Taking Reflection to a Higher Level: A Study of Teacher Engagement in Intellectual Practice

Lori L. Taylor, University of Maine

Introduction
The independent evaluators of the i3 grant used the label deliberateness to describe the thoughtful practice of lesson analysis and reflection on teaching that exemplifies the instructional strength of Reading Recovery teachers (May, Sirinides, Gray, & Goldsworthy, 2016). Schön (1983) defined two levels of reflection as in-action (conscious on-the-run decisions) and on-action (thinking back on decisions and actions and considering how those actions contributed to observed outcomes). In their instructional contexts, these levels of reflection are observed as Reading Recovery teachers strive to reflect both in-the-moment and over time (Clay, 2001, 2015).

Clay calls for “individual adaptation made by the expert teacher to that child’s idiosyncratic competencies and history of past experiences that starts him on the upward climb to effective literacy performances” (Clay, 2016, p. 195). Reading Recovery teachers make critical instructional decisions throughout each lesson considering patterns of student reading and writing behavior and monitoring change over time in student responses. Effective teachers engage in decision-making processes before, during, and after lessons, and reflect on the effects of their decisions.

What happens when teachers intentionally add more-extensive written reflections to their established reflective practice? In this article, I describe a case study (Taylor, 2016) that explored teachers’ self-reported perceptions of and effects of engaging in systematic written reflections of teaching and learning. The following discussion presents details of the case study including a brief review of the literature, the procedures of the study, and discussion of the findings. Recommendations of this study, including a reflection protocol, are presented with suggestions for use by any Reading Recovery teacher.

A Case Study
Continuous improvement of teaching requires deliberate reflective practice (Bryk, 2009; Gallimore & Emerling, 2012; May et al., 2016; Schön, 1983). This study provided an exploration of what occurred when teachers added prompted weekly written reflections to their existing practice. The study focused on three research questions:

1. What is revealed about teaching and learning in systematic, structured, written reflections of Reading Recovery teachers?
2. What are teacher perceptions of engaging in systematic, structured, written reflections of Reading Recovery lessons?
3. What are the self-reported effects of engaging in systematic, structured, written reflections of Reading Recovery lessons on teacher thought and practice?

To answer these questions, three Reading Recovery teachers, nominated by their teacher leaders, were invited to participate. Informative data was qualitative. Over a 6-week period, the teachers submitted weekly written responses to questions posed on a Reflection Protocol and engaged in three interviews conducted individually. As the researcher, I maintained field notes of observations made during these activities.

Background
Research confirms that an effective teacher is key to student achievement (Darling-Hammond, 1996; Wright, Horn, & Sanders, 1997), and that reflective practice is a critical aspect of effectiveness. Further, writing is a suggested tool for enhancing reflection (Billings & Kowalski, 2006; Grieman & Covington, 2007; Purcell, 2013). Following is a brief summary of the relevant research.

The effective teacher. Effective early literacy intervention teachers observe student problem-solving behaviors, make contingent instructional decisions, and monitor student progress over time (Allington, 2002; Clay,
In Reading Recovery, teachers are accustomed to collegial reflection through dialogue (Lyons, Pinnell, & DeFord, 1993; Moore, 1998; Rodgers, 2000; Schwartz, 2006). Thus, while such collaboration was an established practice for the teachers in this study, engagement in writing to prompt deeper self-reflection was the focus of inquiry.

Writing to improve practice. Studies of professional development across many fields support the notion that writing improves learning and professional practice (Billings & Kowalski, 2006; Calderhead, 1991; Cohen-Sayag & Fischl, 2012; Jay & Johnson, 2002; Kent, 2011; Purcell, 2013). Researchers generally agree that the act of writing helps to organize ideas and knowledge (Britton, 1970; Emig, 1977; Langer & Applebee, 1987; Murray, 2004).

The literature on teacher writing as a method of reflection centers on journal writing. Many researchers examining the use of writing as a tool for teacher reflection report benefits to teacher practice, including increased work engagement (Makinen, 2013), heightened levels of reflection (Sung, Chang, Yu, & Chang, 2009), increased self-awareness (Farrell, 2013), and improved results of professional development (Moss, Springer, & Dehr, 2008; Sung et al., 2009). Chi (2010, 2013) described benefits to teaching practice through journal writing as promoting self-awareness and enhancing critical thinking by aiding teachers in dealing with uncertainties and problems.

Understandings gleaned from the literature informed the procedures applied in the current study.

Procedures of the Study

Participants
Three experienced Reading Recovery teachers volunteered to participate in this study. They had been teaching Reading Recovery for 4–10 years and were located at three different sites at substantial distances from one another within the same state. They completed all data collection procedures independently and did not collaborate during this study.

Data Collection
Multiple data sources were established and included weekly written responses to four prompts on a reflective protocol, transcripts from a series of interviews conducted over the 6 weeks of the study by the researcher in individual settings, and my field notes. While student records were also submitted weekly, the current discussion focuses only on the teachers’ responses.

Written reflections. The following four prompts comprised the written Reflection Protocol. The teachers focused on the performance of one student to respond weekly:

- What changes in student progress did you observe?
- What did your student need to learn next?
- How did you teach for strategic activity in response to the student’s needs?
- What changes in student processing did you observe as a result of your teaching?

Participants entered their weekly responses to these questions (data) into an existing, unique, locally developed electronic database.
Interviews. Three formal interviews of the teachers were conducted over the course of the 6 weeks. Initial interviews focused on gathering information about each participant and her report of past practice reflecting on Reading Recovery lessons. The second interview sought their reactions to the experience of writing reflections of lessons weekly, including feelings about the use of prompts, their process for using them, and any effects of doing so. The third interview also focused on perceptions of both the experience and effects of writing reflections systematically during the 6-week study, including feelings about their use of the prompts, their process for using them, and any effects of doing so.

Field notes and observations. I reviewed teachers’ written reflections on an ongoing basis and recorded my observations and impressions. I also maintained notes during each interview. As a neutral observer, I did not engage in communication about their responses. My field notes, containing observations and impressions, informed my analyses of the teachers and the effects of the study procedures.

Data Analyses
Data resulting from the written submissions were analyzed separately using a constant comparative approach (McMillan & Schumacher, 2010; Miles, Huberman, & Saldana, 2014). The data were analyzed as received (i.e., written reflections were analyzed weekly); and therefore, I revisited each step of data analysis systematically throughout the study.

A narrative analysis approach was applied to the interview data as the transcribed comments represented each teacher’s personal perceptions and reactions. This involved identifying units of data for coding and assigning inductive subcodes to further explain the data.

Written reflections. I analyzed each teacher’s written responses to questions on the reflective protocol individually each week. This involved identifying meaningful chunks of information (phrases or sentences) and then assigning each to a specific subcode within one of two broad categories, teaching or learning. The subcodes for teaching were observation, demonstration, prompt, and sharing the task. The subcodes for learning were response to task and response to instruction. This ongoing coding over time led to the emergence of additional subcodes that included strategic processing behavior, sources of information used or neglected, student disposition, and general comments. To check the reliability of the coding, two raters familiar with Reading Recovery instruction also analyzed and coded the data. This process revealed acceptable inter-rater reliability.

Interviews. The interviews were transcribed and coded in the initial categories of process, perception, and effect — the foci of interview questions. Data coded as process were further assigned to subcodes gleaned from the teachers’ reports of what impacted their experience. These were labeled systematic, structured, writing, and electronic. Subcodes identified inductively for perception included reflection, time and effort, planning, level of concern, and instructional moves. Subcodes assigned to effects were lesson records, identification of student needs, instructional language, and contingent instruction. Check-coding of the inductive codes by two external raters resulted in strong inter-rater reliability.

Field notes. My journal notes contained observations recorded during all study activities recorded during all study activities across all 6 weeks of the study. As the written and transcribed data were analyzed, I reviewed these notes to glean insights regarding the teachers, their teaching, their written reflections, and their interview comments.

Findings of the Study
Discussion of Question 1: What is revealed about teaching and learning in systematic, structured written reflections by Reading Recovery teachers?

This question was most directly answered by considering the teachers’ written reflections. Analyses revealed that the teachers’ responses described complex reading and writing behaviors. For example, in one entry Karen wrote:

Jayden always reads for meaning and errors do not usually interfere with comp. [comprehension]. Although Jayden uses initial visual to solve, he sometimes neglects medial and final [visual information]. He reads fluently and with expression. Once engaged in literacy work, he shows pride and effort in his accomplishment.

Within this one entry, Karen commented on her observation of the reader’s processing and attention to sources of information in text, her analysis of errors in the reading, patterns of attention to visual information in text, his reading fluency, and his emotional response to his literacy
work. The focus on processing behaviors in reading and writing was consistent across the reflections of the three teachers. This confirms that the specific question used in the reflective protocol is helpful in prompting thinking about teaching and learning. (See Appendix A for further examples.)

While similar, corresponding patterns emerged among the responses of these teachers, there were also differences in both what was discussed and the format of the responses. The reflection protocol accommodates individual approaches and thinking.

**Discussion of Question 2:**
What are teacher perceptions of engaging in systematic, structured, written reflections of Reading Recovery lessons?

Over the 6 weeks of the study, each teacher reported developing and refining a routine for writing to the prompts that fit her needs. While each took a unique approach to using the prompts, all three teachers reported that they found themselves reflecting upon the writing prompts within and beyond their lessons. They also reported feelings of increased efficacy and improvement of practice as described below.

**Discussion of Question 3:**
What are the self-reported effects of engaging in systematic written reflections of Reading Recovery lessons on teacher thought and practice?

Interview responses revealed that the teachers experienced multiple benefits from the process of engaging in writing weekly reflections. They described feeling they had enhanced abilities to reflect on their lessons, devoted more time and effort to both plan lessons and reflect on their teaching, had increased concern for their teaching, and had improved in their abilities to respond effectively to learners during lessons. Additionally, the teachers reported that they had refined their use of lessons records, felt more insightful in identifying specific student needs, and more successful in responding contingently to learners. (See Appendix B for interview excerpts.)

**A Model to Demonstrate the Findings**
As I analyzed interview transcripts, examined the written reflections, and considered my field notes, I realized that while the written reflections answered the prompted questions, the writing itself did not represent a comprehensive reflective process. It became evident to me that the opportunity for the teachers to discuss engagement in the weekly written reflections provided a meta-cognitive construct for the teachers to further reflect upon and describe the evolving process. It appears that the opportunity to engage in discussion lifted teacher thought and practice to the heightened level they described. For purposes of this study, I label this phenomenon intellectual practice.

The term intellectual practice represents active engagement and use of critical inquiry, thought and layered reflection to increase understandings and influence action, or instruction. Figure 1 represents the study findings.

**Self-reflection.** Reading Recovery teachers are accustomed to reflecting on their instruction, their students’ behaviors, emerging competencies, instructional needs, and their students’ progress over time. Reflecting and thinking about interactions between teacher, learner, and text inform teacher’s instructional decisions and are referred to here as self-reflection. In Figure 1, the components of self-reflection—already established by these teachers—include reflective inner thought and monitoring of teaching and learning. They are presented in this model at the base of the figure as foundational, the first level of reflective practice for the teachers.

Teachers in the study described monitoring of teaching and learning, reflective thought about practice, and engagement in reflective writing during interviews. While the interviews were not dialogue per se, there was an opportunity for the teachers to formulate and articulate their ideas for a listener, me, the researcher. The talk served as a mediator for refined thought and practice. The invitation to talk about engagement in writing about lessons provided an additional layer of reflection for the teachers, reflective discourse. This block represents the added layer of reflection that emerged as influential in the responses offered by the participating teachers. The blocks representing writing and discourse, tasks added during the study, are lighter in color to indicate that a perceived or present other is involved in these levels of reflection.

**Teacher perceptions.** During the series of interviews, the teachers were invited to share feelings and understandings about their engagement in the structured, written reflections. Over the 6 weeks of the study, each teacher reported developing and refining a routine for writing to the prompts that fit her needs. While each took a unique approach to using the prompts, all three teachers reported that they found themselves reflecting upon the writing prompts within
and beyond their lessons. The teachers also shared some perceived challenges, such as added time and effort, along with some level of uncertainty. However, they perceived these challenges as ultimately beneficial to increased levels of self-efficacy.

In this model, the arrows depict factors identified by the teachers as leading to feelings of increased abilities, or self-efficacy. The upward direction of these arrows illustrates raised levels of each factor, as opposed to new perceptions. Common perceptions among the three teachers include increased sense of efficacy regarding reflection, planning for instruction, and instructional moves. Perceived challenges of additional time and effort, as well as a raised level of concern resulting from engagement in the systematic, structured, written reflections also were seen by the teachers as contributing to their increased capability. Each factor is described briefly here.

**Time and effort.** Although the teachers remarked on the added time and effort demanded by deeper reflection and engagement with the written descriptions of lessons, each also pointed out that analyzing more broadly, reflecting more deeply, and dedicating the extra time and effort resulted in improved thought and practice.

**Level of concern.** Teachers described a level of concern in what to attend to, how to articulate their understandings or inquiry, and in scrutinizing their own teaching decisions. Over time, however, the level of concern for the added layer of reflection began to normalize, according to study participants. In other words, the weekly written reflections became part of the routine.

**Reflection.** Findings corroborate many other studies about the use of writing as a method of reflection (Chi,
What mattered in this study were the perceived and reported shifts in the level of reflection on teaching and learning that resulted in increased feelings of efficacy and improvements in teaching practice.
day basis, to identifying patterns of behavior across several lessons as well as more in-depth analysis across lesson components. The other teacher described the complexity as focusing on smaller bits of lesson data than usual, identifying more precisely student needs and next teaching moves. Whether narrowing or widening the focus, each described constructive change in use of lesson data to inform instructional decisions based on student need.

**Instructional language.** During interviews, each teacher highlighted improved use of language within her lessons. They reported that instructional language, mostly referred to as “prompting” in collected study data, became more precisely matched to student needs, calling for exactly what the student needed to attend to or do. Instructional language was descried as more clear, precise, and targeted.

**Contingent instruction.** Teachers reported increased analysis of lesson records and observations of student literacy behaviors resulting in a better idea of next steps in child learning, and therefore in teaching. Specifically, teachers reported clarification of the most effective lesson focus, using patterns of behavior in reflecting in lessons over time. They noted that consistent consideration of multiple records and types of data assisted their monitoring of change over time in both the child’s literacy behavior and patterns of teaching behavior.

**Conclusion**

Results of the study demonstrate that multiple layers of reflection combining inner thought, reflective writing, and discourse are conducive to the critical reflection necessary for impact on teaching practice (Cohen-Sayag & Fischl, 2012; Christie, 2007; Jung, 2012; Parsons, 2012; Spiro et al., 2013; Wold, 2003). The model (Figure 1) represents layers of reflective practice, combining self-reflection with co-constructed reflection, along with resulting perceptions and effects on practice, as reported by the teachers in this study. It is a practical example of adaptive expertise, or advanced knowledge acquisition, described in the literature (Hayden, Rundell, & Smyntek-Gworek, 2013; Lin, Schwartz, & Bransford, 2007; Spiro et al., 2013; Yoon, Koehler-Yom, Anderson, Lin, & Klopfer, 2015). Teachers reported that systematic, structured written responses about observed student literacy behaviors, responsive teaching, and resulting student learning resulted in increased feelings of efficacy and improvements in teaching practice. Furthermore, it was noted by this researcher that the opportunity for reflective discourse provided by the interviews added yet another layer of reflection and influenced the outcomes reported by the teachers. While the figure does not specifically suggest a cycle or process, readers should presume a spiral process of ongoing reflection that would occur in a responsive and contingent teaching and learning cycle (Gibson, 2010; Jones, 2000; Lose, 2007; Wood, 2003).

What mattered in this study were the perceived and reported shifts in the level of reflection on teaching and learning that resulted in increased feelings of efficacy and improvements in teaching practice. The writing of reflections in response to four prompts about teaching and learning provided a tool for organizing and recording inner thought about practice (Bazerman et al., 2005; Britton, 1970; Emig, 1977; Langer & Applebee, 1987; Murray, 2004). The opportunity to then talk about engagement in the writing provided synthesis of inner thought (Cole, John-Steiner, Scribner, & Souberman, 1978; Hanfmann, Vakar, & Kozulin, 2012). Layered reflection including reflective inner thought, writing, and discourse allowed teachers to identify strengths and challenges in teaching and learning and make adaptations to their instruction in an intellectual manner (Hayden, Rundell, & Smyntek-Gworek, 2013; Spiro et al., 2013; Wold, 2003; Yoon et al., 2015), perceiving a change in their practice in just 6 weeks.

**Limitations and Further Research**

Given the complex nature of the human instruments involved in this study (both researcher and participant), it is of course impossible to fully understand the motivation behind discussion of perceptions and self-reported effects of the teachers, and this is a limitation of this study. Additional limitations include the relatively short duration of the study and lack of a control group. Finally, findings presented in this study may or may not apply to settings outside the described literacy intervention or to teachers who have not had similar opportunities.

Further research investigating the premise that layers of reflection including monitoring of teaching and learning, reflective thought, writing, and discourse lead to a heightened level of intellectual practice resulting in adaptation of practice is warranted. Specifically, the additional reflection seemingly mediated by talk about the
engagement in written reflections in this study requires additional exploration. Reflective discourse, as familiar practice to the participants, occurred as an integral component of study design in this case. Further research may determine whether a level of intellectual practice could be reached without that mediator. Results of the current study indicate that the layers of support for teacher reflection worked together in a complex manner. Additional information is needed to clarify and confirm the hypothesis.

Implications for Practice
Deeply reflecting on teaching and learning across several lessons is beneficial to teaching practice. Reflecting on teaching and learning at weekly intervals provided an additional lens through which the three teachers in this study could analyze patterns of student processing behaviors in text as well as their own teaching decisions. Individuals reported that this either narrowed their perspective—providing a more focused examination of lesson data—or expanded their attention to consider patterns of behavior over time. In either case, teachers noted increases in their ability to better design instruction to meet student needs. Given that adding another layer of reflective practice had such an impact on the teachers in this study, one may presume that similar efforts would benefit other teachers.

Responding in writing to prompts representing a teaching and learning cycle may benefit teaching practice. The reflective prompts embedded in the database provided structure for the written responses of teachers in this study. While the specific prompts used reflect early literacy learning, they also represent a teaching and learning cycle (Gibson, 2010; Jones, 2000) in a problem-solving, responsive teaching model that can be applied to any level of instruction. Specific wording could be altered to address various content or instructional goals, but the use of guiding questions can provide a scaffold for effective reflection, as shown in this study and others (Hansen, 2006; Lai & Calandra, 2010). The supportive context and opportunity for multiple layers of reflection was critical to the results of the current study. Suggested by findings in this study and others in the literature, it appears that teachers benefit when provided with the time, space, and context for reflection that results in adaptation of practice (Hayden, Rundell, & Smyntek-Gworek, 2013; Yoon et al., 2015).

Feedback from teachers in the study regarding use of the electronic database for entering written reflections was mixed. While somewhat convenient and perhaps supportive in offering a scaffold for establishing a new routine, teachers did not feel the electronic system to be invaluable nor vital to the added reflection. The last column of the lesson record could serve as a medium for systematic written reflections of teaching and learning. Clay (2005, 2016) guides us to use the column labeled “Comments on any Part of the Lesson” to evaluate teaching decisions as we reflect after the lesson. This study confirms the importance of addressing the teaching and learning cycles as we record reflections daily and systematically in the last column of our lesson records.

The act of writing weekly to prompts representing a teaching and learning cycle seemed, for teachers in this study, to be the mediator to deeper reflection of their practice. While it is likely that the writing about teaching and learning did in fact serve in this capacity, and may have been a key factor in perceived effects on practice, comprehensive analysis of the study data suggests a more complex conclusion. We cannot dismiss the fact that talking about the process may have supported change in the teachers’ metacognitive stance (Lyons, Pinnell, & DeFord, 1993) and level of understanding about their own practice. For the three teachers in this study, who were already experienced and effective Reading Recovery teachers, adding multiple layers of reflection empowered new ways of thinking and being, moving their practice to an intellectual level.

The combination of in-the-moment responsive teaching and thoughtful analysis of responses over time for planned contingent teaching is critical.
resulted in a level of intellectual practice. Teachers gained an increased sense of efficacy and refined, or adaptive, practice. Specifically, teachers reported deeper reflection, broader analysis of lesson records, and more-precise responses to student literacy behaviors. Given that a reflective and responsive teacher matters to student achievement, the concept presented here may inspire researchers as well as practitioners in seeking ways to support heightened levels of reflection for teachers engaging in intellectual practice.

References

An Invitation
This case study resulted in a tool for others to consider and apply in their own work. The reflection protocol summarizes the layers of reflective practice used by teachers in the research study.

Reflection Protocol
1. Monitoring of Teaching and Learning
   Review records of the past five lessons.
2. Reflective Inner Thought
   Analyze and reflect upon teaching and learning interactions.
3. Written Responses to Reflective Prompts
   - What literacy processing behaviors in reading and writing did you observe?
   - What did the student need to learn next?
   - How did you teach for strategic activity in response to the student’s needs?
   - What changes in student processing did you observe as a result of your teaching?
   - What will be the next emphasis in your teaching?
4. Reflective Discourse
   - What have you learned about the student?
   - What have you learned about your teaching?
5. Repeat Systematically

It is important to note that teachers involved in the study recommended a fifth question be added to the list of reflective prompts. As they engaged in systematic reflective writing, each indicated the need for an additional question asking about next steps for instruction. Having reflected deeply about the teaching and learning from the previous week, teachers considered the feedback for the next lessons. Thus, in the protocol shared here, five questions are included. The reflection protocol could be used as a separate document, placed in a notebook or other journal, to ensure that teachers reflect deeply on an ongoing basis. In becoming more deliberate about our practice, it may matter less how we add layers of reflection to our practice than that we do.


Christie, E. N. (2007). Notes from the field: Teachers using reflection to transform classroom practice and themselves as practitioners. Reflective Practice: International and Multidisciplinary Perspectives, 8(4), 483-495. doi: 10.1080/14623940701649172


About the Author

Dr. Lori Taylor is a Reading Recovery trainer at the University of Maine. Her research interests include teacher professional development, teacher reflection on practice, and nonverbal communication in teaching and learning. Dr. Taylor is editor of the JRR Implementation Section, serves on the RRCNA Membership and Communications committees, and currently co-chairs the Teacher Leader Institute Planning Committee.


(see Appendices on Pages 28 and 29)
### Appendix A
#### Examples of Written Responses, Excerpts from Week 3

<table>
<thead>
<tr>
<th>Reflective Prompt</th>
<th>Teacher 1</th>
<th>Teacher 2</th>
<th>Teacher 3</th>
</tr>
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<tbody>
<tr>
<td><strong>What literacy processing behaviors in reading and writing did you observe?</strong></td>
<td>Jayden is noticing and problem solving on the run. He can search, s/m and s/c using all sources of information.</td>
<td>Using analogy to solve words in writing, attempting to break words using partial visual information, monitoring with visual primarily.</td>
<td>Liam is cross-checking to solve and self-correct. He uses text features (italicized and bold print words; punctuation) to guide intonation.</td>
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<tr>
<td><strong>What did your student need to learn next?</strong></td>
<td>Become an active problem solver. Integrate meaning and structure with initial, medial, and final visual. Use analogy to solve.</td>
<td>Search further visual info, monitor for structure, integrate sources while solving.</td>
<td>His reading on higher level texts is sounding a little choppy so we have been working on phrasing.</td>
</tr>
<tr>
<td><strong>How did you teach for strategic activity in response to the student’s needs?</strong></td>
<td>Use explicit prompts for solving: TTA and think about what they are doing while you make the sounds you see. TTA and look here. Give that word a slow check and see if you are right.</td>
<td>Read it and check if it looks right and sounds right (in writing), did that sound right? Try that again and think what will sound right and look right. You read _____ , does that sound right? You know a part of that word.</td>
<td>I had Liam read familiar stories with the intent to practice reading sentences in longer phrases. He also reread some of the stories he had composed. I cut his sentence strips into phrases for him to reconstruct and practice reading in phrases.</td>
</tr>
<tr>
<td><strong>What changes in student processing did you observe as a result of your teaching?</strong></td>
<td>He is noticing, searching, s/m, s/c and actively solving. His self-extending system is taking shape. He no longer avoids the new book but instead, grabs it with confidence.</td>
<td>Attempting to solve words using analogy in reading, some rereading to solve without prompt, stopping when what she read did not make sense or sound right.</td>
<td>Liam’s phrasing and fluency did improve somewhat throughout the week. He is more aware of what he ‘sounds like’ while reading and has reread a sentence on his own to fix his phrasing.</td>
</tr>
</tbody>
</table>
Appendix B
Excerpts of Teacher Interviews Describing Engagement in Systematic Reflective Writing

Teacher 1. Karen described the process of writing about her instruction as powerful, sharing, “Any time you stop and reflect...especially to write...it helps me to synthesize.” Karen described what she meant by synthesis as she spoke of writing reflections about a week of lessons, stating, “That’s the part of the writing that’s powerful, because you’re not taking one lesson, you’re kinda looking at a week’s worth and really synthesizing where do I go next.” Karen explained that writing about her lessons helped her in pulling together more factors than she had considered in the past, to identify what the student needed to learn next. She provided an example of the impact she felt her new process had on the child’s progress, showing the text level graph. She shared, “This is where we started [beginning of lessons], when I started writing [near the end of lessons], and this is where I saw that great big shift [during participation in the study], and I have no idea whether that was going to happen anyway or whether it was part of the process and that my teaching became stronger and more focused because I had done my homework.” Karen spoke of her metacognitive processes in writing reflective responses about her lessons. Describing how she considered the four related questions, Karen shared, “Writing in each of these sections I could see myself going back and adding a little bit more (to other responses).” She felt that this made the process of writing valuable for her practice. Karen also explained how the expectation of writing reflective responses impacted her work throughout the week, sharing, “Knowing I would be writing at the end of the week, I probably spent more time doing this (notes on lesson records) each day...it certainly has value for my notes.” Lastly, Karen noted that writing about lessons for an audience other than herself was helpful, describing that she was “taking my thinking and I’m synthesizing it and trying to write it for somebody else to understand.”

Teacher 2. Melissa explained, “When I write to the questions, I not only have my notes but what’s in my brain.” She reported that the writing of reflections about lessons, integrating notes from lesson records with observations made during teaching and learning interactions helped her to make precise teaching decisions. Sharing an example, Melissa said, “When I was typing up the prompts that I had used in the past week, I thought...that (prompting) was not so streamlined,” that by recognizing this in her writing, she was able to plan for prompting more specifically suited to the student’s needs. Sharing her connection to brain research on learning, Melissa described how the act of writing, for her, improved her decision-making for teaching. She stated, “The motor plan helps you to kind of solidify things in your brain and makes it easier to make decisions and kind of just solidify my thinking about...what I’m doing with the student. I always have a general plan but then that kind of makes it more concrete.”

Teacher 3. Sandra found that writing reflections about lessons helped to articulate observations of learning and teaching, and she saw that in turn this made her “more intentional about what [I needed] to teach next.” She explained that writing about her student and her teaching helped to “condense what I need to do” and determine how to “organize what they need to learn next.” Sandra found that the act of writing about lessons helped her to focus on “the most critical” piece. Sandra discussed that what was “hard for me in the beginning was articulating what I wanted to say,” but that “it got easier.” She shared that she enjoyed the challenge, and for people who want to think more about their practice, she saw it as valuable. She reported, “It makes me more aware of why I am doing it...in words.”