. Interestingly, women were not engaged in stress-relieving activities to the same degree as their male counterparts. Another study found that female teachers reported higher stress levels than male teachers.⁹ When discussing time use, it is critical to remember that personal time is a necessity, not a luxury.

References

- ¹Meehan, M. L., Cowley, K. S., Schumacher, D., Hauser, B., & Croom, N. D. M. (2003). *Classroom environment, instructional resources, and teaching differences in high-performing Kentucky schools with achievement gaps*. Charleston, WV: AEL. (ERIC Document ED 478 672)
- ²Cruikshank, D. R., & Haefele, D. (2001). Good teachers, plural. *Educational Leadership*, 58(5), 26-30.
- ³Wong, H. K., & Wong, R. T. (1998). *The first days of school: How to be an effective teacher*. Mountain View, CA: Harry W. Wong Publications, Inc.
- ⁴Burden, P. R., & Byrd, D. M. (1994). *Methods for effective teaching*. Boston: Allyn and Bacon.
- ⁵Michelson, W., & Harvey, A. S. (2000). *Is teachers' work never done?: Time-use and subjective outcomes*. Retrieved April 9, 2006, from radicalpedagogy.icaap.org/content/issue2_1/02Michaelson.html; Naylor, C. (2001). *Teacher workload and stress: An international perspective on human costs and systematic failure*. B.C. Teachers' Federation: Vancouver, BC. Retrieved April 9, 2006, from www.bctf.ca/researchreports/2001wcol/report.pdf; *Prisoners of Time*. (1994). Education Commission of the States: Denver, CO. Retrieved April 9, 2006, from eric.edu.gov/ERICWebPortal/
- ⁶Michelson & Harvey, 2000.
- ⁷Naylor, 2001.
- ⁸Naylor, 2001, p. 9.
- ⁹Michelson & Harvey, 2000.

Recently Released Study

Route into Teaching Does Matter at the Start

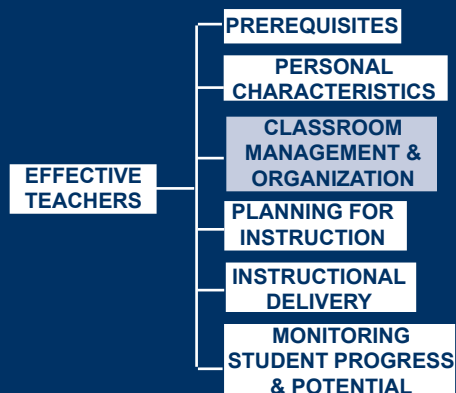
This study examines the effect of various pathways to teaching in New York City Schools on student achievement using data from students in grades 3-8. The study considers whether teachers who enter through routes with reduced education coursework prior to teaching are more or less effective at improving student achievement when compared with teachers who completed university-based teacher programs. The pathways considered included: Teach for America (TFA), New York City Teaching Fellows, temporary licensed teachers, and university-based program graduates. The results of the study indicate that, in some instances, teachers from new routes such as the Fellows program and TFA are able to get higher student achievement gains than temporarily licensed teachers, although there is typically no difference. Teachers with reduced coursework prior to teaching often obtain smaller initial gains in math and language arts as compared to teachers who completed a university-based teacher education program. However, as all groups of teachers gain experience in the classroom, the differences between college-trained teachers and alternative route (i.e., TFA or Fellow) teachers diminish by their third year of teaching.

Want to Read the Study?

Boyd, D., Grossman, P., Lankford, H., Loeb, S. & Wyck-off, J. (2005). *How changes in entry requirements alter the teacher workforce and affect student achievement*. Retrieved December 15, 2005, from http://www.teacher-policyresearch.org/portals/1/pdfs/how_changes_in_entry_requirements_alter_the_teacher_workforce_and_affect_student_achievement.pdf

Conceptually Speaking

This issue of *Teacher Quality Digest* fits within the framework of effective teachers under the quality of *Classroom Management and Organization*. Teachers' management of their time is central to the goals that are accomplished in the classroom. Simply put, when adequate time is allocated to the various activities (e.g., academic, administrative, social) in a classroom, then success can happen.



Research to Practice is a quick read for practitioners. It is ideal for posting in the copier room, faculty lounge, or any place where teachers can read the research in a few minutes.

Teacher Quality Digest presents a synthesis of the research literature on qualities of effective teachers to promote research-based practices that make a positive difference in student learning and performance. Internet addresses given in this issue were current at the time of publication. *Teacher Quality Digest* is published 10 times a year (monthly, except for June and July).

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Research to Practice: Capturing Time



Time in a school day is finite. The clock has started ticking for teachers before students even enter the building as they rush around doing last-minute preparations. And when students leave at the end of the day, the pace continues. Research supports what teachers know: some teachers are better at managing time than others.

This month's Research to Practice explores the question of "How do teachers capture time?" In the Research section, two articles are summarized, including one based on a teacher's action research. Then, in the Practice section, a blackline master of a time log is presented. The time log can be used to support teachers in reflecting on areas where time can be captured and then reallocated.

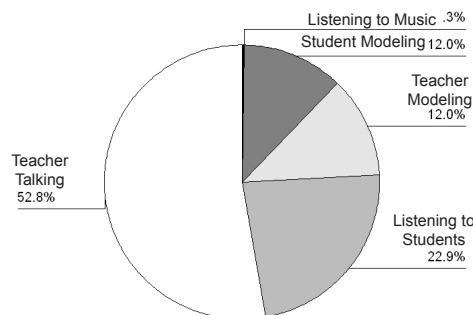
Research

Aligning Class Time With the Standards

In this study, 30 experienced elementary (grades 1-6) music teachers were videotaped and use of class time relative to the nine National Standards for Music Education was analyzed. Videotape analysis was selected in an effort to gain an accurate estimate of time as previous studies had found that teachers tended to overestimate how much time they spent of various activities.

While all the standards were addressed, results showed that teachers allocated less class time to standards that required creativity and/or student decision-making. The majority of class time was spent with the teacher in an active role. Specifically, regardless of grade level, teachers spent the most time talking (46.36%) and the least amount of time listening to music (0.34%). The pie chart shows how time was spent. When the results were disaggregated by national standard, listening and analyzing music comprised 8.7% of class time, whereas each of the other standards comprised less than 5% of the total class time, ranging from 3% to less than 1%. Time restraints were identified as one factor influencing the lack of time allocated to certain standards.

Use of Music Class Time



Want to Read the Study?

Orman, E. K. (2002). Comparison of the national standards for music education and elementary music specialists' use of class time. *Journal of Research in Music Education*, 50, 155-165. Retrieved April 8, 2006, from Expanded Academic ASAP via Thomson Gale: http://find.galegroup.com.proxy.wm.edu/itx/infomark.do?&contentSet=IAC-Documents&type=retrieve&tabID=T002&prodId=EAIM&docId=A90983009&source=gale&userGroupName=viva_wm&version=1.0

Research

New Teacher Tries Strategies to Manage Time More Effectively

Shelly Parsons (co-author of the article) is an elementary school teacher who wanted to improve her time management skills. She recognized that time was a factor in her professional practice. Additionally, “teacher’s time expenditure is also influenced by the increasing needs of students” (p. 27). She had two students with attention deficit hyperactivity disorder (ADHD) in her classroom.

For more on action research, see *Teacher Quality Digest’s* August 2005 issue’s “Research to Practice” on the topic.

Parsons used a couple of strategies suggested in *Teacher’s Time Management Survival Kit: Read to Use Techniques and Materials*-- homework and make-up work strategies--to implement with her third graders. She then recorded how the use of the strategies affected her time. Below are summaries of the strategies.

Homework Strategy entailed arranging students’ desks into groups. For each group, a student was assigned to serve as a homework monitor. This student used a form to record who had homework to turn in and who did not. Then the students attached the form to the top of the completed papers and gave them to the teacher. In the event that a student did not have his or her homework, the monitor asked the student fill out a “homework excuse form,” which was also given to the teacher.

Make-Up Work Strategy involved using a “homework/make-up agreement form” that the teacher filled out and discussed with students. The form included consequences for failure to turn in homework, as well as due date. This form was attached to students’ work. Then, as assignments were returned, the teacher checked off on the form what was submitted.

The teacher reported that prior to implementing the strategies, she routinely left school around 6 p.m. each day; however, after she started using these strategies, she was able to leave by 4 p.m. The table explains the benefits of these strategies.

Strategy	Implementation		Benefits
	Before	After	
Homework	7-10 minutes per subject spent each day on collecting homework	Same amount of time	<p>Increased student ownership of the process</p> <p>Reduced interruptions by students as they had a forum to explain why they were missing homework (homework excuse form)</p> <p>Increased homework submissions as excuse forms were copied and sent home</p> <p>Increased in-class time the teacher had to respond to parental notes or grade papers</p>
Make-up Work	Teacher experienced frustration with remembering to give the work and requesting to get the work back	Time was saved	<p>Increased organization of the make-up work procedure, from documenting assignments to students submitting work with the contract stapled on top</p> <p>Increased students’ sense of responsibility and the importance of submitting completed make-up work as students signed contracts with the teacher</p> <p>Provided a source of documentation</p> <p>Reduced follow-up time that previously was used to ask students about their make-up work</p>

Want to Read the Study?

Borek, J., & Parsons, S. (2004). Research on improving teacher time management. *Academic Exchange Quarterly* 8(3), 27-30. Expanded Academic ASAP. Thomson Gale. Retrieved April 8, 2006, from http://find.galegroup.com.proxy.wm.edu/itx/infomark.do?&contentSet=IAC-Documents&type=retrieve&tabID=T002&prodId=EAIM&docId=A126683335&source=gale&userGroupName=viva_wm&version=1.0

Practice

In some ways minutes in the classroom are like cash in your wallet—they just seem to disappear. When you stop to think of how the time or the cash was spent, major expenditures are recalled, but the little things are often lost. The reality is that some activities take longer than others. The time-use log is designed to capture a snapshot of how teachers are using their allocated time. By examining several days of time use, patterns emerge that can inform professional practice.

Then studies in the Research section illustrate several ways class time can be analyzed. The old saying “getting one’s bang for the buck” aptly applies, as class time is limited and teachers seek to get the most out whatever time they are able to spend each day with students. The time-use log is a tool for teachers to gather data to guide their reflection on how they allocate their time.

Observing With the Form

There are several ways to collect the information on the form, including:

- Recording a class on videotape to analyze later
- Inviting a colleague to conduct several observations (and then return the professional courtesy)
- Keeping the log handy so with each transition it is easy to mark what is occurring. (NOTE: This approach is most likely to result in some missed time.)

How many observations are necessary?

The quick answer is “it depends.” A one-day snapshot may be quite telling. However, if possible, collect three to six days of observations so that patterns can be seen.

How long are the observations?

The length of the observation is set by the time-use period the teacher thinks could be more effective. Take for example the teacher who conducted action research in her classroom highlighted in the Research section. She was concerned about the amount of time it took to collect homework. She could just have noted on the form her start and end time for collecting homework by subject for several days to get an average. Such a simple application does not require a form or even an external way to observe.

But, more likely, a teacher would want an entire lesson segment observed. This may mean a 25-minute handwriting lesson or a 42-minute mathematics class, or perhaps a 90-minute block schedule foreign language class. By having an

observation of the entire lesson, the teacher can see how the time is used. Similarly, the teacher likely will identify areas to conserve time in order to reallocate it to other needs.

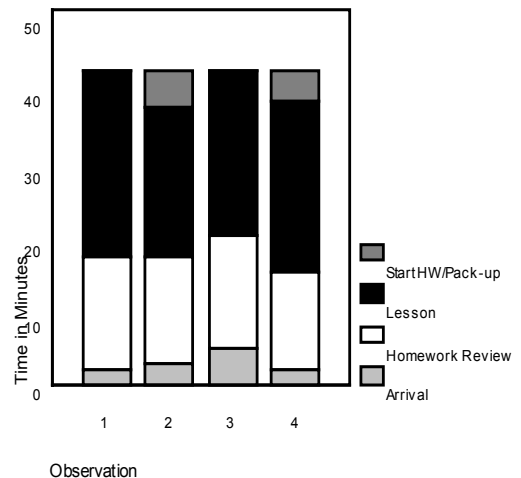
How is the form used?

The time-use log is a stacked bar graph in which the observer starts at the bottom (0 minutes) and makes a line when the target activity transitions to something else. In the space between the two lines, a notation is made as to how the time was used. This continues for the entire observation. Individuals who are very visual may want to use different colors to denote specific activities.

Reflecting with the form

As a teacher using the form, consider if the time use matches your perception of how time flows during class. Examine how the chunks of allocated time are used. Consider how much is instructional time versus non-instructional time (e.g., taking attendance, packing up for the next class). What type of activities are the students doing? What is unexpected in the observation of time use?

Imagine being in the 42-minute Algebra II mathematics class that ran like clockwork (see table), with 15 minutes on homework review, 25 minutes on the new material, and the remaining time spent on starting the next day’s homework or packing up. Some would say that the teacher’s time use was remarkably consistent. Others might express concern that the regularity would suggest that the teacher delivered material without responding to students’ needs. With just a graph, only part of the story is told; the rest is buried in the context. A time-use log is not intended as a stand-alone tool. Rather, it serves as an information source about what typically occurs.



Time Use Log

Directions: Start from the bottom and, with each new use of time, draw a line across the column. In the space between the two lines, indicate what occurred in the classroom.

M I N U T E S	60				
	58				
	56				
	54				
	52				
	50				
	48				
	46				
	44				
	42				
	40				
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	14				
	12				
	10				
	8				
	6				
	4				
	2				
	0				
	1	2	3	4	
	Date: _____	Date: _____	Date: _____	Date: _____	
	OBSERVATION				

Just Released Studies

School Librarians Are Effective Teachers

This study investigated the relationship between student achievement and library resources and staff. The reading test scores of over 50,000 third- and sixth-grade elementary school students in 800 Canadian schools were examined along with attitudinal information and tracking results for school library demographics. The major findings include:

1. Students in schools with teacher-librarians are more likely to say they enjoy reading.
2. The library staffing factor was the only significant factor in the study that impacted grade 3 reading scores. (NOTE: School size determined if a library-teacher was on staff.)
3. Schools with trained library staff (e.g., library technicians, school staff) are more likely to have a higher proportion of grade 6 students meet or exceed the provincial standard on reading tests. In grade 6, schools with a teacher-librarian or library technician had overall reading achievement scores that were 5.5 percentile points higher than the average.
4. Schools without trained library staff often have lower achievement on both the grade 3 and grade 6 reading tests.

“Teacher librarians are qualified teachers who’ve taken more courses to become librarians. They focus on integrating information technology with curriculum, and work with teachers to design research units.”

Tess Kalinowski. Better Grades? Thank a Librarian. *Toronto Star*. Retrieved April 7, 2006 from www.thestar.com

Want to Read the Study?

Queen’s University & People for Education. (2006). *School libraries and student achievement in Ontario*. Toronto, Ontario: Ontario Library Association. Retrieved April 8, 2006, from http://www.accessola.com/osla/graphics/eqao_pfe_study_2006.pdf

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How Class Time Is Allocated Impacts Learning Outcomes

Using time allocation and teacher effectiveness ratings, researchers examined how instructional practices in 107 first- and second-grade classrooms in 17 schools affected student achievement. Participating teachers were divided into two groups (high and low) based on the use of the two measures. The students were pre- and post-tested to get a measure of growth in student achievement. The researchers noted that students’ initial reading ability had a stronger influence on student learning than did teachers’ rating of effectiveness.

Observers recorded what occurred during the first 15 seconds of each minute. The typical length of an observation was 90 minutes conducted every other month for an average of four visits per classroom. Twenty different time allocation items (e.g., oral language, grammar, phonemic awareness, reading comprehension) are included.

The researchers found that when teachers spent more time reading books and less time giving directions, students demonstrated higher word attack skills at the end of the year than their peers whose teachers did not engage in such practice. Sometimes high-ability students were adversely impacted by less effective teachers; for example, when the less effective teacher spent more time on grammar, mechanics, and spelling, the high-ability students had lower word recognition scores than high-ability peers in highly effective teachers’ classrooms. Additionally, the more time less effective teachers spent on mechanical skills, the lower the high-ability students’ spelling outcomes. For high-ability students in highly effective teachers’ classrooms, the amount of time spent on mechanical skills did not impact letter-word outcomes. In first-grade classrooms, the highly effective teachers spent more time on reading instruction activities than on non-instructional activities (e.g., student discipline). In short, highly effective teachers allocated instructional time to maximize word-reading outcomes.

Word attack (also known as decoding skills) refers to when students are able to convert symbols into meaningful language.

Want to Read the Study?

Foorman, B. R., Schatschneider, C., Eakin, M. N., Fletcher, J. M., Moats, L. C., & Francis, D. J. (2006). The impact of instructional practices in Grades 1 and 2 on reading and spelling achievement in high poverty schools. *Contemporary Educational Psychology, 31*, 1-29. Retrieved April 8, 2006, from www.sciencedirect.com

Time to Close Out the School Year with Dynamic End-of-the-Year Lessons

The last days of school present unique opportunities as well as challenges. Students and faculty look forward to the summer break, yet feelings of nostalgia over school days shared are ever present. Preparing to end another school year brings the inevitable routines of collecting textbooks, updating cumulative folders, assigning final grades, and a host of other tasks for teachers and staff. Some school policies create instructional challenges when students are not allowed to access lockers, bring paper or pencils to school on the last day, and textbooks have already been stored. A little ingenuity may yield a worthwhile last day of school with solid instruction.

Think about those lessons you would have liked to do, but, alas, were prevented from doing due to time pressures. For example, Pizza Permutations was designed by a team of middle school team teachers to address all four core content area state standards on the last day of school. A local pizza store sold large pizzas to the teachers at cost for their students. Here is how the team integrated the core subject areas for a fun interdisciplinary activity.

Mathematics – using the pizza menu, students determined how many combinations of pizza could be made based on varying the toppings and types of crust.

English – watching television advertisements, students identified and analyzed the various persuasive techniques used.

Social Studies – reading pizza company backgrounds (obtained online), students discussed entrepreneurship and compared and contrasted the startup and growth of the pizza companies.

Science – reflecting on what they had learned throughout the year, students wrote poems in groups about the science relating to pizza, which they then shared with the class. Topics included how photosynthesis really made the pizza and the physical and chemical changes that occur when making pizza.

The last days of school can be an opportunity to pilot new activities that may find a place in next year's instruction, while reviewing students' knowledge of concepts that were taught during the school year.

Sources for engaging and relevant lessons abound in professional publications, books, and on the Internet. Some websites to review include the following:

Webquest (<http://webquest.org/>) is a treasure trove of content-rich activities that students do using the computer. If you have not used the webquest inquiry format, click on the "top" link for strong examples that are divided by both grade level and subject area, ranging from art to technology.

Lesson plans found on the Internet serve as a starting point for teachers looking for appropriate and engaging ideas to use in the classroom. At the end of the year, sites like <http://www.col-ed.org/cur/>, with its collection of lesson plans for all levels and subject areas, can be especially helpful.

Museums (e.g., http://www.smithsonianeducation.org/educators/lesson_plans/lesson_plans.html), educational television channels (e.g., school.discovery.com/lessonplans/), newspaper, and magazines often have websites with engaging activities.

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Jennifer L. Hindman, Ph.D.
Editor

Leslie W. Grant, Ph.D.
James H. Stronge, Ph.D.
Contributing Writers

Christopher R. Gareis, Ed.D.
Kirsten McBride, M.A.
Copy Editors

Telephone/Fax: 757.564.1294

E-mail: TQDigest@teacherqualityresources.com

Website: www.teacherqualityresources.com



Teacher Quality Resources
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Williamsburg, VA 23187-0519
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