

ARE SCHOOL LEADERS PREPARED TO REFLECT? AN ACTION RESEARCH EXAMINATION OF PROSPECTIVE PRINCIPALS*

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Abstract

Given the importance of reflection in educators' practice, school leaders should be able to both facilitate teacher reflection and model reflective practice. This action research study examined whether or not emerging school leaders demonstrate the ability to reflect on daily practice and decision-making. Data from three classes of prospective leaders were evaluated using a Reflection Matrix that includes key reflective components of Focus, Inquiry, and Change. The data were also examined for the types of precipitants most likely to encourage reflection. Finally, recommendations for stimulating reflective practice and helping prospective leaders to recognize situations that will need reflection are offered.



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1 Introduction

As school leaders negotiate the busy-ness of their day-to-day work, reflection on their practice and decisions may not take a high priority. Often, the act of carefully considering the impact of decisions that have already

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been made and considering changes in daily practice take a back seat to moving on to the next decision. Reflection, however, is frequently included as a key component of effective instruction and leadership, suggesting that it ought to be part of the practice of school leaders. The need to model and facilitate excellent instructional habits for teachers, as well as the importance of looking at decisions from a variety of perspectives, should be aspects of school leadership that lead to reflection. However, it is not clear that school leaders are prepared to reflect on their practice, or engage in that reflection on a regular basis.

Although the demands on educators – both teachers and leaders – are plentiful, reflection is an expected attribute of their practice. The National Council of Accreditation for Teacher Education (NCATE) includes the expectation in both specific and general ways. Specifically, teacher candidates are expected to “reflect on their practice and make necessary adjustments to enhance student learning” (NCATE, 2008, p. 18). This particular definition focuses on classroom instruction, and is complemented by the target that teacher candidates should also be “able to reflect on and continually evaluate the effects of choices and actions on others and actively seek out opportunities to grow professionally” (NCATE, p. 22). In other words, the capacity of educators to reflect on practice goes beyond classroom instruction and reaches into other areas that impact school culture and professional development.

It stands to reason that instructional leaders should be able to continue the work started in teacher preparation. Leaders should be modeling reflection, stimulating reflective practice, and providing professional development opportunities that lead to teacher reflection. NCATE explicitly includes this as a goal for school leaders under the umbrella of standards for “other school professionals”: “They collect and analyze data related to their work, reflect on their practice, and use research and technology to support and improve student learning” (NCATE, p. 19). Beyond this external expectation, however, school leaders often find themselves in the role of being a “teacher of teachers.” As such, they should both practice and model reflection.

If reflection is an essential skill of instructional leaders, there are important questions to ask in terms of how that reflection is defined, how school leaders are prepared to integrate reflection into their professional lives, and whether they actually do incorporate reflection into their practice. This action research study of aspiring school leaders focuses on the first two dimensions. In the first section of this paper, a definition for reflection and rubric to evaluate that reflection will be proposed. In the second section, data from the writing of prospective educational leaders will be examined through a reflective lens. Finally, the questions and topics that seem most likely to stimulate reflection will be presented.

2 Looking Back at Reflection: A Review of the Literature

Foundational work on reflection can be found in the work of Dewey (1933) and Schön (1983). Taken together, this work differentiates reflection from technical or theoretical writing, and connects it to action. More recent frameworks include elements such as situating reflection in practice (Collier, 1999; Korthagen & Kessels, 1999; Loughran, 2002), framing and reframing problems in a cyclic way (Clarke, 1995, Korthagen, 1999; Reiman, 1999); and using multiple perspectives to facilitate reflection (Hatton & Smith, 1995, Rearick & Feldman, 1998). This study builds on those frameworks and extends the framework based on teacher reflection by the author (Ward & McCotter, 2004).

The importance of such reflection in the practice of teaching has been well established. As noted above, it is a requisite skill for the accreditation of teacher preparation programs (NCATE, 2008). Lambert described the personal benefits of reflection for educators: “Reflection – thinking about what we do before, during, and after our actions – is our cognitive guide for growth and development, a way of thinking that we should engage continuously” (2003, p. 7).

On an institutional level, there are additional benefits to the process of reflection. Studies on the impact of reflective practice among teachers have shown its connection to innovative instruction (Elliott & Schiff, 2001), the increased use of data to meet student needs and school goals (Elliott & Schiff; Neuman & Simmons, 2000), and dialogue and collaboration among teachers (Ticha & Hospensova, 2006; Wallace & Engel, 1997).

The reflective practice of school leaders has been less carefully examined, although it has been advocated by NCATE for accreditation. Leithwood, Louis, Anderson and Wahlstrom (2004) noted that preparation

programs for school leaders should emphasize reflective practice by integrating opportunities to discuss problems with peers. Others have also suggested that reflection is a desirable attribute for educational leaders. Blase and Blase (2001) highlight the practices of effective leaders, which include inquiry, collaboration, and promoting reflection among teachers. Similarly, Lambert (2003) believes that effective leaders develop and support a culture of self-reflection by facilitating collaborative planning, peer coaching, action research, and reflective writing among faculty members.

Although few empirical studies on reflection among school leaders have been conducted, one study by Contich (2006) on the journaling practices of school leaders noted that reflective writing was an important strategy to help participants understand and clarify their decisions. Others connect reflection to transformative learning (Davis, 2006), decision-making (Pedro, 2006), and accountability systems (Neuman & Simmons, 2000).

Finally, reflection is included in the standards for school leaders set by the Educational Leaders Constituent Council (ELCC). The second standard focuses on the expectation that school leaders will foster a positive school culture, stimulate effective instructional practice, and facilitate professional growth for faculty. Specifically, Standard 2.4 articulates the following:

- a. Candidates design and demonstrate an ability to implement well-planned, context-appropriate professional development programs based on reflective practice and research on student learning consistent with the school vision and goals.
- b. Candidates demonstrate the ability to use strategies such as observations, collaborative reflection, and adult-learning strategies to form comprehensive professional growth plans with teachers and other school personnel.
- c. Candidates develop and implement personal professional growth plans that reflect a commitment to life-long learning. (ELCC, 2002, p. 6)

Given these expectations, it is important to examine whether prospective leaders are given structured opportunities to reflect on their practice.

2.1 Methodology

In this action research study, student assignments from three sections of an educational leadership class were used as data. The course, *Differentiated Supervision*, focuses on the supervisory responsibilities of school leaders. Students who enroll in the class are pursuing a masters degree in Educational Leadership or certification as a supervisor or school principal. Most students work full time as teachers or in other roles in K-12 settings. Approximately ninety students were involved in this study; sixty took the class during a spring semester, and thirty during a four-week summer semester. Two sections of the course were taught in a hybrid manner (partially online), and the third was taught face-to-face.

The course is structured to address four essential questions:

- What are the roles and responsibilities of supervisors?
- How does a supervisor act as a “teacher of teachers”?
- How do supervisors use observation data to effect quality teaching and learning?
- How does the larger context influence supervision?

Topics studied during the semester include clinical supervision of teachers, designing professional development, and making instructional decisions based on data. Students complete several key assignments, including responses to case studies, development of a professional development program, field-based clinical supervision of two teachers, and a final exam in which they describe their emergent understanding of the four essential questions based on readings and course activities.

The latter two assignments (clinical supervision project and final exam) yielded the data for this study. These two assessments were the ones most likely to stimulate student reflection about their leadership and supervisory practices. The initial step in data analysis was to identify reflective “chunks” from these data.

Specifically, the data were examined for instances where students described and analyzed their own practice. These chunks were then scored on the three aspects of reflection, which will be explained in the next section, and an overall reflection score was derived. Finally, a precipitant was identified for each chunk; in other words, the chunk was categorized according to the topic students were describing. The precipitants were then grouped into several main categories.

After the data had been coded, it was entered into SPSS for quantitative analysis. This analysis provided descriptive statistics for both reflective levels and precipitants. ANOVAs were conducted to find significant differences among reflective levels when grouped by precipitants, and post-hoc tests provided additional insight into those differences. Finally, t-tests were done to look for differences in students' level of reflection given the semester and format in which the course was taken.

2.2 More than a Mirror: Describing Reflection

In order to determine the levels of reflection exhibited by each chunk of student writing, a matrix to evaluate the reflective writing of preservice teachers was revised to better depict the learning and work of school leaders (see Ward & McCotter, 2004 for a description of matrix development process). The rows of the matrix (Table 1) represent three components of reflection. The first, *Focus*, represents the content of the student's writing. At emerging levels, students tend to focus on themselves and how others will perceive their work. As reflective focus progresses, there is movement away from self and towards interconnected issues and school culture.

Reflection Matrix: (revised from Ward and McCotter, 2004)

		Routine	Technical	Dialogic	Transformative
		Self – disengaged from change	Technical response to specific situations without changing perspective	Inquiry part of a process involving cycles of situated questions and action, consideration for others' perspectives, new insights.	Fundamental questions and change
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Focus	What is the focus of concerns about practice?	Focus is on self-centered concerns (how does this affect me?) or on issues that do not involve a personal stake. Primary concerns may include teacher perception of supervisor, time and workload, gaining recognition for personal success, or avoiding blame for failure.	Focus is on specific administrative tasks such as planning, management, and summative assessment, but does not consider connections between issues. Uses data or experiences to mark success or failure without evaluating specific qualities for formative purposes.	Focus is on school or learners (including teachers). Uses assessment and interactions with stakeholders to interpret how or in what ways school is progressing. Especially concerned with struggling students, teachers, or situations.	Focus is personal involvement with fundamental pedagogical, ethical, moral, cultural, or historical concerns and how these impact school or individuals.
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<p>Inquiry</p>	<p>What is the process of inquiry?</p>	<p>Questions about needed personal change are not asked or implied; often not acknowledging problems or blaming problems on others or limited time and resources. Critical questions and analysis are limited to critique of others. Analysis tends to be definitive and generalized.</p>	<p>Questions are asked by oneself about specific situations or are implied by frustration, unexpected results, exciting results, or analysis that indicates the issue is complex. Stops asking questions after initial problem is addressed.</p>	<p>Situated questions lead to new questions. Questions are asked with others, with open consideration of new ideas. Seeks the perspectives of students, peers, teachers, and others.</p>	<p>Long-term ongoing inquiry including engagement with model mentors, critical friends, critical texts, students, careful examination of critical incidents, and school improvement. Asks hard questions that challenge personally held assumptions. Focus is on specific administrative tasks such as planning, management, and summative assessment, but does not consider connections between issues. Uses data or experiences to mark success or failure without evaluating specific qualities for formative purposes.</p>
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Change	How does the inquiry change practice and perspective?	Analysis of practice without personal response – as if analysis is done for its own sake or as if there is a distance between self and the situation.	Personally responds to a situation, but does not use the situation to change perspective.	Synthesizes situated inquiry to develop new insights about teaching or school or about personal strengths and weaknesses leading to intention to improve practice.	A transformative reframing of perspective leading to fundamental change of practice.
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Table 1

The second row, *Inquiry*, explores the process of inquiry experienced by the student. At the most basic level, the data are examined for whether or not questions are being asked. The presence of questioning behavior indicates whether or not students see the need to interrogate their own actions. Further reflection is indicated by the ease with which answers are reached and whether or not initial questions lead to new ones.

Change is examined in the third row. Specifically, do the data show that students are critically considering their practice in light of their observations? Growth in this component is represented by no recognition of need for change (at early levels) to minor changes, to connected and fundamental changes at the upper levels.

The columns of the reflection matrix depict the different levels of reflection. The earliest level is *Routine*. Reflective chunks found at this level are disengaged from the process. Examples tend to focus on external issues, avoid responsibility or accountability for situations, and examine situations as if the reflector is not involved. This type of reflection may be found in novice leaders or leaders who find themselves in crisis mode.

Technical reflection, at the next level, involves the reflector giving a narrow response to specific situations without changing perspective. Leaders (or prospective leaders) who solve problems by figuring out what will be the most efficient solution for the situation may fall into this category. Reflection at this level is characterized by the absence of long-term thinking or acknowledgement of the complex nature of problems.

The next level of the matrix is *Dialogic* reflection. At this level, reflectors use reflection as a more iterative and inclusive process. They tend to look around to see who is impacted by decisions, what insight for solutions can be offered by other stakeholders, and see new questions emerge when the earlier ones have been resolved. Reflection at this level may also lead to new insights about student learning, teacher development or school culture as the gaze becomes broader.

Finally, the last level of the matrix depicts *Transformational* reflection. At this level, the reflection encompasses a much broader and deeper understanding than earlier levels. Reflective understanding at this level may shift the reflector's view of societal, cultural, or institutional norms that have been taken for granted. At a personal level, transformational reflection may fundamentally change the practice of the reflector. This level is not frequently reached, nor would it be desirable for school leaders to often change their practice in fundamental or transformative ways.

In terms of goals, this table is called a matrix rather than a rubric because it is not the goal to move to the *Transformative* level on all occasions. As we work with new or practicing leaders, the more important goal would be to have them identify what levels of reflection are being used in different circumstances, and to explicitly decide whether they need to broaden their perspective in some situations.

2.3 Results

After the reflective chunks of student work had been identified, these data were coded for levels of focus, inquiry, change, and overall reflection. This identification allowed further analysis to explore typical characteristics and precipitants of reflection, as well as the levels of reflection common to prospective leaders. In this section, examples of reflection at the different levels will be provided, and quantitative analysis of the data will be shared.

Identifying Reflection. Altogether, 246 instances of reflection were identified. Table 2 shows the frequency of each level of reflection. As shown, more than half of the reflective chunks (51.6%) fell into the Technical level. The second most common level was Dialogic reflection (32.5%), followed by Routine (12.6%) and Transformative (3.3%).

Reflective Frequencies

Level	Frequency	Percent
Routine	31	12.6
Technical	127	51.6
Dialogic	80	32.5
Transformative	8	3.3

Table 2

The frequencies for reflective levels within the different components show similar, but not identical patterns (Table 3). In each of the three components (Focus, Inquiry, and Change), Transformative is the rarest level, followed by Routine. The frequencies for Inquiry and Change follow the pattern found in the overall rankings, with Technical reflection being more common than Dialogic. In the Focus component, however, more instances of Dialogic reflection exist than Technical.

Breakdown oby Reflective Components

Level	Focus		Inquiry		Change	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Routine	19	7.7	43	17.5	39	15.9
Technical	104	42.3	117	47.6	123	50
Dialogic	119	48.4	70	28.5	75	30.5
Transformative	4	1.6	16	6.5	9	3.7

Table 3

At the Routine level, data revealed a tendency among participants to focus on aspects of leadership work that they did not consider to be under their control. For example, this chunk reveals a belief that the listed qualifications of a supervisor will lead to success.

As a supervisor I would be fulfilling the role of “teacher of teachers.” whose job it is to establish common goals for the school or department and guide teachers towards compliance with those goals. I think that in light of my varied experiences, including kindergarten, high school, middle school and community college and as a special education, basic- skills and now regular education teacher as well as state certification in reading, science and art. This, I feel, will be a strength for me.

This example, which narrowly defines success as teacher “compliance”, does not ask questions about what it will take to be an effective school leader, describe actions or behaviors that the leader will need to develop,

and depicts a leader who acts without seeking input from others. Although it is possible that the speaker's varied experiences will help lead to success, there is not evidence to suggest that this is necessarily the case.

Among Technical responses, data showed a willingness of participants to inquire about best practices until a solution to an immediate issue was found, but not to expand their thinking to inform ongoing practice or long-term initiatives. The following example shows a limited understanding of how a school and community interact.

The community surrounding the school also influences the supervisor. The supervisor needs to try and get community support and in turn they need to offer programs that will support the people in the community. If the school is in a community that has mostly non English speaking people, the supervisor may want to offer programs that will help these people learn English. The school may want to offer programs on helping children to read, or special education. The more that a school can offer to help educate a community the more it benefits everyone. When it comes time for passing a budget, if the school is benefiting the community they will be more likely to help pass this budget.

The speaker in this case is offering technical suggestions about involving speakers of other languages into the school settings to benefit them. There is an absence, however, of understanding how the involvement of all community members may benefit the school, except for the increased likelihood that the school budget may be passed. This view has paternalistic overtones that are not likely to increase school-community relations in the long run, although increased programming may be a step in the right direction.

Dialogic reflection included instances where participants understand and describe the need for perspectives other than their own, and acknowledge how the process of making decisions could be important. In this example, the participant refers to conversation and reading (Abrutyn, 2006) that have helped shape conclusions:

Abrutyn's article on the use of collecting data using walk-through questioning was interesting to me. I was not sure at first of the idea of someone stopping random students and asking them questions about their comprehension of a subject matter. The more I read, and the class discussion we had helped me appreciate the idea of walk-throughs to collect data. The plan of going directly to the source (students) to see if what is being done in class is effective is a very good idea. My first reaction was to think that you could get the same information from standardized testing, but I now think that walk-through questioning can give a unique perspective of learning from a very diverse group of learners.

This reflection demonstrates a change in the speaker's perspective over time and with input from others. The action that will result from the new insight will lead to more questions and additional perspectives, from students in this case.

As discussed earlier, it is not the goal to move all reflection to the Transformative level, nor is it expected that it will happen frequently. When Transformative reflection occurs, however, there is a fundamental shift in the perception of the reflector, for at least an element of their practice. In the following example, the speaker has had an important shift in viewing the ways in which questions are asked.

A supervisor's goal in a Post-conference should not be to inform the teacher of what that teacher needs to improve. Instead, s/he should use the discussion of the data to lead the teacher to a place of greater understanding of that teacher's teaching practices. In preparation for our Professional Development presentation, we focused upon the Critical Friends Group exercises aimed at generating "probing questions". Through this experience, I realized that the construction of a question can have a tremendous effect upon how the receiver of the question learns. If a question is too limited or biased, the corresponding response is likely to be limited, as the teacher (question receiver) will focus upon the judgment implied in the question rather than how s/he can think critically about his/her teaching. I further realized how conscious a supervisor must be of the subtle nuances of his/her speech in these exchanges. As supervisors, we must take every measure possible to ensure that our actions help a teacher to reach new heights of teaching, rather than inadvertently undermine this progress.

Because many novice supervisors and leaders, like many novice teachers, view the practice of instruction as "telling," it is a critical turning point for this emerging leader to realize the importance of "asking". Beyond that, the speaker has showed a sensitive understanding to the ways in which all communication is laden with meaning, both deliberate and unintended. Subsequent reflection by this speaker on the same topic might

allow them to progress further, but not reach the Transformative level. Having made this transition, s/he might begin to look for Technical ways to implement new patterns of questioning or engage in Dialogic reflection to seek others' feedback on how s/he is being understood.

A *Closer Examination*. Looking at the data in a different way helps to reveal what content and questions might lead to different levels of reflection from school leaders. Table 4 shows the means and standard deviations of the reflective data. Because the scores hovered between Technical and Dialogic, it is important to figure out what participants were discussing when they got to different levels of reflection.

Means and Standard Deviations of Reflection

Component	Mean	Std. Dev.
Focus	2.44	.660
Inquiry	2.24	.815
Change	2.22	.751
Overall Reflection	2.26	.717

Table 4

A second round of qualitative analysis assigned precipitants to each of the reflective chunks. In other words, for each chunk, this question was asked: About what were the speakers thinking when they wrote this? After initial assignment of a precipitant was completed, the varied precipitants were grouped into broader categories that could lead to further analysis.

The first group of reflective chunks focused on the actual roles of a supervisor (SUPERVISOR). These related to students' perceptions of themselves as supervisors or what students think a supervisor should be. Data included the desired attributes of a supervisor, important qualifications for a supervisor, and the supervisory style that students either used or felt were most desirable.

A second group centered on the relationships of supervisors to outside groups and factors (CONTEXT). Reflective chunks included in this area included comments about the community or parents, the context in which supervision was carried out, the impact of school climate on supervision, and the relationships in which a supervisor is engaged.

Another group of reflective chunks focused on the specific needs students perceived as they conducted observations and observed the needs of others (NEEDS). Precipitants for chunks in this group included information supervisors had available to them through the observations that focused on either K-12 student learning or teacher needs. Often, these chunks referred to specific data, such as teacher observations or student achievement test scores.

Finally, a group of reflective chunks examined students' perceptions of the actual supervisory work they were learning to do in the class (TASKS). These typically involved students' consideration of the tasks they would need to do as supervisors or the techniques they needed to carry out those tasks.

Table 5 shows the frequency of reflective statements at each level according to each precipitant. Statistical analysis using ANOVA reveals a significant difference in the number of chunks in each category ($F = 3.681$, $df = 3$, $p = .013$).

Reflection Participants

Precipitant	N	Mean	Std. Dev.	Routine (n)	Technical (n)	Dialogic (n)	Trans. (n)
SUPERVISOR	34	2.25	.781	6	24	11	3
CONTEXT	30	1.90	.803	11	11	8	0
NEEDS	68	2.41	.696	6	30	30	2
TASKS	104	2.28	.645	8	62	31	3
Total	246	2.26	.717	31	127	80	8

Table 5

There are some interesting findings in these data. First of all, the highest mean score comes from the precipitant of NEEDS. Of the 68 instances of reflection in this category, 32 are at Dialogic or Transformative levels, and only 6 are at the Routine level. This suggests that considering others prompts higher levels of reflection.

The lowest mean score was in the category of Context. Twenty-two of the 30 chunks in this area were at Routine or Technical levels. When participants made statements that focused on context, they tended to focus on things they felt they had no control over, such as budgets, standardized assessments, or tenured teachers. Because of this, they may have used context as an excuse not to take responsibility and act affirmatively toward situations.

The last two categories, Tasks and Supervisors, had predominantly Technical and Dialogic reflection. In each case, there were roughly twice as many Technical statements as Dialogic. This suggests that prospective leaders are looking to internal resources rather than external to make decisions.

Finally, a post-hoc analysis was conducted to see if there were significant differences among precipitants (Table 6). As might be expected, the only significant difference was between Context and Needs ($p = .02$). An important consideration, then, is getting prospective leaders to shift their thinking away from the ways in which contextual concerns block their way and toward the needs of stakeholders and how they can be met.

Post-hoc Analysis of Participants

Precipitant	Precipitants	Mean Difference	Std. Error	Significance
Supervisor	Context	.350	.188	.343
	Needs	-.162	.145	.846
	Tasks	-.029	.134	1.000
Context	Supervisor	-.350	.188	.343
	Needs	-.512*	.169	.023
	Tasks	-.379	.160	.128
Needs	Supervisor	.162	.145	.846
	Context	.512*	.169	.023
	Tasks	.133	.106	.757
Tasks	Supervisor	.029	.134	1.000
	Context	.379	.160	.128
	Needs	-.133	.106	.757

Table 6

* = significant at .05 level

Because the students who were participants in this study represented classes taught in different semesters and via different instructional formats (face-to-face and hybrid), additional analysis was conducted to examine any role those issues may have played. Analysis also was used to examine differences in reflection between the two assignments from which reflective chunks were identified. Table 7, which presents the results of t-tests, shows that no significant differences emerged.

Different Formats

Format	N	Mean	Std. Dev.	Std. Error	T	df	Sig.
Face-to-Face/Hybrid	91155	2.27/2.26	.761/.692	.080/.056	.176	244	.861
Spring/Summer	16581	2.27/2.25	.719/.716	.056/.080	-.265	244	.791
Clin. Sup. Proj./Exam	82164	2.26/2.27	.699/.727	.077/.057	-.126	244	.900

Table 7

2.4 Implications

These results leave us with several important points to consider. To begin, we must think about whether or not we are sufficiently and explicitly incorporating reflection into the preparation of prospective school leaders. Although the standards for school leaders include reflection as a desirable characteristic, it is not often specifically a part of either preparation or study of school leaders. Some of the characteristics of reflection, however, are highly visible in many preparation programs: collaboration, or seeking multiple perspectives, and focus on learning and instruction are clear and essential components of most effective preparation programs. These elements need to be tied together so that tomorrow's leaders become habituated to revisiting their decisions with an eye toward improving practice.

Linking the components of reflection may be as straightforward as beginning to teach the reflective process to students and expecting them to demonstrate such reflection in their work habits. Asking students to revisit significant pieces of fieldwork, for example, and identify components of focus, inquiry, and change, will signal to them that such elements are important. It would also be possible to have them interview school leaders about significant decisions they have made, focusing on these attributes, or design case studies to prompt discussion of reflection. The articulation of the importance of reflection will allow prospective leaders to see the importance of such actions, and may help them look for opportunities to reflect on their own work.

Another key consideration for prospective leaders is the level of desired reflection to be used in different and varied situations. Instructors should come up with key questions to prompt students to examine the need for reflection. For example, the following questions might provide scaffolding to move from Technical to Dialogic reflection, or demonstrate clearly that only Technical reflection is called for:

- How does this decision affect struggling students or teachers?
- How are stakeholders in the school community affected by this decision? Should they have been consulted or included in the decision-making process?
- What other issues will be raised by this decision? Are there more questions to be answered as a result?
- What have you learned about your leadership practice through making this decision? Are there aspects of your style or philosophy that need to be revisited? Were you consistent with how you envision yourself as a leader?

It may not be important to answer each question for all assignments, but raising them occasionally for prospective leaders puts the components of reflection on their radars.

Finally, the question of precipitants is important to consider. It was quite revealing that reflective chunks focused on CONTEXT were less reflective than other precipitants, and that chunks focused on DATA were more reflective. It is certainly important for emerging leaders to take stock of their surroundings and understand the environment in which they find themselves, but it seems likely that the ways in which that information is interpreted can either help them take responsibility for improving the setting, or offer reasons why change cannot occur. It is important to construct tasks in which emerging leaders can look objectively at settings and being to identify ways to take the next step. Instructional strategies may provide a path to that end. Critical friends groups methodology offers protocols wherein one group member brings a problem to the group and listens without responding as others discuss the problem, limiting defensiveness and blame from the initiate. Utilizing such a strategy in classes to describe the context around a problem or decision may limit personal involvement and emotional entanglement. It would also model one way to seek multiple points of view.

Many teachers who decide to become school leaders are already experienced and effective educators. It is certain that they have been able to reflect on their teaching practice in many ways. Transferring that skill to new role of formal school leader may require some prompting and scaffolding, but it can certainly be done. Like many aspects of education, reflection should be examined with a critical eye, asking the question, what is necessary in this situation? As instructors, we need to give them the preparation and tools to both ask and answer that question.

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