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Teacher Quality An Interview with Dr. James Stronge

What have been the biggest changes (challenges) to teacher quality in the past five years?

While concerns for attracting, developing, and retaining quality teachers aren't new, problems associated with them have been exacerbated in recent years due, among other factors, to shortages of well qualified teachers in selected specialty areas. Consider the following:¹

- **Attracting Teachers** - Teacher salaries, both at the beginning teacher pay level as well as the cumulative pay across the teaching career, put the education profession at a disadvantage in attracting candidates of high potential. Studies comparing salary rates have consistently demonstrated that teacher salaries are more comparable to salaries in technical fields than to the professions, and few occupations requiring college degrees have salaries lower than those found in teaching. In addition, the broadening of career opportunities for women and minorities over the last several decades has influenced young people's professional decision-making, requiring school systems to focus additional attention on recruitment practices to entice candidates to the profession.²
- **Developing Teachers** - A second key area of focus is

the need to ensure quality among practicing teachers and to encourage continuous improvement over the career span. A growing body of research continues to amass evidence that teachers influence student achievement more than any other factor, emphasizing both the positive effect of stronger teachers and the negative effect of weaker teachers.³ This research strengthens the argument for supporting teacher growth and acknowledging exemplary practice.

- **Retaining Teachers** - Studies investigating teacher attrition have documented that among those teachers who leave the profession, newer teachers – who receive lower pay – leave most quickly,⁴ and frequently they cite low pay as a major reason for their attrition.⁵ Approximately 40-50% of new teachers leave their teaching positions within five years.

For beginning principals, is there a common core of criteria that are “musts” when hiring? non-negotiables?

Yes, I do think there are non-negotiables for teacher hiring, and they apply to both beginning and experienced principals. First, it's essential to recognize how

In This Issue

Interview with Dr James Stronge.....	1
From the Editors.....	2
Teacher Quality Literature Review.....	4
Executive Director's Remarks.....	5
Dissertation Abstracts.....	9



Center for Gifted Education

The College of William & Mary

Teacher Quality

(cont'd from page 1)

important and powerful a teacher hiring decision is. In a real sense, the hiring decision is the first evaluation applied to that teacher for the given position, and if this first evaluation is done correctly, all subsequent evaluations will be relatively easy. We must select the best teachers possible if we are to have any hope of improving learning in our schools.

Once the critical nature of teaching hiring is recognized, then it becomes incumbent on the principal to be able to distinguish a high quality teacher candidate from an average or poor candidate. And, for this purpose, I suggest applying the six qualities of effective teachers stated in ASCD's books, *Qualities of Effective Teachers and Teacher Quality Index*:

- Prerequisites of effective teachers (e.g., knowledge of subject matter),
- Teacher as a person qualities (e.g., caring),
- Classroom management and organization (e.g., creating robust learning environments),
- Organizing for instruction (e.g., short and long-term planning),

- Implementing instruction (e.g., using instructional strategies to differentiate instruction), and
- Monitoring student progress and potential (e.g., ongoing student assessment related to student learning needs).

How do you think about teacher quality in response to student achievement?

The two are inseparable. In fact, I would suggest that there is a basic equation for improved student achievement: teacher success = student success. I know that stating the relationship between teaching and learning in this manner overly simplifies the connection between the two. Nonetheless, I do want to make the point emphatically: teachers make an extraordinary difference in student achievement.

How has the current accountability landscape affected teacher quality?

While I recognize that state and federal educational policies can be misdirected in intent or misapplied in



Dr. James Stronge

practice, I do believe that the continuing educational reform efforts in America (and in other countries around the globe, for that matter) are coming to grips with the inevitable: Until we improve what happens in a classroom, reform will remain of little consequence. *No Child Left Behind* may be flawed in design in various ways, but the intent to place a "highly qualified" teacher in every class every day is the right thing to do. Now, we need to go beyond the concept of

Continued on page 3, Teacher Quality



From the Editors



Welcome to the latest theme-based issue of the Center for Gifted Education's newsletter, *Systems*. Previous theme focuses have been: sustaining educational change, language arts, professional development for teachers, use of technology with gifted learners, and identification of under-represented populations. Beginning with the Summer/Fall 2006 issue of *Systems*, we made a decision to discontinue mailing the newsletter. Many past and all future issues will be available online at the Center's website, www.cfge.wm.edu.

The theme of the current issue is teacher quality. We lead off with an interview with Dr. James Stronge, an expert on teacher quality and teacher evaluation at the College of William and Mary. Our executive director shares remarks about a conference the Center co-hosted in 2006 with the National Association for Gifted Children and the Jack Kent Cooke Foundation, titled "The National Leadership Conference on Low-Income Promising Learners". In addition, she comments on the newly approved NCATE standards for gifted education. Dr. Elissa Brown discusses the findings of the Center's Project Athena as they relate to teacher performance. A literature review on the research on teacher quality has been provided for further information. Dissertation abstracts from five of the College's newest graduates are included. They showcase the wide range of interests and expertise of the latest class of Ph.D.'s.

We hope that you continue to find the information collected in our newsletter useful in your planning and practice decisions.

Teacher Quality

(cont'd from page 2)

"highly qualified" and recognize and promote the need for a "highly effective" teacher in every classroom.

Are there steps that teachers can take to self-improve?

Certainly. Perhaps the most powerful force for teacher improvement is internal, and an excellent vehicle to promote self-improvement is reflection. There is no substitute for insightful, deliberate, thoughtful reflection as a means for continuous improvement, whether we're talking about teaching, medicine, engineering, or any other field of endeavor. I like the following definition of reflection as I think it captures the essence of what all good teachers – and certainly improving teachers – do on a regular basis: "Reflection is the 'supervisor' that encourages teachers to continue what worked and correct what isn't working."⁶

What are your current projects with regard to teacher quality?

In terms of research and publishing projects, here are some recent and ongoing projects:

- Last year (2006), I completed a book with Christopher Gareis (College of William and Mary) and Catherine Little (University of Connecticut) for Corwin Press entitled, *Teacher Pay and Teacher Quality*.
- Also, in 2006, I co-authored with Jennifer Hindman (Teacher Quality Resources, LLC) a book published by the Association for Supervision and Curriculum Development, *Teacher Quality Index: A Protocol for Teacher Selection*.
- Tom Ward (College of William and Mary), Pamela Tucker (University of Virginia), and others recently finished a three-year study in which we investigated the student achievement impact and teaching practices of National Board Certified teachers in selected North Carolina school districts.
- With the assistance of Leslie Grant (College of William and Mary) I recently finished revising the Association for Supervision and Curriculum Development book, *Qualities of*

Effective Teachers. This second edition should be published by ASCD in January, 2007.

- Leslie Grant, Patricia Popp (College of William and Mary), and I are embarking on a new project funded partially by the National Center for Homeless Education in which we will investigate the instructional practices of effective teachers that work extensively with highly mobile students or students experiencing homelessness.
- Catherine Little, Leslie Grant, and I currently are engaged in an international comparative study of national award-winning teachers. To date, we have observed and interviewed teachers in the United States, Australia, and New Zealand. We will be continuing the project over the next 12 or so months in selected other countries, as well.

Are effective teachers synonymous with effective principals?

I suspect that effective teachers and effective principals share many qualities. For instance, having strong verbal skills is well documented as a quality related to teacher effectiveness, and I suspect this is true for principals, too. Also, the disposition and behavior of genuinely caring for students likely is a quality that is cross-cutting. However, based on the extant research, one basic way in which effective teachers and effective principals differ is in how they affect student achievement: Effective teachers impact student achievement directly through their teaching practices and interactions with students, whereas principals impact student achievement more indirectly through their leadership behaviors and by supporting the work of teachers and others. Nonetheless, one point is crystal clear to me: both effective principals and effective teachers are essential for student success.

Additional Comments

Of all the factors within a school's control, there is no more powerful influence on student learning than the teacher. Thus, we all need to remember that regardless of

the work we do to support schools, teaching and learning always must be prominent in our thinking and actions.

Nevertheless, the dire predictions of teacher shortages are connected to the issue of aging and retiring teachers, not solely to data regarding teacher preparation programs. Many college students still enter and graduate from these programs, and there is also a trend of professionals from other fields entering education as a second career. Consequently, candidates are available. School systems must then find ways to attract the most talented candidates to their schools. Although conventional wisdom suggests that teachers enter the field for the intrinsic rewards and the service orientation, not for the financial incentives; salary is, nevertheless, an important consideration.

¹ Taken from: Stronge, J.H., Gareis, C.R., & Little, C.A. (2006). *Teacher pay and teacher quality*. Thousand Oaks, CA: Corwin Press.

² Odden, A., & Kelley, C. (1997). *Paying teachers for what they know and do: New and smarter compensation strategies to improve schools*. Thousand Oaks, CA: Corwin Press.; Swanson & King, 1997.

³ Sanders, W. L., & Horn, S. (1998). Research findings from the Tennessee Value-Added Assessment System (TVAAS) database: Implications for educational evaluation and research. *Journal of Personnel Evaluation in Education*, 12, 247-256.

⁴ Murnane, R. J., Singer, J. D., Willet, J.B., Kemple, J. J., & Olsen, R. J. (1991). *Who will teach? Policies that matter*. Cambridge, MA: Harvard University Press.

⁵ Odden & Kelley, 1997.

⁶ Harris, S. (2003). An andragogical model: Learning through life experiences. *Kappa Delta Pi Record*, 40(1), 38-41, p.39.

James H. Stronge is Heritage Professor in the Educational Policy, Planning, and Leadership Area at the College of William and Mary in Williamsburg, Virginia. Among his primary research interests are a) teacher effectiveness and student success, and b)

Continued on page 4, Teacher Quality

Teacher Quality

(cont'd from page 3)

teacher and administrator performance evaluation. He has worked with numerous school districts, state, and national educational organizations to design and develop evaluation systems for teachers, administrators, superintendents, and support personnel.

His most recent research project, in conjunction with SERVE - the regional educational laboratory located at the University of North Carolina, Greensboro, explores the connection between teacher effectiveness and student achievement for National Board Certified Teachers. He served as associate editor for the *Journal of Personnel Evaluation in Education* (Kluwer Academic Press) for the period, 1997-

2004.

Dr. Stronge earned his doctorate in the area of educational administration and planning from the University of Alabama. He has been a teacher, counselor, and district-level administrator. He may be contacted at: The College of William and Mary, School of Education, P.O. Box 8795, Williamsburg, VA 23187-8795, 757.221.2339, or jhstro@wm.edu.

by Dr. Elissa Brown

Teacher Quality Literature Review

by Bronwyn MacFarlane

What makes a quality teacher? Answers to this question are far from simple. Teacher quality is defined by many variables and effective teaching is the result of a combination of factors, including aspects of the teacher's background and ways of interacting with others, teacher education, and the implementation of a variety of specific teaching practices. The term quality has multiple layers and implications within the teaching profession and the following findings on how teacher impact affects student achievement reviews what information has been discovered and where new research can lead for continual school improvement. Review of the research literature included studies of teacher quality, teacher effectiveness, innovation in teacher practices, teacher training and continuing professional development, accountability, and administrative leadership and reform.

Teacher Quality

With the *No Child Left Behind Act* of 2001 (NCLB) expectations as impetus for overall school improvement, defining teacher quality in terms of student achievement is a major concern of school leaders today. Yet defining quality in teaching is difficult since defining quality requires value judgments. Studying teaching cross-culturally makes this evident as behavioral expectations vary

across cultures (Alexander, 2000). Good teaching is normative and made up of at least three components: the logical acts of teaching (defining, demonstrating, modeling, explaining, correcting, etc.); the psychological acts of teaching (caring, motivating, encouraging, rewarding, punishing, planning, evaluating, etc.); and the moral acts of teaching (showing honesty, courage, tolerance, compassion, respect, fairness, etc.) (Fenstermacher & Richardson, 2005). When coupled with demonstrations of student learning, a start toward a definition of quality in teaching is made. Yet the psychological dimension of quality teaching is difficult to assess. Quality teachers are exemplary in their demonstrations of caring, motivating, encouraging, rewarding, punishing, planning, and evaluating, and these behaviors need to be evaluated by discerning observers during the passage of lengthy periods of time in real classes. Although multiple-choice and constructed response items can be built with these dimensions in mind, there is no evidence that teacher quality assessments predict the behavior of teachers in classrooms (Berliner, 2005).

Teacher Effectiveness

A teacher's preparation, relationship with students, and classroom management techniques are inextricably linked with

classroom success. When it comes to assessing a teacher's effectiveness, however, there is nothing more important to consider than the actual act of teaching (Stronge, 2002). There are many elements of the teaching process that have been linked to teaching effectiveness including the strategies teachers use, the clarity of their explanation of the material, and the types of questions they ask. Instructional literature suggests that students whose teachers develop and regularly integrate inquiry-based, hands-on learning activities, critical thinking skills, and assessments into daily lessons consistently out-perform their peers. Stronge (2002) suggested that the qualities of an effective teacher can be summarized: (1) The effective teacher recognizes complexity. (2) The effective teacher communicates clearly. (3) The effective teacher serves conscientiously.

Stronge further pointed out that the ultimate proof of teacher effectiveness is student results. Since outcomes count, teacher success can be correlated with student success. Berliner (2004) indicated the quality of teachers can be inferred through the performance of American students on standardized assessments. Berliner (2005) further pointed out that America's poor and minority students do not do well in most

Continued on page 6, Literature Review



From the Executive Director
Dr. Joyce Van Tassel-Baska

New teacher education standards in gifted education, along with an annotated research base, have now been passed by the NCATE Policy Board. As a field, we have been commended by the organization for our collaboration and our strong research base. Moreover, together with CEC, we have developed guidelines for use by university practioners and P-12 practitioners on complementing the standards in programs at the university level and in professional development at the P-12 levels.

The passage of the new standards should bring coherence to our teacher education programs nationwide at the initial level of certification or endorsement as well as master's level coursework in gifted education. Moreover, it allows us to monitor our own field as professional reviewers of university programs rather than have it done by those outside gifted education as has been past practice.

Finally, the passage of the standards also signals a new era for the professional development of teachers who are not candidates for endorsement, certification, or a master's degree in gifted education. It provides a research-based agenda for professional development workshops, allowing choice and flexibility in the emphases but providing the overall blueprint for activity on all relevant topics deemed essential by the field in the preparation of teachers to work successfully with these learners.

Our important collaborative project on children of promise and poverty, funded by the Jack Kent Cooke Foundation and co-sponsored by both The College of William and Mary Center for Gifted Education and NAGC featured a national conference held in Washington last April attended by over 80 leaders across the nation. The conference monograph is now available for download

from both NAGC (www.nagc.org) and The College of William and Mary Center website (www.cfge.wm.edu). It features an up-to-date annotated bibliography on this timely subject, a set of papers by scholars and practitioners researching and delivering successful programs to these learners, and an action agenda that captures the consensual thinking of conference attendees in the field of gifted education and beyond on this important population. Called *Overlooked Gems*, the monograph is also available in hard cover.

We welcomed the following new students to the doctoral program in gifted education this fall.

Mihyeon Kim received her doctorate in Library and Information Studies from Florida State University, FL; an MLS in Library and Information Studies from Indiana University, IN, and her BLS in Library Science from SungKyunKwan University, Seoul, Korea. She worked for Walker Technical Institute Library as an assistant director in Georgia, and at the Korea Research Information Center as a researcher in Seoul, Korea. She was involved in developing specialized information centers to provide effective nationwide services in Korea. Currently, she is a full time doctoral student in the EPPL gifted program and works for the Center for Gifted Education as a graduate assistant.

Angela Novak Lycan earned a Bachelor's Degree from William and Mary in Psychology and Elementary Education and an M.A. in Education from the University of Connecticut. In her eight years of teaching, she has worked as a classroom teacher, a gifted pull-out teacher and a P.E. teacher across grades K-8. Currently, she is working at a middle school in Norfolk as a Gifted Resource Teacher while she pursues doctoral studies in the EPPL-Gifted program.

Valija C. Rose holds a B.A. in

economics from Rutgers University and an A.M. in economics from the University of Michigan. She has been a high school mathematics teacher for ten years, teaching a range of courses including Advanced Placement Statistics and Advanced Placement Calculus. For the last year and a half, she has served as a high school gifted resource teacher. In 2004-2005, Valija was named Norfolk Public Schools High School Teacher of the Year. She is working at the Center as a graduate assistant in curriculum while she pursues her doctoral studies in the EPPL-Gifted program.

Elizabeth B. Sutton earned a B.S. in Anthropology and Psychology and an M.A. in Teaching Special Education from the College of Charleston. She is currently pursuing a Ph.D. in Educational Policy, Planning, and Leadership with a concentration in Gifted Education Administration. She is from Charleston, South Carolina and worked for the Dorchester District Two School System for nine years. She taught special education for five years and gifted education for three years, working as the Gifted Program Interventionist during her final year with the district. She is currently working as a graduate assistant at the Center.

The following new master's students in gifted education have joined the Center as graduate assistants.

Megan Davison is a recent graduate of SUNY Brockport College where she earned a B.S. in history and secondary education; she has also studied history at Hertford College at the University of Oxford. While at The College of William and Mary, Megan is working on her master's degree in the gifted education program with the ultimate goal of becoming a middle grade social studies teacher in a gifted and talented program. She is a graduate assistant with the

Continued on page 6, Executive Director

Executive Director

(cont'd from page 5)

precollegiate learner programs.

Marvin M. Lee graduated from the University of the Philippines with a Bachelor of Elementary Education in Science and Health degree. He ranked 2nd in the 2004 Philippine Licensure Examination for Teachers and worked as an elementary teacher before moving to the U.S. to pursue a graduate degree in Education. Marvin is in the M.A. Ed in Curriculum and Instruction in the field of Gifted Education program at the College of William and Mary. He is also working as a graduate assistant for Project Clarion at the Center.

Gokhan Oztunc graduated from Bosphorus University in Turkey with a major in science education. From the beginning of his academic life, education and serving the community have been two of his career goals. For this purpose, he joined several non-profit volunteer organizations during his undergraduate years, serving in different positions including teaching, team leader and assistant director. Gokhan chose gifted education as a field of study for the rest of his academic life. He works as a graduate assistant at the Center for Project Clarion. 📖 📖 📖 📖 📖

Center Hosts Fulbright Scholar



Dr. KyungHwa Lee of Soongsil University in Seoul, Korea spent six months at the Center pursuing her cross-cultural research program on creativity in young gifted students. We wish her well in her continued research work in gifted education back in Korea.

Literature Review

(cont'd from page 4)

national and international assessments. In particular, it is these students who need access to more qualified teachers in their schools. Tuerk's study analyzed data from 1,450 Virginia schools and found results indicating student poverty and geography are associated with differential access to highly qualified teachers. Differential access to qualified teachers is uniquely associated with performance on high-stakes achievement tests (Tuerk, 2005).

With outcomes as a definitive measure of performance, NCLB mandated that a highly qualified teacher be in all the nation's classrooms by academic year 2005-2006. To accomplish that goal, each state must define a highly qualified teacher. States are permitted to use teacher licensure tests to demonstrate to the federal government that their teachers are highly qualified, that is, capable, competent, skilled, trained, practiced, and so forth. However the federal law demanding highly qualified teachers in every classroom, in every state may result in 50 different definitions of quality, with each

definition intertwined with and perhaps inseparable from the hiring needs of states and districts. Berliner (2005) stated that teacher shortages or surpluses in a state may influence the definition each state chooses to use. Furthermore, the relationship between teacher quality and the pay and status of teachers in American society may be a variable in attracting "high-quality" teachers given the economic and social status of teachers in our society (Berliner, 2005; Goldhaber & Eide, 2003).

A key finding of Stronge's research (2002) on the qualities of effective teachers is that students taught by teachers with greater verbal ability learn more than those taught by teachers with lower verbal ability. Thus, a discernable link exists between the effective teacher's vocabulary and verbal skills and student academic success. Since communication skills are a part of verbal ability, effective teachers with higher verbal abilities can better convey ideas to students and communicate with them in a clear and compelling manner (Stronge, 2002).

Another strong predictor of teaching performance is the amount of coursework in education. Studies by Darling-Hammond (2001) have consistently found positive effects of teachers' formal education training on supervisory ratings and student learning. Cognition and learning research suggests that students learn better from teachers who go through formal university-based teacher preparation programs (Darling-Hammond, 1999). Despite longstanding criticisms of teacher education, the weight of substantial evidence indicates that teachers who have had more preparation for teaching are more confident and successful with students than those who have had little or none. An important contribution of teacher education is its development of teachers' abilities to examine teaching from the perspective of learners who bring diverse experiences and frames of reference to the classroom (Darling-Hammond, 2000).

The number of well-qualified,

Continued on page 7, Literature Review

Literature Review

(cont'd from page 6)

certified teachers within a state is a consistent and significant predictor of student achievement in math and reading on standardized tests. Furthermore, one of the best predictors of low student performance in individual schools is the number of uncertified teachers in the building. Each year 10 to 30 percent of new public school teachers begin teaching without full certification (Stronge, 2002). Students of teachers who hold standard certification in their subjects score from seven to ten points higher on 12th grade math tests than students of teachers with probationary, emergency, or no certification (Stronge, 2002).

A teacher's formal pedagogical preparation has been shown to have a positive effect on student achievement, especially in the areas of mathematics, science, and reading. Both content knowledge and pedagogical skills are vital aspects of teacher effectiveness (Stronge, 2002). Teachers with a major or minor in content areas are associated with higher student achievement, especially in the areas of secondary science and mathematics. Unfortunately, approximately 23% of all secondary teachers (30% of math teachers) do not have even a minor in the field they teach (Stronge, 2002).

Darling-Hammond's research also indicated alternatively prepared teachers may have more difficulty in the classroom than traditionally prepared teachers. Teachers with little or no coursework in education consistently have difficulties in the areas of classroom management, curriculum development, student motivation, and specific teaching strategies. They are less able to anticipate student knowledge and potential difficulties or to plan and redirect the lesson to meet the individual needs for student differentiation.

Finally, teaching experience matters in teacher effectiveness and student achievement, at least to a certain point. Effective experienced teachers are better able to apply a range of teaching strategies, and they demonstrate more depth and differentiation in learning activities. Teachers with more than three years of experience are more effective than those with three years or fewer, but these differences seem to level off after five to eight years. Teacher expertise as defined by experience (as well as education and scores on licensing exams) accounts for as much as 40% of the variation in students' achievement (Stronge, 2002).

Teacher perceptions and beliefs about best teaching practices

Teachers are presented with the regular challenge of teaching content to a diverse group of learners. Differentiating instruction for diverse learners is an educational phenomenon that enables teachers to develop and implement curriculum that is appropriate for all students (Tomlinson, 1995; Tomlinson & Kiernan, 1997). Students are successful in differentiated classrooms because the teacher is planning and implementing curriculum based on each student's own level of readiness (Tomlinson, 1995). Differentiation of instruction for students who are gifted and talented focuses upon (1) content differentiation, (2) process differentiation, (3) product differentiation, and (4) learning environment differentiation (Tomlinson & Kiernan, 1997; Ehlers & Montgomery, 1999). Personal attitudes about how students should be taught are highly influential among teachers and administrators in regards to what curriculum is relevant and the nature of the physical location where students should receive their education (Ehlers & Montgomery, 1999).

Teacher beliefs about an innovation, its consequences, concerns, and contextual variables associated with it, are important in determining teacher behavior (Burke, Harste, & Short, 1996; Castellano & Datnow, 2000; Kennedy & Kennedy, 1996; Laine & Otto, 2000; van den Berg & Ros, 1999). Kennedy and Kennedy (1996) discussed teacher attitude, in conjunction with subsequent action, as critical change factors. Ultimately, the individual teacher determines the extent to which any innovation occurs. With that in mind, the best teachers never assume they have arrived, but constantly strive to refine their practice (Kent, 2004). Research regarding innovation in teaching has been done that sheds light on effective teaching as well. Teachers will adapt new strategies if they believe those strategies will enhance student learning (Kennedy, 1999). But to adapt such strategies, teacher attitudes must first change in response to classroom applications of new techniques (Guskey, 2000). To effect meaningful change in classroom practice, teachers need a climate of collegiality and professional support for innovation (Borko, Mayfield, Marion, Flexer, & Cumbo, 1997). Teacher leaders in reform efforts tend to be dependable, committed, friendly, and have good interpersonal skills; they also possess the technical skills needed for program improvement (Leithwood, Jantzi, Ryan, & Steinbach, 1997).

Teacher perceptions and beliefs about support and professional development activities

A positive relationship exists between student achievement and how recently an experienced teacher took part in a professional development opportunity such as a conference, workshop, or graduate class (Stronge, 2002). Professional development affects teacher growth, variations in instructional techniques, and improvements in student learning (Joyce & Showers, 1995). Professional development has been found to be most effective when it is an ongoing process. Well-planned professional development can provide purpose, collaboration, commitment, and community (Langer, 2000) among educators.

The National Center for Education Statistics conducted a statistical analysis report in January 1999 on Teacher Quality and the Preparation of Public School Teachers. Results of the survey indicated that teacher participation in formal professional development was high. Moreover, teachers were more likely to have had recent training in programs that seem consistent with the challenge to do things differently and better; these programs focused on topics such as the implementation of state and district curricula, the integration of technology into classroom instruction, and the implementation of new teaching methods. However, in spite of increasing classroom diversity in our school, teachers were least likely to have had recent professional development that addressed the needs of limited English proficient or culturally diverse students.

Effective school leaders create nurturing school environments in which accomplished teaching can flourish and grow (Darling-Hammond, 2003). Teacher support is widely considered most effective when it is situated in everyday experiences, such as in classroom settings (Fullan & Stiegelbauer, 1991). Learning experiences are

Continued on page 8, Literature Review

Literature Review

(cont'd from page 7)

enhanced when they are situated in the context in which they will be needed (Brown, Collins, & Duguid, 1989). Professional support among school environments is important in securing quality teachers (Darling-Hammond, 2003; Stronge, 2002). Good teachers gravitate to schools where they know they will be appreciated and supported in their work. Exemplary teachers become a magnet for others who seek environments in which they can learn from their colleagues and create success for their students.

The establishment of “genuine partnerships between teachers and researchers” is important for educational practitioners to perceive a direct connection to academic researchers (Cordingley & Saunders, 2002; McNally, Boreham, & Cope, 2004). Professional development needs to be a “personal path towards greater professional integrity and human growth” and should not be a trial and error experience (Hargeaves, 2003). A problem with professional development has been the lack of a planned continuity of implementing the professional development teachings after the workshops have been conducted (Berliner, 2005). Lack of follow-through in monitoring or supporting the fidelity of strategy implementation into classrooms or lack of a complete understanding of the strategy for implementation may be a pragmatic problem (Berliner, 2005). The result has been that teachers may change strategies, not use them for the correct duration, or not evaluate the impact of the strategies upon classroom student achievement. Thus, many strategies may be abandoned due to loss of faith in the practitioner’s ability to perform the techniques correctly, or concern that the strategies proven effective were inadvertently modified (Berliner, 2005). Teacher change and identity development is shaped by the interrelationship between personal biography, experience, and professional knowledge linked to the teaching environment, students, subject matter, and culture of the school (Proweller & Mitchener, 2004).

Summary

Currently there is a great deal of written practical application regarding the “how-to’s” in becoming an effective teacher. The amount of practical based writings currently seems to outweigh the amount of research data available. The research on secondary teacher quality is not easy to access and the field is ripe for continuing data findings to follow from recent findings. Quality teaching is made up of the logical acts of teaching, the psychological acts of teaching, and the moral acts of teaching. Darling-Hammond (1996) stressed “the need to focus on much better preparation for teachers and other school personnel.” Teachers need to know how children learn, how different children learn in different ways, and how to use a variety of teaching strategies that will move young people through serious and challenging content. A master teacher has learned to fit all the pieces of the effectiveness puzzle together. An expert teacher promotes an enthusiastic and motivated attitude for learning and their profession, is masterful at classroom management, organization, instructional design and implementation, and is a daily reflective practitioner in her work (Stronge, 2002). Teachers, administrators, and school districts all contribute to the ongoing development, seeking true teacher quality and effectiveness to continually lead to increased overall student performance.

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Continued on page 12, Literature Review

A Descriptive Study of Teacher Perceptions of Self-Efficacy and Differentiated Classroom Behaviors in Working with Gifted Learners in Title I Heterogeneous Classrooms

by Dr. Kimberly M. Tyler

One purpose of this study was to determine the self-perceptions of regular classroom teachers' behavior with behaviors observed by external reviewers when implementing the differentiated skills and strategies necessary for successfully teaching gifted students. Another purpose was to examine the demographic profile of these teachers in respect to academic coursework. Finally, the study examined the self-perception of efficacy of treatment teachers compared to control teachers in Title I schools to determine differences that might be attributed to involvement in a federally funded project requiring the use of differentiated strategies.

Several significant findings emerged from this study. In regards to participating teachers, the Teacher Questionnaire revealed that both the experimental and control groups have equal experience teaching. More experimental teachers were found to have gifted endorsements than control teachers, while

the control group had more experience teaching gifted students. In addition, more of the control population have been identified as gifted than the experimental population, but more experimental teachers had gifted children than control teachers. Finally, more control teachers had master's degrees than experimental teachers.

Findings from the Teachers' Sense of Efficacy Scale (short form) indicated that control teachers showed a greater sense of efficacy than experimental teachers on questions related to classroom management and instructional strategies. There was no statistically significant difference found between experimental and control teachers in the area of Student Engagement.

Data collected from the Classroom Observation Scale-Revised (COS-R) found that experimental teachers rated themselves similar to external observers' ratings. Control teachers, however, rated themselves significantly higher on the classroom observation scale used for Project Athena.

Personal interviews and open-ended questions on the Teacher Questionnaire revealed that the Project Athena experimental teachers have a greater awareness of meeting the needs of their gifted students as a result of participation in the Athena-based professional development sessions. In addition, the following themes emerged regarding teachers' perceptions of characteristics necessary in effectively working with gifted learners: flexibility; having high expectations; understanding individual needs; ability to motivate; and patience.

Implications of this study for future research include conducting a study of a larger sample of teachers endorsed in gifted education vs. non-endorsed teachers in respect to self-efficacy and the use of differentiation strategies to further investigate the effects of systematic training in gifted education. A replication of this study with a larger sample size would also be beneficial.



Developmental Strategies and Styles and Their Measurement

by Dr. Wenyu Bai

Developmental styles and strategies (DSS) are preferences and repeated patterns in intentional self-development. A taxonomy of DSS based on the convergence of talent development and Sternberg's Triarchic Model of Intelligences was proposed to distinguish school learners, street learners, talent developers (specialists), and all-knowers (generalists). This study explored the reliability of the researcher-developed Educational Developmental Style and Strategy Scale, the relationships of age, gender, birth order, ethnicity, and SES to developmental DSS adoption, and the characteristics of five types of DSS adopters (i.e., street learning specialists, street learning generalists, school learning specialists, school learning generalists, the neutral group). Eighty out of 160 students at a governor's school for science and technology completed the survey.

The major findings were the following: 1) The reliability coefficient for the Specialist-Generalist Subscale (SGS) was .79, and

that for the Street Learning-School Learning Subscale (SLSLS) was .76. 2) There were no statistically significant differences among the five types of DSS adopters in age, gender, ethnicity, number of siblings, birth order, and parental education. 3) There were no statistically significant differences across five groups in most measures in the questionnaire. The five groups did not differ significantly in books at home and amount of reading, strengths during childhood, Holland personality types, educational aspirations, developmental ideals and parental expectations, contributors to educational growth, contributors to strength development, source of influence on students' development, amount of time spent on activities weekly, taking private lessons, parents' ability to give good advice on students' development, parents' knowledge in students' areas of interest, the freedom to make decisions






Continued on page 10, Developmental Strategies

Developmental Strategies

(Cont'd from page 9)

on one's own development, having different values from peers, having interests different from peers, not following the crowd, grade-orientation, importance of schooling, diversification strategy, opportunity-orientation, spending efforts on the nearest goal, basing their career choices on their missions rather than on competences and interests, having private projects, considering school as an extra burden, ability to learn on one's own, and having highly developed talents.

There were some significant differences found in some areas.

Generalists had more books at home than specialists had. Generalists were more likely to have military, political, and sports books. School learners were more likely to have science books and less likely to have social science books. School learners' mean school rank in percentile was significantly higher than that of street learners. School learning generalists were different from street learning generalists and school learning specialists in perceiving whether their interests were shared by their classmates.     

Gifted and Talented Adolescents' Experiences in School Counseling




by Dr. Suzannah Wood

Current literature and research has suggested that gifted students encounter developmental challenges typical of all students but also encounter unique stressors due to their giftedness. Several of these stressors, challenges or "predictable crises" have been described in the literature as those gifted students will most likely encounter during the development of their talent. Counseling has been suggested as a means of facilitating the talent development process in accordance with ethical considerations to the gifted students' need, the primary goals of the counseling profession, and the need for future contributions of the gifted student to society at large. School counselors are in a unique position to be an active part of the talent development through utilizing the best practices of counseling the gifted student. However, currently there is a lack of research which methodologically tests these best practices and little is known about what gifted students encounter in their experiences in counseling.

The purpose of this study was to investigate gifted and talented adolescents' experiences in school counseling. This study examined what gifted and talented adolescents experienced in terms of "predictable crises," the counseling relationship, best practices in counseling the gifted, and their ideas of beneficial school counseling program options. Results of an

online survey given to gifted students in the state of Virginia were analyzed via descriptive statistics, factor analyses and multivariate analyses of variance using SPSS 12.0. Descriptive statistics indicated that perfectionism, fear of failing and issues tied to multipotentiality were of concern to participants but few of the best practices of counseling the gifted were experienced by them. Participants reported a need for support by meeting adults in their talent area, discussing class structure and rigor, and a desire for apprenticeships, mentorships, and shadowing as components in their school counseling programs. Factor analyses yielded nine factors which accounted for 69.7% of the variance of survey items.

Implications for high school counselors include an awareness of the concerns gifted students have about their talent development, the infusion of best practices for counseling the gifted through academic, career and personal/social counseling, and a diversity of program components which meet the needs of gifted students. Counselor education preparation programs can consider providing the necessary knowledge of gifted psychology, facilitating student counselor awareness of the need for advocates for the gifted student by integrating the ASCA National Model and NAGC program standards into their curriculum in addition to providing clinical experience to train school counselors to work

with gifted students. Further research is needed to better understand the outcomes of specific counseling techniques, orientations, and best practices when used with this population so that school counselors can be increasingly prepared to meet the unique needs of gifted students.   

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A Pilot Study of Jacob's Ladder Reading Comprehension Program with Gifted and Potentially Gifted Learners in Grades 3, 4, and 5

by Dr. Heather French

The purpose of this study was to investigate the effectiveness of the *Jacob's Ladder Reading Comprehension Program* in improving the critical thinking and reading comprehension skills of identified gifted or potentially gifted learners in grades 3, 4, and 5. A quasi-experimental design was used, with a sample of 45 third, fourth, and fifth grade identified potentially gifted students and 34 third and fourth grade identified gifted students in the experimental group as well as 40 fifth grade identified potentially gifted students and 35 third and fourth grade identified gifted students in the comparison group. Both experimental and comparison groups were assessed before and after the eight week intervention on a measure of critical thinking and a measure of reading comprehension. Other data sources included classroom observations, teacher and student feedback, student

products, and teacher focus groups.

Findings around critical thinking and reading comprehension did not show statistically significant gains in student learning. However, feedback from teachers and students were overwhelmingly positive, suggesting that further research needs to be conducted to determine if quantitative measures of student learning corroborate this qualitative data. Student performance data in several of the ladders and ladder levels was statistically significant in a positive direction. Additionally, statistically significant differences were found based on gender. Teacher effectiveness was also negatively correlated with student success with the program. Specific suggestions for future research are provided. 

Talent Development in the Performing Arts: Teacher Characteristics, Behaviors, and Classroom Practices

by Dr. Bess Worley II





The visual and performing arts have been included in landmark studies of talent development but, within the field of gifted education, less is known of the arts as an area of talent development compared to other intellectual and academic talent areas. The lack of research related to the teachers of talented students in the arts endangers these students by potentially overlooking needs specific to their talent domain.

This descriptive study examined the teacher characteristics and behaviors that contribute to working successfully with artistically talented students at the secondary level as indicated by arts teachers in selected specialized secondary schools for the performing arts. This study also examined the instructional strategies and differentiated teaching behaviors implemented by these teachers and compared these to the literature and research on teacher effectiveness and differentiated instruction in the academic fields of gifted education.

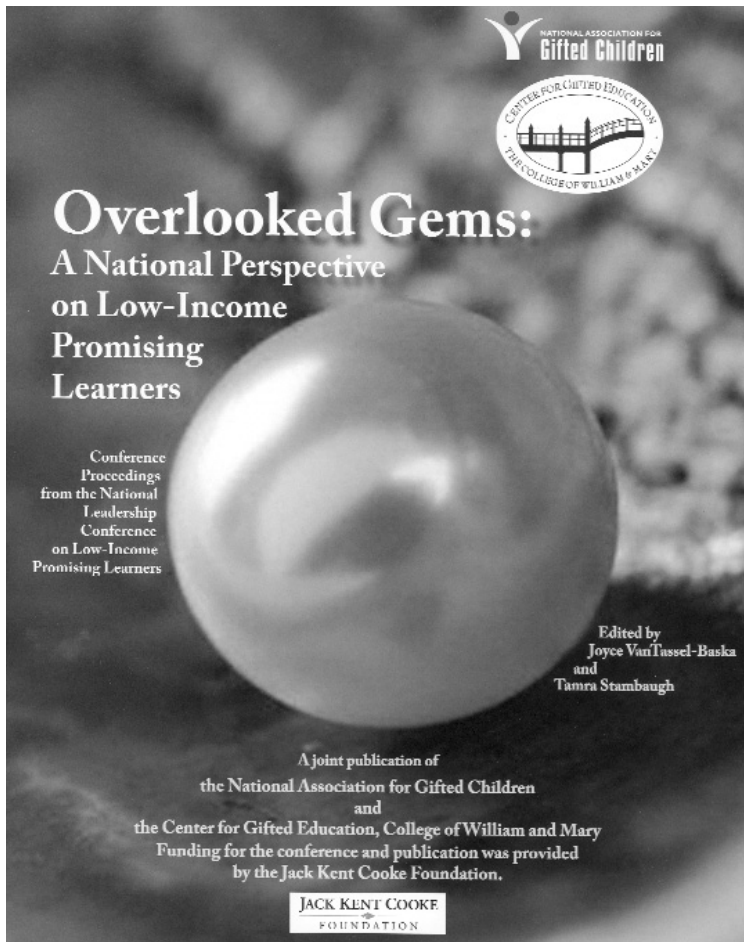
The study used multiple data sources including questionnaire data from

teachers at specialized secondary schools for the performing arts, follow-up interviews with selected teacher participants, administrator interviews, and document review. Overall, the study supported the research on teacher characteristics and behaviors from general and gifted education as applicable to arts teachers who work with talented students in the performing arts in specialized secondary schools. Teacher behaviors received lower ratings overall than teacher characteristics. Participants rated themselves highly on a measure of differentiated classroom practices, but the term differentiation was not recognizable to a majority of the teacher and administrator interview participants.

While the findings from this study support the assumption that the best teachers for talented students in the arts are highly-trained and experienced performing artists, responses indicate that most of the participants lack an understanding of effective pedagogy and educational practices reflected in the educational literature. Implications for practice, policy, and research focus on

connections between general education and arts education regarding teacher effectiveness, connections between gifted education and arts education regarding talent development, and articulating differentiated practices within specialized programs for the performing arts.    

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(cont'd from page 8)

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