A Comprehensive System of School Reform Based on Student Results

Mary E. Little, Associate Professor in Exceptional Education, University of Central Florida

Abstract

School reform is achieved through the collaboration and coordination among educators with the mutual goal of improved learning for all students. Given the complexity within and among educational systems, the need to develop and implement a common framework of school reform based upon mutually agreed-upon goals, standards, outcomes, and competencies must be developed (Hargreaves & Fink, 2000; Senge, 1990). Coordination and continued communication among each of the educational partners (students, teachers, administrators, policy analysts, researchers, community members, and parents) provide valuable input for continuous improvement within this tri-level system of school reform based upon student results (Fullan, 2005). The resulting networks among educators responsible for policy, professional development, local educational programming, and classroom implementation improve student outcomes.

This manuscript describes a comprehensive systems approach to tri-level (Fullan, 2005) school reform to improve learning for all students through the use of disaggregated data, researched instructional practices, instructional coaching, and continuous progress monitoring. Several major topics will be addressed, including an inclusive continuum of curriculum and instruction, a standards-based process of professional development, and continuous monitoring of student results through multiple methods, including classroom action research.

School reform is achieved through the collaboration and coordination among the multiple educators that are responsible for improved learning for all students. Given the complexity within and among educational systems, the need to develop and implement a common framework of school reform based upon mutually agreed-upon goals, standards, outcomes, and competencies is paramount (Hargreaves & Fink, 2003; Senge, 1990). Coordination and continued communication among each of the educational partners (students, teachers, administrators, state department representatives, researchers, community members, and parents) provide valuable input for continuous improvement within this tri-level system of school reform based upon student results (Fullan, 2005). The resulting networks of educators within state departments (policy, accreditation, curriculum standards, certification), state-sponsored professional development regional agencies (initial and follow-up professional development networks regionally and locally), local school districts, (local responsibilities through school improvement plans, supervision, curricular goals), and teachers and administrators (direct implementation and continuous monitoring of instructional strategies to improve student learning) are critical to improved student performance. At times, however, the agencies and

educators dedicated to addressing the needs of students in the name of school reform are often barriers to the same reforms (Fink, 2003).

For example, within the last twenty years, special education intervention research has contributed discoveries that have advanced the understanding of the prevention, care, instruction, and treatment of persons with disabilities (Koh & Siegel-Robertson, 2003). However, the research to practice gap in special education continues (Greenwood & Abbott, 2001). The most current research-based instructional strategies and interventions are not often implemented within the context of school reforms. Responsible for this gap may be the same multiple agencies dedicated to school reform. Often, separateness of the legislative, political, research, and practice communities, lack of relevance as perceived by teachers and administrators, and weak professional development opportunities (Greenwood & Atwood, 2001) are cited as reasons that research-based instructional practices are not implemented within the schools during current reform efforts.

School reform, then, is measured and reported based upon indices identified within and by educators who conceptualized and implemented the framework of school reform. The ultimate purpose of school reform should be to improve student learning (Guskey, 2000; Fullan, 1993, 2003). School reform initiatives and activities, however, originate both outside and inside schools and classrooms, and must be coordinated to maximize impact in a "top down, bottom up" approach (Fullan, 1999). Each of the educational partners has an important role within school reform that addresses both top down and bottom up implementation (Honig, 2004). The reciprocal and interdependent components focus on student outcomes through the major instructional variables within schools and classrooms. The resulting alignment of components and contributions of these stakeholders all focus on improved student results (Little & Houston,

2003). In the areas of curriculum, instruction, and assessment, each of the stakeholders has specific, yet interdependent responsibilities for assuring student improvement. (See Graphic #1.)

To align and maximize each of these components, strategies have been suggested to bridge the research to practice gap and reform instructional practices for all students, including students with disabilities. Collaboration and partnerships among educational constituents and agencies (teachers, administrators, researchers, state education personnel, etc.) appear to be the common themes to creating and sustaining interactions around issues measuring student outcomes and of effective instructional practices to continuously improve schools (Collins, 2001).

To address the necessary collaboration among multiple educators responsible for implementing school reforms to impact student learning, Murphy (1991) developed a conceptual framework that described the components of school reform within three categories: work design, organization and governance, and core technology of instructional practices. The next section of this paper will describe the conceptual framework, roles, responsibilities, and collaborative relationships necessary among each of the educational constituents. In addition, a comprehensive model for sustained professional development based on student results will be described.

Work Design

Work design involves the roles, responsibilities, and relationships of educators within school, district, state and federal levels of education. School reform activities originate from and impact all levels of the educational system. Therefore, relationships among the members within these various roles, if developed, are complex in nature (Datnow, 2005). Each has specific responsibilities and primary roles within the entire process of school reform. Educational goals

are established and mandated at the federal level. Implementation and accountability are the primary focus within the state or locality, while local school districts support teachers and administrators achieve these national, state, and local goals. Teachers and administrators are expected to perform multiple tasks to participate in this total education process (Fullan, et al, 2004), often without benefit of the rationale and full disclosure related to the current mandates and responsibilities. Professional development is designed to support greater accountability for mandates and is a critical component in reform activities to guide effective change in schools. (Killion, 2003). Administrators within school districts make decisions regarding the professional development needs of the teachers to attain the stated goals for their students. However, as discussed earlier, intervention research studies of instructional practices are often not translated into practices for professional development for the teachers and administrators. It is at this juncture that the translation of research into practice needs to be evident. Given the multiple agencies and diverse responsibilities, it appears that issues of separateness and a lack of collaboration are inherent to work design.

However, national and state education agencies can be collaborative partners in these reform efforts. For example, reform of work design can be reflected as the role of the national and state agencies shifts from focusing solely on monitoring and assuring compliance with regulation to setting policy directions and providing assistance for implementation of reform efforts. Setting policies with a clear focus on the standards leading to improved outcomes is a primary role of the state education agency. Once the policies are set, states are designing accountability systems to measure progress toward the stated goals. It is incumbent on leadership at the state level to model quality implementation of state standards. Research,

development, and dissemination of research-based instructional strategies would support the quality implementation of state standards.

Organization and Governance

To further address these issues related to work design, recent changes within school organization and governance have occurred. The major movement in this area is decentralized school administration (Lane & Garcia, 2005). Decision-making about student outcomes (e.g., instructional decisions) now resides with local school educators and community members. State and district policy makers establish broad outcomes and goals and devise systems to hold schools accountable for achieving the goals (Fullan 2001. 2003; McLaughlin & Thurlow, 2003). This type of decentralization also supports the movement to a professional work design so teachers also make increased decisions based on local and classroom needs (Youngs & King, 2002). Examples of common strategies of reform in organization and structure include school choice, site-based decision making, waivers of state and district policies, and modified union contracts allowing school-based variance of assigned duties. The results of these policy shifts afford local educators ultimately accountable for student learning the opportunities and responsibilities to make instructional decisions based upon the goals and accountability frameworks established by the state and national educational policy makers.

These shifts also have a resulting impact upon organization and governance of these agencies. Many national and state education agencies have recently reorganized both their structure and their work to mesh with the shift in organization and governance at the local level. In addition to setting policies, state agencies provide technical support to schools and school districts. States are redesigning professional development structures, providing waivers of current regulations, and deploying staff to provide assistance targeted toward state goals

(Houston & Little, 2003; Kreber & Brook, 2001). This shift in governance finds state agency representatives in a facilitative role with schools and school districts, assisting with reform implementation and resource location.

These reforms within the work design and organization and governance components at both the national and state levels become major supports for changing the core technology (the last of Murphy's components) in the school and classroom. Issues related to identifying, disseminating, and implementing research-based instructional practices within the schools continue to be the challenge to be addressed. Standards can be established for identifying effective practices and disseminating them to educators. Infrastructure and processes to support implementation and maintenance of the effective practices would ensure ease of access and improved quality of implementation. Reflecting the standards for effective practices and incorporating supporting research into state level activities such as instructional materials adoption, identification of model programs and awarding special grants and projects sets the tone and expectation for improving the teaching and learning in classrooms (Carnine, 1999). These revisions in policy, organization, and governance impact the third of Murphy's components necessary for effective school reforms, core technology.

Core Technology

The last component of school reform is one Murphy (1991) labeled core technology. Core technology is defined as the basic work of schools - teaching and learning. Bringing about change in the classroom has historically been described as extremely difficult (Goodlad, 1984; Lortie, 1975). Unless efforts are directed squarely toward reform in the classroom, reform attempts will fall short of improving student outcomes. With the organization and governance policy shifts (see above), this third component of the core technology of the instructional

practices within each classroom becomes critically important to the continued changes of school reforms, and is directly issues related to bridging the research to practice gap (See previous sections.).

Addressing these policy shifts necessitates providing professional development of research-based instructional practices and interventions that provide new or deeper levels of knowledge and practice. Topics would be related to these policies as well as teaching tools, such as curriculum, textbooks, and intervention resources to improve student learning (Cotton, 1999; Darling-Hammond, 2004; Davenport & Anderson, 2002; Hargreaves, 2003). Teachers must use a variety of research-based interventions and instructional strategies to meet all student learning needs. As accountability demands strengthen, the importance of providing teachers with instructional methods with the strongest research base available to meet these diverse needs also increases (Deiker & Little, 2005). To ensure continued focus on improved outcomes for students with disabilities, a commitment to strengthening the empirical base for research and practice in the field of special education is necessary (Carnine, 1999), as well as bridging the research into practice gap. How are these goals realized given the concerns and issues reviewed from both the policy and research perspectives?

Coordinating Reforms for Student Success

Incremental, even dramatic, school improvement is not only possible, but also probable under the right conditions. Although the components of change have been described (Fullan, 1999, 2001, 2003; Hargreaves & Fink, 2003), reforms at each level must be focused, supported, and sustained to improve student outcomes. The multiple partners within the educational systems could be each reforming and changing. These changes may not produce the desired results of improved student outcomes, however, if a clearly communicated and implemented

vision for school reform has not been articulated among all of the educational partners. Given the complexity of school reform, the multiple educational partners with diverse needs and perspectives must be coordinated around the single focus of improved student outcomes to address the public demand for accountability. Change must be managed, communicated, and coordinated across various stakeholders, issues, resources, and settings to meet the promise of quality education for all students. Given the multiplicity of the issues and educational stakeholders, articulating and sustaining the change process requires collaborative leadership within each of the multiple agencies (Fullan, et al, 2001; Hargreaves & Fink, 2004; Heifetz, 2004). To accomplish the mandates set forth through policies and legislation, a continuous improvement process is required when considering school reform to include all students. Accomplishing these goals requires a systems approach (Hargreaves, 2003; Senge, 1990). Successful reform initiatives including all students have demonstrated and sustained improved outcomes for all students through a development, continuous improvement process, beginning with clear goals (Oakes & Lipton, 2002; Senge, 1990). Once identified and clearly articulated, school reform requires "deep participation of the people with the problem; and that is why it is more complex and why it requires sophisticated leadership" (Heifetz, 2004, p. 53).

So, how do school leaders attain deep participation of the educators within their schools to attain complex changes of school reform? School partners create, facilitate, and sustain the beliefs, actions, and supports necessary within the school educational community where these new beliefs could be practiced, expressed, and nurtured (Gladwell, 2000). Given the complexity inherent to school reform, systems thinkers in action (Fullan, 2005) must be committed to a continuous learning process of improvement. In the next section, a model developed to increase

meaningful participation by all students, including students with disabilities within accountability systems of school reforms, will be described.

A Comprehensive Model

Murphy's conceptual framework (1991) of school reform (work design, organization and governance, and core technology) has provided the model for systemic reforms within the state of Florida, USA. Given the impact of each of these components upon school reform, each of the components must be in concert with and communicated among each of the educational partners. Curriculum, instruction, and assessment for student learning from each of the perspectives of federal, state, district, and classroom must address organization and governance, work design, and core technology. Within the state of Florida, revisions in school organization and governance, as well as a redesign of professional development, had been occurring at the policy level. (See previous sections.) The primary focus on learner outcomes for all students within each local school was mandated through revised curriculum changes and statewide legislative and accountability measures. Local school improvement plans, mandated to address the state-established curriculum standards, are developed by educators, parents, and community members of each school. Successful school improvement is now measured by indicators related to student successes (academics, discipline, attendance, etc.) within each local school. Members of local school advisory committees of site-based management teams are charged with development of action plans (outcomes, professional development, and student outcome measures, etc.) to assure the success of their school as measured through specific student indicators. Regional professional development offered through the state department of education (e.g., Florida Diagnostic and Learning Resources Systems-FDLRS; Florida Inclusion Network-FIN; Family Network on Disabilities-FND; etc.) provides technical assistance to local schools and districts

regarding policies, mandates, and legislated changes as local implementation occurs. In addition, professional development from regional personnel immediately communicates policy changes that impacts local implementation related to these mandated changes. Roles, responsibilities, and relationships are re-designed within the current structure to one of greater collaboration at the specific schools and districts among the educational partners. School organization and governance and the revision of roles and responsibilities through increased collaboration among the educational partners were two of the three necessary components for school reform.

Reforming the Core Technologies: Research and Implementation

To actualize a coordinated and comprehensive system of school reform based on student results, the Florida State Department of Education developed a model for professional development through the Effective Instructional Practices (Project CENTRAL) project. To accomplish this coordination within Project CENTRAL, various Advisory Committees and curriculum and instruction sub-committees, with representatives from each of these critical stakeholder groups (e.g., teachers, researchers, administrators, and members from the state department), collaboratively develop, implement, and continuously monitor the goals, activities, and impact on student learning. The ultimate vision for this state-sponsored project is to provide professional development, products, and resources to ensure mastery of established outcomes for all students in Florida based upon researched, effective instructional practices delivered through re-conceptualized professional development system of change, including classroom action research (Little, 2003).

To achieve the goals for continued and supported teacher development to improve student achievement, a sustained continuous improvement model, with specific content related to the needs of the all students with and without disabilities, was developed. The process includes:

(a) identification of research-based instructional practices (Planning), (b) standards-based professional development (Delivery), (c) classroom implementation of research-based instructional practice from initial training to high quality implementation for all students (Follow-Up), and (d) data collection of results of student learning through traditional and action research methodologies (Evaluation). Therefore, professional development in Florida focuses on research-based instructional practices that address identified learning needs for the students within schools and classrooms. Quality implementation is facilitated by on-site, regional instructional coaches. In addition, each teacher is expected to collect student impact data of results through the classroom action research process.

Professional development (process, procedures, results, and samples) about action research is also presented to assist with this data collection and sharing of results (Rawlinson & Little, 2004). Participants are provided with the necessary materials to assure implementation and data collection in their classrooms. The educational concerns of students in the classroom are the instructional problems to be addressed through the action research process. Validated classroom assessment instruments, related to instruction (e.g., early reading skills, math computation, etc.), are modeled during professional development and provided to the participants.

Data collected through classroom action research process are analyzed and reported for two purposes: impact of instruction on student performance within individual classrooms and impact of professional development on student performance within the state. Teachers collect evaluation and student performance data with the support of the instructional coaches and project staff through action research. Participants submit classroom implementation, student data, and summaries to the project staff. In addition, project staff collects data across multiple settings

through more traditional research methodologies. Specific questions include the overarching issues such as sustainability of the instructional practice, the student impact using a standardized measure, access to and mastery of curriculum by all students, and changes in teacher efficacy through this professional development process. Both quantitative and qualitative measures are used for project data collection, to address multiple questions about impact on both the teacher's content knowledge and the students' performance.

Addressing the perceived problems to be solved through the proposed action research in alignment and coordinated with a system of comprehensive school reform addresses identified critical needs of great benefit to students and teachers alike. Issues of accountability within classrooms and schools are based upon student learning through classroom-based action research. Continuously monitoring student performance through classroom-based action research by teachers provides results of student learning to address accountability questions for legislators, parents, researchers, community leaders, school board members, and other educators (Smith & Rowley, 2005). High-quality professional development is essential for school systems to achieve their goals for students and staff performance (Hirsh, 2004). Through the implementation of standards-based professional development within a systems model of continuous support, collaboration, data collection, and standards-based, quality professional development will result in the improved student performance.

Therefore, professional development is re-conceptualized as continuous learning, highly integrated with the moral task of making a difference in the lives of diverse students under conditions of somewhat chaotic complexity (Fullan, 2001). Given the chaotic complexity of creating schools for all students, what better time to re-conceptualize professional development as directly related to the classroom instructional processes (core technology) within a

comprehensive system of school reform? Within this framework, each educational partner contributes expertise to meet the identified learner needs of students. The resulting collaborative process and organizational system of professional development has increased implementation of research-based practices in the schools and classrooms, as well as the increased mastery of learner objectives by students (FDOE, 2005). Students across the state of Florida are increasing academic skills, as evidenced through multiple measures (state assessments, curriculum-based measures, informal assessments, etc.). As comprehensive school reform continues, the impact of continued collaboration among the educational partners will result in improved student learning at every level of school reform. Specific instructional needs for the students of each individual classroom provide the basis for the school improvement process. Once the individual and group needs are identified, the entire professional development planning for the continued school and program improvement can be completed. Each of the educational partners (students, teachers, administrators, state department representatives, community members, and parents) provide valuable input to the specific needs for the continued program improvement within each of the schools be ensuring academic and behavioral successes for students. Through targeted and continuous professional development, including data collection of student outcomes through classroom action research, school reform occurs.

Conclusion

School reform is achieved through the active participation and collaboration among the multiple educators that are directly responsible for the ultimate outcome: improved student learning for all students. Given the complexity within and among educational systems, the need to develop and implement a common framework based upon mutually agreed-upon standards, outcomes, and competencies must be developed. From this framework, each educational partner

contributes expertise to meet the identified standards. The resulting collaborative work design and organizational structures among educators of diverse expertise has produced a very effective professional development framework, as evidenced by the increased implementation of research-based practices in the schools and classrooms, as well as the increased mastery of learner objectives by students. Students across the state of Florida are increasing academic skills, as evidenced through multiple measures (state assessments, curriculum-based measures, informal assessments, etc.). As comprehensive school reform continues, the impact of collaboration among the educational partners will result in improved student learning. Sustaining and improving these efforts rely on the continued vision, commitment, and collaboration among each of the educational partners as specifically related to their function, roles, and responsibilities (Trent, et al, 2003). School reform is not for the feint hearted (Fullan, 2004). However, given the alternatives, these partnerships forge the comprehensive structures, frameworks, and processes critical to successes for all of the students. Individual commitment and continued action by each partner with responsibility for improved student learning makes all of the difference!

References

Brooks, J., Scribner, J. & Eferakorho, J. (2004). Teacher leadership in the context of whole school reform. *Journal of School Leadership, 14*(3), 242-265.

Carnine, D. (1999). Campaigns for moving research into practice. *Remedial and Special Education, 20*(1), 2-6, 35.

Collins, J. (2001). *Good to great*. New York: HarperCollins Publishers.

Cotton, K. (1999). *Research you can use to improve results*. Alexandria, VA: ASCD.

Darling-Hammond, L. (2004). *Standards, accountability, and school reform.* New York: Teachers College Press.

Datnow, A. (2005). The sustainability of comprehensive school reform models in changing district and state contexts. *Educational Administration Quarterly, 41*(1) 121-153.

Davenport, P. & Anderson, G. (2002). *Closing the achievement gap: No excuses*. Houston: American Productivity and Quality Center.

Dieker, L. & Little, M. (2005). Secondary reading: Not just for reading teachers anymore. *Intervention in School and Clinic, 40*(5), 276-283.

Fink, D. (2003). The law of unintended consequences: the "real" cost of top-down reform. *Journal of Educational Change, 4*(20), 105-128.

Fullan, M. (1993). *Change forces*. Philadelphia: The Falmer Press.

Fullan, M. (1999). *Change forces: The sequel*. Philadelphia: The Falmer Press.

Fullan, M. (2001). *The new meaning of educational change* (3rd Ed.). New York: Teachers College Press.

Fullan, M. (2003a). *Change forces with a vengeance*. New York: Taylor& Francis, Inc.

Fullan, M. (2003b). *The moral imperative of school leadership*. California: Corwin Press.

Fullan, M. (2004). *Leadership and sustainability: System thinkers in action*. Thousand Oaks, CA: Sage Publications.

Fullan, M., Bertani, A., & Quinn, J. (2004, April). New lessons for district wide reform [Electronic version]. *Educational Leadership, Leading in Tough Times, 61*(7), 42-46.

Fullan, M., Rolheiser, C., Mascall, B., & Edge, K. (2001, November). Accomplishing large scale reform: A tri-level proposition. Unpublished manuscript, Ontario Institute for Studies in Education, University of Toronto.

Gladwell, M. (2000). *The tipping point.* Boston: Little, Brown.

Goodlad, J. (1984). *A place called school.* New York, NY: McGraw Hill.

Goldberg, C. (2003). Settings for school improvement. *International Journal of Disability, Development, and Education, 50*(1), 7-16.

Greenwood, C. & Abbot, M. (2001). Bridging the gap between research and practices in special education: Issues and implications for teacher preparation.. *Teaching exceptional student education, 24*(4), 276-289.

Guskey, T.R. (2000). *Evaluating professional development.* Thousand Oaks, CA: Corwin Press.

Hargreaves, D. (2003). *Education epidemic.* London: Demos.

Hargreaves, A. & Fink, D. (2003). Sustaining leadership [Electronic version]. *Phi Delta Kappan, 84*(9), 693-700.

Hargreaves, A. & Fink, D. (2004). The seven principles of sustainable leadership [Electronic version]. *Educational Leadership, Leading in Tough Times, 61*(7), 8-13.

Heifetz, R. (2004). *The adaptive challenge.* Presentation to the American Association of School Administrators. San Francisco, CA.

Hirsch, S. (2004). Guidelines for professional development. *Journal of staff development, 15*(2), 23-30.

Honig, M. (2004). Where's the "up" in bottom-up reform? *Educational Policy, 18*(4), 527-561.

Koh, M. & Siegel Robertson, J. (2003). School reform models and special education. *Education and Urban Society, 35*(4), 421-442.

Killion, J. (2003). *Evaluating the impact of professional development.* National Staff Development Council. Oxford, OH.

Kreber, C. & Brook, P. (2001). Impact evaluation of educational development programmes. *International Journal for Academic Development, 6*(2), 96-108.

Lane, B. & Garcia, S. (2005). State-level support for comprehensive school reform; implications for policy and practice. *Journal of Education for Students Placed at Risk, 10*(1), 85-112.

Little, M. & Houston, D. (2003). Comprehensive school reform: A model based on student learning. *Journal of Disability Policy Studies, 14*(1), Summer, 2003, 54-62.

Little, M. & Houston, D. (2003). Research-into-practice through professional development. *Remedial and Special Education, 24*(2), March-April, 2003, 75-87.

Lortie, D. (1975). *Schoolteacher*. Chicago: University of Chicago Press.

McLaughlin, M. J., & Thurlow, M. (2003). Educational accountability and students with disabilities: Issues and challenges. *Educational Policy, 17*(4). 431-450.

Murphy, J. (1991). *Restructuring schools: Capturing and assessing the phenomena.* New York: Teachers College Press.

Senge, P. (1990). *The fifth discipline.* New York, NY: Doubleday.
Smith, T. M. & Rowley, K. J. (2005). Enhancing commitment or tightening control: the function of teacher professional development in an era of accountability. *Educational Policy, 19*(1), 126-154.

Trent, S. C., Driver, B. L., Wood., M. H., Parrott, P. S., Martin, T. F., & Smith, W. G. (2003). Creating and sustaining a special education/general education partnership: a story of change and uncertainty. *Teaching and Teacher Education*, 19. 203-219.

Youngs, P. & King, B.M. (2002). Principal leadership for professional development to build school capacity. *Educational Administration Quarterly, 38*(5), pp. 643-670.

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Figure 1

Comprehensive System Framework