



UNIVERSITY OF
SOUTH FLORIDA

ST. PETERSBURG

4.3. Knowledge Bases

The knowledge bases provide the theory and research upon which are based the unit's professional commitments. They also comprise the wisdom of practice and the requisite education policies that support the unit's commitment to its candidates to acquire and use knowledge on behalf of P-12 students. The knowledge bases in the College of Education comprise three areas, which serve as organizing themes throughout the unit's programs: Knowledgeable Professionalism, Reflective Teaching, and Collaborative Leadership. The literature review which follows is organized around these themes.

KNOWLEDGEABLE PROFESSIONALISM

Strong professions are marked by a relatively large, complex, rapidly growing body of professional lore requiring years of sustained study for its mastery. Professional programs in strong professions respond to knowledge production and scholarly norms, keeping an eye on the validation of research in practice and the changing requirements for licensure. In contrast to programs determined by the conventions of practice, in professional programs the pools of practice and tests for licenses are fed by the streams of relevant inquiry. "This is the professional model" (Goodlad, Soder & Sirotnik, 1990, p. 266).

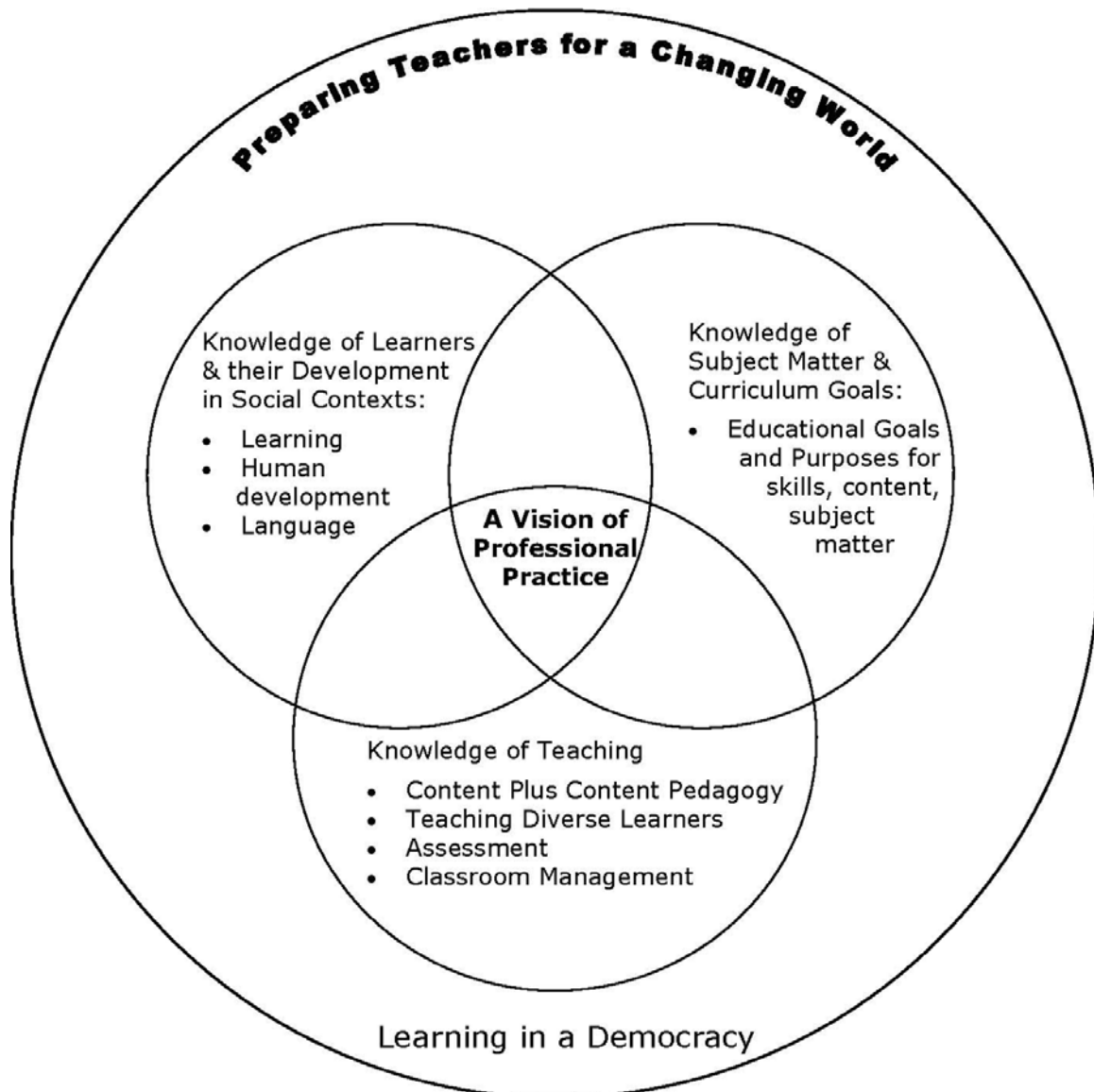
The profession of teaching also comprises both the process by which the occupation of teaching becomes a profession (professionalization) and the quality of practice (professionalism)—“how members [of the profession] integrate their obligations with their knowledge and skill in a context of collegiality and contractual and ethical relations with clients” (Sockett, 1990, p. 36). It is this accountability, Sockett asserts, that requires three conditions for success: “1) the development of trust, 2) the establishment of a partnership between the public and professionals..., and 3) the teacher’s role as a moral agent” (p. 36).

As professionals, educators’ decisions based on “systematic knowledge...foster inquiry and the discovery of new knowledge” (Hazlett as cited in Dill, 1996, p. 933). We know that a scholarly knowledge base of teaching exists (Christensen, 1996; Cruickshank, 1990; Darling-Hammond & Bransford, 2005; Sullivan, 2005). We know that in strong professions programs respond to knowledge production and scholarly norms, rather than intuition and expediency. We know that in strong professions the arbiter of standards is the validation of research in practice, not the vagaries of the licensing agency (Soder, 1990). We also know that “the professions have become responsible for key public values” (Sullivan, 2005, p. 4).

Current pressures from policy makers challenge this professional view of educator preparation and suggest that market driven approaches and content knowledge are sufficient (Podgursky, 2006; Rotherman & Mead, 2004). Yet the study of the professions conducted by Sullivan and his colleagues at the Carnegie Foundation as well as Cochran-Smith and Zeichner’s (2005) report of the AERA Research Panel provide strong evidence that there is a substantial body of knowledge necessary to become an effective educator. Indeed, this is confirmed in the study of teacher education sponsored by the National Academy of Education (Darling-Hammond & Bransford, 2005).

One promising vehicle for achieving this desired connection between knowledge production and professional teacher preparation program development is to provide teachers with professional skills consisting of education (knowledge of content) and training (pedagogical content knowledge) called for as a result of research on teaching (Cruickshank & Metcalf, 1990). Shulman (2004) refers to this as the knowledge base of teaching that comprises both principles and strategies generated through research. Imig and Imig (2006) affirm that professional teacher preparation must happen in the context of the very complex and conflicting policy environment and conditions of schooling.

For competent educational professionals, this knowledge base comprises requisite knowledge in four domains: 1) knowledge of content, 2) knowledge and beliefs of learners and learning; 3) pedagogical content knowledge, skills, and beliefs; and 4) general pedagogical knowledge, particularly pedagogy of the profession of teacher education (Borko & Putnam, 1996; Cochran-Smith & Zeichner, 2005; Cruickshank & Metcalf, 1990; Shulman, 1987, 2004). Most recently, Darling-Hammond and Bransford (2005, p. 11) offer the following scheme to illustrate the interrelationships that define the profession of teaching.



A Framework for Understanding Teaching and Learning

(Darling-Hammond & Bransford, 2005, p. 11)

The Place of Research and Policy in the Lives of Teachers

Those who fall in love with practice without science are like a sailor who enters a ship without a helm or a compass, and who never can be certain whither he is going. (attributed to Leonardo da Vinci)

As engaged professionals, educators are expected to respond to a plethora of policy statements, rules, regulations, and practices. These competent professionals have a responsibility to consider and evaluate the importance and consequences of the policies, practices, and research evidence for themselves, their students, their schools, and the communities where they work and live (i.e., Goodlad, Mantle-Bromley, & Goodlad, 2004; Imig & Imig, 2006; Kennedy, 2006; Oakes, Quartz, Ryan, & Lipton, 2000). The unit is committed to offering programs designed to help educators become thoughtful persons, active citizens, and reflective practitioners. As competent educators, candidates are expected to examine critically various types of scholarship and the role of that scholarship in educational policymaking and practice. Critical analysis of the value-laden nature of educational policy statements is also an important part of candidates' preparation programs (i.e., Cherryholmes, 1988; Giroux, 1988, 2001; Spring, 1988a, 1998b). There is a recognition that as professionals teachers must sort through rather than simply accept research and policy based on its face value. Teachers must make decisions regarding how to use research to defend or revise their practice. They must do this in a society that privileges university research over knowledge gained from practice, according to Cherryholmes (1988).

The unit is committed to engaging candidates in a culture of inquiry in which they will learn how to use research and policy to enliven their own thinking and to engage in productive dialogue about education with parents, fellow teachers, administrators, and policy makers. The curriculum is built on an activist role for the educator, using theory and practical experience to transform practice (Hussler,

Cassidy, & Cuff, 1986). As critical thinkers and reflective learners, candidates are driven by the pursuit of knowledge with an emphasis on the teacher as an agent for change (Cochran-Smith, 2006; Darling-Hammond, 2006; Darling-Hammond, et. al, 2005; Lieberman & Miller, 2004).

Knowledge of Learners and Learning

A professional's knowledge of learners and learning includes their understanding of how individuals learn, develop, and are motivated (Bransford, Brown, & Cocking, 1999; Brophy, 1998; Bruner, 1990; Comer, Haynes, Joyner, & Ben-Avie, 1996; Kamii & Housemen, 2000; Piaget & Inhelder, 1969; Vygotsky, 1986; and others). In fact, Borko and Putnam (1996) have noted that knowledge of students is "arguably the most important knowledge a teacher can have" (p. 675). An example of a professional's knowledge of learners and learning would be that she or he understands that learners are more likely to remember information when they are actively involved in the learning process (National Research Council, 2000). In fact, in light of the scheme presented earlier (Darling-Hammond & Bransford, 2005), candidates are encouraged to explore all aspects of learning such as:

- What should be taught; why is it important and how this knowledge should be organized (knowledge-centeredness)?
- Who learns, how and why (learner-centeredness)?
- What kinds of classroom, school, and school-community environments enhance learning (community-centeredness)?
- What kinds of evidence for learning students, teachers, parents, and others can use to see if effective learning is really occurring (assessment-centeredness)? (Bransford, Derry, Berliner, Hammerness, & Beckett, 2005, p. 41)

In the case of both the USF St. Petersburg candidates and the learners of Pinellas County, a developing community enhances the ways in which candidates learn the importance of learning about developmentally appropriate practice tailored to the needs of a very diverse group of learners (Comer et al, 1996; Delpit, 1995; Eisner, 2004; Gilligan, 1982; Hollins & Oliver, 1999).

Also included in this category is a professional's knowledge of learners from different ethnicities and cultures and whose first language is a language other than English. In very deliberate ways, the USF St. Petersburg faculty assist candidates in developing strategies and enhancing opportunities for English Language Learners that enhance their general knowledge of how learners develop language and other skills (Banks, 2001; Garcia, 1993; Hollins & Guzman, 2005; Irvine, 2003; Ladson-Billings, 2001; Nieto, 1999, 2004). Unlike other institutions, USF St. Petersburg ascribes to this intense preparation for all of its programs.

The educator preparation unit is committed to preparing competent professionals that help all P-12 students develop the skills and dispositions that enable them to create and participate in a democratic society. Teacher education candidates learn the importance of respecting each child and honoring that child's family and community. Through discussion with peers and faculty, candidates also learn the importance of shared inquiry and develop the ability to respond to P-12 students' intellectual and emotional needs. Candidates learn to evaluate their teaching in the context of social, educational, and political structures (Delpit, 1995; Goodlad, Mantle-Bromley & Goodlad, 2004; Jacobs & Duhon-Sells, 1994) and reflect on the role schools play in fostering a more democratic and just society. In fact, the demographics of the area make this a most urgent imperative (Hodgkinson, 2001; Villegas & Lucas, 2002).

Knowledge of Content

Knowledge of content refers to the knowledge that professionals have related to subject matter (McDiarmid, 1994; Shulman, 2004). This knowledge does not include how to teach the content material; rather, it focuses on the content itself. A professional's knowledge can include subjects in areas such as reading, writing, mathematics, science, and social studies. For instance, a professional teaching ecology would understand the carbon cycle and how it relates to similar concepts in ecology. Content knowledge is vital for a teacher to be effective in the classroom. Without solid and deep knowledge of content (both conceptual and procedural), teachers cannot be effective in their teaching (Ball, 1997; Holt-Reynolds, 1999; Kennedy, 1998; Ma, 1999).

A teacher is a member of a scholarly community. He or she must understand the structures of subject matter, the principles of conceptual organization, and the principles of inquiry that help answer two kinds of questions in each field: What are the important ideas and skills in this domain? And how are new ideas added and deficient ones dropped by those who produce knowledge in this area? (Shulman, 2004, p. 94)

It is also clear that simply assuming that both general education and a major will provide these types of knowledge cannot be assumed (Bain & Mirel, 2006; Floden & Meniketti, 2005). Continued exploration of the content knowledge throughout the teaching program has to refocus candidates on that nature of knowing (Kennedy, 1998). While some pundits of education are calling for content knowledge as almost a sole, exclusive determiner of who can be licensed (Walsh, 2004), the USF St. Petersburg faculty are committed to requiring candidate performance to be more inclusive and tied to demonstrating content specific pedagogy and exhibiting a broad repertoire of teaching strategies and skills.

Pedagogical Content Knowledge

Pedagogical content knowledge is an understanding of how to make a specific subject comprehensible to others (Shulman, 1986a, 1986b). In other words, professionals have a variety of strategies for teaching their specific content. For example, a professional who is teaching reading would have strategies for teaching reading that may be similar to or different from strategies that she or he uses to teach writing, science, and mathematics.

This knowledge combines content and pedagogy to provide skills specific to teaching that are part of a teacher's ability to plan to make instruction meaningful.

General Pedagogical Knowledge

A professional's general pedagogical knowledge includes teaching strategies that transcend particular subject matter domains (Borko & Putnam, 1996). General pedagogical knowledge includes having strategies for creating effective learning environments, developing routines for interacting with students, understanding the teacher's role as a mediator of student learning, and having strategies to address classroom management. In conjunction with each of these four domains of knowledge, a professional has the beliefs, values, attitudes, self-knowledge, and ethics to reflect on and effectively integrate each of them.

The *development* of pedagogical knowledge is closely associated with the teacher's understanding of learning and development. Pacing, questioning, staging learning opportunities, recognizing the importance of learner response and assessing the level of student understanding are all skills that must be acquired for whatever the teaching task demands. Teachers and leaders must learn how to construct developmentally appropriate practice including the willingness to accommodate to the cultural context of the classroom and the learners. (Horowitz, et al, 2005; Wiggins & McTighe, 1998).

Sarason (1996) asserts that one of the goals of professional preparation is to instill a sense of uniqueness among those who possess similar knowledge and skills. In teaching, a teacher basing instructional decisions on an ever-expanding knowledge base, “reflecting” in order to know (LaBoskey, 1993), and bound by the moral imperative of teaching all children (Goodlad, 1990) exemplifies this professional uniqueness.

Candidate Commitment to P-12 Student Achievement

Teachers must be able to obtain, reflect upon, and, subsequently use student performance information to inform their teaching. Teachers who use student data systematically and continuously improve the quality of the educational experience of students (Elmore, 2002). Further, by using student data, teachers subject themselves to the discipline of measuring their success by the metric of students’ performance. Growing evidence suggests that teachers learn more deeply about the strengths of diverse learners, engage in more focused observation and documentation of student learning, and also participate in more collaborative inquiry when they use student performance data systematically to make decisions about their teaching (Ball & Cohen, 1999; Education Resources Group, 2001; Falk, 2001; McLaughlin & Zarrow, 2001; Wiggins, 1998).

Attention to student learning involves preparing teachers and leaders to explore the rich context in which students can exhibit their understanding. It also is mindful of the importance of structuring learning opportunities for the students that reflect a culture of high expectations and consideration for the individual needs of learners, especially those who bring many challenges to the learning situation, such as SES, ethnicity, or special learning needs (Darling-Hammond, French, & Garcia-Lopez, 2002; Peske & Haycock, 2006; Sanders & Horn, 1998).

REFLECTIVE TEACHING

Reflective teachers are responsive to the unique educational and emotional needs of each individual student (LaBoskey, 1993; Pollard & Tann, 1987; Ross, Bondy, & Kyle, 1993). To do so, teachers must learn to reflect critically on student, school, and community issues and make ethical decisions using an integrated set of experiences (Good & Brophy, 2000; Goodlad, 1990; Howey, Post, & Zimpher, 2006).

Dewey, following in the social science tradition of Hall and other contemporaries, approached teaching and learning as a science with an emphasis on grounded theory, quantification, and results of observation (Dewey, 1904). Using the scientific method as a scaffold for teaching and reflection, he defined "reflection" as a three-step process "including problem definition, means/end analysis, and generalization" (Dewey as cited in LaBoskey, 1993, p. 10). LaBoskey asserts that what distinguishes Dewey's "reflection" from subsequent applications of the term is his theory of grounded belief.

Reflection thus implies that something is believed in (or disbelieved in), not on its own direct account, but through something else which stands as witness, evidence, proof, voucher...that is ground of belief...one reflects in order to know whatever one wants to know and whenever and wherever a state of perplexity arises. (p. 10)

The teacher as researcher model, often synonymous with "action researcher," is a strong proponent of teacher as active change agent (Garrison, 1998). The work of Cochran-Smith and Lytle (1993), Fullan (1991, 2001), Ladson-Billings (1994), Levine & Trachtman (1997), Zeichner and Liston (1987), Lieberman and Miller (2004), Darling-Hammond (2006), and Wells (1993), among others, has analyzed and documented this role for teachers as advocates for their own and their student's learning as well as successful change agents in the contexts of the reform agenda.

Reflection can be considered one of the cornerstones of professional practice and growth. Reflection is a self-process embedded in a continuous improvement loop that should be an underlying goal for all knowledgeable professionals in education. In short, reflection on pedagogy is needed to identify where and how to improve (Sims-Knight, Fowler, Pendergrass, & Upchurch, 2000). To promote reflection about pedagogy, teachers need not only have beliefs, values, attitudes, and self-knowledge, but also a range of tools to both permit and prompt asking important questions of the curricular process. "If pre-service teachers do not learn to think while in school, it is fair to ask: 'How are they to keep on learning?'" (LaBoskey, 1993, p. 11).

The professional programs in the College of Education at USF St. Petersburg emphasize the role of the teacher as reflective learner and practitioner. Candidates are encouraged to reflect critically upon teaching and upon themselves as candidates learning to teach in four areas: 1) teaching as a personal and social activity; 2) the teacher's use of student performance data to inform teaching; 3) the implications for teaching of the candidate's knowledge of educational research and policies; and 4) the candidate's own pedagogy.

COLLABORATIVE LEADERSHIP

Much of the current discussion of teacher and leader development emphasizes the importance of collaboration and consideration of a community of learners (DuFour, DuFour, Eaker, & Many, 2006.). Teacher beliefs are refined through sharing knowledge and expertise about their practice (Au, 2002; Cochran-Smith & Lytle, 1999; Oakes, Franke, Quartz & Rogers, 2002). As a result of this collaboration, teachers become leaders in both formal and informal ways. Such an instructional leader is one who is known for being an ethical and trustworthy person. He or she understands P-12 students and actively promotes student and fellow teacher success. The instructional leader is a role model for students, teachers, and others.

In their study of teacher leadership, Lieberman and her colleagues (Lieberman & Miller, 2004) identify four domains of skill and expertise: 1) teacher as researcher, 2) teacher as professional, 3) teacher as curriculum and instructional leader, and 4) teacher as ethical decision-maker.

Teacher leaders...are committed for the long term; they do not intend to give up on their students or one another. They plan to continue to assume responsibility for the deepening of their own practice and that of their colleagues. They are determined to become the architects of vibrant professional communities in which teachers take the lead in inventing new possibilities for their students and themselves. (p. 92)

As each educator considers his or her role as a leader, he or she must do so in a rapidly changing, complex school environment. Leaders must embrace that change, build community through collaboration and strive to create environments that support all as learners (DuFour, et al., 2006; Duke, 2004; Evans, 2000; Fullan, 2001). In addition to the development of teacher leadership, the University of South Florida St. Petersburg is committed to preparing collaborative and ethical school leaders who serve as school and district leaders. This preparation takes into account

three major areas: 1) The Role of the Instructional Leader as Change Agent, 2) Collaborative Educational Leadership, and 3) Instructional Leadership Guided by Ethical Reasoning and Behavior.

The Role of Instructional Leader and Change Agent

Capable, conscientious instructional leaders are needed in critical ways. These leaders face intense pressure to increase student achievement, lead teachers in planning instruction and identifying effective practice (Bolman & Deal, 2003; Fullan, 2001; Northouse, 2004). They must lead the families and communities that they serve with increased responsiveness. Marsh (2000) suggests that this is all affected by "dramatic changes in the work environment including a turbulent policy environment, an overwhelming scale and a pace of change, and a new view of teacher involvement and expertise" (p. 127).

These instructional leaders must also respond to the calls for increased academic achievement for all students. National trends in lack of school success historically have paralleled increased diversity (Palinscar, 1993). To work effectively with students from diverse backgrounds the instructional leader knows him or herself, is open minded, views diversity as a source of strength and enrichment to schools (Manning, 2000) and uses every available opportunity to ensure diversity is reflected in the classroom and the curriculum. The instructional leader is knowledgeable about diversity, views it from a pluralistic perspective, develops and uses the necessary skills to effectively work with all students and makes every effort to improve and positively change, as necessary, students' attitudes toward differences. Effective instructional leaders actively reject notions of student failure and serve as advocates for each of their students (Gay, 1995; Good & Weinstein, 1986; Ladson-Billings, 1994).

This dedication to the teaching and learning of all P-12 students is also evident in the instructional leader's commitment to teaching diverse learners.

Typically, diversity in education implies differences in age, ethnicity, exceptionalities, gender, language, race, religion and social class (Gollnick & Chinn, 2000). According to the 2000 Census, Florida's Hispanic population has risen to 16.8%. This group now surpasses Blacks whose population in Florida is 14.6% (78% of Florida's population is white). With this change in demographics, among Hispanics and other groups, diversity in the classroom, for most teachers, is increasingly becoming a challenge.

Teachers in the PK-12 arena are taking on increasingly larger and more meaningful leadership roles and responsibilities during the era of school reform and accountability (Joyce & Showers, 2002). Marsh (2000) proposes that the idea of school leadership has become more inclusive and that teachers are major players in work teams that "work from the middle rather than the top of the organization" (p. 127). Classroom teachers participate in numerous leadership functions within their schools already. Bolman and Deal (2003) acknowledged that leadership, when it works well, enables people to collaborate in meeting the needs of the school by working through shared visions, values, and missions. When these variables are in concert with the leadership density of the schools, together, everyone has a better chance to create and sustain better schools.

The centrality of P-12 student learning is irrefutable for the instructional leader. In fact, preparation standards for school leaders embrace this fundamental fact as one of their national standards (Council of Chief State School Officers, 1996):

A school administrator is an educational leader who promotes the success of all students by advocating, nurturing, and sustaining a school culture and instructional program conducive to student learning and staff professional growth. (p. 12)

Collaborative Instructional Leadership

As leadership is studied in all organizations, it becomes clear that fostering a vision, analyzing the forces that affect the organization and building the human capacity to change are essential in today's leaders. (Bolman & Deal, 2003; Collins, 2001; Lencioni, 2002). School leaders must collaborate with teachers in ways that promote trust, concern for students and accountability in what Glasser (2000, p. 28) characterizes as "non coercive lead-management."

According to Boyer's work in *Basic School* (1995), instructional leaders on both the teaching and administrative levels must work together in the development of instruction. As a result, both are seen as leaders through the collaborative effort of serving community and student needs. The teacher's role is to be involved in the community surrounding the school, to have the ability and knowledge to collaborate with others in the development of curriculum as a team member, to be a mentor to students, and to seek continuous professional renewal through scholarship. Administrators, especially on the building level, must be committed to empowering teachers and providing the support needed to create a community within the school that is committed to the community surrounding the school.

Instructional Leadership Guided by Ethical Reasoning and Behavior

The instructional leader demonstrates high levels of ethical reasoning and models ethical behavior in the classroom and in the community (Fullan, 2001; Sergiovanni, 2007; Starrat, 2004). Leadership demands that the ethical behavior of a leader provides the highest level of concern for the development of young children in public schools as they grow into citizens (Smith & Fenstermacher, 1999). Ethical reasoning is affected positively through college courses and other interventions that emphasize psychosocial development and dilemma discussion, especially when students begin to think differently based upon reflection and personal experiences of themselves and others (Elliott, 2006; Pascarella & Terenzini, 1991; Rest & Narvaez,

1994). Ethical behavior includes attention to moral sensitivity, moral motivation, and moral character in addition to moral reasoning or judgment. According to Rest and Narvaez (1994), individuals progress through stages of moral development.

At the highest level, the instructional leader recognizes the primacy of moral criteria, appeals to ideals that are sharable, and honors full reciprocity (DeVries & Kohlberg, 1990). This developmental journey, while never dictating the exact nature of the “right” moral criteria, eventually fosters an intellectual appreciation of the sharable ideals of respect and care for persons. This is essential for competent instructional leadership and is consistent with the tenets of one of the *Florida Educator Accomplished Practices, Ethics* (Florida Education Standards Commission, 2006).

Given the current policy climate with regard to accountability, one must assume that this ethical leadership includes responsible and comprehensive use of all data available to make the best instructional decisions. Today’s leader shoulders heavy ethical responsibility to ensure that teachers and students have access to the knowledge and skills that they need to foster high student achievement (Smith & Fenstermacher, 1999).

A return to the teacher candidate and leadership outcomes reflects that the faculty of USF St. Petersburg is committed to a rich program that incorporates research to ensure that all of the children in the metropolitan area will have educators committed to their learning.

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