Exploring the Theory-Practice Relationship in Educational Leadership Curriculum Though Metaphor

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A team of curricular leadership pedagogues report the experience of studying their own classroom practice as they engaged educational leadership (EDL) students in sustained, reflective inquiry for the related purposes of clarifying their own meaning systems and experiencing self-empowerment. This descriptive, exploratory qualitative study encouraged students to inquire into and develop metaphorical images that reveal fundamental complexities and challenges of the theory–practice relationship. The areas of theory and practice, metaphor, and reflection are reviewed and workshop design and collaborative activities, including Blackboard and metaphoric displays, are described. Students defined *theory* and *practice*, used a binocular/integration metaphor to describe the theory–practice relationship, applied an architect/builder metaphor to accomplish this end, and created a metaphor of their own. Three patterns emerged from the data: (a) regarding the relationship between theory and practice, discourse connotes separation, interaction, or integration; (b) communication between practitioners and theorists is rooted in authority, distance, and difference; and (c) while power must be equal for focus and balance to occur, disequilibrium characterizes many teacher contexts.

As curriculum leadership pedagogues, we prepare experienced teachers to be reflective school leaders. Consistent with contemporary studies of the educational leadership curriculum, we envision such individuals as democratic, critically thinking, team-oriented professionals adept at using theory to improve practice (e.g., Horn, 2002; Jenlink, 2002; Lortie, 1998). For this case study, we expanded our approach to engage educational leadership (EDL) students in a process that would involve them in exploring the fundamental relationship of theory to practice for the related purposes of clarifying their own meaning systems and experiencing self-empowerment.

This discussion is framed by these research questions: (a) How does the concept of metaphor help EDL students grapple with the theory–practice relationship? (b) What effect does a series of reflective workshop exercises have on EDL students' ideas of theory and practice? (c) What evidence suggests that metaphors enable reasoning, promote reflection, and inform action?

At least two assumptions underlie the use of metaphors as a pedagogical approach to educational study. First, metaphorical images provide an organizational framework for expanding understanding and reflective inquiry of complex concepts (Gentner & Gentner, 1983; Lakoff & Johnson, 1980). Second, metaphorical pedagogy facilitates the concept of reflection for producing insight into human experience that shapes future actions (Schön, 1987). This model supports metaphorical concept clarification as well as informs decision-making and action.

Conceptual Frameworks

Theory and Practice

While theory and practice have been considered integrated parts of a whole, many practitioners and scholars experience these as separate worlds. Consider that Schwab (1969/2004) identified *theory* as a "structure of knowledge" that "abstracts a general or ideal case" (p. 109). It is associated with models, metatheory, and even metametatheory, as well as organizing principles, including conceptual schemes and methods (p. 107), which some see as fixed and hence limiting. On the other hand, practice is viewed as action that "treats real things: real acts, real teachers, real children, things richer and different from their theoretical representations" (p. 110). With this categorization in mind, it is easy to see that theory and practice, when viewed as separate forms of understanding, have become differentiated as lenses for viewing issues in education.

Criticism in the fields of curriculum studies and educational leadership draws attention to the schism that exists between theory and practice (and theoreticians and practitioners), as well as the pressing need for mending (e.g., Horn, 2002; Jenlink, 2002; Jipson & Paley, 1997; Mullen, 2003). For decades, educational leadership programs have been faulted for perpetuating the schism by failing to teach practical ideas for "solving real problems in the field" to aspiring administrators (Murphy & Forsyth, 1999, p. 15). Lortie (1998) attests that practice involving field-based conceptual and social skills – such as interpreting school data, reporting results, and making informed decisions – is critical to the work of school leaders.

Yet in leadership programs such proficiencies tend to be bypassed in favor of theory, particularly in the form of abstract principles of learning, supervision, organization, and so forth.

In leadership studies, Jenlink (2002) and Horn (2002) are among those researchers who are leading efforts to bring theory and practice, theoreticians and practitioners, into a new relationship. The challenge to the professorate is to test theory against practice and to include the practitioner as partners in theory development, which this pedagogical intervention attempted to do. Horn (e.g., 2002) urges that an overarching purpose for education today should be to overcome the "theory/practice binary" that obstructs authentic and deeper relations among schools, universities, and communities. We join Horn in his plea for addressing existing cultural schisms, which specifically highlights "the importance of conversation" for "bringing assumptions into the open" (p. 92). We also reinforce Jenlink's (2002) view that scholar-practitioner leaders should use different disciplinary frameworks (e.g., politics, sociology) for engaging in the theory/practice relationship and for "mediat[ing] dominant ideologies" (p. 3).

Among other critical curriculum theorists including ourselves, English (2003), Kincheloe (2004), and Pinar (1978/2004) concur that teacher researchers can become reflexively aware when they consciously abandon the "'technician's mentality'" (Pinar, p. 154) that reproduces the modernist mindset. Restrictive paradigms that underscore "the way" to thinking about problems and solutions essentially discredit the capacity of practitioners to perform as potentially influential inquirers and change agents. Instead, they are being encouraged to commit to liberatory projects that empower themselves, other practitioners, and, perhaps most importantly, their students. On a larger scale, such individuals identified by Pinar (1978/2004) as "reconceptualists" are concerned with significant sociocultural and political issues, not isolated problems that are easily remedied – similarly, the reconceptualist movement in the curriculum field is concerned with "what curriculum is, how it functions, and how it might function in emancipatory ways" (Pinar, 1978/2004, p. 154).

Through such processes, differences in views, values, and priorities can be aired in the classroom that could, in effect, help mend the theory/practice gap by exposing opportunities for renewal and recovery. At the same time, a prospective leader who gravitates toward inquiry will use theory to guide his or her practical knowing and will also see the possibilities and the limitations of theory in practice.

Metaphor and Possibility

Metaphor can be used to capture a flexible, creative, and analytic form of integration in educational theory and practice, as well as in thought and action. Ivie (2003) sees *metaphor* as the use of a word, phrase, or image in place of another to imply a likeness or comparison. From a cognitive psychological perspective, researchers (Gentner, Bowdle, Wolff, & Boronat, 2001; Gentner & Gentner, 1983) have suggested that metaphor facilitates comprehension and relational knowing.

Lakoff and Johnson (1985) posit that metaphorical mappings, such as "life as a journey," refer to the intricate structures of our language systems. Gibbs (1987) also asserts that "metaphors do not necessarily express a single proposition but are often seen as being 'pregnant' with numerous interpretations" (p. 31). Importantly, alternative meanings can all be "equally plausible."

For our graduate pedagogical intervention, we embraced Anna Craft's postmodern construct of "possibility thinking" that reminds us of Gibbs's (1987) ideas. Possibility thinking views problem solving as a puzzle, where one seeks "alternative routes to a barrier," poses "questions," and identifies "problems and issues" (as cited in Jeffrey & Craft, 2004, pp. 81–82). Relative to educational leadership, we support such postmodern efforts for moving beyond technical or efficiency metaphors to reinvent how we think, act, and create. The technical metaphors of teaching and learning that prevail in our discipline do not necessarily facilitate reflection and inquiry. Postmodernist researchers in educational leadership and administration (see English, 2003; Horn, 2002; Jenlink, 2002; Mullen & Fauske, in press) strongly believe that new metaphors that promote critical thought are needed for aiding scholar-practitioner leaders in breakthrough discoveries that stem from deep reflection and "out-of-the-box" thinking. Leader (teacher, principal, or academic) as scholar practitioner is one such metaphor, in that on the surface it may seem oxymoronic to posit a view of the world and person that combines and essentially integrates two opposites – theory and practice.

Reflection and Inquiry

For this classroom intervention, we approached reflection as a study of theory and practice using metaphor as a conceptual–aesthetic tool for recursive engagement. Schön refers to the phenomenon of engagement as "a reflective conversation with the materials of a situation" (p. 42). When unleashing the reflective practitioner concept onto the world of professional education, he uses exemplars from architecture and the arts. Architects, as designers, deal

with form and functionality to bring stylistic intentions into reality. In the process of construction, however, they are confronted by unforeseen variables and restrictions that require a reconstruction of the initial intention.

In practice, the builder constructs each of the different systems in a structure to generate the architect's design from the ground up. Materials and technologies in the hands of skilled artisans come together to transform idealized visions into functional buildings. However, the architect may not always see the constraints of the site or building medium, while builders, as skilled practitioners, will likely be more aware of physical obstacles to the architect's plan. Through this dialectical process of moving from design to problem then back to design, the practitioner's realizations are discovered in action. With the architectural metaphor, the design and product evolve simultaneously, whereas in the midst of action practitioners not only invent new theories of action but also modify or eliminate old strategies.

Using reflective "conversation" as a strategy for exploration in addition to "leadership activity" (Horn, 2002, p. 83), then, we facilitated a classroom intervention involving school-based scholar practitioners.

Binocular Vision

The new concept of *binocular vision* links theory and practice, metaphor and possibility, and reflection and inquiry – the various parts of our conceptual framework. Mullen's (2004) coinage refers to a form of visual intelligence, acknowledging cognitive scientist Hoffman's (1998) notion that we all have a gift of perception and use it everyday. As Mullen explains, "Binoculars have two glass lenses contained by a frame" and, because the lenses are "functionally connected as part of a larger system, the *binocular* system is conceptually integrated" (p. 15). She expands with a theory–practice activity for student groups:

> Picture two lenses, one called "theory" and the other "practice," neither contained by a frame. Look through each lens separately, concentrate for a few minutes, and then jot down what you have observed. For example, I imagined moral leadership … for the "T" lens, and for the "P" lens I recalled a grave but hopeful situation involving a low-performing school in Alabama. (p. 15)

Mullen then asks, "What might we infer from this experiment?," speculating that the "lenses" of theory and practice (T and P, respectively) are part of a whole. The binocular system similarly represents "the administrative leadership field wherein theory and practice already naturally occur" (p. 16).

Graduate Classroom Setting

This qualitative inquiry occurred throughout the fall semester of 2004 at a public doctoral/research extensive university in the southeastern United States. Carol, Bobbie, and Darlene, female faculty in an educational leadership and policy studies program, collaboratively planned and analyzed the pedagogical activities. The actual activity occurred within a master's course, Foundations of Curriculum and Instruction. During a 6-week workshop, 21 master's students were exposed to reflective learning and in-depth dialogue.

Research and Pedagogical Methods

Workshop Design

The students formed discussion groups (three to four members) that remained intact throughout various activities. These were identified, for data analysis purposes, as Group A, B, C, D, E, and F. The class responded to four directions: (a) define *theory* and *practice*; (b) use Mullen's (2004) binocular/integration metaphor to describe the relationship of theory and practice; (c) apply Schön's (1987) architect/builder metaphor to describe the conflicted relationship of theory and practice; and (d) develop your own metaphor to describe theory and practice.

Teacher Participants

Practicing teachers – 67% elementary school teachers and 86% female, two of whom were Hispanic – employed within the same large suburban school district in Florida participated in the curriculum workshop. The members belonged to a newly implemented EDL cohort that was developed in partnership with the university and the local school district. They had been selected through a nomination process by district administrators based on duration of professional experience, as well as performance appraisals for 2 school years, documentation of leadership contributions, and the recommendation of their immediate supervisor or principal. Our study features this group of 21 teachers who, based on the district's assessment, have already demonstrated professional growth and leadership capacity in their schools and have potential as future school administrators.

Class Activity

The initial class activity was designed to probe student reflection on the complexities of the relationship of theory and practice using metaphorical images. In small groups of three or four, students equipped with markers and paper (11 x 17) were introduced to the workshop by defining *theory* and *practice*; each group then shared its results.

Next in our curricular sequence, the metaphor of binocular vision was used to describe the relationship of theory and practice. After a brief discussion of how binoculars bring distant objects into clear view, a pair of binoculars, fixed with the letter *T* on one lens and *P* on the other, was passed around. (This method follows Mullen's [2004] suggested use of Post-It® notes marked with small letters.) Upon peering through the binoculars, students saw a holistic image, merging the separate close-up view seen by each eye.

Extending the influence of metaphors, students were encouraged to imagine the architect/builder relationship as a metaphor for the conflicted relationship of theory and practice. When an architect sees possibilities for implementation in his or her drawings, the builder must interpret the architect's vision and improvise in uncertain situations.

The concluding task for this class session involved students in the invention of their own metaphors for the theory–practice relationship. Each group represented its metaphor imagistically and pictorially, sharing conceptual associations and personal stories.

Online Discussion

Besides the face-to-face class sessions, asynchronous discussion occurred in the Blackboard Learning System forum. This format permits interaction outside the classroom at any time, allowing students time for reviewing ideas, as well as for organizing and composing their thoughts (Groeling, 1999). Comments, approximately 150 words in length, were guided by questions posted as the first thread in the discussion forum. Each student provided a substantive reaction to a minimum of two commentaries posted by class members. The discussion lasted 1 week and consisted of 95 total postings.

Student Participant Survey

An online, anonymous survey entitled "Reflections on Metaphor and Theory–Practice Relationships" complemented the students' in-class experiences of reflection. It served as an opportunity for us to inquire into the potential benefits of the metaphor activity. The survey included open-ended questions that elicited the students' perceptions of the exercise in order to ascertain the extent to which the metaphor activity may have expanded their perception of theory and practice and to learn whether any of the metaphors stood out as more applicable to the relationship of theory and practice.

Method

For this study, the researchers used a systematic, rigorous, and auditable analytical process in keeping with a basic qualitative study design. In order to assure the trustworthiness of our conclusions we planned the classroom research unit together, co-teaching and reflecting on it while simultaneously carrying out the research for this pedagogical project. By audiotaping, transcribing, and analyzing all relevant sessions, both with the student participants and ourselves, we were able to verify the conclusions reached about the major outcomes of this work.

We enacted an interpretational analysis of all the data by individually coding and classifying the material in order to identify salient constructs, themes, and patterns. The systematic procedures followed in this analysis included the identification and initial coding of text, the development of categories by methods of constant comparison, and generation of themes that emerged from these categories (Gall, Gall, & Borg, 2005). Miles and Huberman's (1994) model of qualitative approaches to data coding, analysis, and display proved particularly helpful as a guide. The researchers searched the texts for units of meaning, collapsed and refined categories, and explored relationships and patterns until consensus and saturation were reached, with no new themes emerging.

In an effort to eliminate unnecessary bias in the interpretation of results, comparisons were made only after the independent coding was completed. For example, the proliferating categories of theory (TH) and practice (PR) were evident in all of the data sets. To further differentiate these, we developed sub-codes; in the case of *theory*, values, beliefs, systems, testing, creativity, concepts, architect, dreamer, metaphors, and practice were identified. *Practice*, as a primary code, was represented through such differentiated notions as self-improvement, discipline, doing, builder, building, metaphor, realist, application, and work. We utilized these and other categories or thematic units for our content analysis of the data. For the pictures (figures) we coded both key words and images, discussing the key elements within each. Our decision on which images to represent herein was based on an effort to balance the two metaphors (architect/builder and binocular vision). We then selected those that best engaged the theme of creative and analytic integration in thought and action.

To identify themes within and across the data sets of texts and images, we searched for recurring concepts and metaphors (Ryan & Bernard, 2003). Individually and collaboratively we analyzed the collected data: student-generated images (14); printed online discussion threads (45 pages); anonymous survey responses (9 pages); and audiotaped transcripts (4 hours) of the in-class lesson. All student-identifying information was removed. Our conclusions were discussed only after the independent analyses to avoid influencing one another's thinking. A list of tentative themes was generated and reviewed, eventually receiving consensual support. The data were triangulated across data types (i.e., web logs, pictures, class transcripts, researcher conversation transcripts) and analysts to provide thematic corroboration.

About the survey itself, the authors developed the questions for this instrument (posted on Blackboard). While this may be suggestive of "self-selection" and hence bias, all of the questions were informed by the literature covered in the conceptual frameworks' section, specifically as related to theory and practice, metaphor and possibility, and reflection and inquiry. Particular emphasis on Schön's documented metaphor of architect/builder and Mullen's metaphor of binocular vision is also evident in the survey. Key concepts developed by curriculum and critical theorists, such as the fundamental relationship between theory and practice, informed the questions asked. As experienced higher education teachers and collaborators we were able to count on our own ability to interpret the frameworks and use them to our disciplinary and pedagogical ends. And as research instruments we influenced the survey questions and classroom interactions through our own interpretive frameworks; we also affected the interpretations developed through the very process of creating an intervention that would ideally not only engage the students in clarifying their own meaning systems but also in experiencing self-empowerment.

These efforts at data analysis yielded the three major themes discussed in the next section.

Thematic Analysis of the Data

Overall Analysis

Based on the researchers' analysis of the entire data set that included intensive dialoguing over a 3-month period, several overall patterns emerged: (a) discourse regarding the relationship between theory and practice occurs at different levels, sometimes connoting separation, other times, interaction, and less frequently, integration; (b) communication between practitioners and theorists is rooted in authority, distance, and difference, and hierarchical assumptions about theory

and practice are reinforced through patterns of socialization; and (c) disequilibrium characterizes many teacher contexts even though power must be equal for focus and balance to occur (as in the case of binoculars and binocular vision),.

Metaphoric Displays

For the purpose of demonstration, we made selections from the workshop data consisting of 14 student images that were generated out of a series of theory–practice activities. Our descriptions of the visual displays were derived from multiple interrelated sources, including in-class audiotape recording (and transcription) of the students' verbal explanations of their group work; students' postreflective discussion of the artwork in an online survey; the discussion board referred to as "fastwrites" (a name given to this Blackboard writing activity); and audio taped transcriptions of the research team's discussion of the artwork, based on the students' interpretations and our own.

The value we placed on recursion as instructors vis-à-vis this curricular activity is evident from the ongoing attention we gave to interpretation and reflection. We treated the meaning-making process in the EDL classroom not as a "one-shot deal" but rather as an extended opportunity for deepening reflection. Our interpretation of the metaphoric displays, then, emerged from multiple exchanges over time through occasions that produced reflection and reflection-on-action. In an effort to create a community of scholar practitioners, we used the modalities of the classroom (small group and whole class discussion), learning technologies (Blackboard), and research meetings.

During the workshop, the student groups created three types of metaphoric displays: (1) binoculars and binocular vision, (2) architect and builder, (3) and their own image. In response to the survey question asking which classroom activities may have helped them to see their practice and classroom in new ways, the students attributed value to numerous metaphors. Using a simple frequency count of the metaphors described in their writing, it became apparent that they experienced the architectural metaphor as having value and strongly identified with the binoculars metaphor in particular. Concerning the binoculars metaphor (see Figure 1), students typically responded in a way that revealed an emergent understanding of the integrative potential of theory and practice, and as related to their own self:

> The illustrations on the white board explaining the two sides of the binocular increased my understanding of how important it is to use theory and practice together; however, the "T" [theory] on the lens made it memorable for me.

Using the binoculars as a metaphor allowed me to gain perspective on how the two work together but independently. The focal point and the distance between the two lenses are an important thing to consider. It is only when we step back from the theories we believe to be true that we can really see how they are being played out in practice. It is also true that when we reflect on our practices we are then in a better position to see how theory has played a part.

Nonetheless, all of the students had found the two primary metaphors in addition to those that were team-generated helpful for stretching their understanding in new ways. As one person explained, "all of the metaphors were useful. One's personal understanding or relation to a certain metaphor makes it more meaningful or applicable. Everyone relates to things differently, so our personal interests come into which ones we most identified with and why." In addition to personal interests, students also made discernments about the metaphors and those they personally favored based on prior knowledge, clear vision, and conceptual fit.

Before elaborating on specific metaphorical displays, a general description of the majority of images is in order. A total of 24 mappings – some text only and some drawings – were created in class, specifically 6 definitions, 6 binocular images, 6 architect/builder images, and 6 original metaphors. Relative to this data cluster, we report the results of the latter three activities, all featuring metaphors rendered visually, accompanied by text (i.e., labels or descriptors).

First, after discussing and seemingly internalizing the two metaphors given to them, the student groups provided rich material in snapshot form:

- *Binoculars metaphor* – theory and practice must be used simultaneously, and the lenses must be balanced, in focus, and equally powerful; the two sides of the instrument underscore the importance of using theory and practice together; theory and practice, which are two halves of the same whole, can function as a seamless, inseparable phenomenon

- *Architectural metaphor* – the architect represents theory and the builder, practice, and these roles work synergistically; architects need prior knowledge of how builders construct dwellings (or practical applications in education) in order to create valid and useful theory, and builders can only build houses to specification if they have "bought into" the architect's vision

Next, following these metaphoric activities, the groups created their own images. The metaphors, complete with verbal descriptions, featured these "favorites" of the students for illuminating insight into the theory–practice relationship:

- *Clothes closet* – contains many theories, old and new, some constantly in use, others used only on special occasions or under certain circumstances; the "stuff" in the closet also represents practice.

- *Ocean-beach* – ocean waves crashing onto a beach and then returning to sea simulates circular motion.

- *Pop culture* – screenwriter and actor (theorist and practitioner, respectively) work in such contexts as television, wherein the viewing audience consists of students and schools; the producers represent the governmental agency that supplies funding; actors make interpretive leaps as they learn about their characters and improvise.

- *Prism* – educators reflect light, just like prisms; the white light entering the prism represents theory; the practitioner turns this light into an array of colors – the colors cannot be seen until the light is implemented into practice; the white light entering the prism can only emerge, transformed into colors, when educators adapt theory to practice; at just the right angle, one can end up with something as beautiful as a rainbow of light, potentially influencing students and their growth.

- *Mountain climbing* – theorists and practitioners will find themselves ascending the same mountain from different sides and following different trails, yet they have the power to inform one another along the way on how to get to the top; they can see what they have accomplished together only by reaching their goal.

- *Journey* – starting out with an itinerary (i.e., theory) of where one is going and how one plans to arrive at the destination, the map (or plan) acts as a guide that travelers interpret; the bridge encountered between theory and practice leads to administration; the traveler stops and refuels in the form of research and learning; anticipating detours is realistic in the experience of travel and so a map will be needed; one uses a visitor's center to obtain information and reflect while resting

Teacher-Generated Metaphors

Binocular Metaphor: Binoculars

The group that drew Figure 2 spent time on "the little focus bar in the middle" and how it functions to achieve balance, depending upon an individual's belief systems (*Note:* Figures 2-5 are an artists rendition of groups' drawings on the large Post-It notes. Every effort has been made to assure the fidelity of the artist's rendition.). They explained that the curricular outcomes educators strive for depend upon the use of theory in balance with practice. Further, they elaborated on the investment of the perceiver/viewer in aligning theory and practice – someone who resorts to "toy binoculars" will obviously fail to see much of anything. And anyone who "takes a lens off a more powerful set of binoculars only to add it to a lesser set" is also doing others or themselves an injustice. This group concluded:

> We agreed that in order to engage in a certain idea one would need to have a balance of theory and practice [within his or her visionary scope]. You could have a school with people who are a big "P" and a little "p," and some will only do the minimal practice while others will commit to a bigger, more complete practice. We also thought that administrators should be the ones holding the binoculars.

Dynamics of power, authority, and control are a covert part of the framing articulated by this group. The members imagine that the individual holding the binoculars will have positional and visionary influence as a direct reflection of his or her role; they may have been hoping that this person would also ideally embody or radiate vision. Consistent with this class as a whole and EDL classes more generally, administrators at the school and district level are associated with visionary prowess and, moreover, thought to be in exclusive possession of the binoculars, or powers of observation (Mullen, 2004). One could infer that such student groups are comfortable with their bureaucratic

arrangements as "lesser" authority figures. Or perhaps they simply wish that their own administrators would take greater responsibility. Alternatively, they may simply believe that having visionary prowess should be innate to the role of administrator.
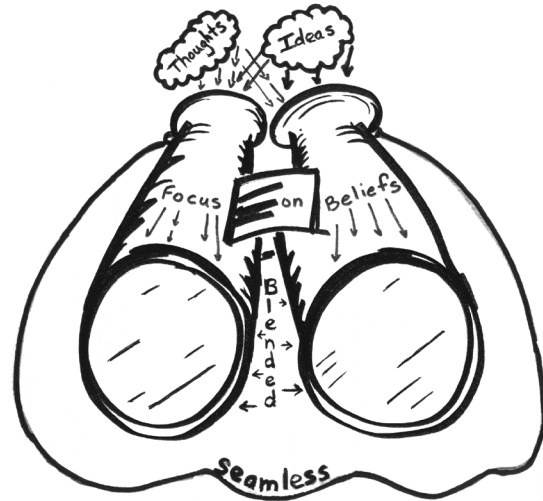
Many students identified the binoculars metaphor as enabling them to see their practice and classroom in new ways: "When we looked through the binoculars, we realized that theory and practice are invisible when brought together, which gave a better understanding of how they are separate but one." Also, "I'm a visual learner, so getting to see through the binoculars and studying the accompanying information on binoculars and vision really solidified the importance of balance between theory and practice for me."

Another group that had created a binoculars artwork shared that communication *must* occur between and among school practitioners and leaders. Its members described an imaginative scenario involving such powerful parties as school boards and district offices. Such decision-making personnel can either dictate to principals and teachers or they can adjust the focus on their own binoculars.

While the binoculars activity engaged these students mentally as perceivers (and believers!), several others preferred the architectural metaphor. One indicated that it had a "human side" that the binoculars lacked, explaining that the architect and builder have the potential to listen and learn from one another in order to "build a better building by understanding and developing the architect's plans."

Architect/Builder Metaphor: Igloo

The question "Use the architect/builder metaphor to describe the relationship of theory and practice" was given to the small groups. In response, one group

created an igloo, explaining: "We wanted to start with something that isn't real to us as Floridians so we decided on an igloo. Of course igloos are not found in Florida, so it doesn't fit, and that would be a conflict. And the issue of snow itself would involve a conflict of portability." The members agreed that portability is a variable that would seriously impact the educational system in terms of student achievement. They gave an example of the conflict that arises for entire school communities as teachers shift in droves to the highest-paying districts in Florida or out-of-state altogether: "So the huge conflict we're describing is between the theory of having great teachers [in low-performing schools or non-affluent districts] and the actual practice of it."

In describing the image (see Figure 3), this group equated the left-hand side of the igloo with practice and the right-hand side, theory. The members gave as their rationale for this dualistic design the notion that "function comes before form," and hence the practical constraints of the builder are more critical than the ephemeral concerns of the theorist. In their teacher world, the issues of "reality" and "affordability" are paramount, dominating "vision" and "quality." Paradoxically, however, we noticed that within the drawing itself, the Eskimo (teacher) was placed at the center of the igloo (school), and that balance has been further ascribed to the structural beams labeled "practice" and "theory"; hence, the equality of space afforded each domain suggests that they have equal value.

Another student identifying with the architectural metaphor expressed:

> Without prior knowledge of how a builder builds houses, the architect could not do his job correctly. This means that theorists need to have an understanding of the practical applications in education in order to create a valid theory. Likewise, the builder has to "buy into" the architect's vision in order to construct the house to specification. There is more than one way to build a house, and more than one way to teach. Without proper communication and a shared vision, the builder and the architect will be terribly unhappy.

As is evident from the commentary we received, two notions about the architectural metaphor were simultaneously alive – that of theorist (e.g., architect/curricular or policy leader) and practitioner (e.g., builder/teacher or principal) as occupying inherently separate roles, and that of theory and practice as interrelated phenomena that inform one another and, presumably, the work of teachers. As one teacher concluded, "Each theory builds upon the last practice in order to make a stronger, more usable theory."
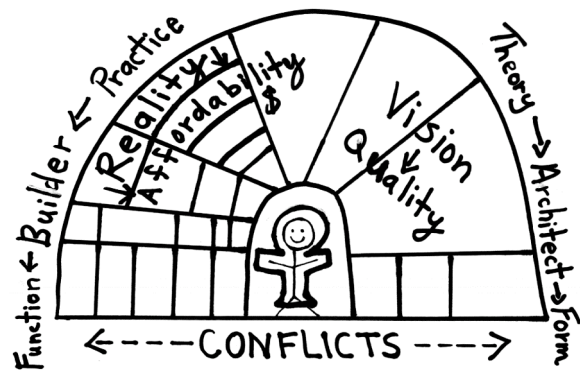
Student-Generated Metaphors

For the development of their own images, students agreed that "taking the time in our groups to create our own metaphor causes us to analyze the very way in which we think of theory and practice. Theory and practice are more directly connected than I once believed and mutually influencing." The two metaphors selected for commentary here – the clothes closet and ocean-beach – had definite appeal within the group as a whole. Because the clothes closet was a particular favorite and also raises some provocative, unresolved issues, we more closely scrutinize its nuances.

Clothes Closet Metaphor

The class gravitated toward the clothes closet metaphor (see Figure 4), largely for its value as an everyday worldview and for the premium it placed, in their minds, on organization, functionality, and storage. Metaphorically speaking, the students envisioned various parts of the closet as important for storing items with various functions. Favorite clothes and objects are pulled out often, they elaborated, and other belongings have seasonal or sentimental value. The light in the closet was uniformly interpreted as "administration," and without self-interrogation. They talked about how this had to be a "good" light and that lighting (i.e., administrative styles) fluctuates in both favorably and unfavorably. All in all, it was agreed that the light needed to be "pure," a choice of diction that hints at goodness and morality and associates light not only with administration but also with its ubiquitous power.

For a few others, the light represented research and, once again, the illumination it provides and the guidance afforded them as practitioners. One teacher speculated that she did not "think about how theory drives my instruction, my practice. The closet metaphor made me think about how, as a reading specialist, I am always saying what good readers do. This metaphor made me think of the light in the closet as the reading

research supporting what good readers should do." In another instance that ties together reflection and morality, someone shared:

> When everything is going well, I don't need to go to the closet. However, when a new student arrives in my class, or a new situation arises and things are not going smoothly, that is when I return to the instructional closet in my head and look for other strategies to try. At these times I turn on the "closet light" to reflect on what I *am* doing and what I *should be* doing.
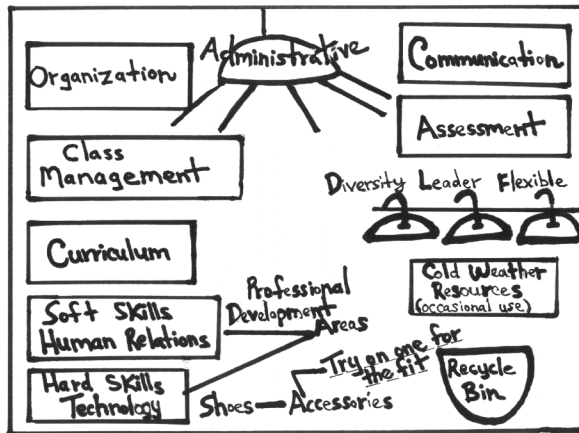
The students believed they were experiencing a personal transformation in understanding. Some commentaries to this effect used the analogies of "cleaning" and "recycling" to represent fuller meanings of teacher decision-making, abandoned practices, and well-worn practices. Lucid examples include: "I've begun looking back on some of my practices and my attention has been on the ones we abandon but still hang on to, like those clothes that used to fit us and may again one day." Additionally, someone else commented: "I have many abandoned practices that I keep in the recycled box. I just don't want to throw them away, and of course, they might just be "in style" again. I also have practices that I pull out on an as-needed basis."

Visualizing the closet in theory–practice terms, the practitioner for whom a repertoire of knowledge, theories, and practices can be imagined as separate, ready-made compartments. Integral to the design of the closet, educational theories (e.g., of organization, classroom management, curriculum, soft skills/human relations, and hard skills/technology) are also stowed inside the space.

The closet metaphor, however, while meaningful, is problematic for the epistemological simplicity (technical rationality) it represents. It seems to illustrate theory as an organized "filing" or classification system with "neat little cubby holes" – a modernist concept underlining the socialization of teachers. The students identified this process as potentially mind numbing. On the other hand, the closet metaphor also raises the possibility that every theory is connected to others, as evidenced when a teacher's theory (borrowed or created) of classroom management folds into her theory of curriculum. Students identified dynamics that make theories changeable and amorphous.

Ocean-Beach Metaphor

The creators of this drawing described it as ocean waves crashing onto a beach and returning to sea, simulating circular motion (see Figure 5). Theory, a set of fluid ideas that frame "the why, when, where," influences practice, "the how, what, and implementation of theory." This group was the only one that created a drawing to "define" theory and practice – the others generated definitions in text only. (Little direction had been given other than to define *theory* and *practice*.) And this is the only group that defined theory and practice in relationship to each other – "theory influences practice"; "practice … the implementation of theory. The other groups defined the concepts as separate entities. When describing theory as a wave that strikes the beach (practice), the group used the terms *reflection* and *revision*, words that had not yet surfaced in class. When asked by us if theory erodes practice, similar to the waves on a beach, the members responded that the waves on the beach work cyclically, building and eroding, and that shifts in sand result from the action of waves.
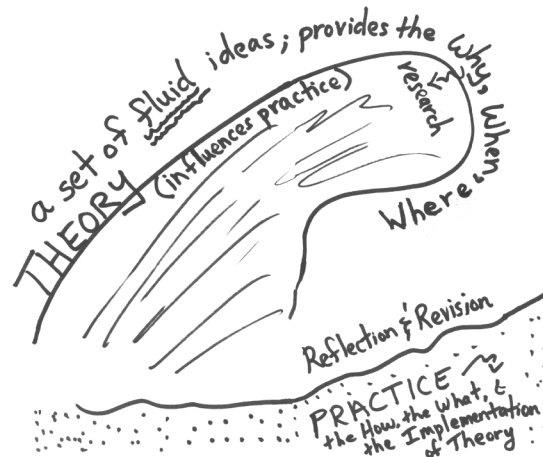
The concepts of theory and practice in the ocean–beach image and their manifold forms can be treated as linear or fluid processes. Its depiction and description hint at postmodernism, which in metaphoric form provokes and encourages discoveries in the unexpected, multifocused, sensual, ambiguous, and indirect aspects

of experience (Jipson & Paley, 1997). Because, as Eisner (1993) says, we as humans do not simply have an experience but rather "have a hand in its creation" (p. 5) – the quality of one's creation depends upon how the mind has been engaged.

Views of the theory–practice relationship that were subjective, evocative, and fluid, then, stood out against those metaphoric displays in which theory and practice were cast as rational, standardized, and transparent notions. As can be expected, the students who seemed to naturally classify their ideas in ways commensurate with technical rationality oversimplified the concepts of theory and practice. The "taken-for-granted" world of teaching and leadership took shape in a host of images of power, authority, and hierarchy that formed a "hidden curriculum" within the students' productions.

Discussion

Metaphor and Theory–Practice Concepts

Educational leadership programs struggle to present a balance between theory and practice to their students (see Mullen, 2003). Theory-laden programs are frequently criticized by practitioners for the perceived lack of practical application to issues facing today's school leaders. On the other hand, as Louis Pasteur said, "Without theory, practice is but routine born of habit" (in Reik, 1948, p. ix).

The EDL students grappled with the concept of metaphor and the theory and practice relationship. Metaphor processing, a means by which learners indicate commonalities, understand the relational structure, and recognize the schema in new situations (Gentner & Gentner, 1983), was used to help students visualize and verbalize understandings of the theory–practice relationship. According to Petrie and Oshlag (1993), "The very possibility of learning something new can only be understood by presupposing the operation of something very much like metaphor. … This [centers on] the epistemic claim that metaphor … is what renders possible and intelligible the acquisition of new knowledge" (p. 582).

Many of the teachers examined the theory–practice relationship as a hierarchical relationship. A speech/language pathologist in the class shared:

> If I felt forced to join the ranks of either theorist or practitioner, I'd have to view this a hierarchical model and would choose to hold theory as foremost in importance. Besides, I believe that a theorist is always a practitioner by default due to the need to prove theory.

But as participants engaged in self-reflection, they were thinking differently about and changing their practice. A third-grade team leader declared, "I know now that theory and practice share a symbiotic relationship. A competent teacher might implement someone else's theories, but a master teacher will develop and modify his or her own theories, implement the theories, and then reflect on them."

When teachers begin thinking more deeply about the theory–practice relationship, they reflect on the purpose of school, what they want their students to learn and know for the future, and the relationship between their pedagogy and these aims. One high school teacher reflected about her first year and personal change over time: "What I was doing at the time was testing out my style of teaching without referencing any theory. My efforts didn't always work. Today I feel successful, and with many different types of students, because I've been willing to accept research and theory as valid references."

Effects of the Pedagogical Intervention

Overall, our thematic analysis of the data in its entirety suggests that the extended activities promoted three areas of development: individual, team/collaborative, and organizational. According to the most recent literature review on teacher leadership, teachers aspiring to become school leaders must have intensive focus in these very areas (York-Barr & Duke, 2004).

Furthermore, our analysis reveals that tensions and contradictions overshadow these crucial areas of transformation. The dialectics we encountered within the EDL group are briefly presented as unresolved tensions that capture the evolving thinking and new growth of leadership aspirants. By *dialectics* we mean a concept that exposes and conceals the "seam" between opposites, that is, "any complex process of conceptual conflict or dialogue in which the generation, interpretation and clash of opposition leads to a fuller mode of thought" (Honzik, as cited in Bothamley, 2002, p. 146).

Dialectic 1: Individual Development. Tensions were revealed in the students' development as individuals, notably, when responding reflectively to preset questions through their fastwrites. Some critiqued those mindless forms of training that teachers feel forced to undergo and went beyond questioning the typical training experience, grappling with best practices. A self-interrogatory comment to this effect was: "Teachers keep adding to their 'bag of tricks,' but that seems to be more about survival. Look at what we are doing in the profession: We have picked up the messages, discerned what is truly valued, and then shaped our behavior accordingly."

Contradicting this message, when individuals wrote about the metaphoric drawings they created collaboratively, particularly the clothes closet, critique was not employed. For example, the notion of technical rationality (e.g., epistemological reductionism or simplicity) was bypassed; in fact, it quickly reached a favored status within the group for illustrating the theory–practice model in its simplest form. This metaphorical view sees theory as a modernist force that shapes teacher thought and practice. However, the students did question some of the practices of socialization, training, and assessment that define their teacher worlds.

Dialectic 2: Collaborative/Team Development. This pedagogical study supports the use of learning communities beyond their perfunctory functions, envisioning what Michaelsen, Knight, and Fink (2002) call a "team-based transformational model." As in our workshop, this emphasis makes group work the primary method of support, creativity, and performance. Illustrating a dialectic witnessed in schools, teachers must be able to "fully exercise the decision authority they have as a team," while also having their "individual autonomy" respected and protected (Conley, Fauske, & Pounder, 2004, p. 667). An unresolved issue in our class similarly concerned the perceived value of teachers in exercising the parameters of one's vision relative to administrative authorities. This is an organizational development issue and is further illustrated under the next dialectic.

Dialectic 3: Organizational Development. Organizational development relative to power, authority, and control is a salient issue in EDL master's classes (e.g., Horn, 2002). On one hand, the teacher participants believed that administrators should exclusively "hold the binoculars" in their schools; presumably the holder of the binoculars would possess positional and visionary influence and consequently direct others. This way of thinking leaves little room for teachers to be creators of vision themselves and to negotiate with administrative authorities. As Ivie (2003) asserts, "Inappropriate metaphors can lead to false conclusions about teaching and learning," especially when metaphors are seen not as symbolic tools for thinking but as "synonymous with reality itself" (p. 5).

On the other hand, tension was introduced when the vision of organizational development was imagined not as a function of top-down hierarchy but rather shared communication between school practitioners and leaders. Although fewer students expressed this democratic notion, they did say that vision would have greater potency when practitioners (e.g., teachers) and theorists (e.g., central district decision-makers) work together, and, conversely, "the further apart they are the more tension and friction might occur." By changing their viewing angle, supervisory personnel can approach the schools for which they have responsibility with a commitment to empower teachers and principals as partners, advisors, or consultants. A liberal view of teacher leadership suggests that "teachers rightly and importantly hold a central position in the ways schools operate and in the core functions of teaching and learning" (York-Barr & Duke, 2004, p. 255).

Reasoning, Reflection, and Action

As the students reflected on theory and practice in the online discussions, many described their own experiences and elaborated on concepts using metaphorical language. The metaphorical content in the online discussion narratives reflects perspectives of teacher practice. One teacher's image represented teacher practice as warlike: "I am indeed in the trenches but am obligated to jump into and out of a variety of foxholes." Another teacher stated that "practice that lacks reflection is akin to a hamster on an exercise wheel – running like crazy and getting nowhere."

One student created a unique image of the theory and practice gap, characterizing the antitheoretical, "make-and-take" training preferred by many teachers: "My children always want a Happy Meal at McDonalds, and not for the nutritional value. Happy Meals are about the toy. It makes my kids happy for a little while, but then it becomes something I clean out of the car. Teaching should be about more than all the neat stuff (toys) we want." The dominance of pressures for easily implemented strategies on school practice is aptly associated with the fast food industry's speedy, cheap, and standardized influence on the American palate. Schlosser (2001) charged that the "McDonaldization" of America has triggered standardization and uniformity. This metaphor conveys the reality of schooling in America, with its emphasis on one-size-fits-all models of school reform.

As these teachers struggled to make sense of the theory–practice relationship, their reflective capacity triggered a questioning process. One of them asked, "If your practice of the theory is poor, is it valuable at all?" Another considered the merit of a theory orientation, "When we subscribe to a theory, it tells people about our values. What if we are basing our theories on outdated research or illogical paradigms?" The class searched for answers and absolutes while several students grappled with the ambiguities of theory and practice:

What I find puzzling is that with the ever-changing education system and educational theories, is there any one right way? Will we ever come to the point when educators agree on the best way to educate? Are we moving toward a true goal to find the

perfect theory? Or, are we merely jumping from one bandwagon to another trying to appease the public or satiate our own egos – that we somehow make the difference for kids?

Not only are these teachers struggling conceptually, they are also in the process of developing plans for future action as school leaders. As one student declared, "The theories that I learn today will be my practices of tomorrow." The teachers revealed a hopeful model of themselves as a school leader: "I know others will ask about my leadership theories, but I hope that they show through my practice."

Chastising an online discussant for referring to theory as a "great place to start, but I don't think we can live there," one teacher provided an intriguing metaphor of theory as street: "It's my gut reaction that although you may not think you are living on "theory street," I'll bet that you visit it as needed. I travel back to that street every time a parent or teacher asks me a question requiring my expertise. Theory pops up as we travel along our practice path."

In sum, the teachers used metaphors in their e-postings to share how they see the reality of schooling and their role in it, and possibilities that extend beyond their current situations. Their metaphors generated original models for the theory–practice relationship and the use of reflection for future action.

Concluding Note

Education students studying in administrative leadership preparation programs are unusual – each is typically an experienced teacher, leader, and hybrid of student and professional. As developing inquirers, the identity and life of the scholar practitioner is newly forming, influenced by the graduate culture and entrenched in the mores of K–12 schools. This challenging process of identity development helps to explain why modernist metaphoric representations of the theory–practice relationship (e.g., clothes closet metaphor) emerged from our participants' creations, while postmodernist metaphors (e.g., ocean–beach metaphor) showed only budding promise.

While some of the thinking about the theory–practice relationship appeared to be modernist reductions, at the same time this group's immersion process generated holistic images of integration. The members built on and related to one another's definitions, at times questioning, other times searching for the "right" answer or way. They did not have the luxury of pulling their thoughts out of a textbook or training session, even though they expressed appreciation for being given "something concrete to manipulate my ideas and construct my own theories." Instead, exploiting the usefulness of props and manipulatives in addition to team work and extended conversations, they created metaphors from their own experiences and reflections, and without any formulaic approach. It was as though whenever they attempted to pull apart theory and practice, they would succumb to simplification, and when they allowed these constructs to coexist, they could produce insight.

Finally, as these teachers learned, there is no one correct way of seeing the theory–practice relationship. Complex, intangible experiences that give meaning to the human experience, such as love, hope, and learning, are often expressed as metaphors, images, and analogies. As reflective inquirers, our participants shifted from seeing theory and practice as tangible, antithetical forces to powerful, interrelated constructs. As concisely captured by one of our participants,

> While planning my lessons and activities for my classes, I often find myself wondering, is theory driving my practice or is practice driving my theory? I now understand that while I may not be able to verbalize succinctly the theory behind my practice, it is helpful to me to be able to at least reflect on the theory behind my practices.

While this transformation may have only been only partial for those participating in our intervention, the classroom activity nonetheless tapped the imaginative and generative capacity of teachers.

Author Note

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