A study explored student teachers' adherence, rejection, or modification of their course work-generated (but untested or "idealized") model of reading when faced with the demands of the classroom. Fifty senior education majors enrolled in an integrated elementary and special education program at an urban university wrote reflective essays, submitted lesson plans and narrative lesson scripts, and were observed by their university supervisors during their full year of student teaching. Results indicated that most of the student teachers appeared to have internalized the basic concepts stressed during their developmental reading course—that reading is an interactive cognitive process and that reading instruction should be guided by thoughtful analysis of the reader's needs and goals. Results also indicated that: (1) lesson observations and student teacher reflections generally were in agreement; (2) most of the student teachers clearly indicated how, when, and if they changed their beliefs; but (3) a few student teachers parroted what they felt was the expected answer when they wrote their reflective essays. (Fifteen references are attached.)

(RS)
TEACHER COGNITION: EVOLVING REFLECTIONS AND USE OF READING PROCESS KNOWLEDGE IN THE CLASSROOM

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Teacher Cognition: Evolving Reflections and Use of Reading Process Knowledge in the Classroom

Classroom teachers' instruction actions should reflect conscious analysis and decision making based upon theoretical knowledge. There is no more critical area for this to occur than reading. Without opportunities to analyze and reflect upon previously held and newly obtained reading concepts, novice teachers may base instruction decisions on their own remembered classroom reading experiences or accept proposed reading philosophies or practices without thorough scrutiny and reflection.

Attempts to promote pedagogical cognitive and metacognitive awareness with preservice and inservice teachers have included using reflective inquiry (Goodman, 1984; Zeichner, 1981; Gore and Zeichner, 1991; Smith and Pape, 1990; Beach, 1991). However, concerns have been expressed about theoretical constructs and methodological approaches used to examine cognitive and reflective characteristics (Kagan, 1990; Gore and Zeichner, 1991) with the recommendation that a multiple measures tactic using both quantitative and qualitative strategies may better grasp subtleties present (Kagan, 1990).

Reading cognition and/or reflection studies have focused on preservice teachers' understanding of reading instruction and reading strategies (Roehler et al., 1987; Roehler, Herrmann and Duffy, 1989; Roehler and Reinken, 1989; O'Brien and Stewart, 1990; Smith and Pape, 1991). Andrews (1990) used reflective inquiry to investigate theory building in methods courses. Gordon and Hunsberger (1990) concluded that preservice content area teachers' knowledge and beliefs about reading were influenced positively when the students reflected on reading issues through hands on activities and journal writing. Bednar (1991) found that preservice elementary/special education and secondary education majors were
able to identify and reflect upon their developing reading process and practice knowledge when a series of reflective activities were used. However, students were not involved in a practicum situation and results were presented with caution.

Although Herrmann and Sarracino (1991) noted some literacy cognition and reflective practice development, they reported generally less positive results with preservice groups who were emerged in a reflective literacy teaching experience. Readence, et al (1991) reported inconsistencies between inservice teachers' theoretical views of reading and instruction practices. It was concern with the possible temporal nature of preservice program developed cognition and reflective characteristics that prompted this follow up study.

This study continued to explore the unfolding reading process knowledge and reading instruction practices of elementary and special education preservice teachers. The purpose of this study was to investigate the degree to which preservice teachers use a theoretical basis to guide reading instruction decisions. Specifically, the study explored student teachers' adherence, rejection or modification of their course work generated but "untested" or "idealized" model of reading when faced with the demands of the classroom. The extent to which the student teachers were aware of using/rejecting or modifying their reading cognition also was examined.

**Method and Procedures**

Fifty education major seniors from an urban university participated in this study. The preservice teachers included forty-seven females and three males. Enrolled in an unique integrated elementary and special education program with an emphasis on child development, these student teachers were engaged in their final preservice experience, a full academic year of student teaching:
one semester at an elementary placement and one semester at a special education placement. Student teaching sites were located in eight different urban and suburban school districts. In addition, placement sites ranged from self-contained elementary classes with considerable resources to urban special education classes located in revamped storage closets. Special education placements had the greatest range: self-contained classes for young learners labelled trainable mentally retarded, secondary level classes for severely emotionally disturbed, as well as classes for physically and mentally impaired transition level young adults. At the conclusion of the practicum, successful candidates were eligible for state certification as elementary education teachers and teachers of the mentally and physically handicapped.

As juniors, students had completed a required developmental reading course which focused on developing reflective reading practices and generating a "working" reading model to guide classroom practices. This model considered reading a dynamic process dependent upon the interactions of reader, text, purposes, context, and strategies. Entry level open ended essays provided initial reading cognition levels. At the conclusion of the reading course, reading cognition levels again were obtained using open ended essays. This data provided baseline information for the current study (Beenar, 1991).

The study's data sources were triangulated. Evidence of reading process knowledge and use during the student teaching experience was elicited through a series of writings, observations and activities. Materials examined included reflective essays, university supervisor observation scripts, and student teacher submitted "reading reflection packets" which included detailed lesson plans and materials, narrative lesson scripts, and reflective statements of the submitted narrative or expository reading lessons. To assist in the packet reflection, audio or video taping was suggested. Additional lesson plans, reflective journal
entries and formal supervision observation reports were reviewed. At the conclusion of the practicum, student teachers' cognition about reading and reading instruction practices again were elicited via a final free response reflection essay.

Analysis

Data collected through the academic year (1991-1992) was analyzed using constant comparative analysis (Glaser and Strauss, 1967) to examine reading cognition characteristics, use of theory to guide instruction decisions and actions, and awareness of consistency or inconsistency between stated reading beliefs and reading practices.

At the end of the field experience year (May, 1992), the exit essays, scored blind, were read to determine individual essay thought units. Essays were re-read and thought units again were identified. Categories were generated from the thought units. An external reader/rater read essays (20%) to identify thought units and determine categories from thought units. Discussion ensued until 100% agreement was found. Categories from these reflection essays were compared to categories identified in the baseline essays obtained when students were enrolled in the reading course (May, 1991).

Using a series of re-examinations, the university supervisor reading lesson scripts were analyzed to identify student teacher classroom instruction practices. General trends were generated from the observed practices.

The reflective reading packet's lesson plans, narratives and accompanying reflection statements, and supervisor scripts were triangulated with 91'baseline and 92'exit reading cognition essays to analyze reading cognition reflections and applications over the field experience year, as well as consistency between stated
beliefs and practice.

Results

Evolving Reading Process Knowledge: Reflection essays '91 - '92

After the year long student teaching experience, the student teachers all indicated that they viewed reading as a dynamic process with emphasis on meaning. This was a slight change from the pre-student teaching essays but consistent with what the majority indicated at the end of the junior year reading course. Reading was presented as part of a holistic communication process wherein reading is very much dependent upon an on-going interaction involving the reader, text issues, reading context, and the strategies available to the reader. Few student teachers specifically included awareness of reader goals and/or purposes when discussing their view of reading.

A few students indicated that they were unsure of what was involved in the reading process. However, unlike statements prior to student teaching stating that she/he "simply didn't know", the student teachers now attempted to specifically address their discomfort and referred to a personal lack of understanding. Several indicated that they could cite the different theories but were not comfortable with how they understood and what they could do with this knowledge.

Reading is not something I feel comfortable defining even after a full year of student teaching. I could not restrict this process to a single sentence or even a few sentences. I feel that it includes numerous components such as the acquisition of language, the ability to read and comprehend written print, the ability to express ideas using written language and the ability to communicate effectively using oral language... (Maryrose).
Prior to engaging in the field experience, the student teachers expressed some concern with knowing how and when to use reading process knowledge to guide decision making in the classroom.

I'm not exactly sure where my level of comfort is with reading techniques that we have discussed. On paper these techniques appear to be very abstract but I'm certain that when they are taken from the paper and put into action they will become easier to understand... (Michael).

After student teaching, most student teachers reported considerable comfort with using specific reading techniques to frame their reading and reading related content lessons. They listed how and when they, not only used a specific reading technique, but adapted it to meet specific contextual or learner needs. In addition to a strong emphasis on teaching learners how to use strategies when reading narrative and expository text, there was a focus on linking these strategies to meeting learner needs when developing instruction.

I used many different techniques in reading. For example, DRTAs, semantic mapping, creative writing, KWL, story grammar maps...(Nicole).

This semester I had to stretch my creativity to incorporate reading into the curriculum. Five to seven year old TMR [Trainable mentally retarded] were not formally reading. Therefore, I developed a curriculum to incorporate reading. I read them stories and had the students use their background knowledge and prediction, and we set purposes for reading. Also, we created Big Books from stories that the students created...(Christine).
Rather than a specific concern with how and when to employ a specific reading approach, students now expressed considerable concern about the dissonance between what they had learned about reading and reading instruction in course work and what they either observed their cooperating teachers do or were required by the cooperating teacher to do in the classroom.

How reading should be taught is an area of conflict for me. What I learned and how I've seen reading taught in the schools is totally different. At [university], I have learned many different reading strategies to teach when teaching reading but in my placements I have only seen the traditional way of teaching reading with basal reader, workbooks and round robin oral reading. I think some traditions are good, but it can not be the only technique used to teach reading. I think that the teaching of reading is going to change drastically in schools... the idea of teaching reading with writing and integrating reading with subject areas (Jill).

Although emphasis on cross curricular approaches to reading instruction was evident prior to student teaching, this emerged as a stronger belief after the student teaching experience. The majority of students indicated that they felt this helped the learners to understand not only specific content but also provided learners with an approach to lifelong learning.

Applying Theory to Practice: Scripted observations

Did the students' reported beliefs about reading and reading instruction coincide with what they actually did on a day to day basis during student teaching? The university supervisors' scripts provided a wealth of information about how the student teachers operationalized their reading process knowledge of reader, text, purposes/goals, context and strategies in the classroom.
Overall, the supervisors noted that the student teachers emphasized reading strategy awareness and development during reading class and content reading instruction. Specific strategies included narrative text structure awareness, prediction, visualization, summarization, and prior knowledge. This emphasis on strategy knowledge cut across programs in that student teachers were involved in using traditional basal programs, new wave basal programs, literature based programs, and "whole language" programs. In addition, strategy instruction was apparent in all types of classes represented by the placement sites.

There did not appear to be a universal procedural framework for the reading lessons observed. Supervisors reported that frequently students modified a basic Directed Reading Thinking Activity DRTA model to suit individual and group needs. Many used story maps to frame their lessons and incorporated prediction, visualization and summarization. Regardless of reading program and instructional format, the student teachers consistently developed lesson set inductions to access and assess prior knowledge and generally set purposes to guide reading.

Supervisors did note that a few student teachers continued to present lessons which reflected reading as a teacher-directed step by step rote process. Isolated presentations of subskills of reading such as phonics and vocabulary, as well as round robin reading, were cited. Although not the majority, there were indications that the integrated interactive reading approach espoused by some of the student teachers was rhetoric.

Supervisors' content reading scripts ran the gamut - from observations of carefully constructed lessons presenting the New England, Middle and Southern colonies using KWL+ and lab lessons on the digestive system using cognitive mapping as a way of foster monitoring to round robin reading to limited or no opportunities to observe content reading lessons. Individual supervisors, at times,
indicated that there were no opportunities to observe the student teachers' content area reading because it was not part of the curriculum, no content texts were available for the class, and/or the cooperating teachers did not teach content concepts using any printed materials but relied on science kits. Overall, the student teachers favored KWL+ and cognitive mapping as instructional tools when presenting content area reading lessons. There were reports of student teachers using guided reading procedure and reciprocal teaching.

Supervisors reported considerable emphasis on writing and reading with content area presentations. In addition, there were reports of cross curricular emphasis with content area theme units. Again, this cross curricular emphasis transcended the specific placement site and was found in regular education classrooms as well as the wide range of special education classrooms.

Concurring Views: Belief and Practice

To ascertain the level of agreement between what the student teachers expressed about their reading beliefs and their practices, fifteen case scenarios - student teachers' reflection essays, supervisor scripts, and student teacher reading reflection packets - were examined.

There was a high degree of agreement (86%) between student teacher reflective essay comments, student teacher presented reading packets and reading lessons observed by university supervisors. It should be noted that except for two cases, the student teacher submitted lessons were not the same lessons observed by the supervisors. Thirteen of the fifteen cases scrutinized demonstrated that regardless of class designation, the student teachers were making instruction decisions based upon an analysis of one or more of the factors developed during their reading course: reader needs, text or curriculum issues, learning
goals, reading/learning context, and strategies for effective reading. At times, their operationalizing of this reading knowledge was at odds with cooperating teacher beliefs and practices.

Some [co-op] thought it would be impossible to teach reading to this population [5-7 year old trainable mentally retarded learners]--except survival words. I felt that as long as the students have a brain and are able to think -- anything was possible. I proved to others as well as myself that reading can be incorporated in any curriculum. The students enjoyed seeing their thinking in print and it raised their self-esteem. In the long run, they will be able to create more stories from these positive experiences (Christine).

Scenario examinations indicated that, for the most part, the student teachers were able to adapt reading instruction to meet individual needs in specific contexts without undermining their view of reading as an interactive cognitive process. Many student teachers taught in learning support, life skills and learning disability programs where learning objectives clearly designated survival reading skills. Consequently, some student teachers made instructional choices to address these learner and contextual needs within the framework of their reading philosophy. For some, this meant, in a class of non-reading learners, reading strategies such as prediction, story grammar, and summarizing were introduced and extended by developing the learners' listening skills. For others, a cognitive mapping using pictures was used to help develop not only sight words but also connections between related concepts.

Not all the student teachers were successful in bridging theory and practice. Two indicated very interactive views of reading and reading instruction in their reflection essays, lesson plans and narrative reflections; however, supervisor scripts
clearly indicated this was not the case.

Conclusions

Investigating the degree to which preservice teachers use a theoretical basis to guide reading instruction decisions, this study explored student teachers' adherence, rejection or modification of their course work generated but "untested" or "idealized" model of reading when faced with the demands of the classroom. Most of these student teachers appeared to have internalized the basic concepts stressed during their developmental reading course - reading is an interactive cognitive process wherein the reader, the text, the context, the purposes or goals of the task, and the reader's available strategies interact to assist comprehension; and, reading instruction should be guided by thoughtful analysis of the reader's needs and goals, in addition to curriculum guidelines and text issues. This particular model of reading parallels the university's teacher education program philosophy of identifying and meeting individual learner needs regardless of the learner's identified classification as regular education or special needs learner. Perhaps it was this pervasive underlying view of the learner that assisted many of the student teachers to adopt the reading tenets.

The extent to which the student teachers were aware of using/rejecting or modifying their reading beliefs as a result of the on-going demands of classroom practice also was examined. Based upon the case study information examined, the outlook is promising. Lesson observations and student teacher reflections generally were in agreement. In addition, most of the student teachers clearly indicated how, when and if they changed their beliefs. Although, at times, they critiqued the principles presented at the university at being insufficient for their specific classroom needs - "We should have spent more time on high interest-low ability materials", they acknowledged the value of having a reading knowledge base to guide
There were students who parroted what they felt was the expected answer when they wrote their reflective essays. Their classroom practices did not reflect understanding of how to bridge theory and practice and they presented reading as they themselves learned or observed in the placement. Given the opportunity to apply what they had been taught, they were unable to do so. Is it a question of not really internalizing the knowledge that there are alternative views and more appropriate means of teaching available? Is it that the student teacher did not feel comfortable teaching reading in opposition to the cooperating teacher? Or, is it that each novice teacher needs to work through these issues individually? One student addressed this issue when she indicated:

Reading for me was the hardest subject to teach - perhaps because of the need for students to excel at it - or at least be successful on their own level. I had a hard time trying to continuously be creative and keep the students motivated. However, this got easier over time. When I first began student teaching, I went about teaching reading entirely wrong [SORRY, I know how much you drilled us!]. I would spend one day doing vocabulary skills, then read some of the story, then check on comprehension, teach or review the skill, then do workbook pages... by the middle of my last placement I integrated vocabulary, strategies, reading, comprehension, and creativity into each daily lesson. And it was not even that hard as I got used to it (Sheri).

This particular student had excelled in the reading course. By all measures used, projects, tests and reflections, she should have been ready to apply the theories to practice. But, she couldn't immediately. In contrast, another student who was marginal in her understanding and acceptance of reading as portrayed by her reflections and course work, was able to apply theory to practice immediately. Unhappy with the rigid basal manual approach the
cooperating teacher was using, Jill eased in strategies and eased out the manual. She applied reading strategies with content materials by using instructional techniques which focused learner attention on monitoring and summarizing.

Perhaps the answer is as Herrmann and Sarracino (1992) suggested when they cite the need for teachers to be able to think for themselves in regard to literacy issues. The more knowledgeable and comfortable teachers are about their discipline, the more able they may be to make decisions in the field. The student teachers included in this study were not taught to view reading in a formulaic manner but were encouraged to view reading as a dynamic cognitive enterprise. For some, this was a great challenge, for others it provided an incredible obstacle. Teacher education programs and inservice programs can only provide guidelines and assistance to help teachers become more thoughtful of their beliefs and practices.

Similar to the concern expressed at the close of the 1991 investigation, are these budding reading views and practices temporal in nature? Or will they develop when the student teachers obtain "real" classroom positions. A follow up study is underway to track the students teachers as they complete their first year of teaching. How they fared in the semi-structured environment of student teaching may be very different from how they will fare in their own classrooms. Will they feel freer to explore reading beliefs and employ reading approaches now that there is no cooperating teacher or grade attached to the experience? Or will they conform to the reading standards and practices at their school of employment? Their reading process and instruction knowledge and reflections on the reading process at this stage will be compared to the information obtained for the current study.
Selected References


