

## DOCUMENT RESUME

ED 361 684

CS 011 422

AUTHOR Schumaker, Karen A.  
TITLE A Taxonomy for Assisting Teacher Reflection and Growth in Reading Instruction.  
PUB DATE Mar 93  
NOTE 19p.; Paper presented at the Annual Midwest Reading and Study Skills Conference (6th, Kansas City, MO, March 1-2, 1993).  
PUB TYPE Speeches/Conference Papers (150) -- Reports - Descriptive (141) -- Reports - Research/Technical (143)  
EDRS PRICE MF01/PC01 Plus Postage.  
DESCRIPTORS Classification; Dialog Journals; Elementary Education; Elementary School Teachers; Higher Education; Preservice Teacher Education; Professional Development; \*Reading Instruction; Reading Research; \*Teacher Response; Teacher Student Relationship  
IDENTIFIERS Reflective Teaching

## ABSTRACT

A taxonomy of teacher responses to pupils' connected reading was developed to characterize the instructional decisions and development of teacher interactions with individual readers. In developing this instrument, content analysis procedures were used to investigate actual teacher responses to readers. The X axis (reading categories) of the taxonomy displays important areas of reading skill. These skills were chosen because they are frequently considered by teachers when responding to readers. The Y axis (levels of instructional reading skill) identifies distinct states that represent progression in instructional growth exhibited by teachers. These levels characterize a teacher's development in responding to the reading needs of his/her pupils. The taxonomy was used to investigate growth in preservice teacher responses to readers during a student teaching semester. Four-way dialogue journal communication (between student teacher, program director, cooperating teacher, and university supervisor) of 15 student teachers was analyzed to determine instructional reading growth. Results of the study supported growth and also noted similarity and differences in student teacher responses to pupil connected reading. In addition to its use as a research tool, the instrument provides a framework for communication and dialogue among preservice teachers, teachers, teacher educators, and supervisors for the purpose of encouraging growth and reflection in teacher responses to the connected reading of students. Additionally, the taxonomy permits analysis of differences in levels of growth among categories for individual teachers. (Three tables of data are included; 20 references and the taxonomy are attached.) (Author/RS)

\*\*\*\*\*  
\* Reproductions supplied by EDRS are the best that can be made \*  
\* from the original document. \*  
\*\*\*\*\*

# A TAXONOMY FOR ASSISTING TEACHER REFLECTION AND GROWTH IN READING INSTRUCTION

U.S. DEPARTMENT OF EDUCATION  
Office of Educational Research and Improvement  
EDUCATIONAL RESOURCES INFORMATION  
CENTER (ERIC)

This document has been reproduced as  
received from the person or organization  
originating it

Minor changes have been made to improve  
reproduction quality

Points of view or opinions stated in this docu-  
ment do not necessarily represent official  
OERI position or policy

Karen A. Schumaker Ph.D.

The University of Texas at Austin

PERMISSION TO REPRODUCE THIS  
MATERIAL HAS BEEN GRANTED BY

K. Schumaker

TO THE EDUCATIONAL RESOURCES  
INFORMATION CENTER (ERIC).

## Abstract

### *A Taxonomy of Teacher Responses to Pupils' Connected Reading*

was developed in an effort to characterize the instructional decisions and development of teacher interactions with individual readers. In developing this instrument, content analysis procedures were used to investigate actual teacher responses to readers.

The X axis (reading categories) of the taxonomy displays important areas of reading skill. These skills were chosen because they are frequently considered by teachers when responding to readers. The Y axis (levels of instructional reading skill) identifies distinct states that represent progression in instructional growth exhibited by teachers. These levels characterize a teacher's development in responding to the reading needs of his/her pupils.

The taxonomy has been used (Schumaker, 1992) to investigate growth in preservice teacher responses to readers during a student teaching semester. In addition to its use as a research tool, this instrument provides a framework for communication and dialogue between preservice teachers, teachers, teacher educators, and supervisors for the purpose of encouraging growth and reflection in teacher responses to the connected reading of students. Additionally, the taxonomy permits analysis of differences in levels of growth between categories for individual teachers.

ED 361 684

CS 011422

# A TAXONOMY FOR ASSISTING TEACHER REFLECTION AND GROWTH IN READING INSTRUCTION

Karen A. Schumaker Ph.D.

The University of Texas at Austin

"It is widely conceded that the core transactions of formal education take place where teachers and students meet."

(Lortie, 1975, pp.viii)

A teacher's ability to reflectively combine cognitive and experiential knowledge in his/her analysis and practice of instruction is believed to be a critical factor in the realization of effective teaching (Cruickshank & Armaline, 1986; Duffy, 1981; Evans, 1991; Grant & Zeichner, 1984; Guszak, 1985, 1992; Killion and Todnem, 1991; Sparks-Llanger & Colton, 1991). In describing a reflective practitioner, Shon (1987) calls for reflection-in action: "the thinking about what they are doing while they are doing it" (p.xi).

Teachers often find it difficult to be reflective while trying to establish and coordinate a continuous activity flow for twenty to thirty plus children. The information processing demands placed on teachers are considerable, and it appears that rote or routine behavior may be adopted in an effort to reduce "cognitive overload" (Duffy, 1981).

## Purpose of the Taxonomy

There are wide variations between teachers in the quality of instruction provided to individual pupils during reading. A *Taxonomy of Teacher Responses to Pupils' Connected Reading* was developed to provide information about growth in instructional

reading skill. It may be used as a developmental tool in examining the "core transactions" of reading instruction, and may be useful for assisting teacher reflection by characterizing the nature of instructional responses provided to individual readers. Such analysis may encourage teachers to critically investigate their responses to individual readers and the resultant effect of their actions on pupil reading.

The taxonomy provides a framework for communication and dialogue between preservice teachers, teachers, teacher educators, and supervisors for the purpose of encouraging growth and reflection in teacher responses to the connected reading (Connected reading refers to extended reading of textual material--entire stories and books--which matches the ability of the reader.) of students. Additionally, the taxonomy permits analysis of differences in levels of growth between categories for individual teachers.

### Development of the Taxonomy

Taxonomic development began with a research review. Much is known about teacher development, and a few models of learning to teach have been published. These include models of teacher concerns (Fuller, 1969; Campbell & Wheatley, 1983), stages of teaching (Leland, Cooper & Harder, 1984), and Hollingsworth's "Model of Complexity Reduction" (Hollingsworth, 1988; Lidstone & Hollingsworth, 1990). However, no models could be found which specifically characterized the development of teacher responses to pupil connected reading.

Content analysis procedures were then used to investigate actual teacher comments (grades 1-4) regarding reading instruction.

## X Axis--Reading Categories

The X axis displays important areas of reading skill. These skills were chosen because they are frequently considered by teachers when responding to individual pupils engaged in reading of connected text.

The first step in developing the taxonomy was to identify the reading categories which would be included. In order to identify these, the researcher drew on: a) personal knowledge and experience gained through teaching reading to children in grades K-8; b) personal knowledge and experience in teaching illiterate adults; c) personal experience in serving as a consultant to teachers of reading; d) personal experience in clinical supervision of "reading specialty" student teachers; e) information provided in published resources (Anderson, Hiebert, Scott, & Wilkinson, 1985; Guszak, 1985; The Handbook of Reading Research, 1984; f) analysis of actual teacher comments regarding reading instruction provided by teachers in journals; and g) the expert advice of five university scholars (reading experts) from two major universities .

It was determined that this would be a cognitive rather than an affective taxonomy. Initial categories were identified, and an attempt was made to specify all descriptors pertaining to each category.

### Content analysis

Content analysis procedures were used to investigate actual teacher comments (grades 1-4) regarding reading instruction. Comments were derived from 4-way dialogue journals which were a required component of a field based preservice elementary

education program at a major university in the Southwest. The journals were designed as a vehicle for collegial reflection about the reading progress of individual students in connected text.

The 4-way dialogue journals contained instruction-related communication between student teacher, cooperating teacher, university program director, and university supervisor) Journal comments were coded according to the taxonomic descriptors. An example of four-way communication contained in these journals follows:

- 3/16 Program Director: *I noticed that Dan was off task during independent reading. As I approached he began to read, but was frustrated. What do you think?*
- 3/16 Student Teacher; *I am looking into changing his book tomorrow. He is usually on task. I think this is an inappropriate placement for him.*
- 3/16 Cooperating Teacher: *"Let me help you choose a good placement for Dan!"*
- 3/18 University Supervisor: *"Dan is very attentive to his book today. His fluency rates are high and his prosody is good. Comprehension in giving an oral summary was excellent. Clearly your decision to alter his placement was a wise one! Good Work!"*

Initial reading categories were identified, and an attempt was made to find descriptors pertaining to each category. The categories

were refined as reading related journal comments were coded according to the developing categories. The categories became firm when it was found that identified taxonomic categories described the majority of teacher-student reading interactions. The final taxonomic reading categories are: placement, word recognition, fluency, practice, and comprehension (see taxonomy for category definitions.)

### Y Axis--Levels of Response (Levels of Instructional Reading Skill)

"Levels of Response" are distinct states that represent progression in instructional growth exhibited by teachers. These levels characterize a teacher's development in responding to the reading of his/her pupils.

In developing the taxonomy, journal comments and teacher behaviors were listed by category and ranked in a developmental progression. Comments and behaviors were then studied across categories to find common patterns in teacher response and instructional growth. Clear journal examples of each level for every category were highlighted in an effort to distinguish developmental levels of progression in skill. Generic descriptors of teacher behavior were then identified for each level.

A preliminary taxonomy was developed, and used to code reading comments from two journals. During this process, additional revisions were made to the taxonomic levels. The taxonomy underwent numerous revisions until a clear taxonomy was developed.

The taxonomic levels of development became firm when it was found that the identified taxonomic levels were descriptive of the



majority of teacher-student reading interactions. The final taxonomic levels of development are: (1) No Response; (2) Limited Response; (3) Observation; (4) Observation with Analysis; and (5) Observation, Analysis, Action, and Reflection. (Examples of comments for each category which typify these levels are located in the taxonomy.) The resulting taxonomy was used to code comments from five additional journals.

### Intrajudge Reliability

The researcher coded comments from five randomly selected journals which were not included in the taxonomic development. One hundred twenty-six randomly selected journal comments were coded by the researcher for the purpose of achieving intrajudge reliability. After a period of eight days a blind rating of the same comments (recoded the same 126 comments without reference to the first rating) was conducted. Percentage of agreement between the first and second rating was 93.6%.

The reading categories incorporated in the taxonomy (X axis) were supported by the journal data, as were the levels of response (Y axis). Comments were found to code easily according to the taxonomy.

### Interjudge Reliability

Two additional judges (graduate students specializing in reading) independently coded the same 126 randomly selected comments. Interjudge reliability statistics of 93%, 86%, and 81% were obtained.

The final taxonomy contains 25 cells which describe characteristic teacher responses for five identified developmental



levels and five instructional categories concerning pupil connected reading.

### The Taxonomy as a Research Tool

The taxonomy was recently used (Schumaker, 1992) to investigate growth in teacher responses to readers. Four way dialogue journal communication (written communication between student teacher, program director, cooperating teacher, and university supervisor) of fifteen student teachers was analyzed to determine instructional reading growth during a student teaching semester.

Comments were coded according to student teacher, number of comments, date, week of the student teaching semester, reading category, and taxonomic level. A week by week taxonomic analysis was conducted for all 15 journals.

Results of this study supported growth (See Tables 1, 2, &3) and also noted similarity and difference in student teacher responses to pupil connected reading (See Table 3). As the student teaching semester progressed there was a steady decrease in "low level" limited response comments and a concomitant increase in comments involving observation, analysis, intervention, and reflection with regard to pupil connected reading (See Table 2).

Findings indicated that: (a) Fourteen of fifteen student teachers responded regularly to pupil reading by "observing", or "observing and analyzing" gathered information (See Table 3); (b) Fewer individuals responded to pupils by monitoring, assessing, and reflecting on their instructional interventions made on behalf of pupils (See Tables 1, 2, and 3); (c) Taxonomic analysis of pre-

narrative, narrative, and post narrative journal comments supported the value of implementing a mid-to-early semester assignment which required student teachers to write a narrative analysis of individual pupil reading progress (Table 2 shows a significant increase in Level IV and Level V comments during weeks 3 through 6, the time span during which the narratives were written); (d) Student teachers differed individually (Table 3) and by grade level in total number of journal comments, amount of attention devoted to various taxonomic categories, and percentage of journal responses coded at the five taxonomic levels. Results indicate that most individuals in this study were prepared to identify and respond to the connected reading needs of individual pupils upon completion of their student teaching experience.

TABLE 1. NUMBER AND PERCENTAGE OF TOTAL JOURNAL  
READING COMMENTS BY LEVEL

<u>LEVEL</u>	<u>NUMBER OF COMMENTS</u>	<u>PERCENTAGE</u>
Level II <i>LIMITED RESPONSE</i>	349	14.20%
Level III <i>OBSERVATION</i>	1054	42.90%
Level IV <i>OBSERVATION WITH ANALYSIS</i>	818	32.29%
Level V <i>OBSERVATION, ANALYSIS, ACTION, AND REFLECTION</i>	236	9.61%

TABLE 2. PERCENTAGE OF LEVEL IV AND LEVEL V  
COMMENTS BY WEEK OF THE STUDENT TEACHING  
SEMESTER

<u>WEEK</u>	<u>LEVEL IV</u>	<u>LEVEL V</u>	<u>COMBINED PERCENTAGE</u> <u>LEVEL IV AND LEVEL V</u>
1	13.85	3.07	16.92
2	28.22	8.06	36.28
3	21.00	6.00	27.00
4	35.16	7.69	42.85
5	31.25	9.38	40.63
6	33.23	9.09	42.32
7	35.00	13.75	48.75
8	30.05	11.92	41.97
9	44.44	10.10	54.54
10	37.64	10.59	48.23
11	39.79	8.90	48.69
12	46.22	20.75	66.79

TABLE 3. NUMBER AND PERCENTAGE OF COMMENTS BY  
LEVEL FOR EACH STUDENT TEACHER

LEGEND

% = percentage

JRNL = Journal

LEVEL	JOURNAL		JOURNAL		JOURNAL	
	"a"	%	"b"	%	"c"	%
Level I	0	0	3	0	8	0
Level II	23	17.42	23	14.74	10	9.52
Level III	46	34.85	55	35.26	36	34.29
Level IV	46	34.85	46	29.49	52	49.52
Level V	17	12.88	32	20.51	7	6.67
TOTAL	132	100.00	156	100.00	105	100.00

LEVEL	JOURNAL		JOURNAL		JOURNAL	
	"d"	%	"e"	%	"f"	%
Level I	4	0	0	0	3	0
Level II	16	15.84	25	13.59	33	22.76
Level III	35	34.65	109	59.24	58	40.00
Level IV	44	43.57	46	25.00	50	34.48
Level V	6	5.94	4	2.17	4	2.76
TOTAL	101	100.00	184	100.00	145	100.00

Table 3 Continued

LEVEL	JOURNAL		JOURNAL		JOURNAL	
	"g"	%	"h"	%	"i"	%
Level I	6	0	9	0	1	0
Level II	22	6.73	36	30.25	24	18.04
Level III	108	33.03	56	47.06	75	56.39
Level IV	143	43.73	21	17.65	25	18.80
Level V	54	16.51	6	5.04	9	6.77
TOTAL	327	100.00	119	100.00	133	100.00

LEVEL	JOURNAL		JOURNAL		JOURNAL	
	"j"	%	"k"	%	"l"	%
Level I	1	0	5	0	5	0
Level II	14	6.93	36	48.64	2	10.53
Level III	88	43.56	28	37.84	133	63.64
Level IV	69	34.16	9	12.17	4	20.09
Level V	31	15.35	1	1.35	12	5.74
TOTAL	202	100.00	74	100.00	151	100.00

LEVEL	JOURNAL		JOURNAL		JOURNAL	
	"m"	%	"n"	%	"o"	%
Level I	0	0	3	0	5	0
Level II	39	21.91	7	4.93	19	7.6
Level III	74	41.57	44	30.99	109	43.6
Level IV	62	34.83	68	47.89	95	38.0
Level V	3	1.69	23	16.19	27	10.8
TOTAL	178	100.00	142	100.00	250	100.00

## Conclusions

*A Taxonomy of Teacher Responses to Pupils' Connected Reading* was developed in an effort to characterize the instructional decisions and development of actual teacher interactions with individual readers. The taxonomy was created as a developmental tool for investigating the quality of teacher responses (through examination of journal comments) to pupil connected reading (extended reading of textual material--entire stories and books--which matches the ability of the reader.) Four-way dialogue journals were investigated because they are a required component of a student teaching experience, and are designed to promote collegial reflection (among the university director, university supervisor, cooperating teacher, and student teacher) about pupil progress in connected reading.

This instrument is unique because it describes the "core transactions" which occur between teacher and student as reading occurs in the classroom. The taxonomy's practical emphasis offers assistance to teacher educators, reading specialists, supervisors, and classroom teachers in their efforts to improve the quality of instructional reading decisions made on behalf of individual students.

Studies need to be conducted which validate use of this instrument with inservice teachers. This taxonomy would have considerable implications for use in teacher education programs and school districts if it could be validated for use in all varieties of reading programs (e.g., phonics based, whole language, "Reading Recovery", "Exemplary Center for Reading Instruction", basal-based ability grouped, basal-based whole class instruction, additional individualized connected reading programs, etc.)

Preliminary reports from preservice and inservice teachers suggest that the taxonomy is valuable in reminding them to focus on the needs of individual readers. Teachers also report that the instrument helps them view reading as a "holistic process" rather than as a conglomeration of isolated skills.

### The Taxonomy as a Tool for Professional Growth

The taxonomy characterizes the core transactions which occur between teacher and student as connected reading occurs in the classroom. This instrument may be used: 1) as a stimulant for reflective thought concerning the academic progress of individual students; 2) as a reference for information about reading categories for instructional focus; 3) to provide actual examples of strategies for assisting pupil reading; 4) as a diagnostic tool for promoting self-analysis as well as collegial discussion regarding professional development.

The taxonomy is currently being used to assist preservice teachers in combining knowledge with practice, and to illustrate the interconnectedness of the taxonomic reading categories. Professors at two universities are currently employing the taxonomy as a guide to show preservice teachers what is expected of their field performance in terms of integrating course knowledge with instructional practice.



## References

- Anderson, R.C., Hiebert, H.H., Scott, J.A., & Wilkinson, I.A. (1985). Becoming a Nation of Readers: The Report of the Commission on Reading. The National Institute of Education, Washington, D.C.
- Campbell, P., & Wheatley, G. (1983). A model for helping student teachers. Mathematics Teacher, 60-63.
- Cruickshank, D., & Armaline, W. (1986). Field experiences in teacher education: Considerations and recommendations. Journal of Teacher Education, 37, 34-40.
- Duffy, G.G. (1981). Teacher effectiveness research: Implications for the reading profession. In M.L. Kamil (ed.), Thirtieth Yearbook of the National Reading Conference. Rochester, NY: National Reading Conference.
- Evans, C. (1991). Support for teachers studying their own work. Educational Leadership, 48(6), 11-13.
- Fuller, F. (1969). Concerns of teachers: A developmental conceptualization. American Educational Research Journal, 6(2), 207-226.
- Grant, C., & Zeichner, K.M. (1984). On becoming a reflective teacher. In Grant, C. (ed.), Preparing for reflective teaching. 1-18. Boston: Allyn & Bacon.
- Guszk, F.J., (1992). Reading for students with special needs. Kendall/Hunt Publishing Company.
- Guszk, F.J., (1985). Diagnostic reading instruction in the elementary school. (3rd ed.). New York: Harper & Row Publishers.
- Hollingsworth, S. (1988). Prior beliefs and cognitive change in learning to teach. The American Educational Research Journal.

- Killion, J., & Todnem, G.(1991). A process for personal theory building. Educational Leadership, 48(6), 14-16.
- Leland, A., Cooper, J., & Harder, H. (1984). Teacher development: Learning experience framework for teacher education candidates. Teacher Education Quarterly, 11(3), 115-125.
- Lidstone, M.L. & Hollingsworth, S. (1990). Assessing change in beginning teachers' cognitions and performance: The model of complexity reduction. Paper presented at the Annual Meeting of the American Educational Research Association. Boston, Massachusetts. April, 1990.
- Lortie, D.C. (1975). Schoolteacher: A sociological study. Chicago: University of Chicago Press.
- Schumaker, K.A., (1992). Teacher reflection in action: Integrating knowledge and experience in the practice of reading instruction. The Reader . . . IRA in Arkansas. Spring, 1992, Vol.16.
- Shon, D.A. (1987). Educating the reflective practitioner. Toward a new design for teaching and learning in the professions. San Francisco, CA: Jossey Bass.
- Sparks-Langer, G.M., & Colton, A.B. (1991). Synthesis of research on teacher's reflective thinking. Educational Leadership, 48(6), 37-44.

A TAXONOMY OF TEACHER RESPONSES TO PUPILS' CONNECTED READING

LEVELS OF RESPONSE	PLACEMENT	WORD RECOGNITION	FLUENCY	PRACTICE	COMPREHENSION
Levels of response are distinct states that represent different types of behavior exhibited by teachers regarding pupil reading performance. These levels characterize a teacher's development in responding to the reading of his/her pupils.	Placement refers to instructional decisions regarding appropriate positioning of a child in textual material for the purpose of facilitating word recognition, fluency and comprehension.	The process of identifying words. Context, sight vocabulary, and word mediation (the process of identifying the component parts of a word) are word recognition tasks. Each of these skills interact to facilitate word recognition.	Fluency is the facility with which an individual reads text. Two means of describing fluency are prosody (the intonational patterns of language: junctures, terminals, pitch, and stress), and rate (measurement of the number of words read per minute).	Pupil engagement in rehearsal activities for the purpose of improving performance in connected reading (e.g. home, practice, repeated oral readings, etc.)	The understanding a reader derives from text. Important comprehension skills include the ability to: recall information, identify main ideas and supporting details, locate and organize information, distinguish between fact and opinion, and predict, verify, and evaluate textual content.
LEVEL I: NO RESPONSE: • NO RESPONSE Level at which the teacher does not respond to pupil connected reading behaviors.	PLACEMENT LEVEL I • No stated awareness of, or attention to placement of children in text which is suitable to their needs.	WORD RECOGNITION LEVEL I • No response to word recognition	FLUENCY LEVEL I • No attention to pupil fluency.	PRACTICE LEVEL I • No attention to the influence of practice on development of pupil reading skill.	COMPREHENSION LEVEL I • No stated awareness of or attention to factors which affect pupil reading comprehension.
LEVEL II: LIMITED RESPONSE • LIMITED RESPONSE (e.g., "Thanks!" "O.K.") • REPORTS PROCEDURES Level at which responses appear to be random or spontaneous rather than planned.	PLACEMENT LEVEL II • Reports general or procedural information regarding pupil placement, e.g., "The children seem well placed."	WORD RECOGNITION LEVEL II • Makes general statements about word recognition, e.g., "His word recognition is good."	FLUENCY LEVEL II • Makes general fluency statements(e.g., "She has good fluency." "His fluency is poor.")	PRACTICE LEVEL II • Makes general comments regarding practice (e.g., "If they finish their story, they start reading it a second time until the timer goes off.")	COMPREHENSION LEVEL II • Reports general or procedural information regarding reading comprehension (e.g., "One day he seems to remember and the next day he doesn't." "I understand the grading policy for reading comprehension.")
LEVEL III: OBSERVATION: • OBSERVES • ACCUMULATES INFORMATION Teacher describes pupil connected reading behavior based on observation, but provides no rationale for solution of reading problems.	PLACEMENT LEVEL III • Notices individual differences and reading problems. • Attends to pupil progress in text placement (e.g., "Lindsay has moved from a primer to a first reader.") • Monitors for appropriate placement during connected reading.	WORD RECOGNITION LEVEL III • Makes specific statements about word recognition needs of pupils doing connected reading, e.g., "She misses medial vowels." There is no attempt to suggest why, or what might be done to remedy such a problem.	FLUENCY LEVEL III • Makes specific statements about pupil fluency in terms of: 1) prosody (e.g., "He omits periods.") and/or 2) conformity with or deviation from minimum rate standards (e.g., "Her rates are consistently below 60 words per minutes.") • There is no explanation for the cause of the problem, and no suggestions are provided for what may be done to correct or improve it.	PRACTICE LEVEL III • Makes specific statements about pupil practice needs with regard to placement, word recognition, fluency and comprehension (e.g., "She really needs the practice, as she is not getting much at home." "She has been making substitutions on medial vowels and needs some practice on this.") • There is no attempt to suggest why the pupil is having difficulty, or what might be done to correct the problem.	COMPREHENSION LEVEL III • Makes specific statements about pupil: 1) process comprehension (understanding of text as reading occurs - prior to completion of selection) e.g., "His oral tell-back lacked supporting details." 2) product comprehension (understanding of text after completion) e.g., "His comprehension grades are slipping: They were 95, 80, and 75." • There is no analysis of the cause of the problem, or suggestions for solution.
LEVEL IV: OBSERVATION WITH ANALYSIS: • OBSERVES • ACCUMULATES AND ANALYZES INFORMATION • PLANS ACTION AND/OR ACTS ON BASIS OF INFORMATION Teacher observes pupil reading behavior and analyzes the information. If an intervention is made, there is no evidence that assessment is made of the effectiveness of the intervention.	PLACEMENT LEVEL IV • Contemplates whether a pupil is underplaced or overplaced in connected reading. • Analyzes different possibilities for placement (i.e., whether to back up, or advance a child in his/her basal text, shift a child laterally into different text of comparable difficulty, utilize build-up readers, suggest different genre, recommend another selection or story, or move to a different tradebook or basal text..	WORD RECOGNITION LEVEL IV • Contemplates the nature of observed word recognition problems (e.g., "Why is he missing blends?"). Suggests a possible action to assist the problem.	FLUENCY LEVEL IV • Speculates as to why student is having prosodic or rate difficulty and suggests an intervention (e.g., "The vocabulary is difficult in that book, and his rates have been low - I think he may need some rehearsal to build up his fluency.")	PRACTICE LEVEL IV • Contemplates the nature of practice needs and suggests a course of action (e.g., "She really needs to practice her reading - perhaps she could practice at home every night.")	COMPREHENSION LEVEL IV • Speculates regarding pupil needs with regard to organization and use of connected text and suggests a possible action or intervention, such as direct instruction on specific comprehension strategies (e.g., locating title, author, main idea and supporting details; periodic oral tellbacks; evaluation of text; pre-reading of comprehension questions; utilization of question stems to formulate comprehension answers, etc.), use of directed reading thinking activities, provisions of models for written comprehension, etc.
LEVEL V: OBSERVATION, ANALYSIS, ACTION, AND REFLECTION: • OBSERVES • ACCUMULATES AND ANALYZES INFORMATION • PLANS ACTION AND ACTS ON BASIS OF INFORMATION • REFLECTS ON ACTION Level at which a teacher acts, and then follows his/her intervention by monitoring, assessing and reflecting on the effects of the intervention on student performance.	PLACEMENT LEVEL V • Analysis of pupil reading behavior leads to consideration of different placement options (i.e., lateral, backward, or forward progression in basal text, build-up readers or tradebooks, rehearsal, tape-assisted reading). The teacher acts by trying the student in another placement and concluding something about his/her subsequent placement. The new placement is monitored and evaluated for effectiveness.	WORD RECOGNITION LEVEL V • Analysis leads to consideration of intervention options (e.g., use of linguistic readers, one to one, small or whole group instruction, teacher guided rehearsal, etc.) The teacher implements an option, and monitors and evaluates its influence on pupil word recognition performance.	FLUENCY LEVEL V • Analysis of fluency difficulties leads to consideration of a number of possible interventions, e.g., tape assist, transparencies for punctuation, repeated readings. The teacher chooses an option, acts to implement it, and monitors and assesses its impact on pupil fluency.	PRACTICE LEVEL V • Analysis of practice needs leads to consideration of varied options, such as appropriate choice of practice materials, collaboration with parents for home practice, development of contract and reward systems for independent practice, etc. An option is chosen and implemented. The intervention is then monitored and assessed for its influence on pupil reading behavior.	COMPREHENSION LEVEL V • Analyzes comprehension information and considers options for intervention. Tests the intervention and monitors or evaluates its impact on pupil comprehension.

Copyright © 1992 Karen Schumaker