**MONTCLAIR STATE UNIVERSITY**

Systematic Pedagogy:

Intentional Infusion of Skills and Strategies in Teacher Education
Submitted by the Systematic Pedagogy Working Group

Final Report | September 2010

## I. OVERVIEW

The Montclair State University community is committed to the continuing development of teachers who exemplify the dispositions, knowledge, and skills reflected in the *Portrait of a Teacher*. As teacher educators, we acknowledge that high quality teacher preparation requires a complex body of knowledge, skills and dispositions that include subject area expertise, understanding of child and adolescent development, culturally responsive teaching practices, differentiated instruction, critical thinking, democratic practice, multiple forms of assessment, nurturing pedagogy, reflective practice, communities of practice, literacy skills, professionalism, social justice and moral agency.

To be successful in the classroom, beginning and accomplished teachers need a set of skills and strategies that enable them to successfully facilitate productive learning for all students. Five full-time and clinical faculty members within the College of Education and Human Services at Montclair State University convened during Summer 2010 to identify essential pedagogical skills and strategies for teachers to put into practice. Our intention was and is not to distill or reduce teacher education to a set of skills or moves but to identify specific skills and moves that should be included in a holistic teacher preparation program.

This document sets forth an intentional and systematic infusion of a carefully selected set of essential pedagogical skills and strategies that embue the knowledge, skills and dispositions outlined in the *Portrait of a Teacher*. We refer to the skills and strategies outlined in this document as an Intentional Pedagogy Framework (IPF) to reflect an initial operationalization of the attitudes and dispositions comprising the *Portrait of a Teacher*. The IPF consists of seven areas of strategic knowledge for all teachers:

1. Planning curriculum
2. Creating a community of learners
3. Managing the classroom
4. Classroom teaching practices
5. Assessing student learning
6. Creating effective partnerships
7. Cultivating professionalism

The seven categories emerged from an extensive review of the teacher education literature. (See Section II. Process). Taken together, the skills and techniques that comprise each area listed above represent a theoretically grounded framework for effective teaching. We organize the document according to the following sections:

- SECTION II describes the inductive process of culling the literature base of best pedagogical practices to arrive at the seven emergent categories of the IPF. We also identify the limitations of this work and contextualize the document as a basis for further conversation.

- SECTION III outlines core pedagogical skills and techniques that comprise each of the seven IPF areas and grounds them (wherever possible) in evidence-based research.

- Section IV also identifies exemplar research-based techniques (e.g., Jigsaw) that can be shared with teacher education candidates to help them develop the widest repertoire of skills from which to draw.

- SECTION V outlines programmatic points and courses where specific skills might be introduced (I), emphasized (E), and achieved (A). It is important to note that the "Sample Techniques" *are not exhaustive and are merely suggested* pedagogical moves to accomplish the specific actions outlined in the bordering "Pedagogical Skills" column.

- SECTION VI contextualizes the IPF in terms of its strengths and limitations. We also outline considerations and possibilities for implementation within existing programmatic structures at Montclair State University.

- SECTION VII provides biographical information about the participants in the Systematic Pedagogy Work Group.

- SECTION VIII contains the bibliographic citations for the supporting literature referenced throughout the document. It is organized according to each of the seven IPF categories.

II. PROCESS & CONSTRAINTS

As a professional learning community, our initial step was to mine the literature (paying particular attention to teaching practices grounded in empirically-based research) and to identify and deliberate those skills and strategies that comprise best practice and effective teaching in the twenty-first century. Our starting point for research and deliberation was the recent work of Deborah Ball at the University of Michigan that outlines a set of "high leverage practices" to make teaching more effective for students' learning.[i] We also mined Saphier and Gower's (2008) comprehensive, classic volume, *The Skillful Teacher* (outlining a repertoire of language, concepts and skills for teaching). We also consulted Doug Lemov's (2010) technique-oriented *Teach Like a Champion*; and Steven Farr's (2010) academic-driven Teach for America text, *Teaching as Leadership*. One particular work of global relevance to developing this pedagogical framework is Linda Darling-Hammond's (2007) edited volume, *Preparing teachers for a changing world*.

As the group individually and collectively reviewed the literature, we identified recurring themes that resonated alongside current challenges within teacher education on both state and national levels. It was incumbent upon the group to situate our work within an increasingly pressurized political climate of preparing young people for a world that is highly digital, increasingly global, and sharply focused on workplace readiness. For example, the industry-heavy and widely popular Partnership for 21st Century Skills emphasizes the use of tools to collaborate and solve problems to enable students to compete in a global economy.[ii] Resta & Carroll (in press) from the University of Texas in their summit report, *Redefining teacher education for digital age learners* identify the attributes of 21st Century teachers that include (among other things) the ability to coordinate students' formal and informal learning experiences, teach in multiple modalities; and teach as a member of a learning team. While we acknowledge the multitude of stakeholders—each attempting to steer the ship of teacher education reform—it is worth noting that our anchor throughout this process was identifying the essential skills, moves, and procedures that enable teachers to be successful at facilitating productive learning for all students.

We also acknowledge that while we were diverse in experience, we are few in number and therefore limited in areas of expertise and experience. The identification of program points and coursework is also primitive at this point, as the process was constrained by those courses most understood (and taught) by SPWG participants. We therefore acknowledge the essential perspectives of course coordinators, NCATE coordinators, and Field Work staff in further identifying how the IPF can better align with field experience requirements and existing course-embedded assessments. Similarly, "Creating and Sustaining Effective Partnerships" and "Cultivating Professionalism" are two IPF areas that extend beyond the scope of coursework. Since the Center of Pedagogy and TEAC are inextricably connected to these areas, we recommend that they assist in teasing out programmatic points where students can begin to cultivate partnerships and the knowledge, skills and dispositions associated with professionalism in teaching.

## III. INTENTIONAL PEDAGOGY FRAMEWORK (IPF)

Within each of the seven areas we outline specific pedagogical skills that classroom teachers need in order to be successful in their practice. Underneath each pedagogical skill we offer sample techniques (some research-based) that represent ways in which teachers might enact these skills (See also TABLE 1).

**PLANNING CURRICULUM**

The committee recognizes "backward design" (Wiggins & McTighe, 1998) as an overarching approach to curriculum planning and design. Planning backwards starts with identifying the state learning standards (Common Core and/or Core Content Curriculum Standards) for a particular content area/grade level and determining the knowledge and skills students are expected to master to attain those standards. Learning goals and objectives guide decisions about what to teach and how to teach it. Teachers must be able to:

A.  ***Identify and write learning goals and objectives related to content***
    1.  Learning goals guide decisions about what to teach and how to teach it.
    2.  Framing the Big Picture: Establish a direction for learning (Saphier, Haley-Speca & Gower 2008)
    3.  Communicate appropriately high expectations (Good & Brophy, 2008)
    4.  Student personalized learning goals: Student contracts (Miller & Kelley, 1994)
    5.  Powerful ideas/big ideas/essential questions (Smith & Girod 2003, Wiggins & McTighe 2005)
    6.  Curriculum mapping (Jacobs, 1997)
    7.  Behavioral objectives: Performance, Conditions, Criterion (Mager, 1962)
    8.  Three domains of learning: Cognitive, Psychomotor, Affective (Bloom, 1956)

B.  ***Plan and construct thoughtful assessments with clear criteria***
    1.  Assessment is not something that should be done after instruction; it should inform the process before, during and after teaching has occurred.
    2.  Provide criteria, exemplars of products that are done well, and rubrics for scoring the exemplars (Saphier, Haley-Speca & Gower, 2008).
    3.  Planning blueprint (Nortar et al, 2004)
    4.  Pre-assess students' knowledge (Ausubel,1968; Gronlund, 2003).
    5.  Assess during instruction: Instruction-embedded assessments (formative) help teachers determine what students know and still need to know. (See section on Assessing Student Learning)
    6.  Assess after instruction (See section on Assessing Student Learning)
    7.  Provide students with multiple and varied formative and summative assessments with technology standards (ISTE, 2008)

C.  ***Plan a sequence of activities to accomplish the goals and objectives (lesson and unit design):***
    1.  Understanding by Design (Wiggins & McTighe, 1998; 2005).
    2.  Transformative learning (Girod & Wong, 2001)

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3. Knowledge Networks (Good & Brophy, 2008)
4. Select or develop learning activities that meet the primary criteria of goal appropriateness (essential and relevant), feasibility (students' prior knowledge and time, space, and equipment required), and cost-effectiveness (ie: time and effort) (Brophy & Alleman, 1991)
5. Integrated curriculum (Shoemaker, 1989)
6. Personalized contextual instruction (Voltz, 2003): A form of integrated curriculum that blends various content areas and explores student-identified questions related to a given theme and/or unit.
7. Elements of Unit Design (Marzano, 2003)
   a. Identify clear learning goals and communicate them to students
   b. Develop learning (input) experiences
   c. Review, practice and apply content
8. Lesson Design
   a. Active teaching model  (Good & Brophy, 2008)
   b. Madeline Hunter model
   c. Nine Events of Instruction (Gagne, 1979)

D. *Differentiate instruction based on assessment data*
   1. Pre-test and assess students' skills--assess the student's current performance level for the skill in question, use data to determine the appropriate learning strategy (Tomlinson, 2001).
   2. Formative assessments to diagnose learning needs in time to make instructional modifications (DuFour, DuFour, & Eaker, 2008).
   3. Create multiple paths to learning for diverse students (Tomlinson, 1999).
   4. Differentiate Curriculum (Tomlinson, 2001).
      a. Content: The knowledge and skills students are to learn
         i. Use formative assessment to identify students that do not require direct instruction
         ii. Use reading materials at varying levels,
      b. Process: The performance task that allows the student to practice and make sense of the content
         i. Offer manipulatives to students who may need them
         ii. Vary the length of time a student may take to complete a task
         iii. Use tiered activities
      c. Products: The outcomes of the lesson (i.e. an assessment or project)
         i. Give students the option of how to express the required learning (i.e. create a mural, write a play, develop a board game).  Encourage students to create their own assignments as long as they contain required elements  (Tomlinson, 2001).
         ii. Encourage students to create their own assignments as long as they contain required elements.

   5. **Universal design** (An instructional approach that gives particular attention to students who have physical, sensory, and cognitive disabilities)
      a. Design instruction, from the beginning, with students' diverse needs in mind

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      b.      provide multiple ways of presenting material (auditory, visual, varying levels of complexity),

      c.      allow students to respond in multiple ways (Orkwis,1999).


## CREATING A COMMUNITY OF LEARNERS

Effective teaching requires the establishment of relationships of trust with children and adolescent youth; the creation of a classroom climate of learning and achievement, modeling positive dispositions toward learning, and supporting students' efforts as learners. More specifically, teachers must be able to:


A. *Build and maintain trusting relationships with children and adolescents*
1. Take a Responsive Classroom Approach; Northeast Foundation for Children (Rimm-Kaufman, 2006) which integrates social-emotional and academic learning.
2. Collect information about students' backgrounds and interests through surveys, interviews, and parental input (Tabors, 2008; Routman, 2002).
3. Implement daily  class meetings to create sense of community as well as  providing times to be acknowledged by teacher and classmates (Kriete, 2002)
4. Use the Circle of Respect (CPR) middle school version of Responsive Classroom Morning Meeting (Kriete, 2002)


B. *Create a classroom climate of learning and achievement*
1. Communicate appropriately high expectations (Good & Brophy, 2008)
2. Establish a positive tone of student accountability using No Opt Out (Lemov, 2010)
3. Establish and maintain a high standard of correctness; Right is Right (Lemov, 2010)
4. Normalize error; praise hard work and sound reasoning rather than correctness (Lemov, 2010)
5. Utilize encouraging language for high student engagement /achievement (Denton, 2007)


C. *Model dispositions/excitement for learning*
1. Infuse the hard work of learning with ample amounts of energy, fun, suspense, enthusiam & humor (Lemov, 2010)
2. Use positive and encouraging tones/language (Farr, 2010)
3. Utilize academic choice, an instructional approach that permits students to select from academic offerings to meet a learning goal (Rimm-Kaufmann, 2006)
4. Frame learning in positive terms; make no apologies for content (e.g. Sorry but we have to cover this)


D. *Support students' efforts as learners*
1. Provide visual representations of student progress/ i.e. progress trackers (Farr, 2010)
2. Utilize news and announcements a visual message written  daily by the teacher to the class (Kriete, 2002)
3. Celebrate learning through movement, song, cheers, visual representations, discussions, notes etc.


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**MANAGING THE CLASSROOM**

Definitions of classroom management vary in their complexity and expanse. Here we recognize a broad view of classroom management which includes "actions taken by the teacher to establish order, engaged students, or elicit their cooperation" in order to make learning possible (Emmer & Stough, 2001, p. 103). We recognize that this includes issues related to physical space, student movement, group management, and classroom relationships. We also agree with Brophy's (1982) assumption that "good classroom management implies good instruction" (p. 266). That is, classroom management and classroom instruction are inextricably linked and while we can (and do) identify specific strategies within each of these areas we recognize that in practice they must occur in tandem. Additionally, research suggests that preservice and practicing teachers recognize classroom management as a distinct body of knowledge needed for teaching (Fives & Buehl, 2008; Tschannen-Moran & Woolfolk-Hoy, 2001). Moreover, the goal of any classroom management strategy or technique is to increase opportunities for student learning. Classroom management alone is not sufficient but excellently planned lessons cannot be implemented without it. Teachers must be able to:

A. ***Organize classroom spaces (physical and virtual) to support learning goals.***
   1. Action zone (Good, 1983a; Lambert, 1994).
   2. Interest Areas (Morow & Weinstein, 1985).
   3. One-computer class (Ashmus, 2004).
   4. Multicomputer Classrooms (Burns, 2002).
   5. Mobile computing (Domine, 2009)
   6. Match the classroom space to the instructional goals (e.g. for cooperative work students should be able to face one another)

B. ***Establish and maintain developmentally and context appropriate routines for (1) administrative tasks, (2) student movement, (3) housekeeping, (4) accomplishing lessons, (5) student teacher interactions, and (6) student socializing*** (Weinstein2007; Weinstein & Mignano, 2007).
   1. Tight transitions (Lemov, 2010)
   2. Seat signals (Lemov, 2010)
   3. Do now (Lemov, 2010)

C. ***Establish classroom rules and consequences.***
   1. Classroom bill of rights (Weinstein & Mignano, 2007)
   2. Positive Rules (Bicard, 2000)

D. ***Enact practices to prevent off task behavior***. (Brophy, 1982; Emmer & Stough, 2001; Kounin, 1970)
   1. Withitness
   2. Overlapping
   3. Group focus
   4. Movement Management

E. ***Respond effectively to inappropriate behaviors***.
   A. Woolfolk (2010) reported seven techniques identified in the research literature (i.e., Levin & Nolan, 2000; Emmer & Evertson, 2009) for dealing with inappropriate student behavior:
      a. Eye contact
      b. Verbal hints
      c. Check for student awareness of behavior
      d. Rule reminder
      e. WDEP (Glasser, 1969) *What do you <u>want</u>? What are you <u>doing</u>? Will what you're doing get you what you want? (<u>e</u>valuation) Can we make a <u>plan</u> to get what you want?*
      f. Stop the behavior
      g. Offer a choice
   2. Check-In Procedure (MacKenzie, 1997)
   3. Cut-Off Technique (MacKenzie, 1997)
   4. Clean Slate Approach (MacKenzie,1997)


**CLASSROOM TEACHING PRACTICES**

Here we refer to the means by which teachers present content to their students—that is, *how* to teach. We recognize again the integration of this thread with planning and classroom management as parts of an integrated whole that comprises the practice of teaching. However, here we focus on the specific methods teachers enact during instructional time. Experts across content areas generally agree that no one approach to instruction is best for all students (Duffy & Hoffman, 1999; Pressley, 2006). Teachers must enter the profession, therefore, with beginning mastery of exemplary teaching techniques from a variety of instructional approaches - direct-explicit instruction, guided inquiry/constructivist approaches, and cooperative learning – and understand both the circumstances or goals to which each approach is best suited, and the role of motivation and effective scaffolding across all approaches.  Our definition of good teaching includes the ability to lead and organize productive discussions, a practice that is key to ensuring students' deep understanding of content (Saphier, Haley-Speca, & Gower, 2008; Lemov, 2010) and to fostering higher-order thinking  (RAND Reading Study Group, 2002). Teachers must learn questioning techniques that produce engaged, content-focused classroom conversations (Allington, 2002) and that move students from recall and comprehension of facts to critically

evaluating and being metacognitive about their own learning (Anderson & Krathwohl, 2001). The specific strategies we propose below will allow beginning teachers not only to use questioning as a form of on-going student assessment, but also to create a classroom where "problem-posing, problem-solving talk related to curricular topics" (Allington & Johnston, 2002; Johnston, Woodside-Jiron & Day, 2001) is the norm. To this end, teachers must be able to:

A. ***Motivate interest in learning: Get and keep students' attention***.
   1. Provide a short introductory "hook" that captures what is interesting or engaging about new content (Lemov's, 2010).
   2. Elicit prior knowledge about topic (Rumelhart, 1984)
   3. Connect to students' personal interests by linking content to students' cultures and/or out of school experiences (Goldenberg, 2008; Moll, L., Amanti, C., Neff, D. & Gonzalez, N. (1992).

B. ***Employ direct or explicit instructional techniques to scaffold student learning.***
   1. Gagné's 9 Instructional Events (Gagné & Briggs, 1979; Ertmer et al., 2003)
      a. Gain attention
      b. Inform learner of the objective
      c. Stimulate recall of prior learning
      d. Present stimulus material (new content)
      e. Provide learning guidance
      f. Elicit performance
      g. Provide feedback about performance correctness
      h. Assess the performance
      i. Enhance retention and transfer
   2. Gradual Release of Responsibility model (Pearson & Gallagher, 1983)
      a. Explicit description of a skill, strategy, concept or technology and when, how and why it should be used.
      b. Teacher demonstration/cognitive modeling of the skill, strategy or technology: Teacher uses think aloud procedure to reveal thought processes while demonstrating the skill or process students will be asked to use (Duke & Pearson, 2002).
      c. Shared demonstration
      d. Guided Practice with corrective feedback
      e. Independent Practice
   3. Ausubel's (1963) Expository Teaching
      a. Advance Organizer (activate prior knowledge; Verdi & Kulhavy, 2002)
      b. Present content (in as organized a fashion as possible)
      c. Relate back to organizer
   4. Observational Learning and worked examples (Shunk, 1991; Glover, Ronning & Bruning, 1990)

B. ***Lead and organize productive discussions*** (Bloom, 1973; Marzano, 2008).
   1. Explicitly teach and practice procedures for classroom discussion (Graves, Juel & Graves, 2007).

2. Introduce, visually post and practice use of discussion phrase-starters (e.g. I agree with x because..., In my opinion....Kinsella, Stump & Feldman, 2010).
3. Use Bloom's Taxonomy to develop a sequence of questions that move from simple to complex, literal to critical-interpretive (Anderson, L., & Krathwohl, D. 2001)
4. Ask students to reflect on a question in writing before discussing to enhance the quality of student thinking  (Lemov, 2010)
5. Use wait time to enhance quality of student responses (Rowe, 1986)
6. Probe/stretch student thinking by asking students to justify or elaborate on their own responses (Lemov, 2010)
7. Digital Reflection Technique (Ribble, 2004).
8. Reciprocal conversations: Encourage students to respond to, build upon, and question one another's responses (Vukelich, Christie & Enz, 2008; King, 1992; 1995; 2002)
9. Redirect conversation to keep student responses focused on instructional objective (Lemov, 2010)

**C. *Facilitate guided inquiry and problem based learning.***
1. Guided discovery learning (Bruner, 1961; Mayer, 2004)
2. Problem-based learning (Hmelo-Silver, 2004)

**E. *Implement a variety of cooperative learning techniques and manage student groups*** (see Johnson & Johnson, 1999; 2009; Kagan, 1989; O'Donnell & Kelly, 1994; Slavin, 1890; Slavin, 1996; for reviews and overviews of practices).
1. Reciprocal Peer Tutoring/Teaching (e.g., Menesses & Gresham, 2009; Palincsar & Brown, 1984)
2. Think-Pair-Share (e.g., Tyminski, Richarson, & Winarski, 2010)
3. Partner-reading/peer-assisted learning strategies (PALS; IES, 2007; Mathes et al, 2003).
4. Jigsaw I & II [e.g., Aronson, Blaney, Stephin, Sikes, & Snapp, 1978; Totten, 1995; Pozzi, 2010 (applied to online learning); Santos Rego & Lorenzo Moledo, 2005; Slavin, 1980; 1996].
5. Scripted Cooperation (Dansereau, 1988; O'Donnell, 1999; O'Donnell & Dansereau, 1992)
6. Reciprocal Peer Questioning/Question Stems (King, 1992; 1995; 2002)

**ASSESSING STUDENT LEARNING**

Assessment should be considered an integral aspect in the teaching-planning-learning cycle. Assessment is "the process of obtaining information that is used to make educational decisions about students, to give feedback to the student about his or her progress, strengths, and weaknesses, to judge instructional effectiveness and curricular adequacy, and to inform policy" (American Federation of Teachers, National Council of Measurement in Education, and National Association, 1990, p. 1). Therefore, assessment includes the related concepts of measurement (i.e., "the process of converting information into a numeric representation; it is the quantification of an educational event" Alexander, 2007, p. 297); evaluation (the process of making judgments or decisions about learners or teaching practices based on assessment practices); and tests (any sampling of human behavior including paper and pencil exams as well as other more authentic

tasks). Strategies for collecting, analyzing, and interpreting student data for teaching practice and evaluation purposes are necessary for practicing teachers. Teachers must be able to:

A. ***Engage in formative assessment practices to inform classroom instruction and facilitate student self-assessment and self-regulation*** (Tomlinson, 2007; Bambrick-Santoyo, 2007; Chappuls & Chappuls, 2007*)*

B. ***Prepare, analyze, and interpret summative assessments to provide valid evaluations of student progress***.

C. ***Construct meaningful assessments that match the identified learning goals and enacted instructional activities***.
   1. Test Construction using a Table of Specifications (Nortar, Zuelke, Wilson & Yunker, 2004; Gronlund, 2003).
   2. Guidelines for constructing multiple-choice items (see Haladyna, Dowing, & Rodriguez (2002).

D. ***Provide learners with meaningful, timely, appropriate feedback (oral and written) to facilitate learning goals*** (Hattie & Timperley, 2007; Shute, 2008).
   1. The use of formative feedback that is non evaluative, supportive, timely, and specific (Shute, 2008). Shute (2008) gives an extensive review of the nuances of formative feedback and concludes her work with guidelines for providing effective feedback for differing learners.
   2. Feedback Timing: feedback on process is best received immediately whereas feedback on skill or knowledge attainment is best with some delay (see Hattie & Timperly, 2007 for a review)

**CREATING & SUSTAINING EFFECTIVE PARTNERSHIPS**
Standard 10 in the Portrait of a Teacher addresses building relationships with colleagues, families, and agencies to support student learning and well being. To meet this standard, novice and seasoned educators need a repertoire of communication skills based on sound pedagogy. For example, the Northeast Foundation for Children uses a Responsive Classroom approach based on a philosophical orientation that enhances the building of partnerships with parents, families, colleagues, and students through the use of effective teacher language ( Denton, 2007), development of classroom community (Kriete, 2002) and an emphasis on social and emotional learning (Charney, 2002). Teachers must be able to:

A. ***Enhance parent partnerships***
   1. Track purpose and follow-up to support student learning in collaboration with parents through multiple modes (i.e., parent contact logs, conferences, emails, phone calls, progress reports, newsletters, and other communication technologies)
   2. Provide opportunities for parental involvement
      a. Request parental development of Hopes and Dreams for Child Responsive Classroom (Kreite, 2002)
      b. Utilize 'Good news' phone calls

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    c.  Online connections for homework, sharing of student work, information sharing, and communication (Hammond, Bransford, LePage, & Hammerness, 2007).

B. ***Collaborate with colleagues***
1. Partner with colleagues to enhance teacher performance via team projects and team meetings.
2. Use visitations to peers' classrooms as a means to reflect and dialogue on best practices (Clark, 2001).

C. ***Involve the community***
1. Align school structures to enhance community support from community volunteers, community organizations, universities, and parent-teacher associations


**CULTIVATING PROFESSIONALISM**

The cultivation of professionalism is ongoing, transformative, cumulative and inextricably connected to field experiences within formal teacher preparation. Our identification of specific skills and techniques for cultivating professionalism among teachers, is based on the assumption that teachers require long-term professional development that, in part, consists of "conversation-based" learning (Clark, 2001). Key components are reflective practice, seeking out opportunities for professional development, modeling oral, written and digital communication skills, and promoting civility and citizenship.  To these ends, Teachers must be able to:

**A.** ***Manage time productively outside the classroom***
1. Use organizational tools (e.g., seating charts, daily planners, gradebook programs)
2. Seek after professional development opportunities
    a.  Interact in both face to face and online contexts (ISTE, 2008)
    b.  Participate in local and global learning communities

**B.** ***Orally communicate in a clear, tactful and culturally responsive manner with students, parents, colleagues and community leaders.***
1. Use civil, professional and inclusive language with employers in the interview process, with colleagues in the workplace, with students in the classroom and with parents and community leaders
2. Oral "translation" techniques to navigate political, socio-economic, cultural differences among students, parents and colleagues (Cook-Sather, 2001).
3. Empathetic disposition (Darling-Hammond, 2000): Responding sensitively based on that individual's perspective rather than the teacher's own perspective.
4. Exhibit effective listening skills (e.g., active listening)
5. Use eye contact appropriately

**C.** ***Model effective and appropriate written communication***
1. Crafting test questions and writing prompts
2. Narrative reports of student progress
3. Letters/memos home to parents/guardians

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4. Expository writing skills (Wilder & Mongillo, 2007)
5. Online writing (Mitchell, 2003)

**D.** ***Model appropriate uses of educational technology*** (ISTE, 2008)
   1. Model collaborative knowledge construction by engaging in learning with students, colleagues and other in face-to-face and virtual environments.
   2. Model and facilitate effective use of current and emerging digital tools to locate, analyze, evaluate, and use information resources to support research and learning.

**E.** ***Act responsibly, ethically, and lawfully***
   1. Understand and abide by school/district policies & procedures
      a. Dress
      b. Physical appearance
      c. Legal issues (i.e. cyberbullying, child abuse, IEPs)
   2. Arrive to school on time
   3. Be prepared to teach
   4. Display collegiality
   5. Respect others opinions
   6. Maintain confidentiality
   7. Maintain accurate records
   8. Be receptive and responsive to suggestions.
   9. Participate in school events
   10. Practice digital citizenship and responsibility (ISTE, 2008)
      a. Advocate, model and teach safe, legal and ethical use of digital information and technology (i.e. respect for copyright, intellectual property, and appropriate documentation of resources)
      b. Promote and model digital etiquette and responsible social interactions

F. ***Engage in reflective practice*** (Hatton & Smith; Valli, 1997)
   1. Reflection-on-action (Reflect upon the process of their curriculum planning, development, implementation, and evaluating)
      a. Peer Classroom Observations
      b. Peer Interviewing
      c. Journaling/Writing (Ross, 1980)
      d. Critical friend dyads. Hatton & Smith (1995) define "critical friend" as involving reason giving for decisions or events which takes account of the broader historical, social, and/or political contexts.
      e. Action research
      f. Video recording and self-evaluation
      g. Case study method

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2. Reflection-in-action (Reflect while events are originally unfolding, so that teachers think about reasons for what is going on as it happens; Schon, 1983) (See Classroom Teaching Practices) (i.e., Team teaching, also called "Learning Teams.")
3. Use "Four Stage Technology Learning Framework" to establish norms of behavior with regard to technology use (Ribble & Bailey, 2004).With every technological act, teachers should themselves engage in the four-stages of questioning:
   a. Awareness (Knowledge of technology and how it effects others and myself)
   b. Understanding (Ability to grasp the uses of technology that are considered appropriate or inappropriate)
   c. Acting (Using technology in the most appropriate way with the information available)
   d. Deliberation (Thinking about how technology was used and determining if it was appropriate).

**TABLE 1. INTENTIONAL PEDAGOGY FRAMEWORK (IPF) PROGRAM POINTS**

The Sample Techniques in Column 3 are suggestive (not prescriptive) and illustrate how to achieve the Pedagogical Skills identified in the adjacent column. The techniques, skills and standards (POT) below are conceptually (as opposed to visually) aligned.

| Portrait of a Teacher *Institutional Standards* | Pedagogical Skills Planned Action *What practical skills all teachers should possess* | Sample Techniques Practical Moves *How teachers can enact these skills* | Program Points Specific Coursework *Where these techniques and skills can be: 1) introduced; 2) emphasized; and 3) achieved* | |
|---|---|---|---|---|
| | | | Undergraduate level | Graduate level |
| **1. PLANNING CURRICULUM** | | | | |
| Expert knowledge of the disciplines they will teach and can use various strategies for creating learning experiences that make the subject matter accessible and meaningful to all students (Standard 1)

Plan instruction based on a variety of factors (Standard 4) | • Identify and write learning goals and objectives related to content

• Plan and construct thoughtful assessments w/clear criteria.

• Plan a sequence of activities to accomplish goals and objectives.

• Differentiate instruction based on assessment data | • Backwards design
• Big picture
• Student contracts
• Big ideas
• Behavioral objectives
• Learning domains

• Criteria, exemplars, rubrics
• Double planning (T-chart)
• Pre-assess
• Assess during instruction
• Assess after instruction

• UbD
• Transformative learning
• Knowledge networks
• Selection criteria for learning activities
• Integrated curriculum
• Personalized contextual instruction
• Unit design
• Lesson design
• Integrated Curriculum

• Universal Design for Learning

• Assess student's current performance level

• Content, Process, Product | K-12 cert
  READ 411 (I )
  CURR 316 (E)
  CURR 314 (E)

  Methods Course (E)
  CURR 453 (A)

-----------------------------

P-3 cert
  READ 400 (I)
  ECEL 417 (I)
  ECEL 216 (I)
  ECEL 435 (E)
  ECEL 421 (A)

-----------------------------

K-5 cert
  READ 400 (I)
  ECEL 427 (I)
  ECEL 408 (I)
  ECEL 422 (E)
  ECEL 421 (A) | K-12 cert
  CURR 505 (I)
  CURR 518 (I)

  EDFD 519 (E)
  READ 501 (E)

  Methods Course (E)
  CURR 529 (A)

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P-3 cert
  READ 500 (I)
  MATH 577 (I)
  ECEL 516 (I)
  ECEL 517 (I)
  ECEL 528 (E)
  ECEL 504 (A)

-----------------------------

K-5 cert
  READ 500 (I)
  MATH 577 (I)
  ECEL 516 (I)
  ECEL 517 (I)
  ECEL 522 (E)
  ECEL 504 (A) |

| Portrait of a Teacher<br>*Institutional Standards* | Pedagogical Skills<br>Planned Action<br>*What practical skills all teachers should possess* | Sample Techniques<br>Practical Moves<br>*How teachers can enact these skills* | Program Points<br>Specific Coursework<br>*Where these techniques and skills can be:<br>1) introduced; 2) emphasized; and 3) achieved* | |
|---|---|---|---|---|
| | | | Undergraduate level | Graduate level |
| **2. CREATING A COMMUNITY OF LEARNERS** | | | | |
| Understand the practice of culturally responsive teaching. . . use knowledge of students and their lives to design and carry out instruction that builds on students' strengths (Standard 3)<br><br>Understand principles of democracy and plan and carry out instruction that promotes democratic values and communication in the classroom (Standard 6)<br><br>Create a community in the classroom that is nurturing, caring, safe, and conducive to learning (Standard 8) | • Build and maintain trusting relationships with students<br><br>• Create a classroom climate of learning and achievement<br><br>• Model dispositions/excitement for learning<br><br>• Support students' efforts as learners | • Responsive Classroom Approach/Circle of Respect<br><br>• Survey students' background and interests<br><br>• Utilize positive language<br><br>• Acknowledge and greet students on a daily basis<br><br>• Utilize academic choice to support student autonomy | K-12 cert:<br>  EDFD 221 (I)<br>  CURR 210 (I)<br><br>  CURR 305 (E)<br>  CURR 310 (E)<br>  CURR 312 (E)<br><br>  CURR 451 (A)<br>---------------------------<br><br>P-3 and K-5 certs:<br>  READ 400 (I)<br>  ECEL 412 (E)<br>  ECEL 421 (A) | K-12 cert:<br>  CURR 505 (I)<br><br>  CURR 509 (E)<br>  CURR 516 (E)<br>  CURR 517 (E)<br><br>  CURR 526 (A)<br>-----------------------<br><br>P-3 and K-5 certs:<br>  READ 500 (I)<br>  ECEL 502 (E)<br>  ECEL504 (A) |

| Portrait of a Teacher<br>*Institutional Standards* | Pedagogical Skills<br>Planned Action<br>*What practical skills all teachers should possess* | Sample Techniques<br>Practical Moves<br>*How teachers can enact these skills* | Program Points<br>Specific Coursework<br>*Where these techniques and skills can be:*<br>*1) introduced; 2) emphasized; and 3) achieved* | |
|---|---|---|---|---|
| | | | Undergraduate level | Graduate level |
| **3. MANAGING THE CLASSROOM** | | | | |
| Understand how children develop in a variety of school, family and community contexts, and can provide learning opportunities that support their students' development. (Standard 2)<br><br>Understand the practice of culturally responsive teaching. . . use knowledge of students and their lives to design and carry out instruction that builds on students' strengths (Standard 3)<br><br>Create a community in the classroom that is nurturing, caring, safe, and conducive to learning. (Standard 8) | • Organize classroom spaces (physical and virtual) space to support learning goals | • Action Zones<br>• Interest Areas<br>• One-computer class<br>• Multi-computer classrooms | K-12 cert:<br>  EDFD 200 (I)<br>  CURR 316 (I)<br>  Methods course (E)<br>  CURR 310(E)<br>  CURR 312 (E)<br>  CURR 450/451 (E)<br>  CURR 452/453 (A)<br>--------------------------<br><br>P-3 cert:<br>  READ 400 (I)<br>  ECEL 435 & 410 (E)<br>  ECEL 414 & 421 (A)<br>--------------------------<br><br>K-5 cert:<br>  READ 400 (I)<br><br>ECEL 422 & 410 (E)<br>ECEL 414 & 421 (A) | K-12 cert:<br>  CURR 518 (I)<br>  Methods course (E)<br>  CURR 516 (E)<br>  CURR 517 (E)<br>  CURR 529 (A)<br>  CURR 543 (A)<br>------------------------<br>P-3 cert:<br>  READ 500 (I)<br>  ECEL 528 & 510 (E)<br>  ECEL 511/514 and 504 (A)<br>------------------------<br><br>K-5 cert:<br>  READ 500 (I)<br>  ECEL 522 & 510 (E)<br>  ECEL 511/514 & 504 (A) |
| | • Establish and maintain developmentally and context appropriate routines | • Tight Transitions (Lemov)<br>• Seat Signals (Lemov)<br>• Do Now (Lemov) | | |
| | • Establish classroom rules and consequences | • Classroom bill of rights<br>• Positive Rules | | |
| | • Enact practices to prevent off task behavior | • Withitness<br>• Overlapping<br>• Group Focus<br>• Movement management | | |
| | • Respond effectively to inappropriate behaviors. | • 7 Techniques<br>  o Eye contact<br>  o Verbal hints<br>  o Check for student awareness<br>  o Rule reminder<br>  o WDEP<br>  o Stop the behavior<br>  o Offer a choice<br>• Check-in Procedure<br>• Cut-off Technique<br>• Clean Slate Approach | | |

| Portrait of a Teacher<br>*Institutional Standards* | Pedagogical Skills<br>Planned Action<br>*What practical skills all teachers should possess* | Sample Techniques<br>Practical Moves<br>*How teachers can enact these skills* | Program Points<br>Specific Coursework<br>*Where these techniques and skills can be: 1) introduced; 2) emphasized; and 3) achieved* | |
|---|---|---|---|---|
| | | | Undergraduate level | Graduate level |
| **4. CLASSROOM TEACHING PRACTICES** | | | | |
| Have expert knowledge of the disciplines they will teach and can use various strategies, including media and technology, for creating learning experiences that make the subject matter accessible and meaningful to all students (Standard 1)<br><br>Understand how students learn and develop and can provide learning opportunities that support their development (Standard 2) | • Motivate learning: Get and keep students' attention | • Introductory "hook<br>• Elicit prior knowledge<br>• Link to student interests & experiences | K-12 cert:<br>  EDFD 200 (I)<br>  READ 411 (I)<br>  CURR 316 (I)<br>CURR 305/310/312 (E)<br>  Methods course (E)<br>  CURR 450/451 (E)<br>  CURR 452/453 (A)<br><br>P-3 and K-5 certs:<br>  READ 400 (I)<br>  ECEL 412 (E)<br>  ECEL 414 & 421 (A) | K-12 cert:<br>  ELRS 580 (I)<br>  CURR 505 (I)<br>  CURR 518 (I)<br>  CURR 509/516/517 (E)<br>  Methods course (E)<br>  CURR 529 (A)<br>  CURR 543 (A)<br><br>P-3 and K-5 certs:<br>  READ 500<br>  ECEL 412 (E)<br>  ECEL 511 or 514 & 504 (A) |
| | • Employ direct or explicit instructional techniques to scaffold student learning | • Gagné's Instructional Events<br>• Gradual Release of Responsibility model<br>• Expository Teaching<br>• Observational Learning<br>• Worked Examples | K-12 cert:<br>  EDFD 200 (I)<br>  Methods course (E)<br>  CURR 450/451 (E)<br>  CURR 452/453 (A)<br><br>P-3 and K-5 certs:<br>  READ 400 (I)<br>  ECEL 417 (I)<br>  ECEL 412 (E)<br>  ECEL 414 & 421(A) | K-12 cert:<br>  ELRS 580 (I)<br>  Methods course (E)<br>  CURR 529 (A)<br>  CURR 543 (A)<br><br>P-3 and K-5 certs:<br>  READ 500 (I)<br>  MATH 577 (I)<br>  ECEL 412 (E)<br>  ECEL 511 or 514 & 504 (A) |

| Portrait of a Teacher<br>*Institutional Standards* | Pedagogical Skills<br>Planned Action<br>*What practical skills all teachers should possess* | Sample Techniques<br>Practical Moves<br>*How teachers can enact these skills* | Program Points<br>Specific Coursework<br>*Where these techniques and skills can be:*<br>*1) introduced; 2) emphasized; and 3) achieved* | |
|---|---|---|---|---|
| | | | Undergraduate level | Graduate level |
| Have expert knowledge of the disciplines they will teach and can use various strategies, including media and technology, for creating learning experiences that make the subject matter accessible and meaningful to all | • Lead and organize productive discussions | • Teach discussion procedures<br>• Practice/post discussion phrase-starters<br>• Sequence questions using Bloom's Taxonomy<br>• Quick-write before discussion<br>• Wait time<br>• Probe and stretch student thinking<br>• Digital Reflection Technique<br>• Reciprocal conversations<br>• Redirect back to objective | K-12 cert:<br>  EDFD 220 (I)<br>  CURR 316 (E)<br>  Methods course (E)<br>  CURR 450/451 (E)<br>  CURR 452/453 (A)<br><br>P-3 and K-5 certs:<br>  READ 400 (I)<br>  ECEL 435 (E)<br>  ECEL 414 & 421(A) | K-12 cert:<br>  ELRS 580 (I)<br>  CURR 518 (E)<br>  Methods course (E)<br>  CURR 529 (E)<br>  CURR 543 (A)<br><br>P-3 and K-5 certs:<br>  READ 500 (I)<br>  ECEL 412 (E)<br>  ECEL 511 or 514 & 504 (A) |

| Portrait of a Teacher<br>*Institutional Standards* | Pedagogical Skills<br>Planned Action<br>*What practical skills all teachers should possess* | Sample Techniques<br>Practical Moves<br>*How teachers can enact these skills* | Program Points<br>Specific Coursework<br>*Where these techniques and skills can be: 1) introduced; 2) emphasized; and 3) achieved* | |
|---|---|---|---|---|
| | | | Undergraduate  level | Graduate  level |
| students (Standard 1)<br><br>Understand how students learn and develop and can provide learning opportunities that support their development (Standard 2) | • Facilitate guided inquiry and problem based learning. | • Guided Discovery<br>• Problem based learning | K-12 cert:<br>  EDFD 200 (I)<br>  Methods course (E)<br>  CURR 450/451 (E)<br>  CURR 452/453 (A)<br>P-3 and K-5 certs:<br>  READ 400 (I)<br>  ECEL 435 (E)<br>  ECEL 414 & 421(A) | K-12 cert:<br>  ELRS 580 (I)<br>  Methods course (E)<br>  CURR 529 (E)<br>  CURR 543 (A)<br>P-3 and K-5 certs:<br>  READ 500 (I)<br>  ECEL 412 (E)<br>  ECEL 511/ 514 & 504 (A) |
| | • Implement a variety of cooperative learning techniques to facilitate student learning and manage student groups. | • Reciprocal Peer Tutoring/Teaching<br>• Think-Pair-Share<br>• Partner-reading/peer-assisted learning strategies<br>• Jigsaw I & II<br>• Scripted Cooperation<br>• Reciprocal Peer Questioning/Question Stems | K-12 cert:<br>  EDFD 200 (I)<br>  Methods course (E)<br>  CURR 450/451 (E)<br>  CURR 452/453 (A)<br><br>P-3 and K-5 certs:<br>  READ 400 (I)<br>  ECEL 435 (E)<br>  ECEL 414 & 421(A) | K-12 cert:<br>  ELRS 580 (I)<br>  Methods course (E)<br>  CURR 529 (E)<br>  CURR 543 (A)<br><br>P-3 and K-5 certs:<br>  READ 500 (I)<br>  ECEL 412 (E)<br>  ECEL 511/ 514 & 504 (A) |

| Portrait of a Teacher<br>*Institutional Standards* | Pedagogical Skills<br>Planned Action<br>*What practical skills all teachers should possess* | Sample Techniques<br>Practical Moves<br>*How teachers can enact these skills* | Program Points<br>Specific Coursework<br>*Where these techniques and skills can be: 1) introduced; 2) emphasized; and 3) achieved* | |
|---|---|---|---|---|
| | | | Undergraduate level | Graduate level |
| **5. ASSESSING STUDENT LEARNING** | | | | |
| Understand and use multiple forms of assessment to promote the intellectual, social, and physical development of learners and to inform instruction (Standard 7) | • Engage in formative assessment practices to inform classroom instruction and facilitate student self-assessment and self-regulation<br>• Prepare, analyze, and interpret summative assessments to provide valid evaluations of student progress.<br>• Construct meaningful assessments that match the identified learning goals and enacted instructional activities.<br>• Provide learners with meaningful, appropriate feedback to facilitate learning goals | • Running Records<br>• Table of specifications<br>• Multiple-choice guidelines<br>• Formative feedback guidelines | K-12 cert:<br>  READ 411 (I)<br>  CURR 314 (E)<br>  Methods course (E)<br>  CURR 450/451 (E)<br>  CURR 452/453 (A)<br><br><br>P-3 and K-5 certs:<br>  READ 400 (I)<br>  ECEL 417/427 (I)<br>  ECEL 422 & 435 (E)<br>  ECEL 414 (A) | K-12 cert:<br>  ELRS 580 (I)<br>  CURR 519 (E)<br>  Methods course (E)<br>  CURR 529 (E)<br>  CURR 543 (A)<br><br><br>P-3 and K-5 certs:<br>  READ 500 (I)<br>  MATH 577 (I)<br>  ECEL 517 (I)<br>  ECEL 528 (E)<br>  ECEL 511/514 (A) |

| Portrait of a Teacher<br>*Institutional Standards* | Pedagogical Skills<br>Planned Action<br>*What practical skills all teachers should possess* | Sample Techniques<br>Practical Moves<br>*How teachers can enact these skills* | Program Points<br>Specific Coursework<br>*Where these techniques and skills can be: 1) introduced; 2) emphasized; and 3) achieved* | |
|---|---|---|---|---|
| | | | Undergraduate level | Graduate level |
| **6. CREATING & SUSTAINING EFFECTIVE PARTNERSHIPS** | | | | |
| Build relationships with school colleagues, families, and agencies in the community to support students' learning and well-being, and work to foster an appreciation of diversity among students and colleagues. (Standard 10) | • Enhance parent partnerships<br><br>• Collaborate with colleagues<br><br>• Involve the community | • Collaborate with parents through multiple modes<br><br>• Provide opportunities for parental involvement<br><br>• Partner w/colleagues via team projects and meetings<br><br>• Peer classroom visits<br><br>• Align school structures to enhance community support from community volunteers, organizations, universities and parent-teacher associations<br><br>• Team Teaching | K-12 cert:<br>  CURR 210 (I)<br>  READ 411 (E)<br>  CURR 316 (E)<br>  CURR 305/310/312 (E)<br><br>  CURR 450/451 (E)<br>  CURR 452/453 (A)<br>--------------------------<br><br>P-3 and K-5 certs:<br>  FCST 518 (I)<br>  ECEL 420 (I)<br>  ECEL 412 (E) | K-12 cert:<br>  CURR 505 (I)<br>  CURR 518 (I)<br>  CURR 509/516/517 (E)<br><br><br>  CURR 526/527 (E)<br>  CURR 529/543(A)<br><br>--------------------------<br><br>P-3 and K-5 certs:<br>  ECEL 518/508 (I)<br>  ECEL 502 (E) |

| Portrait of a Teacher<br>*Institutional Standards* | Pedagogical Skills<br>Planned Action<br>*What practical skills all teachers should possess* | Sample Techniques<br>Practical Moves<br>*How teachers can enact these skills* | Program Points<br>Specific Coursework<br>*Where these techniques and skills can be:*<br>*1) introduced; 2) emphasized; and 3) achieved* | |
|---|---|---|---|---|
| | | | Undergraduate level | Graduate level |
| **7. CULTIVATING PROFESSIONALISM** | | | | |
| Possess the literacy skills associated with an educated person; can speak and write English fluently and communicate clearly (Standard 11)<br><br>Develop dispositions expected of professional educators. (Standard 12) | • Manage time productively outside the classroom<br><br>• Orally communicate in a clear, tactful and culturally responsive manner with students, parents, colleagues and community leaders.<br><br><br><br><br>• Model effective and appropriate written communication<br><br><br>• Model appropriate uses of educational technology (NETS-T)<br><br><br>• Act responsibly, ethically and lawfully | • Use organizational tools<br>• Seek after PD opportunities (both online and face to face)<br><br>• Use civil, professional and inclusive language<br>• Oral "translation" techniques to navigate differences<br>• Empathetic disposition<br>• Exhibit effective listening skills<br>• Use eye contact appropriately<br>• Exhibit effective listening skills (i.e., active listening)<br><br><br>• Crafting test questions & writing prompts<br>• Narrative reports of student progress<br>• Letters/memos home to parents/guardians<br>• Expository writing skills<br>• Online writing<br><br><br>• Understand and abide by school/district policies & procedures (e.g., dress, physical appearance, child abuse, IEPs) | K-12 cert:<br>  CURR 210 (I/E)<br>  CURR 316 (E)<br><br>  CURR 450/451 (E)<br>  CURR 452/453 (A)<br><br>---------------------------<br><br><br>P-3 and K-5 certs:<br>  ECEL 412 (I)<br>  ECEL 414 and 421 (E) | K-12 cert:<br>  CURR 505 (I)<br>  CURR 518 (I)<br><br>  CURR 526/527 (E)<br>  CURR 529/543(A)<br><br>-----------------------<br><br><br>P-3 and K-5 certs:<br>  ECEL 502 (I)<br>  ECEL 511 or 514 & 504 (E) |

| Portrait of a Teacher _Institutional Standards_ | Pedagogical Skills Planned Action _What practical skills all teachers should possess_ | Sample Techniques Practical Moves _How teachers can enact these skills_ | Program Points Specific Coursework _Where these techniques and skills can be: 1) introduced; 2) emphasized; and 3) achieved_ | |
|---|---|---|---|---|
| | | | Undergraduate level | Graduate level |
| Develop dispositions expected of professional educators. (Standard 12)<br><br><br>Are reflective practitioners who continually inquire into the nature of teaching and learning, reflect on their own learning and professional practice, evaluate the effects of their choices and actions on others, and seek out opportunities to grow professionally (Standard 10) | • Engage in reflective practice | • Arrive to school on time<br>• Be prepared to teach<br>• Display collegiality<br>• Respect other opinions<br>• Maintain confidentiality<br>• Maintain accurate records<br>• Be receptive and responsive to suggestions.<br>• Participate in school events<br><br>• Peer Observation<br>• Journaling/Writing<br>• Critical friend dyads<br>• Action research<br>• Video recording and self-evaluation<br>• Case study method<br>• 4-Stage Technology Learning Framework | K-12 cert:<br>  CURR 210 (I/E)<br>  CURR 316 (E)<br><br>  CURR 450/451 (E)<br>  CURR 452/453 (A)<br><br>---------------------------<br><br>P-3 and K-5 certs:<br>  ECEL 412 (I)<br>  ECEL 414 and 421 (E) | K-12 cert:<br>  CURR 505 (I)<br>  CURR 518 (I)<br><br>  CURR 526/527 (E)<br>  CURR 529/543(A)<br><br>-----------------------<br><br>P-3 and K-5 certs:<br>  ECEL 502 (I)<br>  ECEL 511 or 514 & 504 (E) |

**V. Emergent Findings**

Several key findings emerged from this process of research and deliberation. These findings are both descriptive and interpretive in their implications for our teacher education programs.

*There is a severe lack of evidence-based research to support the efficacy of teaching skills and techniques.*

An emergent constraint of this project is what we found to be significant gaps in the literature within teacher education—specifically, the lack of evidence-based research to support or nullify the efficacy of specific teaching techniques. For example, there is substantial research on teaching practices (e.g., cooperative learning, direct instruction) with specific techniques identified and tested (e.g., jigsaw; instructional events) however, in the areas of building classroom community and assessment much of the published work is based on theory or common practices rather than empirical findings (e.g., Halaydna et al., 2004). Thus, there is variation in the number and depth of techniques we could recommend with valid empirical support. Given these limitations, we acknowledge that this document is merely a starting point for deeper conversation among CEHS faculty and our colleagues across the university and in our partner schools about the skills and strategies future teachers need to be successful practitioners.

*A direct or explicit instructional approach is crucial to a skillful pedagogy.*

Through this process we have found it particularly crucial that our teaching candidates have repeated opportunities to plan and implement lessons using a direct or explicit instruction approach that includes clear explanation, demonstration and guided practice in skills and cognitive processes. Direct instruction is arguably the most reliably effective core teaching approach across content areas (Goeke, 2008, Allington, 2002, Duke & Pressley, 2002) and one that is widely neglected in schools, to the particular detriment of children at risk for academic underachievement (Allington, 2002). At the same time, we recognize that "explicitness" is essential to the effectiveness of most forms of instruction, regardless of the particular pedagogical orientation. We understand explicitness not to mean telling students *what* to think, but rather, making clear and visible for students the language, behaviors, thinking processes, procedural steps, and/or expected products or outcomes that characterize student mastery. Whether introducing procedures for passing out papers, teaching the steps in a science experiment, or preparing students to discuss a novel in cooperative groups, teachers will find that making expectations for participation in each task explicit pays a great dividend in terms of available teaching time and student success.

*The IPF skills are interdependent and interconnected.*

Some IPF skills are pre-requisite to others (i.e., unit planning); some are sequential and/or cyclical (i.e., planning, instruction, assessment); and others are cumulative across students' programmatic experience and beyond (i.e. professionalism). Some IPF skills are assessed once and others are assessed multiple times across a programmatic sequence. We acknowledge this complexity to punctuate further discussion about where IPF skills might be formally and informally introduced, emphasized and achieved across existing course-specific performance assessments.

*Introducing the IPF in pre-requisite coursework is essential to achieving mastery of these pedagogical skills and techniques further along in the professional sequence.*

Teacher education candidates come to operationalize the principles in the *Portrait of a Teacher* through observation (in the field) and inquiry (in their coursework progression) . The four pre-requisite courses (i.e., *Pyschological Foundations, Historical Foundations, Philosophical Orientation,* and *Public Purposes of Education*) can and should play a more integral role in this process. For example, a Responsive Classroom Approach is one exemplar technique to support creating a community of learners (See Table 1). One possible integration thread is to *introduce* RCA (explicitly and/or through modeling) in CURR/EDFD 210 and EDFD 221 and then later *emphasize* it in the professional sequence co-requisites CURR 305/310/312—to ultimately reach *achievement* in CURR 451/526 (and evaluated by the existing course-embedded assessment). It is worth noting that the 4 one-credit course modules (K-12 certification) in assessment, technology integration, inclusion and educating English language learners provide a practical space for emphasizing IPF skills and techniques while also magnifying co-requisite course content. Identifying points of IPF emphasis in the methods courses and advanced fieldwork are also essential to the systematic introduction, emphasis and mastery of these core skills. We encourage further dialogue among course coordinators and across content area and education faculty to thread the IPF throughout existing courses and course-embedded assessments.

## VI. Work Group Participants

The Systematic Pedagogy Work Group is a combined effort of a distinguished group of educational leaders representing various stakeholder groups and perspectives within teacher education at Montclair State University:

**Vanessa Domine** is an Associate Professor in Curriculum and Teaching at Montclair State University in New Jersey. Her research focus is media and technology literacy among young people and democratic practices in education. She is the author of *Rethinking Technology in Schools* (Peter Lang, 2009) and serves on the Board of Directors of the National Association for Media Literacy Education (NAMLE).

**Helenrose Fives** is an Associate Professor in Educational Foundations at Montclair State Univeristy in New Jersey.  Her research interests lie at the intersection of learning and teaching, with a particular emphasis on the learning of how to teach. Dr. Fives has received awards for her scholarship from the American Educational Research Association, Division C and the Southwest Educational Research Association.

**Fran Greb** is an Associate Professor in the Early Childhood, Elementary and Literacy Education Department at Montclair State University with more than twenty-five (25) years of teaching experience in special and general education settings. Her research at MSU focuses on working with partner schools. She is a founding member of the National Association for Professional Development Schools

**Margaret Freedson** is an Assistant Professor in Early Childhood, Elementary and Literacy Education at Montclair State University and a Research Fellow at the National Institute for Early Education Research at Rutgers University. Her current research focuses on bilingual early literacy development and preschool teaching practices that support the kindergarten readiness of Spanish-speaking English language learners.

**Cheryl Hopper** is the director of the Montclair State University Network for Educational Renewal, a partnership between MSU and 28 public school districts. In this role, she creates professional development opportunities for public school administrators and teachers. Before working at Montclair State, she was a Social Studies teacher at Paramus High School and Montclair High School.

**Caren Verde** is a clinical faculty member in Curriculum and Teaching at Montclair State University in New Jersey. She currently works as an administrator in the Newark Public Schools.  She served as an assessor of newly appointed administrators where her role was to provide feedback and rate administrators for the State of New Jersey.

VII. BIBLIOGRAPHY

The bibliography is organized according to each of the seven areas that comprise the IPF and serves as a starting point for teacher education faculty, school partners, program candidates and other stakeholders in moving towards a pedagogy that is more systematic, rigorous and praxis-oriented.

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