

Forward

A committee consisting of administrators and teachers was organized under the direction of the Superintendent in June 2009 for the purpose of recommending to the Superintendent and the School Committee the most effective ways to create job embedded, capacity building, professional development, utilizing stimulus funds, to support the long-term educational goals of the school system.

The committee was charged with, "Identifying the short- and long-term ways in which, together, we can create a self-sustaining, job-embedded professional development program that supports the ongoing needs of teachers and students." (P. Ash)

Members of the Professional Development Committee

•	Michelle Bartley	Clarke Middle School	Teacher
•	Charles Caliri	Lexington High School	Assistant Principal
•	Robert Collins	Lexington High School	Department Head, Social Studies
•	Jackie Crowe	Lexington High School	Teacher
•	Edward Dube	Diamond Middle School	Teacher
•	Rebecca Gruber	Diamond Middle School	Teacher, LEA Representative
•	Julia Hendrix	Fiske	Math Specialist K-5
•	Kristina Lieberman	Estabrook	Teacher
•	Peg Mongiello	Diamond Middle School	Principal
•	Carol Pilarski	Central Office	Assistant Superintendent
•	Tom Plati	Central Office	Director of Technology
•	David Pittman	Bridge	Teacher
•	Ellen Quirk	Bowman	Teacher
•	Ann Tenhor	Hastings	Teacher
•	Sandra Trach	Estabrook	Principal
•	Roberta Wehmeyer	Harrington	Teacher
•	Howard Wolke	Diamond Middle School	Teacher
•	Joanne Hennessy (Chair)		

Lexington Public Schools: Professional Development Plan (Draft)

I. Introduction

The mission of professional development is to prepare and support educators to help all students to achieve higher standards of learning and development (WestEd, 2000). It is a process for improving the skills and competencies needed by staff to produce positive educational results for students. Meaningful, effective, high quality professional development focuses on individual, collegial and organizational improvement. It reflects the best available research and practice in teaching, learning and leadership. No Child Left Behind, the Massachusetts Curriculum Frameworks, the Massachusetts Comprehensive Assessment System, the new Student Assessment Program, and College Board assessments, including the Scholastic Aptitude Test (SAT) and Advanced Placement (AP) tests have raised the academic bar for all students. The standards and the ways in which educators and schools are held accountable for student performance place greater demands on educators to combine understanding of subject matter and teaching practices with knowledge of learners. Indeed, the movement towards standards-based reform, data based assessments and accountability for learning has served to emphasize the important role professional development plays and its link to improved student achievement. "As students are expected to learn more complex and analytical skills in preparation for further education and work in the 21st century, teachers must learn to teach in ways that develop higher order thinking and performance. These new standards require a new kind of teaching, conducted by teachers who understand learning as well as teaching, who can address students' needs as well as the demands of their disciplines, and who can create bridges between students' experiences and curriculum goals" (Darling-Hammond, 2005).

II. Background

During the last decade, researchers have begun to examine what works in professional development. Supovitz, Mayer, and Kahle (2000) studied the impact of intensive, standards-based professional development on teachers of science in Ohio. They found that teachers "became more positive about instructional reforms and more likely to use inquiry- centered pedagogy" as a result of standards-based professional development. Cohen and Hill (2001) studied mathematics teachers who participated in the intensive curriculum-based professional development offered by the California Subject-matter Network in the 1990s. They compared the changes made in the participants' instructional practice with those made by teachers who received more conventional professional development in mathematics. "They found that teachers who participated in the former were much more likely to make changes in their practice, and that these changes were associated with gains in student performance. They concluded that providing teachers with extended content-specific opportunities combined with follow-up support produced results" (Corcoran, McVay, and Riordan, 2003).

These findings are consistent with the research studies of the California Subject-matter Network (Pennell & Firestone, 1996; Wilson, 2003), the research on reforms in literacy and mathematics teaching carried out in District #2, NYC (Elmore & Burney, 1997), the evaluations of the National Writing Project (St. John & Stokes, 2003), and the secondary analysis of data from National Science Foundation's LSC projects (Supovitz & Turner, 2000). Studies of comprehensive school reform programs like Success for All and America's Choice (Haslam & Seremet, 2001; Supovitz & Taylor, 2003) and the national Eisenhower program (Desimone et. al., 2002; Birman, Desimone, Garet, & Porter, 2000) have yielded similar results. "The general conclusion is that extended opportunities to engage in professional development that is aligned with the curriculum to be taught, and accompanied with on- site follow-up support, can produce significant changes in classroom practice and benefits for students" (Corcoran, McVay, and Riordan, 2003).

Moreover, these findings are consistent with the experiences and recommendations of those who design and deliver professional development, (Cohen & Hill, 2001; Corcoran, 1995; Darling-Hammond, 1999, 2005; Desimone et al., 2002; Elmore, 2002; Lieberman & Wood, 2002; Loucks- Horsley et al., 2003; National Research Council, 1996; National Staff Development Council, 2001 and 2009.) Sustained, high quality professional development has a direct and positive impact on student achievement.

III. Philosophy

The success of professional staff development is determined by whether it alters instructional behavior in a way that benefits students. According to the report *Teachers Who Learn, Kids Who Achieve: A Look at Schools with Model Professional Development* (WestEd, 2000), there are a number of characteristics that are shared among schools that have distinguished themselves in the U.S. Department of Education's National Awards Program for Model Professional Development. These schools have clear student achievement goals, provide an array of professional development opportunities, embed ongoing learning in the school culture, build a highly collaborative school environment, and use a broad range of student performance data. Similarly, the results of several national studies on the importance of professional development have concluded that high quality professional development provides access to the best research and experiences of successful practitioners; focuses on deepening teachers' content knowledge and pedagogical skills; includes opportunities for practice, research, and reflection; is embedded in educators' work; is sustained over time; and is founded on a sense of collegiality and collaboration among teachers and between teachers and principals in solving important problems related to teaching and learning (Sparks, 2002).

Given that research indicates that teacher quality is the single most powerful influence on student achievement, it is essential to ensure that teachers are provided with ongoing, high quality professional development to sustain and enhance their practice (Darling-Hammond, 1999). Indeed, teacher professional development is an essential element of comprehensive school improvement. However, the professional development needs of all members of school community, including administrators and support personnel, must be addressed to ensure a focus on continuous learning and to create the conditions necessary for closing the achievement gap and providing Equity and Excellence for all students.

The purpose, therefore, of the Lexington Public School's professional development plan is to improve the quality of learning - learning for students, teachers, and other professionals who support children. This purpose is directly aligned to the District's continued commitment to close the achievement gap and provide equity and excellence for all students. Indeed, this professional development plan is intentionally designed to build skills and capacity for improvement through comprehensive and ongoing learning. It is the committee's belief that a sound and practical professional development program is an important link to establishing effective instructional practices that will enhance the knowledge of curriculum content, design and delivery and actively engage all learners.

IV. Vision

Lexington Public Schools is committed to providing a high quality, continuous and sustained, professional development program to all its teachers and other educational professionals. The professional development plan for Lexington Public Schools describes a vision for adult learning that is collaborative, continuous, embedded in daily practice and focused on student achievement. This model builds on the wealth of knowledge and experience that teachers and practitioners have and expands upon that knowledge and skills. It builds on and strengthens the successes already evident in the district by providing a framework that affords every educator an opportunity to enrich his/her practice. The vision of Lexington Professional Development ensures that standards-based professional development results in continuous professional growth and enhances on-going student learning.

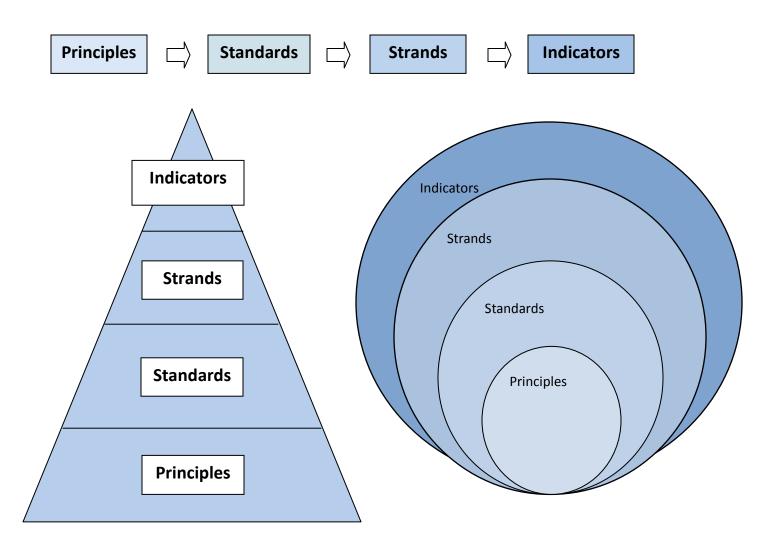
There are ten key **Principles** embedded within the Lexington Public Schools' Professional Development Plan. (See Figure 1.) The **Principles** are based on the accumulated research about effective professional development and the impact on student learning. The **Principles** provide guidance for achieving high quality professional development planning, design, delivery and assessment, and serve as a foundation for ongoing professional development in Lexington Public Schools.

Derived from the Principles, the **Standards** provide direction for designing an effective, high quality professional development program that ensures educators acquire the necessary knowledge and skills. It is clear that professional development in the 21st century must be results-driven, standards-based, and job-embedded. Lexington Public Schools' Professional Development **Standards** provide a blueprint for high quality professional

development for all educators to improve instruction and student achievement. These **Standards** promote and sustain continuous development, growth, and examination of practice. They provide clearly defined expectations and commitment to change. They are aligned with Lexington Public Schools' Core Purposes, systemwide goals and vision, and adapted from the National Staff Development Council's Standards for Staff Development.

Organized into **Context**, **Process** and **Content** standards (NSDC), the Lexington Public Schools Professional Development Standards and the related **Strands** and **Indicators** are intended to guide and support the design and implementation of meaningful professional learning opportunities for all school personnel.

Figure 1: The relationship between the Principles, Standards, Strands and Indicators as indicated in the three diagrams.



V. Lexington Public Schools: Guiding Principles for Professional Development

The mission of professional development is to prepare and support educators to help all students achieve to high standards of learning and development. When professional development is effective, a number of principles can be identified (WestEd, 2000).

Professional development is most effective when it...

- Fosters a culture of continuous improvement.
- Is research based.
- Is job embedded.
- Promotes shared leadership and responsibility.
- Involves and reflects the diverse nature of the community.

(For further elaboration, see Appendix 1.)

- Improves the learning of all students.
- Is data driven.
- Supports refinement of practice.
- Encourages the use of new strategies.
- Occurs in professional learning communities.
- Is adequately supported.

VI. Lexington Public Schools: Professional Development Standards

Standards	Explanation	Strands
Context	High quality professional development occurs within an all important context. Learning is an ongoing process of reflection, experimentation, and discussion that requires more than a single event. The environment in which educators work must support their learning – through adequate resources, strong supportive leadership, and a community that encourages collaboration and application of new learning.	 Learning Communities Leadership Resources Technology
Process	In this view of professional development, the workshops and other one-time events become part of a coherent series of events that sustains, reinforces, and deepens learning. Today's professional learning allows far more active engagement for the purpose of deepening understanding and making application in real-life contexts. Ongoing teamwork, discussions, product and project development, research, data analysis, reflection, demonstrations, and modeling are just some of the ways professional development facilitates the active engagement of the learner.	5. Data-Driven Professional Practice 6. Evaluation 7. Research-based 8. Design 9. Learning 10. Collaboration
Content	Effective professional development balances attention to content knowledge, instructional strategies and assessment practices. The content of staff development that advances student achievement reflects national, state, and local content standards. The content of staff development that advances student achievement is further aligned with district goals, school improvement goals and educators' individual professional goals, level of experience and competence.	11. Equity 12. Quality Teaching 13. Family Involvement

(For further elaboration see, Appendix 2.)

Lexington Public Schools: Guiding Principles for Professional Development

- Professional development is most effective when it fosters a culture of continuous improvement for all
 engaged in the learning endeavor. Practices address the needs of professionals throughout their
 careers and embrace stakeholders as active participants in learning. Practices address the
 continuum of an educator's experience and level of expertise; and are based on an analysis of individual
 educator needs; current knowledge and skills; and district, building and educator learning goals.
- Professional development is most effective when it improves the learning of all students, including those with different educational needs, learning styles, and incremental abilities, and those from diverse cultural and linguistic backgrounds. Professional development ensures that educators have the knowledge and skill to meet the diverse learning needs of all students. It ensures that educators are able to create safe, secure, supportive and equitable learning environments for all students.
- Professional development is most effective when there are clear research-based expectations for what educators should know and be able to do to support student learning. Professional development addresses the fundamental issues of curriculum, instruction and assessment as part of an integrated process that requires application, evaluation, reflection and review in order to be successful. As such, professional development is grounded in [1] research on child and adolescent growth, development and learning, [2] content knowledge and content-specific, research-based instructional strategies, and [3] knowledge of assessment practices and data analysis. Professional development is targeted to the district purpose, offered over time, and evaluated both for effectiveness and impact on student learning.
- Professional development is most effective when professional growth opportunities are derived from a
 baseline of collected data from observational and assessment sources. Professional development uses
 disaggregated student data and other evidence of student learning to determine professional development
 learning needs and priorities, to monitor student progress, and to help sustain continuous professional
 growth.
- Professional development is most effective when it is job embedded, directly relevant to classroom practice, and provided over time. Professional learning is a product of both externally-provided and job-embedded activities that increase educators' knowledge and change their instructional practice in ways that support student learning. While formal professional development represents a subset of the range of experiences that result in professional learning, the activities [1] focus on reducing the gap between actual and desired levels of student achievement, [2] involve participants in identifying the content and objectives, [3] help participants develop a theoretical as well as practical understanding of the new practices, [4] include follow-up and support, and [5] are linked to a comprehensive change process that focuses on student learning.
- Professional development is most effective when it supports the ongoing refinement of practice and when it provides opportunity for practice of new strategies, time to reflect on changes, and time to integrate new learning into the teaching practice. Professional development that truly enhances adult learning provides opportunities to be involved in leadership activities that focus on direct interaction with colleagues: follow-up demonstrations, feedback on mastery of new knowledge and skills, peer coaching and mentoring, opportunities for collaboration and problem-solving, study teams, and action research. This leadership opportunity grants ownership to the participants and allows them to construct a learning community that engages in continuous growth.

- Professional development is most effective when there is collaborative leadership and shared responsibility for improving teaching and learning. Meaningful collaboration is more likely to occur when colleagues share responsibility for major tasks of teaching and for student learning, when there is a commitment to collective inquiry into student learning and collective action in improving it. Collaborative leadership for professional development embraces the individual and collective goals and talents of teachers, paraprofessionals, parents, school administrators, district administrators and school committee members. Effective professional development builds on the wealth of knowledge and experience that these stakeholders already have and expands upon that knowledge and skills. Professional development is not limited to a single content, grade or even school level. Growth opportunities should go beyond the school doors to ensure that the most efficient learning opportunities are present. By connecting professional development across levels, the opportunities become more effective and more likely to receive the support needed to be successful.
- Professional development is most effective when it takes place in professional learning communities.
 Professional development that truly enhances adult learning provides opportunities to be involved in
 learning communities. These learning communities might take various forms, but they are all characterized
 by ongoing learning. They encourage individual and collaborative exploration, practice, and reflection. They
 foster collegiality and problem solving, and they emphasize continuous improvement in classrooms and
 schools.
- Professional development is most effective when it involves and reflects the diverse nature of the
 surrounding community. It is vital for parents and leaders in the community to be engaged and
 understand why professional development is crucial in improving student outcomes. There needs to be
 two-way communication where the concerns of the community are reflected in the professional
 development growth opportunities and the goals and outcomes of the opportunities are shared with the
 community-at-large.
- Professional development is most effective when adequate resources are provided. Resources include
 money, people, technology, and time. Resources necessarily come from a variety of sources, and must be
 sufficiently sustained over time to ensure the full impact of professional development. Resources are
 defined as adequate when they ensure that all educators can study, practice, reflect, receive feedback on
 practice, and implement knowledge and skills necessary to be effective with their students and others.

Appendix 2

Lexington Public Schools: Professional Development Standards

Context Standards Sustained, high quality professional development provides a context in which it can have lasting impact. This perspective assumes that learning is an ongoing process of reflection, experimentation and discussion that requires more than a single event. It assumes that mastering complex ideas and skills requires continuous learning and long-term support. If educators are to introduce new practices into their work and to deepen their understanding of content, their students, and teaching, the environment in which they work must support their learning – through adequate resources, strong supportive leadership, and a community that encourages collaboration and application of new learning.

Standard 1: Learning Communities

Effective professional development that improves student learning supports teams of educators whose goals are aligned with those of the school and district and who work collaboratively in a trusting and respectful manner.

Indicators:

- a. Teams are composed of groups of educators that meet on a regular basis for the purpose of improving student learning: examining the standards; planning lessons; creating common assessments; critiquing student work; examining data; and problem-solving
- b. Time is available on a regular basis for teams to meet collaboratively.
- c. Teams operate with a commitment to the norms of continuous improvement and experimentation and engage members in improving their daily work to advance student learning.
- d. Teams determine additional professional activities that will best serve the goal of solving identified needs. These can include workshop attendance, and /or course focused on content, pedagogy, or instructional skills, follow-up demonstrations, feedback on mastery of new knowledge and skills, peer coaching and mentoring, study teams and action research.
- e. Teams assume collective responsibility for all students represented by team members'.
- f. Technology is used to support collaboration. Technology use can include but is not limited to electronic bulletin boards, email, shared servers, on-line courses, and video conferencing.

Standard 2: Leadership

Effective professional development that improves student learning requires the guidance of outstanding leaders from the district and school level and supports the development of skillful leadership among educators.

- a. Leaders establish structures that support ongoing, embedded professional development and continuous improvement. They encourage educators to participate in activities such as peer coaching, observation, assessment design, and action research.
- b. Leaders clearly articulate the district's professional development vision statement to foster a partnership between the administration, parents, educators, school committee and surrounding community.

- c. Leaders ensure an equitable distribution of resources and allocation of time to accomplish district and school goals in order to support all educators.
- d. Leadership opportunities are open to all educators and are designed to prepare educators for leadership roles such as trainers, peer coaches, mentors, department chairs, and committee members.
- e. Leaders stay current on technological tools in order to communicate effectively and efficiently.

Standard 3: Resources

Effective professional development that improves student learning requires adequate resources that support educator's professional growth, as well as opportunities for collaboration.

Indicators:

- a. Resources allocated include time for educators to work collaboratively towards district and school goals.
- b. Resources allocated include funding for expenditures, such as attendance at workshops, conferences, consultants, substitutes, and stipends.
- c. Resources allocated include funding for technology and educators in leadership roles such as coaches, facilitators, trainers, department heads, mentors, and administrators.

Standard 4: Technology

Effective professional development that improves student learning promotes educator and student technological literacy, and facilitates the effective use of all appropriate technology.

- a. Professional development ensures educator technological literacy by providing ongoing opportunities for educators to learn about new and current technologies that are useful in instructional practice, communication, and collaboration.
- b. Professional development enables educators to use technology as a tool in curriculum design and communication.
- c. Professional development enables educators to use technology as a tool for designing student learning opportunities, monitoring student learning, and evaluating the effectiveness of instruction.
- d. Professional development promotes the application of technology to meet diverse students' needs in optimal and equitable learning environments.
- e. Professional development ensures student technological literacy as educators engage students with available technologies, related to curricular activities, and assist students in using new and current technologies in innovative ways.
- f. Professional development informs educators about the legal and ethical issues surrounding technology and internet safety.

Process Standards Consistent with what is known about adult learning, this perspective assumes that professional learning is an ongoing process of reflection, experimentation, and discussion. In this view of professional development, the workshops and other one-time events become part of a coherent series of events that sustains, reinforces, and deepens learning. Today's professional learning allows far more active engagement for the purpose of deepening understanding and making application in real-life contexts. Ongoing teamwork, discussions, product and project development, research, data analysis, reflection, demonstrations, and modeling are just some of the ways professional development facilitates the active engagement of the learner.

Standard 5: Data-Driven Professional Practices

Effective professional development that improves student learning actively engages participants in collecting, analyzing and interpreting data to inform decisions about [1] changes in instruction, curriculum and assessments; [2] changes in school and district organization; and [3] additional professional development needs.

Indicators:

- a. Data on student learning is gathered from standardized tests, district-made tests, student work samples, portfolios, etc. and provides important input to the selection of district and school improvement goals.
- b. Data is drawn from other sources, including local, state and national assessments, reports on grade retention, high school completion, student disciplinary actions, enrollment in specific courses. These data are typically disaggregated to reveal differences in learning among subgroups of students.
- c. Data is also drawn from teacher-made tests, common assessments, assignments, portfolios. Data analysis from this examination of student work creates a direct link between the work and content standards, the expectations for student learning, and the use of scoring rubrics.
- d. Professional development ensures that educators are able to acquire knowledge and skills related to formative classroom assessment, data collection, data analysis, and data-driven planning and evaluation.
- e. Professional development ensures that educators are able to gather and analyze data from multiple sources throughout the school year, to design assessment instruments, to implement various forms of assessment, and to determine the appropriate assessment to guide student instruction and monitor student progress.
- f. Professional development provides educators with current, high quality data analysis presented in a clear, understandable format to ensure optimal student learning opportunities.
- g. Professional development promotes technology as a tool in collecting, analyzing, and evaluating data to monitor student learning.

Standard 6: Evaluation

Effective professional development that improves student learning uses multiple sources of information to assess the effectiveness in improving professional practice and student learning. Evaluation is viewed as an ongoing process that is initiated in the earliest stages of program planning and continued beyond program completion.

Indicators:

a. Goals of the professional development plan and needs of the specific group participating in the professional development program are used when creating evaluations.

- b. Resources, including the use of technology and student data, are provided to plan and conduct ongoing evaluation of professional development programs.
- c. Evaluations include multiple measures used throughout the school year to assess student learning after educators have had the opportunity to implement new instructional practices.
- d. Results from the evaluation process are shared with key groups involved in the planning of professional development to inform future decisions about professional development plans.

Standard 7: Research-Based

Effective professional development that improves student learning applies research to instructional decision-making and provides educators with opportunities to analyze, apply, and engage in research.

Indicators:

- a. Professional development is based on current research in improving student learning.
- b. Professional development encompasses sound, researched-based theories in student expectations, child development, curriculum content and design, instructional and assessment strategies, and shared leadership.
- c. Professional development includes ongoing opportunities for educators to evaluate and reflect on current research topics that are both relevant to educators' professional responsibilities and consistent with district and school goals.
- d. Professional development involves discussion of research with a variety of perspectives and conclusions to assist educators in applying research within the specific context.
- e. Professional development ensures that educators have the knowledge, skill, and opportunity to apply research in instructional decision making and engage in action research.
- f. Professional development provides opportunities for educators to collaboratively test their hypotheses and report results about the impact of professional development programs and the effectiveness of instructional strategies and programs.

Standard 8: Design

Effective professional development design that improves student learning is based on data, is derived from the experience, expertise and needs of educators and reflects best research and practices in sustained job-embedded learning.

- a. Professional development design begins with a needs assessment that involves the analysis of multiple sources of disaggregated teaching and learning data.
- b. Professional development design is grounded in the Massachusetts Curriculum Frameworks, the LPS Standards for content areas, and student learning goals.
- c. Professional development design bases priorities on the careful examination of "gaps" or discrepancies between data reality and the desired outcomes.

- d. Professional development design is based on the learning styles of adult learners as well as the diverse cultural, linguistic, and experiential resources that they bring to the professional development activity.
- e. The intended beneficiaries of professional development are substantively involved in all aspects of professional development design.
- f. Professional development design addresses the continuum of an educator's experience and level of expertise, and is based on an analysis of individual educator needs; current knowledge and skills; and district, building and educator learning goals.
- g. In addition to workshops, sustained, job embedded professional development includes, but is not limited to, expanded training, lesson study and demonstrations, peer observations, analysis of student work and assessment data, collegial circles, coaching/feedback, action research, reflection, and opportunities for collaboration and problem solving.
- h. Professional development provides continued support to educators in the form of follow-up, demonstrations, feedback on mastery of new knowledge and skills, peer coaching and mentoring, and continued opportunities for additional study.
- i. The format of professional development incorporates technologies to provide more extensive and diverse content, expand access and participation, and create virtual professional learning communities.

Standard 9: Learning

Effective professional development that improves student learning incorporates knowledge about human learning and change. It ensures that educators have the knowledge and skills to meet the diverse learning needs of all students by meeting the diverse learning needs of educators.

- a. Professional development provides opportunities for educators to create a safe, inclusive, equitable learning community where everyone participates in maintaining a climate of caring, respect, and high achievement.
- b. Professional development provides opportunities for educators to develop a deep understanding of topics, practice new skills with feedback, and interact with ideas and procedures through active learning processes and reflection.
- c. Professional development provides opportunities for educators to participate in learning processes that incorporate different learning styles and strengths.
- d. Professional development provides opportunities for educators to engage in a learning process that factors in the anxiety caused by change, and addresses concerns through skillful listening and problem solving within a respecting and trustful culture.
- e. Professional development provides opportunities for educators to engage in a learning process that recognizes life stage differences and taps the unique strengths and talents of staff.
- f. Professional development provides opportunities for educators to engage in distance technology to enable learning throughout the day in various settings, using appropriate technology that appeals to different learning preferences.

Standard 10: Collaboration

Effective professional development that improves student learning provides educators with the knowledge, skill and opportunities to collaborate for the purpose of improving instruction and student achievement in a respectful and trusting environment.

Indicators:

- a. Professional development provides teachers and administrators the appropriate knowledge and skills regarding group processes to ensure various teams, committees and departments districtwide and within schools achieve their goals and provide satisfying and rewarding experiences for participants.
- b. Professional development provides educators with the appropriate knowledge and skills to communicate effectively, to listen to the ideas of others, to exchange and discuss ideas, to work in diverse teams, and to share responsibility toward a common goal.
- c. Professional development provides ongoing opportunities for educators to work with colleagues including teachers, principals, instructional assistants, librarians, counselors, social workers, psychologists, specialists, higher education faculty, and any others critical to student success.
- d. Professional development maximizes the use of technology to share ideas, strategies and tools with colleagues in ways that dramatically increase the collaborative links among educators.

Content Standards Effective professional development balances attention to content knowledge, instructional strategies and assessment practices appropriate to helping students master the subject matter content. The content of staff development that advances student achievement reflects national, state, and local content standards and is aligned with district goals, school improvement goals and educators' individual professional goals, level of experience and competence.

Standard 11: Equity

Effective professional development that improves student learning prepares educators to understand and appreciate all students, holding high expectations for their academic achievement and creating safe, orderly and supportive learning environments.

- a. Professional development prepares educators to create and maintain an environment where high expectations for academic achievement are expected for all students.
- b. Professional development ensures that educators understand the cognitive and social- emotional characteristics of children and adolescents in order to provide developmentally appropriate curriculum and instruction.
- Professional development provides strategies for educators to tap the learning strengths and preferences of each student.
- d. Professional development ensures that educators are able to differentiate instruction, curriculum materials, and assessment tools in order to meet the cognitive and social/emotional needs of all students.

- e. Professional development assists teachers and administration in creating school-based and districtwide programs to close the achievement gap and provide equity and excellence for all students, e.g. the development and implementation of an after-school Extended Learning Program for at-risk students; the development and implementation of a mentoring program at each school site for students in need of additional support and connection; the development and implementation of a multi-tiered intervention system for literacy learning and mathematics instruction at all levels.
- f. Professional development equips educators with the knowledge and skills to establish safe and orderly learning environments characterized by mutual respect in which academic learning and appropriate socialemotional development can occur.
- g. Professional development assists educators in developing an appreciation of the benefits that diversity provides in their classroom for both students' academic performance and interpersonal and social development.

Standard 12: Quality Teaching

Effective professional development that improves student learning provides opportunities for educators to deepen their content knowledge, increase knowledge of instructional strategies and use formative and summative assessments to inform instruction.

- a. Professional development ensures that content curriculum meet the highest national/state standards in core concepts in all disciplines.
- b. Professional development supports the development of curriculum documents which include state and local standards, instructional strategies, materials alignment, common assessments and essential content vocabulary and language.
- c. Professional development ensures educators are prepared to implement recommendations from each curriculum review process.
- d. Professional development ensures educators participate in a wide-range of activities in order to stay current and/or deepen understanding of content area knowledge. Activities require collaboration with colleagues and can include electronic subject-area networks, university or electronically delivered coursework, subject area institutes, professional learning communities, and/or engagement in action research.
- e. Professional development ensures educators have opportunities to participate first-hand in observing, learning, and practicing instructional strategies that can be used in the classroom.
- f. Professional development ensures educators continue to develop classroom management skills that promote respectful and caring environments where all children feel safe and are able to engage in academic learning.
- g. Professional development provides ongoing opportunities for educators to examine a variety of classroom assessments, practice using them in their classrooms, and analyze the results to 1) understand and report on student achievement, 2) identify gaps in student learning, and 3) adjust instruction.
- h. Professional development focuses on developing educators' knowledge of the learning styles, needs, and abilities of their students, as well as the diverse cultural, linguistic, and experiential resources that their

students bring to the classroom.

- Professional development provides opportunities for educators to develop the knowledge and skills necessary to design and implement differentiated instruction and to implement assessment strategies that meet diverse student learning needs.
- j. Professional development ensures that educators have the necessary knowledge and skills to develop and foster the social-emotional, critical thinking, problem solving, literacy, and technological skills that students will need for success in the 21st century.

Standard 13: Family Involvement

Effective professional development that improves student learning recognizes the importance of collaboration between the school, home, and community.

- a. Professional development provides opportunities for educators to develop the knowledge and skills to build active partnerships with parents, families, and community members.
- b. Professional development prepares educators to demonstrate sensitivity to families whose primary language is not English/and or whose cultural traditions differ.
- c. Professional development provides opportunities for educators to learn about the diverse cultural backgrounds represented by students, families, and community members and prepares educators to establish respectful and caring learning communities within the schools.
- d. Professional development provides technology training for educators to enhance communication with parents, families, and community members.

REFERENCES

Cohen, D. K., & Hill, H. C. (2001). Learning policy. New Haven, CT: Yale University Press.

Collins, D. (2001). *Achieving your vision of professional development: How to assess your needs and get what you want.* Greensboro, NC: Regional Educational Laboratory at SERVE.

Corcoran, T. B. (1995). *Helping teachers teach well: Transforming professional development* (CPRE Policy Brief No. RB¬16). New Brunswick, NJ: Consortium for Policy Research in Education, Rutgers University.

Corcoran, T., McVay, S., & Riordan, K. (2003). *Getting it right: The MISE approach to professional development*. Philadelphia, PA: Consortium for Policy Research in Education.

Darling-Hammond, L. (1999). *Teacher quality and student achievement: A review of state policy evidence*. Seattle, WA: Center for the Study of Teaching and Policy.

Darling-Hammond, L. (2005). Educational goals and purposes: Developing a curricular vision for teaching. In L. Darling-Hammond & J. Bransford (Eds.), *Preparing teachers for a changing world* (pp. 169-200). San Francisco: Jossey-Bass.

Darling-Hammond, L., Chung Wei, R., Andree, A., Richradson, N., Orphnos, S., & the School Redesign Network at Stanford University. (2009). *Professional learning in the learning profession: A status report on teacher development in the United States and abroad*. National Staff Development Council and the School Redesign Network at Stanford University. Retrieved from http://www.nsdc.org/news/NSDCstudytechnicalreport2009.pdf

Desimone, L., Porter, A. C., Garet, M., Suk Yoon, K., & Birman, B. (2002). The effects of professional development on teachers' instruction: Results from a three-year longitudinal study. *Educational Evaluation and Policy Analysis*, 24(2), 81-112.

Elmore, R. F. (2002). *Bridging the gap between standards and achievement: The imperative for professional development in education*. Washington, DC: Albert Shanker Institute.

Elmore, R.F., & Burney, D. (1997). *Investing in teacher learning: Staff development and instructional improvement in community school district #2, New York City.* New York: National Commission on Teaching and America's Future, Teachers College, Columbia University, and Philadelphia: Consortium for Policy Research in Education, University of Pennsylvania.

Gusky, T. (2000). Evaluating professional development. Thousand Oaks, CA: Corwin Press.

Hassell, E. (1999). Professional development: Learning from the best. A toolkit for schools and districts based on the National Awards Program for Model Professional Development. Oak Brook, IL: North Central Regional Laboratory.

Harwell, S. (2003) *Teacher professional development: It's not an event, it's a process*. Retrieved from http://www.cord.org/uploadedfiles/HarwellPaper.pdf

Haslam, M. B., & Seremet, C. P. (2001). *Strategies for improving professional development: A guide for school districts*. Washington, DC: New American Schools.

Killion, J. (2008). *Assessing impact: Evaluating staff development*. Oxford, OH: National Staff Development Council and Thousand Oaks, CA: Corwin Press.

Kitano, M., Montgomery, M., Vantassel-Baska, J., & Johnson, S. (2006) *Using the national gifted education standards for prek-12 professional development*. National Association for Gifted Children, Council for Exceptional Children and The Association for the Gifted. Thousand Oaks, CA: Corwin Press.

Lauer, P., Dean, C., & Nelson, R. (2005). *The teacher learning continuum*. Denver, CO: Mid-Continent Research for Education and Learning.

Lieberman, A., & Wood, D. R. (2002). *Inside the National Writing Project*. New York: Teachers College Press.

Loucks-Horsley, S., Love, N., Stiles, K. E., Mundry, S., & Hewson, P. (2003). *Designing professional development for teachers of science and mathematics, second edition*. Thousand Oaks, CA: Corwin Press.

National Research Council. (1996). *National Science Education Standards*. Washington DC: National Academy Press.

National Staff Development Council. (2001). NSDC standards for staff development. Oxford, OH: Author.

New York State professional development standards. Retrieved from http://www.highered.nysed.gov/tcert/404.html

Pennell, J. R., & Firestone, W. A. (1996). Changing classroom practices through teacher networks: Matching program characteristics with teacher characteristics and circumstances. *Teachers College Record*, 98, 46-76.

Richardson, J. & Hirsch, S. (Eds.) (2001). *Tools for growing NSDC's standards*. Oxford, OH: National Staff Development Council.

Roy, P. (2006). *Training manual NSDC's standards for staff development: Challenging our practice*. Oxford, OH: National Staff Development Council.

Skinner, K. (2002). Creating communities of learners: A district professional development handbook for Massachusetts school districts and local teachers' associations. Retrieved from http://massteacher.org/teaching/ceqpd/dpdp2002.pdf

Snow-Renner, R., & Lauer, P. (2005). *Professional development analysis*. Denver, CO: Mid-Content Research for Education and Learning.

Sparks, D. (2002). *Designing professional development for teachers and principals*. Oxford, OH: National Staff Development Council.

Steiner, L. (2002). *Designing effective professional development experiences: What do we know?* Naperville, IL: North Central Regional Educational Laboratory.

Supovitz, J. A., Mayer, D., & Kahle, J. B. (2000). The longitudinal impact of inquiry-based professional development on teaching practice. *Educational Policy*, 14(3), 331–356.

Supovitz, J. A., & Snyder Taylor, B. (2003). *The impact of standards-based reform in Duval County, Florida,* 1999- 2002. Philadelphia: Consortium for Policy Research in Education, University of Pennsylvania.

Tallerico, M. (2005). Supporting and sustaining teacher's professional development: A principal's guide. Thousand Oaks, CA: Corwin Press.

Western Regional Educational Laboratory. (2000). *Teachers who learn kids who achieve: A look at schools with model professional development*. San Francisco, CA: WestEd.

Zepeda, S. (2008). *Professional development: What works*. Eye on Education and National Staff Development Council. Larchmont, NY: Eye On Education.