Reciprocity: Promoting the Flow of Knowledge for Learning to Read and Write

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For many children, the knowledge they have in writing flows to and informs their understandings in reading, and what they learn in reading can help them to learn more in writing. Clay (1993) refers to this flow of knowledge “as the reciprocity of the two activities that both use written language” (p. 44).

The American Heritage Dictionary (1983) defines reciprocity as a mutual exchange or interchange. Clay relates this concept to literacy in both Reading Recovery: A Guidebook for Teachers in Training (Clay, 1993) and her newest text, Literacy Lessons Designed for Individuals, Part One: Why? When? and How? (Clay, 2005a) in sections entitled “Reciprocal gains of reading and writing.” From these discussions we learn that reciprocity is a basic tenet of Clay’s theory of how children learn to read and write. In referring to teaching procedures, she reminds us that “reading and writing are interwoven throughout the Reading Recovery lesson series and teaching proceeds on the assumption that both provide learned responses that facilitate new responding in either area” (Clay, 2005a, p. 27).

However, she warns us that reciprocity does not occur spontaneously for all learners and that the supportive knowledge interchange is not automatic for many children who have difficulty learning to read and write. For the child who appears unaware of the reciprocity, she challenges teachers “to help the learner use what he knows in writing to help him read in reading and vice versa” (Clay, 1993, p. 44).

In their discussion of reciprocity, Lyons, Pinnell, and DeFord (1993) create the analogy of the child having two separate pools of knowledge and note that the teacher’s job is to help the child “dig a ditch” so the knowledge in the two separate pools flows together.

I’ve been thinking about teaching for reciprocity from the perspectives of Clay (1993, 2005a) and Lyons, Pinnell, and DeFord (1993). In this article, I share examples of what teaching to enhance reciprocity—to connect the pools of knowledge about reading and writing—looks like. Although Clay challenges teachers many times to provide teaching that helps the child relate these two areas of literacy learning, she provides few examples. For some teachers, how to
teach for the flow of knowledge between reading and writing has not been evident or spontaneous. This article is intended to present some helpful examples of how teaching for reciprocity might look as children’s competencies and the teaching change over the series of Reading Recovery lessons.

Using Writing During Reading in Early Lessons

Early in the series of Reading Recovery lessons, many teachers have experienced the situation where a student comes across a word in reading and stops—saying nothing—as if this were the first time this word has ever been seen, while at the same time the teacher knows the child has written this word independently many times. Clay has provided specific teaching procedures to help the teacher sort out this type of disconnect, and her discussion in the section “Suggestions for extending a meager knowledge of words” (Clay, 1993, p. 27) offers teachers guidance in how to use writing to help the child during reading. When the child stops, dead in his tracks, at a word known in writing but with no response or seemingly no recognition of the same word in reading, the teacher could say, “That’s a word you know how to write,” or “Go to the chalkboard, write that word.” Whatever the cause of the initial disconnect, helping the child understand that what he knows in writing will help him in his reading is important.

Writing during familiar reading was used to help sort out confusions for Maddy, who was often thrown into a swirl of “w” words while reading. The following example shows how the teacher used her word writing knowledge to address her confusion.

Familiar Reading: *The Red Rose* (Level 7)
The text is “Done, said the caterpillar, and it went back home.”

Maddy: Gone, said the caterpillar, and it was… (Maddy stopped and looked up.)

Teacher: (putting a white board and pen in front of Maddy) You can write that word. Write it.

Maddy: (quickly writes w-e-n-t)

Teacher: What did you write?

Maddy: *went*

Teacher: Now read. (Maddy goes back to reading successfully.)

The teacher skillfully interrupted Maddy’s confusion and intervened with an economy of words using the child’s strength in writing a known word. Interrupting the confusion on this page was particularly important because the next three pages contained the same refrain, *and it went back home.* The teacher’s action at the point of confusion prevented Maddy from practicing error or becoming further confused by thinking which one is it: *was, we, wants, went.* The writing helped her solidify the correct response. The next three pages gave her the opportunity to practice fast, correct responding.

In both Clay’s *Guidebook* (1993, p. 27) and *Literacy Lessons* (2005b, p. 40) she provides teaching suggestions to help children build a knowledge base of the reading vocabulary that is used many times in story books at early levels. Constructing the word with magnetic letters, tracing the word on the chalkboard, and writing the word using different media are some of the ways to help the child pay attention to the details of print and the sequence of letters in order to learn how to learn a word. The pattern of movement and the attention to the sequence of letters while writing have productive payoff in reading as well as in writing. Using writing to help learn words during reading is one of the critical connections teachers need to establish for children early in their journey of literacy learning. The following exchange between William and his teacher offer an example of such a procedure.

Familiar Reading: *Wake Up, Dad* (Level 3)
The text is “Look, mom! Look at Dad!”

William: (reading page 12)

Look, mom! Look *is* Dad!

(At the end of this line, William looks at the teacher.)

Teacher: Are you sure?

William: (William nods his head yes. He continues reading and reads the last two pages of the book successfully.)

Teacher: Dad finally woke up. Where are they all going to go?

William: The merry-go-round.

Teacher: I bet you’re right.

Now, you know what I noticed? When you aren’t quite sure you look at me. You can check yourself. Let’s make sure you were right on this page. You look at it.
William: (begins reading page 12) Look, mom! Look at (William stops.)

Teacher: Was there a tricky part? (William nods.) Was that is or at?

William: Look at Dad!

Teacher: At is an important word. You need to learn that word. Have you seen it before?

William: Yes. (He begins to spell at.)

Teacher: That was in one of your favorite books... the one about Danny. (Teacher shows the book and the student sees the word at.) You can read at and you can learn to write at. (Teacher and child stand. She makes the word at on the white board with magnetic letters, being sure to move the a to the left first.) Are you looking? Is that what at looks like?

William: Yes. (Teacher mixes the letters and William constructs at two times.)

Teacher: Now you can write at. (She hands William the chalk.) How many letters?

William: Two. (writes at on the chalkboard)

Teacher: Are you right? Is that what at looked like when you read it?

William: (nods yes)

Teacher: You are teaching yourself a new word, at. Write it again. First letter first. Around and down.

William: (writes at correctly)

Teacher: One more time. Write it quickly. (William writes at faster.) What word did you learn how to write?

William: at

Teacher: Let’s make sure you can read that word. Read this again.

William: Look, mom! Look at Dad!

Teacher: Are you sure?

William: Yes!

Teachers should be aware that for many children the seemingly simple two-letter words are often confusing. Extra effort must be made to establish what this teacher demanded and demonstrated: “first letter first.”

In my own teaching I am careful in early lessons to stress what I call a slow check of a word when locating a word or making decisions about how the letters of a word help us to say or confirm an unfamiliar word while reading. (See Clay’s comments on the left-to-right check in Literacy Lessons, 2005b, p. 12.)

The following interaction occurred during the new book orientation for a child who was in his first week of
lessons and was going to read *Tiger, Tiger* (Rigby PM Collection, Level 3).

Teacher: In this story the Tiger is asleep. When Tiger wakes up he is hungry and he goes looking for something to eat. Let’s see what happens. (page 2) There’s Tiger. Tiger is asleep. (page 4–5) There’s Mother Monkey and Baby Monkey. Are they asleep too?

Motasa: Yes.

Teacher: (page 6) Look, Baby Monkey wakes up. What letter do you expect to see first for *wakes*?

Motasa: *w*

Teacher: Find *wakes* in the story.

Motasa: (locates *wakes* by pointing under the word and quickly looking up at the teacher)

Teacher: When you find the word you have to check it like this. (Teacher demonstrates by putting her finger under the first letter and moving her finger left to right underneath the word while saying *wakes* slowly. The student is then asked to do the same thing, keeping his eyes on the word as he says it slowly, while moving his finger under the word left to right.)

Motasa had a second chance to practice this slow-checking procedure when the teacher asked him to predict the first letter and locate the word *safe* on the last page of the book. You can guess the rest of the story: Motasa was successful in locating and checking *safe* independently—and Baby Monkey was not eaten by Tiger!

This slow check helps to establish not only the left-to-right directional movement across the word but also directs the visual perceptual movement across the word. The slow check helps the child develop concepts of what is the first letter and how the sounds he is saying relate to the letters he is seeing. This is similar to the left-to-right sequential analysis task using Elkonin boxes in writing. An important caution is not to continue the slow check beyond its early usefulness because soon the child must make more advanced, rapid checks and have fast recognition of words. However, during early lessons the child must gain consistency in directional movement and security with the serial order concepts of English if he is to be successful.

These concepts are supported and demanded as the child writes messages and stories and should also be promoted by the teacher while reading. Inconsistencies in directional movement across a word may lead to what Clay calls “a haphazard approach to print which can be a major roadblock to learning to read” (Clay 1993, p. 53). Further discussion of this problem, “Teaching for a sequencing problem,” is presented in Clay’s *Literacy Lessons, Part Two* (2005b, pp. 164–165).

Elkonian boxes, an essential and extremely powerful procedure used many times in Reading Recovery lessons, provide a visible framework for more abstract sound analysis. Into boxes drawn by the teacher for each sound heard in a word, Sydney pushes counters or her finger into the boxes in sequence as she says the word slowly.
A similar slow check across a word can be used when the child makes a meaningful substitution by reading a word that does not look right. The following interaction took place during Motasa’s first reading of the story introduced above.

The text is “Baby Monkey is safe. Motasa: Baby Monkey is OK.
Teacher: Yes, the Baby Monkey got back with his mother. Check to see if it says OK or safe.
Motasa: Safe! (with his finger moving under the word)
Teacher: You’re right. Now it looks right and you kept your eyes down when you checked.

Again, the slow checking across a word would be done very deliberately in early learning and advance to speeded checking and recognition soon. The left-to-right visual analysis of a word to confirm that it looks right is highly productive when reading or writing.

After students have made progress in learning the task of Hearing and Recording Sounds in Words, which is taught during the writing portion of the Reading Recovery lesson, they are ready to tap into another productive pool of literacy knowledge.

**Using Strengths of Hearing and Recording Sounds in Words During Reading**

Some children respond quite easily to the sound analysis, or phonemic analysis, of words by using Elkonin boxes. Students are taught to use these boxes to provide a visible framework for the more abstract sound analysis. Early on in this procedure, the teacher draws a box for each sound heard in a word of three or four distinct sounds. The child pushes counters or his finger into the boxes in sequence as he says the word slowly. This is an essential and extremely powerful procedure used many times in most Reading Recovery lessons. In this procedure, the child is learning to connect the sounds of spoken language to the letters of written language. I have often called this procedure the “Rosetta Stone” of the Reading Recovery lesson. For some children, when they learn to do the Hearing and Recording Sounds in Words task successfully, it is like a “Eureka” moment!

Charlie was trying to write the word *make* in his story: “I am going to make a card for my mom for her birthday.” When Charlie said, “I don’t know how to write *make*,” the teacher drew three connected boxes and gave him three colored counters. They had practiced this activity several times before, but this was the first time they were using it while writing a story. After Charlie pushed in the counters as he said the word slowly, he wrote *m-a-k* in sequence in the boxes. The teacher added the *e* and said, “That’s how you write the word *make*.” Charlie said, “I get it. You say it and hear it so you can write it. Then I can read it!”

Charlie seemed to make the complete connection; letters represent the sounds you can hear and the letters give you some of the sounds so that you can read the word. For him it was as if the floodgates of the dam had been released, and the flow was now ready to come fast and strong.

The task of Hearing and Recording Sounds in Words, while done in the writing portion of the Reading Recovery lesson, also has a productive payoff in reading. But again, this does not happen spontaneously for all children. Jenny is an example of a learner whose strengths in sound analysis had little or no impact on her success in learning to read until the teacher took specific action.

Jenny had made some accelerated learning gains in early Reading Recovery lessons, especially in writing. In fact, her scores (raw score 24, stanine 5) on the Hearing and Recording Sounds in Words part of An Observation Survey of Early Literacy Achievement (Clay, 2002) indicate she entered her series of lessons with definite strengths in phonemic analysis. She also had a fairly good score in the Writing Vocabulary task, writing 12 words (stanine 4) to put her at the low end of the average range. Jenny demonstrated definite strengths in the areas of writing which should have supported her in learning how to read, but Jenny’s strengths in writing and sound analysis did little to impact her success in reading.

Jenny did make early gains in moving up the gradient of difficulty of text reading, but once she reached Levels 7, 8, and tried Level 9, success was hard won. It was as if she had reached a plateau and could not go much further. Her reading became a series of ups and downs with a barrier at Level 9 which seemed impossible to overcome.

Jenny’s teacher, Vicki, observed that Jenny’s tendency for slow processing and lack of monitoring was one cause of frustration. In addition, her lack of initiative in searching for more
information and in self-correcting errors independently was another source of worry. Strong teacher support and effective prompting was needed to help Jenny complete the reading of any new book. “What had happened? How can this be?” asked Vicki. “And, she is so good in writing that I am thinking about putting her in letter boxes!”

Vicki had done a good analysis of Jenny’s problems and also recognized that her teaching needed to change, but she needed help. She called for a clinical visit from the teacher leader who arranged for a small group to observe, analyze, and give a fresh look at Jenny’s processing problems. (The group for this clinical visit was composed of a trainer, a teacher leader-in-training, and a trained teacher leader.) After watching the lesson, the members of the group confirmed Vicki’s analysis of Jenny’s slow processing and her strengths in sequential, sound analysis in writing. However, they had observed Jenny disengaging many times during the familiar reading part of the lesson. She often looked up, or looked at the teacher, or tried to push the sleeves of her shirt up, or twist her hair as she read the easy, familiar books. The reading was not difficult for her in any way, but she read with a lack of attention and forward momentum.

It was during the first reading of the new book that the lack of momentum—the processing problems of not noticing errors and not taking initiative to problem solve unfamiliar words at difficulty—resulted in problems that compounded. Jenny made substitutions that fit the story and the language structure of the sentence but did not look anything like the words in the print. When she did stop at a difficulty, puzzled by an unfamiliar word, her first response was to look at the teacher and wait for help. She was expecting the help to come from the knowledgeable teacher instead of problem solving on her own. The gate was closed, and she did not appear to know how to draw on her high level of writing knowledge to help her problem solve during reading.

Charlie seemed to make the complete connection; letters represent the sounds you can hear and the letters give you some of the sounds so that you can read the word. For him it was as if the floodgates of the dam had been released, and the flow was now ready to come fast and strong.

After discussion confirming Vicki’s analysis of Jenny’s strengths and problem areas, the teacher leaders and trainer worked together to propose several areas for adjustments in teaching which were expected to benefit Jenny’s learning. The first area focused on how to get Jenny to attend more deliberately during familiar reading with fluent, phrased, and yes, speeded up processing. The teacher was simply to tell Jenny to keep her eyes down on the book and read the whole familiar book a little faster without looking up even one time. The group thought the overt behavior of looking up would be easy to shift. They also reminded Vicki to assure Jenny they would talk about the story after she read so the child’s responses and genuine enjoyment of the story would not be forgotten and so it would not interrupt the flow of the story. She needed to build a feeling of momentum—or feed forward—for reading. Vicki had to monitor her own behavior to make sure she didn’t interrupt Jenny’s reading with comments or teaching. Most commonly, a child stops processing the text being read when his teacher talks to him. Conversation, of course, is encouraged, but not during the reading of the book for a child who is breaking the habit of slow processing.

The second area of concern was how to use Jenny’s strengths in sequential sound analysis in writing to connect to noticing errors and problem solving words on the run during reading. Since this clinical visit to problem solve Jenny’s lack of continued accelerated progress was videotaped, I have the following excerpt of the teaching interaction at the end of the second reading of the new book (teaching after taking the running record) to share.

I did the teaching with Jenny as a demonstration for the group as part of the clinical visit being made. Jenny was reading Sally’s Friends (Rigby PM Collection, Level 9). After the running record, page 8 was selected for a teaching interaction. This interaction should not be interpreted as a demand for accuracy but rather as an opportunity for Jenny to learn how to use her sound analysis strengths in writing to help her monitor and confirm during reading.
The text is “Sally made the cars go down the road to the tunnel.

Jenny: Sally made the cars go under the road to the tunnel.

Teacher: (using page 8) Try this again. (The first prompt is for monitoring, finding the error.)

Jenny: (Jenny reads the page again making the same error, under/down, but this time makes an additional substitution, tunnel/road.)

Teacher: Try that again, something didn’t look right.

Jenny: (Jenny points to the word road.) This was s’post to say road.

Teacher: Nice work. Now read it with me. (The teacher and Jenny read up to the error, under/down, the teacher taps her pencil over the word down and doesn’t move on.)

Jenny: Oh! (Now Jenny rereads with the teacher sounding the d. This time Jenny reads the rest correctly.)

Teacher: And is that what was happening in the story? (sliding her pencil along the picture) Sally made the cars go down the road to the tunnel. I like the way you

found that word (road) didn’t look like tunnel, did it?

Jenny: It didn’t start with a t. It started with an r.

Teacher: Does that look like how you would write road if you put it in boxes?

Jenny: (Jenny tilts her head and shrugs as if uncertain.)

Teacher: Would you put an r in the first box? Does that look like how you would write road?

Jenny: (Now, Jenny nods her head to indicate a strong yes.)

Teacher: If you were writing down would you write a d in the first box?

Jenny: (nods yes again)

Teacher: Yes. You are very good about writing words in boxes. That might be a good thing to think about when you are checking a word. That might be a very good thing to think about.

The above teaching interaction may seem a bit long and labored, but it was intended to have a three-fold purpose. First, it was intended to help Jenny use her strengths in sound-to-letter analysis used in writing to transfer and become productive when going from letter-to-sound analysis while reading. The second purpose was to serve as a demonstration for Jenny’s teacher. And lastly, the teaching interaction was used to promote a discussion about working for shifts in learning for the teacher leaders who were taking part in the clinical visit. Clay (2001) provides this added insight which relates to this example:

A couple of new items read correctly is a small gain when compared with consolidating the strategy of knowing how to cross-check the letters in sequential order with an analysis of their phonemic structure, checking each move, and all unprompted and in your head. (pp. 128, 129)

This is the understanding Jenny needs to internalize as she taps into her reservoir of how sounds and letters work together in both writing and reading.

During Writing, How Does the Teacher Help Make Connections to Reading?

I have provided examples of how teachers can help children learn more about printed text when reading by using their strengths in writing, and how strengths in writing can be made explicit and connected to monitoring and problem solving while reading.
Now let’s look at enhancing writing by applying understandings of reciprocity, and at procedures for connecting strengths and growth in reading to the child’s writing. The writing component is part of every Reading Recovery lesson and has the goal of helping children learn to compose and write stories and messages at a level of achievement considered to be average for first-grade students. The writing component was not included in the lesson framework to support accelerated achievement in reading exclusively. Clay’s procedures focus equally on developing writing skills, as indicated by the titles in her two-volume Literacy Lessons (2005a, 2005b). In teaching during the writing component of the lesson, as in other components, the teacher makes decisions based on observations of the learner and responds to changes over the series of lessons.

An early lesson with Rachel serves as an example of how the teacher made specific connections to reading during the writing of a story. Rachel had read the book, The Baby Owl, (Rigby PM Collection, Level 4). After talking about the owl story, she composed this story: “Mother Owl is cooking mice for her babies.”

Writing about the book they have just read is not a requirement for students, but since Rachel was also learning to speak English while learning to read and write, she often used the security of the recently read story as a basis for her composition. In the book, the mother owl had fed the babies a moth, so Rachel had added her own twist to her story.

The writing of her story began:

Rachel: Mother, \textit{m}—(Rachel sounded /m/ then wrote the \textit{m}. The teacher completed the word \textit{mother}.)

Rachel: \textit{w} (Rachel quickly wrote a \textit{w} on the story page.)

Teacher: Try up here, (indicating the work page and covering the \textit{w} written on the story page)

Rachel: \textit{l-w-o} (Rachel quickly wrote the letters for \textit{owl} left to right but in reverse order.)

Teacher: Oh! That’s interesting. You have all the letters. You need to make the \textit{o} first.

(writes an \textit{o} above Rachel’s rendition of \textit{owl})

That’s backwards.

(draws a line through \textit{l-w-o})

Look at Mother Owl’s name in the story.

(finds the book and a page with \textit{Mother Owl} written on it) Look, see the \textit{o} is first. See the word \textit{Owl}.

Rachel: (looks at the book, smiles, and then writes \textit{owl} in her story)

This beginning episode in writing offered opportunities to help Rachel gain some connections and learn some basic concepts about printed
English. (Note: Her first language was Shona spoken in Zimbabwe. Shona is written left to right, the same as English.) First, she seems to understand that talking before writing is one way to discover a story to write. More importantly, she experienced that directionality matters! Writing left to right is important, and now perhaps she has a better concept of first letter. The teacher tried to help her understand the critical concept of first letter both on the work page and by using the actual book she had read. Clay states: “Time, exposure, construction of words in writing and putting this to work in reading seems to bring the child to a knowledge of how words are made in English” (1993, p. 43). Rachel’s series of lessons continued to support her in sorting out her unique confusions as she continued to compose and write some wonderful stories. One day she spontaneously declared, “I love to write the stories!”

Another example of connecting reading to writing happened with Sara, who was nearing the end of her series of lessons and was at an advanced level in both reading and writing. In trying to write an unfamiliar word, she now either gave it a try independently on the work page or the teacher drew a series of connected boxes for each letter to represent the actual spelling of the word. In advanced lessons, Sara had read a fairly long, complex version of The Three Little Pigs (Reading Unlimited Scott Foresman, Level 13), and now was going to write a summary of the story which would have a beginning, middle, and end as required by the classroom teacher and the district achievement standards.

Sara composed this beginning: “The mother pig told the three little pigs to get out of the house. The pigs went down the road and started to build their house.”

Sara wrote “The mother pig” quickly and independently. She initiated going to the work page to try out the word told. After writing told she said, “That’s right!” and wrote it into her story. She continued writing quickly until she came to the word little.

Sara: I think I need boxes.

Teacher: I don’t think so. You know how it starts. Think about how it looked in the story you just read. You read little pigs so many times—how did it look? Try it.

Sara: Oh, yes. I know now. (She confidently wrote “Little pigs” with a capital letter first for “Little” just as it had appeared in the story many times as the first word in the sentence.)

The middle part of Sara’s episodic story continued the next day: “The big bad wolf huffed and puffed to blow the first pig’s house away so he could eat him. But the pigs got away.” She wanted to write the word huffed for this part of her story. After writing wolf she stopped and looked up.

Teacher: I’ll draw boxes for huffed.

Sara: (b was written quickly in the first box) a? e?

Teacher: Yes, it’s a vowel. Think what it looked like in the story.

Sara: u and now I know the rest. Two f’s!

Sara was in high gear, tapping into the advanced skills that many adults use: thinking what the word looks like when they have seen it in print, or writing down several versions to determine the correct spelling. Yes, Sara is ready to have her series of lessons discontinued in terms of using reading and writing together. Her knowledge base of reading and writing is now an intermingled, steady flow to support her as she continues to make progress with the support of classroom instruction.

In conclusion, this discussion has focused on a basic tenet of Clay’s theory of how children learn to read and write, that is, the reciprocity of reading and writing during the early stages of literacy acquisition. The examples were chosen to make
teaching for the reciprocal gains of reading and writing more explicit. Teaching that supports the learner in using his knowledge of writing during reading and his understandings gained from reading in writing messages facilitates literacy development. We are therefore more effective Reading Recovery teachers as we become more skillful in observing and supporting learners in applying this knowledge interchange. The outcome is enhanced learning and accelerated progress for the children we teach.

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References

Children’s Books Cited

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