

California State University, San Bernardino

CSUSB ScholarWorks

---

Theses Digitization Project

John M. Pfau Library

---

2005

## Reading fluency instruction in upper elementary international school classrooms

Jinky Lunaspe Dagoon

Follow this and additional works at: <https://scholarworks.lib.csusb.edu/etd-project>



Part of the [Education Commons](#), and the [First and Second Language Acquisition Commons](#)

---

### Recommended Citation

Dagoon, Jinky Lunaspe, "Reading fluency instruction in upper elementary international school classrooms" (2005). *Theses Digitization Project*. 2624.  
<https://scholarworks.lib.csusb.edu/etd-project/2624>

This Project is brought to you for free and open access by the John M. Pfau Library at CSUSB ScholarWorks. It has been accepted for inclusion in Theses Digitization Project by an authorized administrator of CSUSB ScholarWorks. For more information, please contact [scholarworks@csusb.edu](mailto:scholarworks@csusb.edu).

READING FLUENCY INSTRUCTION IN UPPER ELEMENTARY  
INTERNATIONAL SCHOOL CLASSROOMS

---

A Project  
Presented to the  
Faculty of  
California State University,  
San Bernardino

---

In Partial Fulfillment  
of the Requirements for the Degree  
Master of Arts  
in  
Education:  
Teaching English to Speakers of Other Languages

---

by  
Jinky Lunaspe Dagoon

December 2005

READING FLUENCY INSTRUCTION IN UPPER ELEMENTARY  
INTERNATIONAL SCHOOL CLASSROOMS

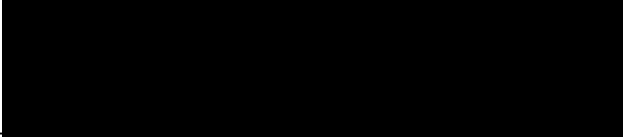
---

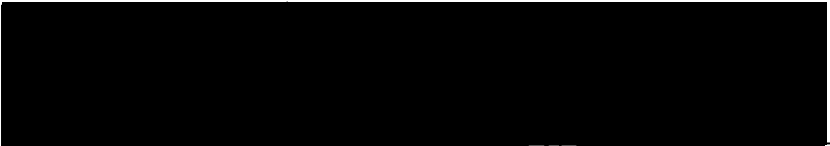
A Project  
Presented to the  
Faculty of  
California State University,  
San Bernardino

---

by  
Jinky Lunaspe Dagoon  
December 2005

Approved by:

  
Dr. Lynne T. Diaz-Rico, First Reader

  
Dr. Randall Wright, Second Reader

*Nov. 30, 2005*  
Date

© 2005 Jinky Lunaspe Dagoon

## ABSTRACT

As important as it is to students' reading competence and overall academic success, reading fluency instruction is often neglected in the classroom. Many students, especially second-language learners, continually fail to acquire literacy because little attention is given to the development of reading fluency. This project focuses on the importance of reading fluency, emphasizing its role in the construction of meaning and aiding in the overall comprehension process. Its components--accuracy, automaticity, and prosody--are examined in relation to various activities that enhance each component. This project acknowledges the role of independent reading and other fluency developing strategies and methodologies in providing inside and outside classroom support as second-language learners progress towards fluency in reading English.

## ACKNOWLEDGMENTS

I would like to acknowledge the following people who contributed to the realization of this project. First and foremost, Dr. Lynne Diaz-Rico, TESOL program coordinator, wise adviser, patient critic, counselor, listener, and teacher. Thank you so much for being all of the above.

Dr. Randall Wright, for lending not only his valuable time in reading this project, but also whose examples inspired me to go the extra mile. Thank you for all the wonderful learning experiences I had in your classes.

To my best friend, Jose Razon, for being the best buddy, and for uncomplainingly driving me to and from school the whole duration of my pursuits for higher education at CSUSB: I simply cannot thank you enough.

My sister, Jasmin Dagoon, whose support I am lucky to have especially on the heavy days of working on this project. Thank you for excusing me from all chores and for physically nourishing me during the days when all I could think of is this project.

Finally, to God, for making something beautiful of my life and for showing me that nothing is impossible.

## DEDICATION

This project goes to all the students who shared my classrooms at Ekamai International School, wonderful students who showed me that being a teacher is one of the greatest and noblest professions in the world. And to Mr. Ronald Anderson, former school director, who gave me the chance to be a real classroom teacher. Straight out of college and unsure of what to do, you gave me not only a job the day I sat teary-eyed in your office, but you also gave me a lifetime vocation. Thank you, Sir, for the trust; I am greatly indebted to you.

TABLE OF CONTENTS

ABSTRACT ..... iii

ACKNOWLEDGMENTS ..... iv

LIST OF TABLES ..... xi

LIST OF FIGURES ..... xii

CHAPTER ONE: INTRODUCTION

    Background of the Project ..... 1

        History of English Teaching and  
        Methodologies ..... 1

        Issues and Concerns at the Target  
        Teaching Level ..... 3

    Purpose of the Project ..... 6

    Content of the Project ..... 7

    Significance of the Project ..... 8

CHAPTER TWO: REVIEW OF RELATED LITERATURE

    Reading Fluency ..... 9

        Reading Fluency Defined ..... 9

        Components of Reading Fluency ..... 12

        Research on Reading Fluency Instruction .... 13

            Rereading ..... 14

            Repeated Reading Strategy ..... 15

            Fluency Development Plan ..... 16

            Other Interventions in Improving  
            Reading Fluency ..... 17



Summary .....	18
Automaticity in Word Recognition .....	19
Automaticity, Reading Rate, and Reading Comprehension .....	20
Automaticity and Reading Rate .....	20
Reading Rate and Comprehension.....	22
Automaticity and Reading Comprehension.....	22
Phonics Instruction and Word Recognition....	24
Antecedents in Learning to Read .....	26
Letter Knowledge .....	27
Listening Comprehension .....	29
Phonological and Phonemic Awareness ...	31
Word Recognition in a Print-Rich Environment.....	32
Summary .....	33
Word Identification Strategies .....	34
Word Recognition versus Word Identification .....	35
Strategies that Promote Accuracy in Decoding Words .....	36
Phonic Analysis .....	37
By Analogy .....	38
Syllabic Analysis .....	39
Morpheme Analysis .....	40

Summary .....	43
Prosodic Reading .....	44
Prosody Defined .....	44
Teachers as Models of Prosodic Oral Reading .....	45
Chunking and Phrasing .....	46
Prosodic Oral Reading Activities .....	48
Choral Reading .....	49
Buddy Reading System .....	51
Easy-Reading-for-Fluency Strategy .....	51
Readers' Theater .....	52
Dialogue .....	54
Read-Arounds .....	54
Summary .....	55
Activities that Motivate Independent Reading .....	56
Independent Reading and Fluency Development .....	57
Frequency and Volume of Reading .....	58
Strategies and Activities that Motivate Independent Reading .....	59
The Teacher as a Model Reader .....	60
A Print-Rich Environment .....	62
Unassisted Reading Practice .....	63
Literature Circles .....	64

Sustained Silent Reading Program .....	65
Summary .....	67
Summary of the Chapter .....	69
CHAPTER THREE: THEORETICAL FRAMEWORK FOR ACTIVITY SETTINGS IN READING FLUENCY DEVELOPMENT	
Background of the Model .....	70
Description of the Model .....	73
Independent Reading .....	74
Other Strategies and Procedures that Develop Components of Reading Fluency .....	75
Automaticity in Word Recognition .....	75
Word Identification Skills.....	75
Prosody in Reading .....	76
Utilization of the Model in the Classroom .....	77
Summary .....	77
CHAPTER FOUR: CURRICULUM DESIGN	
Curriculum Organization .....	79
Components of the Unit .....	81
Word Recognition and Word Identification Strategies .....	82
Prosodic Reading .....	83
Independent Reading .....	84
Summary .....	85
CHAPTER FIVE: ASSESSMENT .....	88

Summary of the Project.....	91
APPENDIX A: UNIT OVERVIEW .....	94
Unit Theme: Rainforest .....	95
Lesson One: "The Heart of the Tree".....	98
Lesson Two: "The Great Kapok Tree" .....	101
Lesson Three: Layers of the Rainforest .....	104
Lesson Four: Rainforest Animals: Predators and Prey .....	106
Lesson Five: Saving the Rainforest .....	109
APPENDIX B: UNIT RESOURCE MATERIALS .....	111
APPENDIX C: SAMPLE READING FLUENCY ASSESSMENT RESOURCES .....	172
BIBLIOGRAPHY .....	178

## LIST OF TABLES

Table 1.	Factors Influencing Listening Comprehension.....	30
Table 2.	Word Identification Strategies.....	42
Table 3.	Connections between Key Concepts and Lesson Plan.....	86
Table 4.	Integration of Activities that Encourage Reading Fluency in Content-Based Instruction .....	87

LIST OF FIGURES

Figure 1. The Dynamicity of Reading Fluency,  
Independent Reading, and Reading  
Comprehension..... 70

Figure 2. Reading Fluency Instructional Strategies  
and Independent Reading Activities toward  
Reading Comprehension..... 72

## CHAPTER ONE

### INTRODUCTION

#### Background of the Project

For a nation's economy to stay sustainable and competitive in today's world requires its citizens to be highly educated in general and acquire English-language skills in particular. Even though only the second most widely spoken language in the world, English has become an essential skill in the global market and in the workplace. Proficiency in the language correlates with success and failure in today's competitive world. Like most of its Asian neighbors, Thailand has embraced English as a necessary communication tool.

#### History of English Teaching and Methodologies

English is considered one of the core subjects in Thai schools, and it is introduced at an early age. Yet many students arrive in secondary school with little knowledge of the language. Even after getting a collage degree, most students' practical and academic English skills remain at the elementary level.

Critics partially charge this sad reality to the traditional nature of schooling in Thailand, where rote memorization of large quantities of information is still

prevalent. Too much time is spent on writing and grammar instruction, and little time is devoted to developing reading and speaking skills. Students are regularly tested on their coursework before going to the next level using multiple-choice questions, assessments that have little relevance to language skill development. In addition, the student-teacher ratio usually averages 40 to 60 students per class; and when it comes to English language instruction, little can be accomplished with these numbers in the classroom.

In response to the growing need for good English-language education, many parents opt to send their children to international schools and commercial language centers for after-school support. International schools continually gain popularity not only among Thai upper class, but also with Thai middle-class families. International schools offer either American or British curricula, with credentialed native and nonnative teachers and excellent teaching resources. Most international schools following the American system are accredited by the *Western Association of Schools and Colleges*, and provide students with classroom experience similar to that in California and other states in the United States.



## Issues and Concerns at the Target Teaching Level

Despite international schools' many advantages over its public school neighbors, various issues still prevail pertaining to students' failure to acquire English language proficiency; particularly in the area of reading, which many educators consider as the heart of every child's learning. Schema theory, or the use of prior knowledge when reading, has been a popular strategy in teaching reading to ESL/EFL students; that is, if the programs are versatile enough to include literary selections that students find interesting and meaningful. How about those second-language learners in international schools with fixed American or British curricula?

My personal experience as a reading teacher for two years in an international school in Thailand could testify to the frustrations of both students and teachers when it comes to reading grade-level textbooks. For example, in a third-grade social studies class, students read about Squanto, the pilgrims' landing in Plymouth Rock, Madison, Anasazi Indians, life in a pueblo, and the Liberty Bell. A typical third-grade reading class selection ranges from tamales and nopal cactus to Ramona Quimby's adventures in an American public school--topics to which an average Thai third grader would find hard to relate. What pedagogical

intervention at the classroom level could be provided to enrich students' reading experience despite their dealing with materials about which they know little?

Aside from this curricular constraint, several points are identified to explain the challenges faced by Thai international school students in acquiring reading proficiency in English.

There is the issue of first-language (L1) interference, a behaviorist notion that native language is a cause for lack of success in learning the second language (L2) (Gass & Selinker, 2001). Conversely, Ringbom (1987) highlighted the importance of L1 in L2 learning, saying that "similarities, both cross-linguistic and inter-linguistic, function as pegs on which the learner can hang new information by making use of already existing knowledge, thereby facilitating learning" (p. 134). Despite this positive view, the relationship between Thai and English language systems remains problematic because of the distance of their "pegs" from each other. A wide gap exists between the two language systems.

For one, Thai script is very much different from Roman script, which makes up the English alphabet. It follows that English learners need to learn and master a new alphabet before beginning formal reading instruction.

Punctuation marks, an important indicator for prosodic and fluent reading in the English language, are also absent in Thai writing.

The complexity of the English language compared to the simplicity of Thai is another cause of distress for English learners: the language's relatively small vocabulary attributes to its general lack of expression. For facilitation purposes, it is difficult for learners to draw accurate translations from Thai to English. And considering international school curricula, where the literature used for instruction is based mainly on a Western context and far from the local cultural context familiar to the student, comprehension becomes even more difficult for the learner.

Finally, because English is not widely used in authentic day-to-day tasks in Thailand, it is a challenge to stimulate students to speak English outside the classroom. The lack of authentic practice outside the classroom results in a low level of confidence in using English as a communication tool when the need arises. But most importantly, the confinement of spoken English to formal classroom instruction and discourse narrows students' exposure to target language oral forms, which are very important to the development of reading ability.

Success and failure in school-related tasks such as learning to read are influenced by one's oral language skills and habits (Beron & Farkas, 2004). Gillet, Temple, and Crawford (2004) added,

The roots of reading ability are buried deep in oral language, and we cannot overlook this foundation if we wish to help students read better. The more direct experience with language students have, the more their language use will expand. The more it grows, the more their listening comprehension develops, the more they will be able to bring to reading, and thus reading will improve. (p. 314)

Teaching children to read is a school's single most important work (Stanovich, 1992). Considering the additional constraints discussed above, teaching reading to second language learners becomes even more challenging.

#### Purpose of the Project

It is an impossibility to find the best methods to improve the quality of reading instruction for the generic learner. Individual instructional needs vary from one person to another, depending on the characteristics of the learner. One of the purposes of this project is to find the best combination of reading strategies that is most likely to work in the Thai setting and meet the literacy needs of the unique population identified above, those of upper elementary students in international schools. Another

purpose of this project is to provide a theoretical position to support the implementation of the strategies identified that would increase students' literacy in international school classrooms. A skill identified as a major determinant in students' overall success in reading, reading fluency and its components, is investigated in this project.

### Content of the Project

This project features reading fluency and its dynamic relationship with independent reading and comprehension. Chapter One describes the English teaching context in traditional Thai schools, and identifies challenges faced by Thai students in learning English. Chapter Two provides an extensive literature review on the nature and role of reading fluency in students' comprehension, and discusses ways to develop the skill through implementation of various activities and the use of several strategies. Chapter Three unites the findings in Chapter Two into a theoretical model that supports the implementation of in-class and outside-class activities that foster reading fluency. A curriculum sample composed of five lessons incorporating strategic activities for fluency development is introduced in Chapter Four and included in the appendix. Finally, Chapter Five

discusses the assessment of the lessons, which are planned to evaluate the applicability of the theoretical model and the designed curricula to the issues raised in Chapter One. A summary of the project is also presented in Chapter Five.

### Significance of the Project

This project sheds light on the importance of a strong reading foundation to students' overall academic success. It follows that for students to have a strong reading foundation, fluency in reading must be strengthened. In consideration of the needs of the unique population described above--Thai upper elementary international school students--this project offers a framework that supports the implementation of activities that develop reading fluency. It provides a curriculum design that successfully integrates reading fluency instruction across various disciplines.

## CHAPTER TWO

### REVIEW OF RELATED LITERATURE

#### Reading Fluency

The Merriam-Webster Dictionary (2004) defines the verb "to read" in nine ways. The definitions range from "to understand language by interpreting written symbols for speech sounds," and "to utter aloud written or printed words," to "to discover the meaning of," and "to recognize or interpret." With the definitions comes the weight of its importance to literacy. Reading is at the heart of every child's learning, a major determinant in a student's overall success in school, and one of the most important academic skills a learner should have (Stanovich, 1992). Bernhardt (1991) suggested that reading is a cognitive and social process by which participants both extract and construct meaning. To be able to effectively extract and construct meaning, students must develop fluency in reading.

#### Reading Fluency Defined

Reading fluency is the ability to read most words in context with automaticity, accuracy in speech, appropriate speed, and phrasing and expression (Rasinki, 2003). Fluent reading is reading with expression as one would when

speaking the words; it is the skill of the reader to sound like he or she is speaking while reading aloud (Cunningham, 2005). Fluency is seen as the evident characteristic of a skilled reader with rapid, melodious flow of words. One benefit of fluency is increased comprehension of the text because readers can identify words easily (LaBerge & Samuels, 1976; Perfitti, 1985; Stanovich, 1986). Fluency as an important reading skill enables children to develop greater self-confidence as readers and enjoy the reading experience to a greater extent (Gillet, Temple, & Crawford, 2004).

On the other hand, an obvious characteristic of poor reading is lack of fluency, a problem often overlooked by teachers. A nonfluent reader reads slow and lacks expression and phrasing. This poor practice overloads the reader's working memory, resulting in comprehension being hindered by diverting the reader's attention away from the meaning of the text. The following describes the performance of nonfluent readers:

1. Students read slowly.
2. Students cannot decode individual words.
3. Students guess at words based on the beginning sound.



4. Students do not remember a word a second or third time it is used in the passage.
5. Students do not break multisyllabic words into syllables to decode them.
6. Students point at words as they read.
7. Students repeat words and phrases.
8. Students read without expression.
9. Students read word by word.
10. Students ignore punctuation marks.
11. Students do not remember or understand what they read. (Tompkins, 2003, p. 200)

According to the National Reading Panel Report (2000), reading fluency is a critical factor necessary for reading comprehension; and students who do not develop reading fluency are likely to remain poor readers throughout their lives regardless how bright they are. As important as it is, reading fluency instruction is often neglected in the classroom and many students continually fail in acquiring the needed reading skill. Allington (1983) proposed a set of hypotheses explaining why some children simply fail in becoming fluent readers:

1. Some children are not exposed to fluent adult reading models or to prereading experience reciting memorized books.

2. Good readers are more likely to be encouraged to read with expression, while poor readers get more instruction on individual words and word parts.
3. Fast learners are given more opportunities for reading and hence more practice actually reading.
4. Successful readers more often read text that is easy for them, while poorer readers more often are faced with frustration-level material.
5. Successful readers do more silent reading, which provides practice and experience.
6. Children's ideas differ about what good reading is--poor readers often view reading not as meaning getting but as an accuracy competition. (p. 599)

#### Components of Reading Fluency

The three main components of reading fluency are accuracy, automaticity, and prosody (Rasinski, 2004). Accuracy is the accurate decoding of words in text. Proficient readers not only read accurately but are also able to recognize words with automaticity (Kuhn & Stahl, 2000), meaning without conscious effort or thought. To add to that, fluent readers are also prosodic readers, reading texts in expressive rhythmic and melodic patterns.

There is a mention of a fourth component--reading rate. However, reading rate, the speed at which the student

reads, is discussed in relation to automaticity and accuracy. In this study, reading rate is seen as a reflection of how automatically a reader recognizes words and how accurate he or she is in decoding words in text. Instead of being treated as a separate component, reading rate is considered a tool in determining students' level of automaticity and accuracy (Rasinski, 2004).

The three main components identified above are discussed more in separate sections in this chapter: automaticity in word recognition is discussed in relation to reading comprehension, accuracy in decoding words in text is discussed in relation to word identification strategies, and prosody is discussed in relation to oral reading.

#### Research on Reading Fluency Instruction

Fluency as an aspect of good reading makes it a necessity for students to engage in activities that help develop the skill. Various strategies and exercises are recommended; however, the issue of the best technique for developing reading fluency has not yet been decided (Hook & Jones, 2002). There are excellent suggestions below but they are based only on clinical experience. More research is needed to determine the most effective methods in developing reading fluency in children. Other strategies to

improve specific components of reading fluency are discussed in the next sections.

Rereading. To reread means reading the same materials more than once. For beginning readers, Cunningham (2005) suggests a lot of reading and rereading of easy, high-interest books, and teachers are advised to allot time during school hours for these activities. Clay (1991), a proponent of reading literacy in Australia, believes that when children are given the opportunity to reread familiar materials they develop as good readers. This process allows them to "draw on all the language resources and knowledge of the world, to put this very complex recall and sequencing behavior into a fluent rendering of the text" that can never be achieved in reading difficult books (Clay, 1991, p. 184). This strategy also helps students read with comprehension as their ability to chunk words into meaningful phrases is enhanced (Dowhower, 1987).

Regardless of one's reading level, rereading is an important strategy in developing fluency through bolstering students' self-confidence as readers, helping students recognize familiar words at sight, and helping students use phrasing to support the meaning of what they read (Gillet et al., 2004). Neuhaus Education Center, a nonprofit educational foundation serving mainly as a teacher-training

institute, also encourages the use of rereading strategy. The organization promotes the idea that "fluency development requires intentional, well-designed practice" (see Neuhaus Education Center, 2004) and activities involving repeated reading of words and text are most effective for fluency improvement.

Repeated Reading Strategy. One of the most effective methods suggested for fluency development is repeated reading or guided oral reading. This refers to a "systematic practice of using timed oral rereading" (see Neuhaus Education Center, 2004) where the passage is read and reread three to four times.

Citing Samuels (1979) work, Gillet et al. (2004) described the repeated reading strategy as a method involving students' choosing an instructional passage and setting a reading-rate goal. The teacher records the speed of the first unrehearsed oral reading and the successive readings after practice. Students' reading rates after successive timings are recorded in a simple chart. The students start with another passage of equal difficulty when they are able to read the passage at or beyond the reading-rate goal. As they continue to practice different passages for timing, reading rate climbs dramatically. And keeping a chart showing increases is a great way to

motivate students, especially older poor readers, to keep up their practice.

The process of repetition provides the repeated exposure necessary to improve the reader's memory for word recognition. According to researchers (Schreiber, 1980; Samuels, 1979; Pflaum & Pascarella, 1980) repeated readings of a text promote familiarity with the visual form of words that will appear in other contexts. Evidence is presented that this strategy builds fluency for that text and other selections as well. Repeated reading strategy does not directly aid comprehension, but it is valuable in students' acquisition of sight words and development of reading confidence.

Fluency Development Plan. Rasinki and Padak (2001) developed a lesson plan for teaching fluency called fluency development lesson (FDL). It starts with the teacher choosing a short passage, often a poem, fable, or short story that is appealing to the students. The teacher reads the passage aloud several times, modeling fluent reading. The meaning of the text and vocabulary words is built along the way through discussion with the children.

After the teacher's first reading, the passage is read chorally several times, often with different students reading different parts. Then students working in pairs

take turns reading the passage to each other three times. Students show support by responding to each others' readings with praise and encouragement. When the class gathers together, the teacher asks volunteers to read the passage again to everyone. In some cases, students may read the passage to other classes or school personnel. The passage is read again the next day before beginning a whole cycle with a new passage.

#### Other Interventions in Improving Reading Fluency.

Index cards, bookmarks, and highlighters are also great tools for students who are having trouble tracking the direction of the reading. To limit distractions or instances of losing place while reading, a card or bookmark may be placed under the sentence. Students who respond well to visual organizations may also use highlighters to color-code reading selections. The use of different colors helps students identify main ideas and important information, and locate vocabulary and spelling words. Color-coding helps break the reading selection into more manageable segments, which makes it easier to keep track of content, in order not to overwhelm some students with too much reading.

Another way to facilitate fluency is the use of audio cassettes. Most reading textbooks and reading series are accompanied by audio tapes, which could be played aloud to

model fluent reading while students silently read the selection. Book talks and discussions in literature circles could also be recorded and later played for the whole class to hear (Gillet et al., 2005).

A technology originally made for the deaf, screen reading, has been found to help develop reading fluency. Captioned television programs, with written sentences corresponding to words spoken on the video, provide opportunities for reading practice that is entertaining and self-correcting. Captioning of spoken language in televisions is made possible by TeleCaption decoders (Parks, 1994; Gillet et al., 2005). Less fluent readers and bilingual students benefit from this technology. When students screen read they make use of simultaneous multisensory processing, which is found to enhance learning and increase students' motivation and interest to read (Koskinen, Wilson, Gambrell, & Nueman, 1993).

As the each component of reading fluency is examined in the succeeding sections, more strategies and activities are discussed that provides suggestions on how readers could progress towards fluency.

### Summary

Fluency is the rate and accuracy with which students perform reading tasks. A fluent reader has the ability to



read most words in context, accurately, automatically, and with appropriate expression. Fluency embodies three components that contribute to the success of a reader-- automaticity in word recognition, accuracy in decoding words, and prosody. Various strategies and activities are proposed for effective fluency instruction. Two of the most popular are the students' rereading of familiar texts and the teacher's reading aloud to students. The repetition process in rereading provides the repeated exposure necessary to improve readers' memory for word recognition. Reading aloud allows the teacher to model what good readers do, how they sound, and how good readers use different strategies.

#### Automaticity in Word Recognition

Early reading success has been clearly shown to be "one of the keys that unlock a lifetime of reading habits" (Cunningham & Stanovich, 2003, p. 34). Early success means being able to crack the spelling-sound code and automatically recognize familiar words. Fluent readers are quick and automatic in recognizing a majority of words they encounter in text (Stanovich, 1984). They are said to have automaticity--the fast, accurate and effortless recognition of words.

## Automaticity, Reading Rate, and Reading Comprehension

If children fail to automatically recognize a good number of words by early second grade, the growth spurt in reading rate and fluency associated with this critical period is affected. When this occurs, the gap between poor and good readers begins to widen even more, and those who are lagging behind start to feel like failures (Gillet et al., 2004). The interrelationship of automaticity in word recognition, reading rate, and reading comprehension are explained below.

Automaticity and Reading Rate. Reading rate is the speed at which the student reads. To be considered a fluent reader, a student at the end of first grade must be able to read an average of 60 words per minute, 110 words per minute at the end of second grade, and by middle school 150 to 200 words per minute (Gillet et al., 2004). As students read more, reading rate continues to increase until they are able to read approximately 250 to 300 words per minute by the time they are adults. Reading speed may vary depending on the difficulty of reading material, age of the reader, and purpose for reading (Tompkins, 2003). In measuring reading rate, automaticity in word reading and speed in reading connected texts are taken into

consideration. Tests of sight-word knowledge and timed readings are used (Hudson, Lane, & Pullen, 2005).

Anderson (1999) observes that many second-language readers read in a "suffocatingly slow process, yet developing rapid reading, an essential skill for all students, is often neglected in the classroom" (p. 2). He suggests activities like rate-buildup reading, repeatedly reading the same material in sixty seconds each time; repeated reading, discussed later in the section; class-paced reading, setting a minimal reading rate goal for the whole class; and self-paced reading, an activity that allows students to determine their reading rate goal. But teachers need to note that isolated practice to increase reading speed is a necessary but not sufficient condition for fluent reading.

To improve general reading rate, practice is definitely still the best answer. It is advised that students should read regularly as much as they can. For beginning and emergent readers, it is suggested that they begin with easy materials featuring familiar vocabulary and ideas that can be grasped with little effort. As the students progress towards fluency, it is necessary that they step up to the next level of difficulty like reading news magazines and nonfiction on topics of current

importance. Reading rate eventually improves in all types of reading materials (University of Minnesota, 2003).

Reading Rate and Comprehension. Checking progress charts of thousands of individuals taking reading training, Rood (2000) observed that reading rate is directly related to comprehension, where increase in comprehension parallels the increase in reading rate and vice versa. If reading is excessively slow, comprehension suffers; with a faster reading rate, comprehension increases. Anderson (1999) commented that reading rate above the minimal threshold level allows "readers to read more with greater understanding, thereby leading to an increased language proficiency" (p. 6). The relationship between reading speed and comprehension is explained by Gillet et al. (2004) in the following words: "The faster the reading, the more likely the reader is to process the text in increasingly larger, more meaningful units: words, then clauses, then sentences, then concepts" (p. 41).

Automaticity and Reading Comprehension. Automaticity in decoding words is one of the prerequisites in achieving the ultimate goal of reading comprehension, which is constructing meaning out of text (Lesgold & Resnick, 1982). Various research has established that automaticity in word recognition significantly affects readers' ability to

comprehend effectively what they are reading (Lyon, 1995; Torgeson, Rashotte, & Alexander, 2001; Beck & Juel, 1995). In fact, it has been found that children's word recognition speed in first grade predicts their reading comprehension ability in second grade (Beck & Juel, 1992).

This finding is supported with a description of how the brain works, as it simultaneously constructs meaning and identifies words during the reading process. It is the brain's characteristic to carry out automatic functions simultaneously, and the only nonautomatic function it can perform is meaning construction. When reading a text, the brain stops as it encounters words it cannot immediately identify or spell. During this time attention is diverted from meaning to words (Cunningham, 2005).

Because reading is a cognitive task involving the determination of words and construction of meaning, there is competition for limited attention available (Freedman & Calfe, 1984). As more and more letters and words become familiar through improvement of decoding skills, less mental energy is directed towards text processing at the orthographic level, and more mental energy is left for comprehension (LaBerge & Samuels, 1974; Samuels, 1987).

To ensure enough attention for understanding and comprehending the text, it is necessary for readers to

reach a decoding point where words are recognized instantaneously (Kuhn & Stahl, 2000). Automatic word recognition allows the reader to be less reliant on alternative knowledge sources to figure out what the words say, allowing contextual analysis to focus on comprehension rather than on decoding. Thus, even moderate difficulties in word recognition could significantly reduce the speed of reading, creating the need to reread selections to grasp the meaning because attention is pulled away from comprehension (Hook & Jones, 2002).

It also follows that weak word recognition skill is a characteristic of poor readers. Royer and Sinatra (1994) described how poor decoding skills affect reading. First, slow decoding "decays" some words before they can be processed into meaning because words can only be stored in working memory for approximately 10 to 15 seconds. Second, insufficient decoding skills result in comprehension breakdown because with a focus on words, less mental energy is available for higher-level comprehension.

#### Phonics Instruction and Word Recognition

To develop automatic word recognition, readers must have the right skills in decoding basic and familiar words. Decoding, the conversion of written word into spoken language, is done by sounding out words with the aid of

phonics analysis (the association of specific spellings with specific sounds) and syllabication techniques (Blevins, 1998). Due to the irregularity of the English language, students must also recognize some words by sight.

But despite the irregularity, many researchers and educators believe in the importance of phonics instruction to reading success. Anderson, Hiebert, Scott, and Wilkinson (1985) wrote that "the first step toward the ultimate goal of fast, accurate word identification and fluent reading" is phonics instruction (p. 46). Instruction in phonics increases a child's awareness of sounds in written words (Carbo, 2005). It emphasizes the alphabetic principle that letters of the alphabet represents sounds (Chall, 1996).

Most children have acquired a vocabulary of approximately 6,000 listening and speaking words by the age of six. Consistent relationships (even though not entirely predictable) between letters and sounds in the English alphabet makes it easy for children to access most of the words in their spoken language when they see them in print (Anderson et al., 1985). Phonics helps them read and write these words faster than they would without phonics, making it an essential ingredient in reading instruction (Blevins, 1998).

Eldredge (1995) described the steps followed by a child in decoding an unfamiliar one-syllable word using knowledge gained from phonics instruction:

1. Determine the vowel sound in the word, and isolate the sound.
2. Blend all the consonant sounds in front of the vowel sound with the vowel sound.
3. Isolate the consonant sound(s) after the vowel sound.
4. Blend the two parts of the word together so the word can be identified. (p. 108)

Instruction in phonics enables students to make faster progress in acquiring reading and writing skills (Chall, 1996), and has a positive effect on decoding ability (Stanovich & West, 1989). Cunningham and Stanovich (2003) discussed that "children who crack the spelling-to-sound code early appear to enter something like a positive feedback loop, a reciprocal effect in which reading increases their ability to read" (p. 34). Chall (1996) added that if a reader fails to acquire appropriate decoding skills by third grade, the students will have a serious problem with reading comprehension.

#### Antecedents in Learning to Read

To be able to decode words, students must have a strong foundation on what Ritchey (2004) identified as the



three prerequisites for learning to read. These prerequisites are considered to be sublexical skills having strong correlation to later oral word reading. These antecedents are phonological and phonemic awareness, letter knowledge, and listening comprehension (Leppanen, Nieme, Aunola, & Nurmi, 2004).

High initial levels of these three ingredients predict not only the level of reading skills of emergent and beginning readers, but also predict the success of every reader's progress to fluency.

Letter Knowledge. Prior to reading at an orthographic level, children apply their knowledge of letters to analyze words (Frith, 1985). Letter knowledge forms the basis of children's understanding of alphabetic principles. Previous research (e.g. Stahl & Murray, 1994) has shown that the process of letter naming predicts later reading skills (Leppanen, et al., 2004). With the knowledge of letters the child learns about the concept of words and print in general, and this knowledge is used to recognize words as wholes, sound out words, and create spelling as they write (Gillet et al., 2004).

Tompkins (2003) enumerates the eight components of letter knowledge identified by Pinnell and Fountas (1998):

1. The letter's name

2. The formation of the letter in upper- and lowercase manuscript handwriting
3. The features of the letter that distinguish it from other letters
4. The direction the letter must be turned to distinguish it from other letters (e.g., b and d)
5. The use of the letter in known words (e.g., names and common words)
6. The sound the letter represents in isolation
7. The sound the letter represents in combination with others (e.g., ch and th)
8. The sound the letter represents in contrast of a word. (p. 114)

Identifying and writing letters is the most basic knowledge children could learn about the alphabet. Children do not learn the alphabet in any particular order; neither do they learn by isolating letters from meaningful context. Children learn letters by singing the alphabet song and most importantly through exposure to meaningful written language. For children to learn all the letters of the alphabet, children must have lots of experience with written language (McGee & Richgels, 2001). Phonemic awareness improves with children's letter knowledge,

resulting in the emergence of strong orthographic patterns (Hook & Jones, 2002).

Listening Comprehension. Reading has been seen as dependent on listening (Samuels, 1987). Researchers (e.g. Curtis, 1980) found that subsequent reading performance is associated with listening comprehension skills, and it has been suggested that listening comprehension is an important antecedent of learning to read (Leppanen et al., 2004).

Take for example the case of dyslexic students. One of the major factors pointed out by researchers in dyslexic students' inability to read is their difficulty in hearing accented syllables in words. In this case, teachers are advised to resort to additional methodologies, like beginning lessons with listening practice and then moving to oral production, and incorporating visual and tactile/kinesthetic strategies in the lesson (Hook & Jones, 2002).

Samuels (1987) viewed listening comprehension as an interactive process that involves the reconstruction of spoken message through translation of lexical and grammatical information into meaning units. This then is combined with the listener's knowledge and cognitive abilities. It is not only interactive but also is a complex process involving numerous factors, both external and

Table 1. Factors Influencing Listening Comprehension

Inside-the-head	Outside-the-head
<p>Intelligence: Listener's intelligence to comprehend the language</p>	<p>Discussion Topic: Type of topic that is understandable to the listener</p>
<p>Language facility: Accuracy and automaticity in the recognition of words and in the ability to segment speech stream into morphemic and syntactic units (syntax, vocabulary, dialect and idiolect)</p>	<p>Clarity and speaker effectiveness: Use of anaphoric terms, speaker's ability to shift topics, presence of cohesive ties and casual links, formal presentation of goals and objectives</p>
<p>Background knowledge and schema: Necessary knowledge to understand the topic and make appropriate inferences</p>	<p>Context: Presence of contextual cues that support what the speaker is saying</p>
<p>Speech register and awareness of contextual influences: Awareness of different speech styles and registers</p>	<p>Speaker awareness of audience need: Awareness of level of the listener's background knowledge; speaker's adjustments of terms, complexity of sentence structures, and type of information appropriate to the listener; speaker's voice modulation; and quality of information</p>
<p>Metacognitive strategies: Awareness of break in comprehension and appropriate time to clarify and request additional information</p>	
<p>Kinesics: Understanding of nonverbal signals in spoken communication</p>	
<p>Motivation: Listener's interest to focus attention on and interact with what the speaker is saying</p>	

Source: Samuels (1987).

internal to the receiver. These factors influence how well the receiver comprehends the spoken language. Table 1 shows different internal and external factors influencing listening comprehension.

The framework is useful because it forces one to consider the numerous interacting factors influencing one's comprehension of oral language. The proper combination and interplay of internal or inside-the-head and external or outside-the-head factors determine the success of meaning construction. It is practical to identify these factors so that in cases of comprehension breakdowns potential trouble spots could be immediately pointed out (Samuels, 1987).

Phonological and Phonemic Awareness. Phonological and phonemic awareness, children's understanding of words and their sounds, is an essential part of the foundation for learning to read. Phonological awareness is the broader term that pertains to the ability to separate sentences into words and words into syllables, with the learner becoming aware that "language is made up of individual words, words are made up of syllables, and syllables are made up of phonemes" (Cunningham, 2005, p. 5).

Leppanen et al. (2004) pointed to the relevance of phonological awareness as a variable in cross-sectional (Lieberman, Shankweiler, Fischer, & Carter, 1974) and

longitudinal studies (Juel, 1988). It has been found that previous phonological awareness is associated with the learner's subsequent reading ability. Based on their findings, phonological awareness is best described as "an early marker of learning to read rather than a predictor of future skills" (Leppanen et al., 2004, p. 90).

Phonemic awareness, on the other hand, is the child's oral ability to manipulate sounds and recognize that words are made up of discrete set of sounds. Carbo (2005) differentiates phonemics from phonics in the following words:

Phonemics and phonics are not the same. Instruction in phonemics helps children to become aware of sounds in spoken words, where phonics increases awareness of sounds in written words. Phonemics instruction helps prepare children to learn phonics. (p. 46)

Phonemic awareness is an important ability and highly correlates with the child's success in beginning reading. Furthermore, Cunningham (2005) believed that "only when children realize that words can be changed and how changing a sound changes the word they are able to profit from instruction in letter-sound relationships" (p. 6).

#### Word Recognition in a Print-Rich Environment

Like other skills that require a series of coordinated smaller actions to create a unified process, practice

allows learners to develop automaticity in word recognition. And this practice is accomplished through successive exposure to print. Exposure to print is important because frequency of word usage is one of the major factors affecting word recognition. Extensive experience in decoding words in text is critical in minimizing errors and recognizing words by sight. The words readers frequently encounter are the ones they are most likely to recognize readily by sight (Gough, Juel, & Roper-Schneider, 1983). A possible explanation is "that lexicon is partially organized by frequency rather than simply in terms of the sounds in beginning-to-end order" (Tserdanelis & Wong, 2001, p. 315).

### Summary

Automaticity in recognizing words is one of the most important and the most basic skills a learner can develop. It is a skill students should acquire in order to progress towards reading fluency. Automaticity in decoding words is identified as one of the prerequisites in successful reading comprehension of texts. Despite irregularities in the English language when it comes to the spelling-sound relationship, phonics instruction is still favored by researchers and educators in developing word recognition skills.

Word recognition is an interactive process involving the reconstruction of spoken message through translation of lexical and grammatical information into meaning units. In developing word-recognition skill, students must have strong foundations in the three antecedents of learning how to read--knowledge of words and its sounds or phonological and phonemic awareness, knowledge of letters and understanding of alphabetic principles, and reading-listening comprehension.

#### Word Identification Strategies

From word-by-word reading, students advance to reading fluency by third grade. But a good 10 to 15 percent of the student population is still left behind with the difficulty in recognizing words, in the process slowing their reading development (Allington, 1998). Many fourth-grade teachers observe a phenomenon referred to as the "fourth-grade slump," characterized by some students' losing ground in their reading development.

There are suggestions that this problem is caused by lack of instruction in word-identification strategies for unfamiliar and multisyllabic words (Chall, Jacobs, & Baldwin, 1990). For accurate and faster identification of words, readers must be strategic in approaching unfamiliar



words (Vacca, 2000). Researchers (Adams, 1990; Anderson et al., 1985) also point out that effective readers are strategic readers who know when and how to use different combinations of word identification strategies.

### Word Recognition versus Word Identification

In teaching students to read and write words, teachers aim to accomplish two goals. First is to teach students to instantly recognize a group of several hundred high-frequency words necessary in order for them to read and write automatically. This goal is word recognition, or the quick and easy pronunciation or spelling of familiar words, usually accomplished by second and third grade. According to Gillet et al., (2004), "Immediate and accurate recognition of more than 90 percent of the words in running text is necessary for effective instructional level reading" (p. 280).

The second goal is to equip students with strategies that are necessary in identifying unfamiliar words. These words are often long, multisyllabic words students come across during reading and need to spell during writing. The second goal is word identification, or the ability to figure out accurately the pronunciation or spelling of an unfamiliar word using strategies such as morpheme analysis, in which words are broken into root words and affixes

(Tompkins, 2003). It is important for students to learn and master the use of these strategies throughout the elementary grades. These strategies are discussed below.

#### Strategies that Promote Accuracy in Decoding Words

As developing readers read more and experiment with different types of texts, they often encounter words that they do not recognize on sight. The role of teaching word analysis or word identification is to help students acquire efficient strategies for figuring out unrecognized words. Reluctant readers benefit from decoding instructions because they are the ones who cannot recognize many of the words they see (Perfitti, 1995). Continuous practice in higher-order processes like inferencing and predicting "does not eliminate the need for proper attention to the lower-level abilities necessary for processing written information quickly and accurately" (Cantoni-Harvey, 1992, p. 176).

Moreover, Greenwood and Bilbow (2002) commented that good teachers teach replicable and transportable analytical processes instead of teaching words. Tompkins (2003) identified four word-identification strategies that help older students when they encounter unfamiliar words. These strategies make use of semantic, syntactic, and pragmatic cues, as well as phonological information. The use of these

strategies is guided by generalizations or possibilities and not by rules; they are often used in conjunction with each other.

Phonic Analysis. According to researchers (Stanovich, 1992; Vellutino & Scanlon, 1987) the big difference between students who can identify words effectively and those who do not is their ability to survey the letters in a word and analyze its interior components. Proficient readers notice all letters in a word and can completely analyze letter sequences, which are foundations for phonic analysis in decoding and spelling words. In order to accomplish this, students use their knowledge of phoneme-grapheme correspondence, phonic generalization, and spelling patterns. Using phonics analysis, unfamiliar words are identified by sounding vowels and vowel patterns, and blending sounds together. For multisyllabic words students break the words into syllables first and follow the same procedure (Tompkins, 2003).

English is not a perfectly phonetic language but phonics analysis is still considered a very useful strategy in word identification "because almost every word has some phonetically regular parts" (Tompkins, 2004, p. 189). To build a good foundation in phonics, Stahl (1992) did not see the need for instruction worksheets, teaching it "as a

set of discrete skills mastered in isolation" (p. 618), but instead suggested ways to implement effective phonics instruction. Among them are making phonics instruction clear and direct, building on what children know, integrating it into a total reading program, focusing on reading words and not on learning rules, inclusion of onsets and rimes, spelling practice, categorization practice and word sorting, and focusing attention on the internal structure of words.

By Analogy. As readers build an increasing store of words that they can easily recognize, their ability to recognize unfamiliar words also improves. Students do this by associating unfamiliar words with words they already know (Gaskins, Gaskins, & Gaskins, 1991; Pikulski, 1998). This procedure is known as decoding by analogy, a word-identification strategy that is dependent on student's phonemic awareness and phonics knowledge.

Students who know a lot of sight words are more successful in using this strategy because they are able to identify word patterns better (Ehri & Robbins, 1992). Students who are also good in onsets and rhymes, word families, and substitutions can perform this strategy better than those who cannot. For example, in the case of rhymes, Wylie and Durrell (1970) identified 37 rhymes that

can be used to produce nearly 500 words. Developing and fluent readers are the ones who are more likely to use this strategy in decoding and spelling words (Tompkins, 2003).

Syllabic Analysis. Syllabic analysis is a strategy used by older students in order to decode and spell long words such as "biodegradable" and "unforgettable." This is done by dividing words into syllables; and once the word is chunked into syllables, phonics analysis and analogy are used to identify the word. This strategy is important because identifying syllable boundaries affects the pronunciation of the vowel sound (Tompkins, 2003).

Teachers use minilessons to introduce the concept of syllabication and syllabication rules, how to divide words into syllables. The most common rule for syllabication is that there is one vowel sound in each syllable. Five of the most useful rules are as follows:

1. When two consonants come between two vowels in a word, divide syllables between the consonants.
2. When there are more than two consonants together in a word, divide syllables keeping the blends together.
3. When there is one consonant between two vowels in a word, divide syllables after the first vowel.
4. If following the third rule does not make a

recognizable word, divide syllables after the consonant that comes between the vowels.

5. When there are two vowels together that do not represent a long vowel sound or a diphthong, divide syllables between the vowels. (Tompkins, 2003, pp. 191-192)

Students and teachers practice syllabic analysis by choosing words from books the class is reading or from thematic units. Next, they identify syllable boundaries by chunking words into syllables. And finally, students pronounce and spell the words syllable by syllable. To enhance in-class instruction, teachers can also create word walls using marked multisyllabic words, and create centers where students can practice dividing words into syllables and building words using word parts.

Morpheme Analysis. Morpheme analysis is a strategy that involves examination of morphemes, "the smallest linguistic unit that can have a meaning or grammatical function (Tserdanelis & Wong, 2001, p. 526). This is sometimes referred to as structural analysis, in which knowledge of meaningful parts of a word helps students identify an unknown written word (Greenwood & Bilbow, 2002).

This strategy is used in decoding long unfamiliar words. Morphemes like affixes (prefix and suffix) and root words, the basic part of a word, are identified (Tompkins, 2003). After the affixes are separated from the root word, syllabication rules are applied to pronounce the root word (Bremer, Clapper, & Deshler, 2002). Morpheme analysis is not only a word identification skill but also a comprehension skill because as the reader analyzes root words and affixes, word meanings are also obtained. Mature readers often use this strategy for both purposes (Greenwood & Billow, 2002).

As complement to the four strategies discussed above, provision of classroom activities and language-rich materials is encouraged to develop students' word identification skills. Teachers may create activities around lessons on consonants, onsets and rimes, word sorting, chunking of words, recognizing high-frequency letter-sound combinations, context clues, and first syllable-last syllable attacks. Interesting and fun word games, like building words using Scrabble tiles and magnetic letters, can also be played in class (Greenwood & Billow, 2002). A lot of software is also available to assist reluctant readers in developing word identification

skills. With computer game features, this reading software offers additional advantage, especially for unmotivated readers.

Table 2. Word Identification Strategies

<u>Strategy</u>	<u>Description</u>	<u>Examples</u>
Phonic Analysis	Students use their knowledge of sound-symbol correspondence and spelling patterns to decode words when reading and to spell words when writing.	<i>flat,</i> <i>peach,</i> <i>spring,</i> <i>blaze,</i> <i>chin</i>
By Analogy	Students use their knowledge of rhyming words to deduce the pronunciation or spelling of an unfamiliar word.	<i>creep from sheep,</i> <i>think from pink,</i> <i>include from dude</i>
Syllabic Analysis	Students break multisyllabic words into syllables and then use phonics and analogies to decode the word, syllable by syllable.	<i>cul-prit,</i> <i>tem-po-ra-ry,</i> <i>vic-to-ry,</i> <i>neg-a-tive,</i> <i>sea-weed,</i> <i>bi-o-de-grad-a-ble</i>
Morphemic Analysis	Students apply their knowledge of root words and affixes (prefixes at the beginning of the word and suffixes at the end) to identify an unfamiliar word. They "peel off" any prefixes or suffixes and identify the root word first. Then they add the affixes.	<i>trans-port</i> <i>astro-naut</i> <i>bi-cycle</i> <i>centi-pede</i> <i>pseudo-nym</i> <i>tele-scope</i>

Source: Tompkins (2003, p. 190).



## Summary

Extensive reading experience and combination of various types of instruction are necessary for students to become fluent readers. In order to be a fluent reader one must have a long list of sight words and knowledge of word-identification strategies in decoding unfamiliar words. Students who do not become fluent readers depend on explicit instruction to learn how to identify words. The terms word recognition and word identification are frequently used interchangeably. But closer examination on the usage of the terms reveals that word recognition is used when one decodes familiar words, and word identification for unfamiliar words. As students develop automaticity and fluency, they need word identification instruction and practice, tools necessary to construct meaning. Three basic word-identification strategies are phonics analysis, syllabic analysis, and morphemic analysis. In decoding unfamiliar words, capable readers usually employ one or more combination of these strategies making use of semantic, syntactic, and pragmatic cues, as well as phonological information. Effective manipulation of these strategies is not guided by rules but by generalizations and possibilities.

## Prosodic Reading

Prosody, as an aspect of reading fluency, needs to be developed to achieve the goal of literacy in reading and writing. This section examines prosody in both oral and silent reading: how it aids in the comprehension process and the construction of meaning, and different strategies to develop it.

### Prosody Defined

Prosody is the musical quality of language (Seeger, 2003). With prosody, the reader not only reads words quickly and accurately, but also reads the text with expression. The expressive reading of a text is referred to as prosodic reading, a skill that could be achieved through effective use of prosodic features that includes pitch or intonation, stress or emphasis, tempo or rate, and the rhythmic and melodic patterns of language (Dowhower, 1991). Prosodic reading reflects an understanding of meaningful phrasing and syntax, the ways words are organized in sentences and passages (Rasinki, 2000).

There are six main markers that are characteristic of prosodic reading. Dowhower (1991) identified them to be pausal intrusion, length of phrases, appropriateness of phrases, final phrase lengthening, terminal intonation contours, and stress. Kuhn and Stahl (2000) believed that

the readers' use of the following markers enable them to make connection between written and oral language, where knowledge of syntax from speech is transferred to text by applying prosodic features to their reading. In addition to accurate reading at an appropriate rate, the use of prosodic features results in an expressive oral language.

Prosody is a component of fluency that plays an important role not only in the students' success in oral reading but in overall reading comprehension. Appropriate application of phrasing and prosodic features improves the construction of meaning, as readers connect prosodic features in text to the established spoken language (Hook & Jones, 2002).

#### Teachers as Models of Prosodic Oral Reading

Teacher modeling, the setting of the tone and provision of examples by which students judge what is useful and important, is necessary to students' success in oral reading fluency. Through modeling, teachers show what they expect from students' oral reading performance, exhibiting "interest in and curiosity about words and expression and share with students interesting and unusual language in what we read" (Gillet et al., 2004, p. 314). In order to read fluently, students must first hear and understand what fluent reading sounds like (Clark, 1993).

Teacher modeling in oral reading is called for because in an average classroom many children do not hear models of fluent oral reading, especially in activities like round-robin reading and paired reading. Modeling of fluent reading may also be done by other proficient readers including narrators in electronic books. In addition to readers' degree of proficiency in word identification and comprehension, to achieve oral reading fluency, teacher modeling must be complemented by several conditions--that of providing students with the "opportunity to discuss the features of fluent reading and have their attention drawn to volume, pitch, phrasing, rate, and emphasis" (Oakley, 2003, n. p.).

#### Chunking and Phrasing

To achieve reading fluency, beginning readers who have mastered decoding skills must learn how to group words into appropriate syntactic phrases (Schreiber, 1987). It is recommended that students be taught the ability to split sentences into phrases or meaningful units (Schreiber, 1980) in order to read the text with expression and process information in sense-groups (meaning based-segments) rather than word-by-word (Irwin, 1991).

Rasinski (1994) observed that some children have poorly developed skills in chunking texts into meaningful

units. Pedagogical interventions to assist these children include "explicit instruction in identifying phrase boundaries, which are determined in oral language largely through prosodic cues but are absent from written texts" (Oakley, 2003, n. p.). Helgesen, Gakuin, and Sendai (1993) recommended an activity to increase students' skill in phrasing and chunking. The steps are as follows:

1. Before class, the teacher prepares five paragraphs and reads the first paragraph, putting a slash at each pause. The teacher prepares worksheet A by marking the pauses with slashes on Paragraphs 2 and 4. The teacher marks paragraphs 3 and 5 on worksheet B. The teacher makes an even number of copies. Half the learners receive the A sheet. Half receive the B sheet.
2. In class students look at the first paragraph. The teacher reads it to them, having them draw a slash each time the teacher pauses. Then the students read the paragraph back, telling the teacher where to put the slashes.
3. The class is divided into pairs, A and B. Each learner needs the appropriate worksheet. In their pairs, the learners who have worksheet A read Paragraph 2 while those with Worksheet B listen and

mark the phrasing. Then *Bs* check by reading back the paragraph, indicating where the slashes were put. *Bs* then read paragraph 3 while *As* listen and mark. The procedure continues until they have finished. (p. 263)

As students become more proficient with the technique, the teacher could have them work independently deciding on where they would pause. With the activity continuously done in class, students become "more aware of the way form and structures contribute to meaning since pauses usually come between the subject and the verb, around propositional phrases" (Helgesen et al., 1993, p. 264). Chunking and phrasing as a fluency strategy helps students independently determine phrase boundaries in order to successfully read in meaningful chunks instead of in a word-by-word fashion (Oakley, 2003).

#### Prosodic Oral Reading Activities

With teachers' intervention and continuous practice, nonfluent readers can learn to read fluently. These readers may need to work with prosodic elements like phrasing and stress timing, and experiment with the use of expression and affect. By engaging in activities like choral reading, dialogue presentation, and poetry reading, students not only increase their ability to speak clearly and

effectively, but they also gain new insights into the meaning and aesthetic quality of a text (Cantoni-Harvey, 1992). By reading materials aloud, language learners are also allowed to self-check their pronunciation and hear the words in their own voice (Cho & Krashen, 1995).

Choral Reading. A good way to practice phrasing and chunking is through choral reading. Choral reading is reading poetry and other interesting texts aloud as a group. Two or more students read a passage in unison, with the less fluent readers following the reading model provided by the more able readers in the group (Carbo, 1995). The format allows students to practice phrasing together chunking words, varying reading speed, and reading more expressively. Whether the selected text is chorally read as a class or in small groups, students take turns in reading lines or sentences. Tompkins (2003) suggested four possible arrangements for choral reading:

1. Echo reading: The leader reads each line, and the group repeats it.
2. Leader and chorus reading: The leader reads the main part of the poem, and the group reads the refrain or chorus in unison.

3. Small-group reading: The class divides into two or more groups, and each group reads one part of the poem.
4. Cumulative reading: One student or one group reads the first line or stanza, and another student or group joins in as each line or stanza is read so that a cumulative effect is created. (p. 466)

Tompkins (2003) also suggested the following steps in doing choral reading in the classroom:

1. Select a poem for choral reading. Teachers select a poem or other text to use for choral reading and copy it onto a chart or make multiple copies for students to read.
2. Arrange the text for choral reading. Teachers work with students to decide how to arrange the text for reading. They add marks to the chart or have students mark individual copies so that they can follow the arrangement.
3. Do the choral reading. Students read the poem or other text with students several times, and teachers emphasize that students should pronounce words clearly and read with expression. Teachers may want to tape-record students' reading so that they can hear themselves. (p. 466)



Reed & Limon (2005) stated that "choral readings offer students a creative way to explore issues of voice, characterization, rhythm, and rhyme, along with the dialects and cadences of the texts" (n. p.). Other benefits of choral reading include the active participation of students in the poetry experience, and helping them learn to appreciate the sounds, feelings, and magic of poetry. As a low-anxiety but enjoyable activity, it is also a recommended activity for ESL students to help them learn English intonation patterns and improve fluency in reading (Tompkins, 2003).

Buddy Reading System. In buddy reading, students pair with a classmate or a "buddy" to read and reread a selection. The buddy-reading system not only provides peer support but also encourages the development of oral-reading proficiency. It is a good social activity for the students as they take turns reading the text, helping each other with vocabulary, and clarifying ideas. It provides valuable practice to support readers' transition from beginner to intermediate fluency, and excellent opportunity to work with English learners and those with special learning needs (Tompkins, 2003).

Easy-Reading-for-Fluency Strategy. Easy-reading-for-fluency is best used for upper-elementary students whose

fluency levels are that of first to third graders. In this strategy they are encouraged to read easy books by being partnered with kindergarteners. The teacher gathers a selection of easy books (including alphabet books) and in the span of a week or two reads them to the students. Each student then chooses an easy book to read to a kindergarten buddy, practicing reading the selection several times as preparation--to a partner, tape recorder, and the teacher--before finally going down to the kindergarten building.

Upon returning to the class, the children discuss their experience with their kindergarten buddies. The teacher takes note of who read what and the following day asks students to pick a new book to practice. Students go back to their kindergarten buddies the next week, this time feeling more confident. The cycle continues, depending on the length of the reading program (Cunningham, 2005).

Readers' Theater. Readers' theater, a strategy that combines reading practice and performing (Bafile, 2005), is a dramatic production of a script by a group of readers (Martinez, Roser, & Strecker, 1999). Citing the works of Sloyer (1982) and Laughlin, Black, and Loberg (1991), Diaz-Rico (2004) describes it as a reading activity where readers read stories or plays with the use of expressive voice, gesture, and bodily tension to help the audience

visualize the action, scenes, and characters. Unlike traditional plays where students have costumes, sets, and memorized lines, it makes use of students' voice and facial expression as they read aloud from a script. Students' grade level, length of the text, and suitability of language and plot to oral adaptation are three of the main considerations when choosing scripts for readers' theater. Scripts for readers' theater presentations are available online, through trade books, and in textbooks. But students and teachers can choose to make their own script from interesting stories they have read in class (Tompkins, 2003).

Readers' theater is a great way to involve students in read alouds, giving them a reason to practice reading with a purpose (Bafile, 2005). It provides opportunity for students to develop reading fluency, particularly in the areas of expression, intonation, and inflection, through repetitive reading of the text during rehearsals (Kimbell-Lopez, 2003). According to Martinez et al. (1999), the format followed by readers' theater allows readers to take part in a repeated reading activity with a meaningful and purposeful context, motivates students' enjoyment of literature, and promotes reading fluency. Their study found that readers' theater resulted in significant improvement

in second graders' reading fluency as they practice reading story scripts. Busching (1981) added that it could particularly benefit weak readers as their need for mediation is met by rereadings and rehearsals. Furthermore, readers' theater is also a great way to enhance comprehension and create enthusiasm for learning (Burns, Roe, & Ross, 1999; Rudell, 1999).

Dialogue. One of the most common and widely used oral reading activities is prepared dialogue. This activity not only aids oral language fluency but also provides a context that makes comprehension easier and serves as model of real interaction. The use of dialogue enables learners to experience role-playing that may relax and remove the seriousness and inhibition that sometimes come with studying English. Because dialogues are often short enough for students to master, they are something learners could be comfortable with after several rereading (Helgesen et al., 1993)

Read-Arounds. Read-arounds not only encourage comprehension of texts but also promote oral-reading fluency. Unlike the "round-robin," students are not obliged to read-aloud but freely volunteer to read their favorite passages from a selection of stories and other books. This activity is usually performed at the end of literature

units. Students skim a book they have already read, mark a favorite passage, and rehearse it to themselves. Teachers may begin the read-around by reading a favorite passage or asking volunteers to read theirs. The read-around continues until everyone who wants to read has read.

The students' familiarity with the text helps them participate in read-arounds. They also enjoy listening to classmates read favorite passages and noticing literary languages. Not following a programmed format, students go back and forth through the story, enabling them to remember events and revisit the scenes (Tompkins, 2003).

### Summary

Prosody is a component of reading fluency that enables learners to orally or silently read with expression and near-musical quality. Prosodic readers are skilled in manipulating pitch, stress, tempo, and the rhythmic and melodic patterns of language. Educators believe that teacher modeling of prosodic reading is important in capturing students' interest and in showing students how expressive oral reading sounds. To achieve prosody in reading, students should be taught the basic principle of chunking or phrasing of sentence. This allows them to split sentences into meaningful units and process words in sense-groups rather than word-by-word. Explicit instruction in

identifying phrase boundaries is needed by children with poorly developed skills in chunking and phrasing.

Furthermore, like other skills, prosodic reading is developed through practice. Activities like choral reading, dialogue presentation, poem presentation, read-arounds, and readers' theater provide students opportunities to speak clearly and effectively with the help of rehearsal.

#### Activities that Motivate Independent Reading

A positive correlation exists between reading ability and independent reading. Students who read for fun at least once a week have higher average reading proficiency scores than students who never or hardly ever read for fun (National Center for Education, 1997). Educators are continuously encouraging students to read independently for pleasure. Reading must be practiced for a student to become proficient at it, and far too many children do not read enough to develop their real potential. Independent reading also encourages the use of familiar techniques for comprehension--making mental images, surveying the book and making predictions, and monitoring reading (Diaz-Rico, 2004).

## Independent Reading and Fluency Development

Wide-range independent reading of a large number of texts promotes reading proficiency among students. As student become better readers, they begin to read their own self-selected books and tend to engage more in independent reading. According to Stanovich (1986), the more children practice independent reading, the faster they progress towards reading fluency. As they are continuously exposed to print, they build up familiarity with the words they encounter again and again in the written language. This familiarity leads children to read many words rapidly and accurately, facilitating more fluent reading.

Children who practice self-selected reading on a regular basis also tend to enjoy reading more than children who do not engage in independent reading. Believing that independent reading is a "critical daily component of a balanced reading program in any classroom" (p. 56) and is the biggest variable affecting student's reading fluency, Cunningham (2005) suggested that a substantial amount of time must be allotted for students' independent reading. Children are often engaged in independent reading because of motivation and personal interests in certain subject areas that they want to pursue by means of books.

## Frequency and Volume of Reading

According to Allington (2001), there is no ideal time to read in order to develop reading proficiency. Instead, he gives importance to volume irregardless of reading type--may it be choral or paired reading, silent or oral reading, or almost any combination of reading activities. He claimed that as long as children read, knowledge is gained and reading fluency is enhanced, making the issue of the type of reading less critical. Studies demonstrate that reading a lot increases a child's cognitive level and reading ability (Cunningham & Stanovich, 2003).

One of the major differences between good and poor readers is the amount of time they spend reading. Many studies have found a strong relationship between reading ability and how much a student reads, and that reading achievement is related to frequency and volume of reading (Barr & Dreeben, 1983; Walberg & Tsai, 1984; Rosenshine & Stevens, 1984). In 1984, Walberg and Tsai studied the out-of-school behavior of 2,890 American 13 year-olds. According to their study, the median child reads 7.2 minutes per day, while forty-four percent of 13 year-old children spend three hours or more reading.

Various research has found that independent, out-of-school reading largely contributes towards "reading



ability, aspects of verbal intelligence and general knowledge about the world" (Cunningham & Stanovich, 2003, p. 38). For example a study on the out-of-school reading habits of 155 American fifth-graders (Anderson, Wilson, & Fielding, 1988) revealed a bleak picture of most children's voluntary reading habits. The median child spends 14 minutes a day in reading various materials. Those who spend the most time reading read nearly five times as much as the median child and more than 200 times as much as the ones at the bottom. Fifty percent of American fifth graders read from books for 4.6 minutes per day or less, and about 10 percent of the children surveyed never read a book the entire interval of the survey.

Students' disinterest in independent reading is a result of negative reading experiences that affect learner's development of reading skills and habits (Stanovich, 1986). To achieve the goal of reading fluency children must be exposed to positive reading experiences and provided motivation and support. The love for reading must be inculcated in children as early as possible through various strategies and interventions at home and in school.

Strategies and Activities that Motivate Independent Reading

Students who do the most reading make the greatest gain in reading (Gunning, 1998). Anderson et al. (1988)

suggested that the average child's time spent reading would be doubled if teachers and librarians would enlighten parents in the importance of reading, convincing them to make books, space, and at least twenty minutes a day for reading, available to their children. Gillet et al. (2004) also added that "in school, if we have children drop everything and read for an extra twenty minutes every school day that, also will double their average reading time. But we can do more" (p. 315). On the basis of this evidence, teachers have long been encouraged to promote voluntary reading in the classroom.

The Teacher as a Model Reader. Trelease (2001) commented that one cannot give a child the love of reading if one does not have it. Teachers cannot teach their students the love of reading if they themselves do not read. For teachers to have a successful independent reading program in the classroom, good modeling should be provided. This could be done through daily teacher read-aloud like storytelling and poetry-reading, provision of scheduled time each day for students' self-selected readings, and provision of lots of different books on all levels, types, and genres (Cunningham, 2005). Oral reading to children also motivates them to read independently for pleasure (Trelease, 2001).

Modeling is especially important for nonfluent older readers who do not think of themselves as good readers but at the same time do not want to read easy books. Fielding and Roller (1992) suggested that teachers could confront this problem by modeling the use of both difficult and easy books to students. Among some of the suggestions for teachers are as follows:

1. Allow students independent time to read and reread difficult books.
2. Read difficult books to students but as much as possible precede them with easy books.
3. Model the use and enjoyment of easy books.
4. Alter purposes for easy reading (e.g. preparing to read to a younger audience).
5. Challenge preconceptions about easy books and broaden the concept of acceptable reading. (Fielding & Roller, 1992, pp. 3-6)

Children and young people read more when they are read to, when they see adults reading, and when they have access to a wide range of reading material, including magazines, comic books, teen romances, and nonfiction. And most importantly, because students are likely to read books that are neither too hard nor too easy, books written for their

appropriate level of difficulty should be available at home and in school (Gunning, 1998).

A Print-Rich Environment. There is enough evidence that the amount of children's exposure to print has profound cognitive consequences, and the act of reading itself can determine achievement differences among learners (Cunningham & Stanovich, 2003). The reading environment--including level of comfort, quietness, and availability of reading materials--affect reading, literacy development, and reading scores (see Free Voluntary Reading in Schools, 1993). Classrooms, as learning camps, must have a print-rich environment that provides substantial opportunities for reading.

Gunning (1996) suggested some ideas to enhance students' exposure to print in a learning environment. These include the creation of bulletin boards with words and pictures, aquariums and terrariums labeled with the names of their inhabitants, and a calendar with children's birthdays and other important events. Teachers could also label objects in several languages, display stories and booklets done by students, operate a student-run post office, have a library corner and listening centers with audiotaped books for read-along. Furthermore, the availability of materials like magnetic letters, printing

sets, typewriter, computers, commercial and student-made picture dictionaries, blanks, notepads, shopping lists at play centers, contribute to a richer print environment.

More ideas from educators (Lipton & Hubble, 1997; Morgan, 1992) include the use of real restaurant menus, advertising flyers to cut and paste, weekly words collected on hanger "mobiles," and a "living" bulletin board that accumulates evidence of the week's learning. And to make a rich-print environment more habitable to English learners, teachers can display different scripts and languages, appropriate books other than English, language tapes, and pictures of a country in which that language is spoken (Diaz-Rico, 2004).

Unassisted Reading Practice. Students read independently in unassisted reading practice. This type of reading is done at reading centers and during workshops. In primary classrooms, a form of unassisted reading practice called "reading the classroom" is often used, where students "walk around the classroom reading all the words and sentences that are posted" (Cantoni-Harvey, 1992, p. 189). Sometimes students prepare for this activity by wearing eye-glasses without lenses and holding sticks as pointers as they track their way around the room.

Literature Circles. Daniels (1994) referred to literature circles as "a new kind of reading group" (p. 6), where children meet in small groups to read and discuss self-selected books. Various reading materials and children's literature that are interesting and manageable are used in this activity, including poems, stories, biographies, and informational books. The creation of discussion groups depends on students' book choices, and heterogeneously composed of children with different interests and abilities (Hill, Johnson, & Noe, 1995). The duration of literature circles depends on the length of the book and students' age, and may last from one day to two weeks.

Exhibiting three key features--choice, literature, and response--literature circles are an important component of a balanced reading program. This activity gives students opportunities to read and discuss books with a supportive community of learners. Researchers (Hill et al., 1995; Samway & Whang, 1996) enumerated some of the benefits of using literature circles:

1. Students view themselves as readers.
2. Students have opportunities to read high-quality books that they might not have chosen on their own.
3. Students read widely.

4. Students are inspired to write.
5. Students develop reading preferences.
6. Students have many opportunities to develop critical and creative thinking.
7. Students learn responsibility for completing assignments.
8. Students learn to self-assess their learning and work habits. (Tompkins, 2003, pp. 368-369)

Sustained Silent Reading Program. Sustained Silent Reading is a time when everyone, including the teacher, reads silently for a given period of time (Butler & Turbill, 1987). It is also known by the following names: DEAR (Drop Everything and Read), USSR (Uninterrupted Sustained Silent Reading), DIRT (Daily Individual Reading Time, OTTER (Our Time to Enjoy Reading) and SQUIRT (Sustained Quite Un-Interrupted Reading Time) (Anderson, 2000). The main purposes of SSR are for students to learn the joy of reading, to treat reading as an activity that should be valued by all (Hopkins, 2003), and to become lifelong readers.

During SSR, most teachers give students the freedom to choose a book they like to read and are encouraged to select the ones that are not too difficult. Depending on how classrooms work, students may also select from a

predetermined reading list or from a bin of books color-coded to indicate reading level. SSR is not the time to require textbook reading or doing assignments. Students may also rely less on teacher-provided materials and start bringing books and magazines from home or the library (Anderson, 2000).

Students are taught the "five-finger test" as a method in choosing a readable material. Hopkins (2003) describes the five-finger test in the following words,

Students are asked to select a page from the book to read to themselves. They hold up all five fingers on one hand as they begin to read. Each time the student encounters a word that is hard to read, he or she puts down one finger. If all five fingers are in the down position before a student finishes reading the page, the book is probably too difficult. The student probably should put the book back on the shelf and look for one that won't be so hard. (n. p.)

To become efficient and independent learners, students need extensive practice in silent reading (Cantoni-Harvey, 1992). Providing time for sustained silent reading in schools has positive impact on reading comprehension, vocabulary development, spelling, written style, control of grammar, and reading fluency (see Free Voluntary Reading in Schools, 1993). Krashen (2005) suggested that reading ability is developed through extensive reading of texts that makes the reader interested instead of feeling



strained by the experience. He argued that "reading has to feel effortless for it to result in language development," backed by studies indicating "that a text needs to be about 98 percent comprehensible in order for it to help the reader acquire new vocabulary" (p. 445).

ESL learners also benefit from sustained silent reading by becoming self-directed agents seeking meaning. In ESL classrooms students select reading materials with respect to content, level of difficulty, and length. SSR allows ESL learners to choose books that are interesting and are relevant to their own experiences (Carrell & Eisterhold, 1987). Many teachers expressed satisfaction with SSR use, especially in helping achieve curricular goals and develop students' positive attitude toward reading (Nagy, Campeni, & Shaw, 2000). Through involvement with SSR, students develop proficiency in reading independently for an extended period of time, and develop an appreciation and enjoyment of literature while reinforcing reading skills and strategies (Anderson, 2000).

### Summary

Reading ability is directly related to independent reading; students who do the most reading make the greatest gain in it. Reading ability is developed through extensive reading of texts that makes the reader interested instead

of feeling strained by the experience. To achieve the goal of overall reading proficiency, children must develop the right attitude towards it. There is no ideal time, place, or type of text for independent reading. As long as children read, knowledge is gained and reading fluency enhanced.

Parents and teachers use various strategies to encourage independent reading. Adult modeling especially through daily teacher read-aloud; provision of scheduled time each day for students' self-selected reading; provision of lots of different books on all types, levels, and genres; and a print-rich learning environment are suggested to foster independent reading. Classroom interventions are also important with activities like unassisted reading practice, literature circles, and sustained silent reading programs. To become efficient and independent learners, students need extensive practice in silent reading. Free voluntary reading in schools has positive impact on reading comprehension, vocabulary development, spelling, written style, control of grammar, and reading fluency.

## Summary of the Chapter

Reading is at the heart of every child's learning, and is a major determiner of students' overall success in school. And as revealed in this chapter, reading fluency is one of the strongest overall indicators of reading competence. Students who do not develop reading fluency are likely to remain poor readers throughout their lives regardless of how bright they are. Recognized as an important aspect of proficiency in reading, fluency aids the construction of meaning and the overall comprehension process.

It follows that instructional focus must be given to this aspect; especially in the development of its components--automaticity in word recognition, accuracy in word identification, and prosody. Attention must especially be given to the acquisition of effective automatic word recognition and word identification skills. Moreover, home, community, and school intervention are important in the development of reading fluency through the encouragement of independent reading. Independent reading together with various strategies and activities discussed in this chapter aids students in acquiring the goal of reading fluency.

CHAPTER THREE  
THEORETICAL FRAMEWORK FOR ACTIVITY SETTINGS IN READING  
FLUENCY DEVELOPMENT

Background of the Model

In the light of the challenges faced by second-language learners described in Chapter One and the recommendations in the literature review, this chapter presents a framework that supports the implementation of activities that encourage reading fluency instruction in upper elementary international school classrooms.

This framework stems from the recognized notion that reading is a dynamic process, in which different aspects of reading affect each other; take for example, the dynamic relationship between independent reading, reading fluency, and reading comprehension, as discussed in the previous chapter. Figure 1 illustrates the relationship.

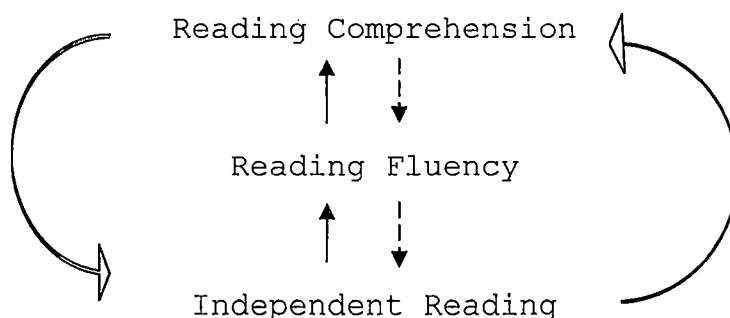


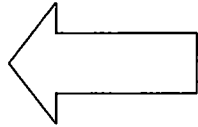
Figure 1. The Dynamicity of Reading Fluency, Independent Reading, and Reading Comprehension

Reading fluency is a critical component of reading comprehension and the two are found to have a direct relationship with each other. It suggests that if reading fluency instruction is neglected in classrooms, students' reading comprehension suffers. And it follows that in order to acquire reading fluency, students should practice reading. Enough evidence is presented on the contribution of independent reading in developing reading fluency.

One could state that the more students engage in independent reading, the more fluent readers they become; the more fluent readers they become, the better they are in comprehending the text. Moreover, this increase in reading comprehension results in students' increased enjoyment of what they are reading; further resulting in more hours spent reading independently. And the cycle goes on and on, making proficient readers better and better while leaving the poor ones lagging behind.

However, it is not as simple as it sounds in the real world. This model works best only if all components of the reading program are in place. That leads to the presentation of another framework that best identifies with what is happening in the real classroom setting. The framework is illustrated in Figure 2.

READING COMPREHENSION



<u>Components of Reading Fluency</u>	<u>Strategies/Methodologies</u>	
Automaticity in Word Recognition	Phonics Instruction Word Games Exposure to Print Repeated Reading Rereading Rate-Buildup Reading Class-Paced Reading Self-Paced Reading	Independent Reading <ul style="list-style-type: none"> <li>• Unassisted Reading Practice</li> <li>• Teacher Modeling</li> <li>• Print-Rich Environment</li> <li>• Literature Circles</li> <li>• Sustained Silent Reading Programs</li> <li>• Weekly Library Visit</li> <li>• Home-Library Connection</li> <li>• Research Projects</li> </ul>
Word Identification Skill	Phonics Analysis Analogy Syllabic Analysis Morpheme Analysis	
Prosody in Reading	Chunking and Phrasing Readers' Theater Buddy Reading Choral Reading Teacher-Modeling (e.g. poetry reading, story-telling) Easy-Reading-for-Fluency Dialogue Read-Aloud	

Figure 2. Reading Fluency Instructional Strategies and Independent Reading toward Reading Comprehension

## Description of the Model

Even though recognized as an important instructional tool by many proponents of education, independent reading alone is not enough to fully establish students' reading fluency considering the constraints of many classrooms. An average classroom does not allow an extended period of time for students to engage in independent reading, especially in school settings where teachers need to follow certain syllabi and a fixed curriculum. In addition to that, with the advent of video games, television, and the mass media, little attention is given by students to independent reading at home. As promising as it is, independent reading is not a panacea to all students' reading needs.

Derived from the model discussed earlier in this chapter, this project presents a model that is more likely to be feasible in the actual setting, especially in the international school setting described in Chapter One. It features the combination of activities that encourage independent reading combined with other reading strategies and procedures in order to achieve the goal of reading fluency. In this framework, independent reading and the combination of various reading strategies and activities serve as pillars that support reading fluency inside and outside of the classroom.

## Independent Reading

In the model shown in Figure 2, independent reading serves as a complement to formal classroom instruction and other related activities, instead of being the only "peg" supporting the development of reading fluency and overall proficiency in reading. The model illustrates that independent reading activities are among the strategies that increase students' automaticity in recognizing words, word identification skills, reading speed, and reading prosody.

In this model, students are engaged in independent reading inside and outside the classroom through motivation, which stimulates their interest in certain subject areas that they might want to pursue by means of books. Aside from the time provided students in independently reading selections during formal class hours and during weekly library visit, the teacher taps students' interest in various subjects. This prompts students to independently search for information that is personally meaningful to them in books or on the Internet. This is accomplished through incorporating interesting topics in disciplines other than language arts, the teacher's modeling of independent reading, assigning student-selected research projects, and providing a print-rich environment.



## Other Strategies and Procedures that Develop Components of Reading Fluency

Aside from independent reading, the framework recognizes the role of other reading strategies and procedures in building up students' reading fluency and overall proficiency in reading. These methods and strategies are discussed below in relation to the component of reading fluency they directly help promote.

Automaticity in Word Recognition. The model acknowledges the importance of phonics instruction in providing a strong reading base for students, especially English learners whose native language's writing system bears little or no resemblance to Roman script. The literature review suggests that beginning and emergent readers should be given explicit instruction in this area. For upper elementary students, automaticity in recognizing words is strengthened through continuous exposure to print, incorporating word games in class activities, rereading of texts, and practicing repeated reading methodologies such as rate-buildup reading, class-paced reading, and self-paced reading.

Word Identification Skills. Instruction at the word level does not end with the automatic recognition of familiar words. As developing readers read more and

experiment with different types of texts, they encounter unfamiliar words that they do not recognize on sight. The model identifies the need for students to be taught word identification skills to help them figure out multisyllabic words. This is accomplished by teaching students replicable and transportable analytical processes making use of semantic, syntactic, and pragmatic cues, as well as phonological information.

Four strategies are identified in the literature review. These are phonic analysis, which makes use of students' knowledge of phoneme-grapheme correspondence and phonic generalization and patterns; analogy, which utilizes students' knowledge of patterns like onsets and rhymes syllabic analysis, the chunking of words into syllables and then using the first two strategies; and morpheme analysis, which uses students' knowledge of the smallest meaningful parts of the word, like base words and affixes.

Prosody in Reading. To achieve expressively rhythmic and melodic oral reading requires the effective use of prosodic features--stress patterns, variations in pitch, and tempo. Prosodic reading reflects an understanding of the ways words are organized into sentences and passages. This kind of understanding could be acquired through exposure to print and continuous independent reading.

However, modeling of the sound of prosodic reading is vital for students' acquisition of the skill. The most likely model for prosodic reading is the teacher. The framework encourages story-telling, poetry reading, and read alouds in the classroom led by the teacher. It is also important for teachers to give direct instruction in chunking and phrasing of sentences to teach students the boundaries of words. Students practice prosodic reading through activities like readers' theater, buddy reading, choral reading, easy-reading-for fluency (e.g. older student reading a story to a 1st grader), and dialogues.

#### Utilization of the Model in the Classroom

The theoretical model presented in this chapter could be used in both explicit and implicit instruction, either to be taught exclusively in language arts class or inter-disciplinarily integrated with other academic goals. The next chapter of this project describes how the model is used to enhance a theme at the same time working towards the goal of reading fluency.

#### Summary

The model presented in this chapter is framed in consideration of the needs of the unique population described in Chapter One. The model illustrates how reading

fluency instruction could be implemented effectively in upper elementary international school setting. The model features the consolidation of independent reading and other reading strategies and methodologies to develop upper elementary students' fluency in both silent and oral reading.

CHAPTER FOUR  
CURRICULUM DESIGN

Curriculum Organization

This curriculum is made up of five lessons built around the rainforest theme, incorporating activities that provide both explicit and implicit instruction in developing reading fluency. The theme allows content-based language learning and an inter-disciplinary approach in the curriculum, integrating social studies, science, and language arts.

Throughout the unit, students deal with different types of literature relevant to the theme--poetry, realistic fiction, nonfiction, articles, lyrics of rap songs, and fact sheets. In Lesson One, students deal with poetry. They listen to the lyrics of the song "Trees," which is originally a poem by Joyce Kilmer, and read the poem "The Heart of the Tree." In Lesson Two, the teacher tells a nonfiction story of "The Great Kapok Tree," where students learn about rainforests and their animal inhabitants. In Lesson Three, the class read chorally about the four layers of the tropical rainforest. In Lesson Four, students work with a partner to read an article on rainforest animals. Finally, in Lesson Five, students read

a fact sheet about disappearing rainforests, and read the lyrics of "Rainforest Rap" while watching it on a video.

As an introduction to the unit, the class plays a word category game to give students an idea what to expect in the unit. Two unit projects--Endangered Animal Report and Walk-the-Classroom--are created as the lessons progress. Students enjoy various activities at the end of the unit like a readers' theater presentation, film-showing, and a tropical rainforest party.

Each lesson follows a lesson plan consisting of three task chains, which are supported by focus sheets and worksheets, each incorporating at least one reading fluency strategy. Each lesson includes a warm-up activity, assessment, and homework. Giving homework to students is an important aspect of the Thai educational system. Parents prefer their children to have homework everyday. It follows that responsible teachers must give worthwhile tasks to students, not just something that fills their time after school. In this unit, students are encouraged to check out books from the library or search the Internet as part of their homework. The aim of the curriculum is to implement activities that foster reading fluency inside and outside the classroom.

The rainforest theme is chosen because it is a topic that many children find interesting. It is topic that could easily prompt students to read independently about related subjects. This unit takes into consideration students' personal interests, allowing them to grow into independent learners; for example freely choosing an endangered animal that interests them for the unit project and creating a "save the rainforest" flyer using the computer. Through the encouragement of independent reading, students are given the opportunity to "discover" content, not depending on the teacher to provide all the information.

#### Components of the Unit

This curriculum design acknowledges that reading fluency is not end in itself, but only one of the means to enhance students' reading comprehension of the theme being studied as a whole. Aside from activities that develop reading fluency, this curriculum promotes an interdisciplinary approach to language arts and honors students' diverse learning styles. Because reading fluency instruction is the main focus of this project, only content-based activities that provide students opportunities to develop reading fluency are discussed in this section.

## Word Recognition and Word Identification Strategies

At the start of the unit, the students played a word game by grouping rainforest-related words under different categories. These categories are posted in the corner of the classroom until the end of the unit to encourage acquisition of sight words. In Lesson One, students identify rhyming words in poetry as they listen and read the poems "Trees" and "The Heart of the Tree." These activities help students identify word patterns and expand their sight-word "bank." With the knowledge of rhymes and sight words, students can better decode unfamiliar words by analogy. In Lesson Three, students identify compound words in the focus sheet on tropical rainforest layers. They practice dividing compound words and putting together words to create meaningful compound words. In Lesson Four, students decode unfamiliar words using context clues and morpheme analysis, a process that involves the separation of affixes (prefixes and suffixes) from the root word, in reading an article on tropical rainforest animals.

As an addition to the activities mentioned above, the unit promotes a print-rich environment with the use of posters, library books, Internet resources, and display of students' work in the "classroom walk" project, increasing students' knowledge of sight words. In this unit, students



are not only encouraged to grow in a print-rich environment, but also they become creators of an environment rich in print. At the end of the unit, the class also watches a captioned animated film, Fern Gully, to provide opportunities for reading practice that is entertaining and self-correcting.

### Prosodic Reading

The teacher models prosodic oral reading to the students as different styles of writing are explored by the class. The teacher uses different expressions, speech styles, and registers as the poems "Trees" and "The Heart of the Tree," the story "The Great Kapok Tree," the readers' theater script of the "Great Kapok Tree," and articles on rainforest layers and animals are read aloud to the class. Teacher modelling is important because it not only shows students what prosodic oral reading sounds, but also shows when and where appropriate speech styles are used.

For students to practice prosodic oral reading and improve reading rate through rereading of the same materials, students engage in readers' theater. This activity allows them to participate confidently in read-alouds as they reread their scripts and familiarize themselves with their parts. It also promotes familiarity

with the visual form of words that will appear in other contexts.

A low-anxiety reading activity that encourages the development of oral-reading fluency and comprehension of the text is buddy reading. This strategy is used in Lessons Three and Four, where students take turns in reading and rereading the articles aloud with their partners. It provides peer support as students help each other with vocabulary words and clarifying ideas, and valuable practice to support readers' transition from beginner to fluency.

Another low-anxiety read-aloud activity is choral reading, because students read poetry and other interesting texts as a group. In this unit, choral reading is done in Lessons One, Three, and Four, a good exercise for the class to practice phrasing and chunking of sentences. But explicit instruction in chunking and phrasing sentences is given in Lesson Five where students chunk the lyrics of "Rainforest Rap."

#### Independent Reading

The theme of the unit strongly encourages students to engage in independent reading in and out of the classroom. Students are given low-anxiety research projects, geared toward awakening students' interest in the topic instead of

making them feel "burdened" with homework. For example, students can check out rainforest and rainforest animal books from the library to read at home. For the unit project, students are given freedom to choose an endangered rainforest animal they are interested in. They independently read resource materials from the library, Internet, grade-level textbooks, and texts at home. Not only does independent reading encourage reading fluency, but it also makes students feel that they have ownership of their knowledge.

#### Summary

The unit "Rainforest" (see Appendix A) demonstrates that reading fluency instruction does not need to be taught exclusively in language arts classes but could be integrated with other subject areas. The unit also demonstrates independent reading and other strategies and procedures to achieve the goal of reading fluency.

Table 3. Connections between Key Concepts and Lesson Plan

<u>Key Concept</u>	<u>Unit Intro- duction</u>	<u>Lesson</u>					<u>Homewor k</u>	<u>Unit Project</u>	<u>End of Unit Activities</u>
		1	2	3	4	5			
Automaticity in Word Recognition	X	X	X	X		X	X	X	X
Word Identification Skills				X	X	X	X	X	X
Prosodic Reading		X	X	X	X	X	X	X	
Independent Reading							X	X	

Table 4. Integration of Activities that Encourage Reading Fluency in Content-Based Instruction

Components of Reading Fluency	Activities	Lesson
Automaticity in Word Recognition	<ul style="list-style-type: none"> <li>• word category game</li> <li>• watching captioned animated film</li> <li>• rhyming words</li> <li>• word search</li> <li>• rereading</li> <li>• "walk the classroom"</li> <li>• independent reading</li> </ul>	<ul style="list-style-type: none"> <li>• unit introduction</li> <li>• end of the unit activity</li> <li>• Lesson One</li> <li>• Lesson Two</li> <li>• Lessons Three and Five</li> <li>• unit project</li> <li>• unit project and homework</li> </ul>
Word Identification Skills	<ul style="list-style-type: none"> <li>• rereading</li> <li>• manipulating compound words</li> <li>• decoding by context clues</li> <li>• decoding by morpheme analysis</li> <li>• watching captioned animated film</li> <li>• "walking the classroom"</li> <li>• independent reading</li> </ul>	<ul style="list-style-type: none"> <li>• Lessons Three and Five</li> <li>• Lesson Three</li> <li>• Lesson Four</li> <li>• Lesson Four</li> <li>• end of the unit activity</li> <li>• unit project</li> <li>• unit project and homework</li> </ul>
Prosodic Reading	<ul style="list-style-type: none"> <li>• storytelling</li> <li>• listening to a song</li> <li>• reading poetry aloud</li> <li>• chunking and phrasing</li> <li>• choral reading</li> <li>• buddy reading</li> <li>• readers' theater</li> <li>• independent reading</li> </ul>	<ul style="list-style-type: none"> <li>• Lesson Two</li> <li>• Lesson One</li> <li>• Lesson One</li> <li>• Lesson Five</li> <li>• Lessons One, Three, &amp; Four</li> <li>• Lesson Four</li> <li>• Lesson Two homework</li> <li>• unit project and homework</li> </ul>

## CHAPTER FIVE

### ASSESSMENT

The ability to measure students' achievement in a certain task and monitor their progress towards achieving an academic goal is key to successful teaching. As with reading fluency instruction, teachers need to be able to determine if instruction is effective in meeting students' individual needs. Assessment also provides teachers with the opportunity to intervene and support students whose progress towards fluency is slow. Reliable, valid, and efficient assessment instruments are necessary to accomplish this.

In assessing reading fluency, various instruments are now available from major publishing houses. Assessment packets range from simple tools that measure only specific components like automaticity to multidimensional fluency scale assessments that take one to two hours to administer. As a part of the No Child Left Behind act under the US Department of Education, a number of states and districts have already required periodical testings on reading fluency from third to eighth grade. These formal assessments are given three times a year--at the beginning,

middle, and end of the school year--standardized for all students in the class, grade level, district, or state.

In the unit described in Chapter Four, formative and summative assessments are used to distinguish whether the lessons made a difference in students' level of reading fluency, and to tell how students are fairing in the activities. For formative assessment, the teacher takes note of students' participation in read-alouds and the effort given in learning new skills and applying new strategies. This requires continuous observation from the teacher while students chorally or individually read in class.

Worksheets and rubrics also provide formative assessment. In Worksheets 1.1, this activity reflects students' knowledge of rhymes. This information could be used to tell which student has poor word recognition skills and who are the ones who are ready to advance to higher-level skills. Fourth-graders are supposed to be already experts in these concepts; but sadly, that is often not the case. A large percentage of students are not reading in their grade-level fluency and many of them have limited word banks. Worksheets 3.3 and 4.3 monitor students' knowledge of compound words and morphemes (affixes and base

words). Their answers tell how proficient students are in manipulating language patterns and sight words.

Worksheet 5.1, the chunking and phrasing activity, is also helpful in informing the teacher how well students perform in dividing sentences into meaningful units and how much knowledge they have in phrasal boundaries. Moreover, a listening rubric, Assessment Sheet 2.1, provides students' self-assessment of their performance while listening to the teacher read the story. The self-assessment sheet informs about students' listening ability and provides a rough evaluation of their learning on the listening activity.

For a summative assessment of reading fluency, a rubric and a formal instrument are used at the end of the unit. Students' performance in the readers' theater presentation, a homework given in Lesson Two but performed after the unit, is assessed using a rubric. Students are graded according to the following criteria: clarity of speech, volume of voice, accuracy in pronouncing words, the use of expressions, effective use of chunking and phrasing, and effective manipulation of intonation and pitch.

As a formal summative assessment, a one-on-one reading procedure is done after the unit. Each student is asked to read to the teacher a selection from a fourth grade-level textbook. Students read the same material in order for the



teacher to have a valid base of comparison after the assessment. The teacher records the number of words read in sixty seconds and compares the rate to the grade level-rate (see Appendix C). The number of words becomes the students' reading rate, which is evidence of their automaticity in word recognition. The teacher also takes notes of the mispronounced words and the effort the child is giving in decoding multisyllabic words. This reveals students' ability to use decoding skills to accurately identify words. Research reveals that this method of formal assessment constitutes a highly reliable and valid measure of general reading achievement, including comprehension.

Pertaining to the unit described in Chapter Four, the three components of reading fluency--automaticity of word recognition (reading rate or number of words per minute), accuracy in decoding words (pronunciation), and prosodic reading (the exhibition of proper phrasing and chunking)--are formally and informally assessed through the use of instruments like worksheets, rubrics, and one-on-one oral reading fluency assessment.

#### Summary of the Project

A strong reading foundation is necessary to students' overall academic success. One of the primary foundations of

reading and one of the strongest indicators of reading competence, reading fluency must be acquired by all children to achieve the goal of literacy. Reading fluency is the ability to read most words in context with automaticity, accuracy in speech, appropriate speed, and phrasing and expression. Recognized as an important aspect of proficiency in reading, fluency is vital to the overall comprehension process.

Instructional focus must be given to strengthen students' reading fluency, especially in the development of its components--automaticity in word recognition, accuracy in decoding words, and prosody. In consideration to the needs of upper elementary Thai students in international schools, a model feasible in the Thai setting is framed that supports the implementation of activities that develop reading fluency. The model demonstrates the consolidation of independent reading and other strategies and procedures to achieve the goal of reading fluency.

A curriculum is designed to demonstrate how the model works in the authentic classroom setting. Composed of five lessons built around the rainforest theme, the unit successfully integrates reading fluency instruction across disciplines instead of being taught exclusively in language arts class. Aside from explicit and implicit classroom

instruction on reading fluency, the unit takes into consideration the importance of classroom, library, and home connection in the development of reading fluency through the encouragement of independent reading. To determine the applicability of the unit, the three components of reading fluency are formally and informally assessed through the use of instruments like worksheets, rubrics, and one-on-one oral reading fluency assessment.

APPENDIX A  
UNIT OVERVIEW

## **Unit Theme: Rainforest**

Teaching Level: 4<sup>th</sup> Grade (Intermediate Fluency)

### TESOL Standards:

- Goal 2: To use English to achieve academically in all content areas.
- Standard 1: Students will use English to interact in the classroom.
- Standard 2: Students will use English to obtain, process, construct, and provide subject matter information in spoken and written form.
- Standard 3: Students will use appropriate learning strategies to construct and apply academic knowledge.

### Unit Starter: Word Category Game

1. The teacher randomly distributes two word cards to each student.
2. The teacher writes on the board five categories that relate to the unit theme.
3. As the teacher calls out each category, the students quickly select word cards that fit the category.
4. Students share and compare answers, explaining how specific words relate to the category.
5. Word cards are pasted under the right categories.

### Weekly Library Visit:

1. Two 45-minute sessions of weekly library visitation is devoted on examining, browsing, and reading books on rainforest and other related topics.
2. The teacher requests the librarian in advance to prepare books and other library resources on the rainforest for the scheduled class visit.
3. Students read independently, in pairs, or in groups while in the library.
4. Each student is expected to take home at least two books to read for the weekend.

## Unit Projects:

### A. Endangered Animal Report

1. This project is introduced in Lesson Four as part of the homework. Students choose one endangered animal for in-depth study.
2. Students may use library books, video tapes, and the Internet to research information about the animal, particularly on their habitat, food, locomotion, defenses, enemies, and reproduction.
3. Students make a poster and a short written report that they will read aloud to the class.

### B. Classroom Walk

1. Students working in their original groupings of four gather the posters, reports, maps, and charts that they made in Lessons One to Five.
2. The group may also gather additional information and interesting facts about the unit by browsing books in the library or accessing websites in the computer lab.
3. The group displays all their work and findings by organizing them in one corner of the room.
4. Students walk around, surveying and reading the class's work. The teacher may also invite students from other classes to view the class exhibit.

## End of Unit Activities:

- A. Readers' Theater Presentation: As a culmination of the unit, the students present their readers' theater scripts.
- B. Film Showing: As a celebration of the unit completion, the class watches an animated film Fern Gully, the Last Rainforest. If available, the teacher uses TeleCaption decoders to improve students' reading fluency.
- C. Rainforest Party: The class brings different food (e.g. banana, chocolate, popcorn, nachos, salsa, cashew nuts) that are derived from the rainforest. The food could be eaten during the film showing.

Content:

<u>Lesson Title</u>	<u>Performance Objective</u>		
	<u>Content</u>	<u>Learning</u>	<u>Language</u>
Reading "The Heart of a Tree"	Read the poem "The Heart of a Tree"	Make a poster describing the importance of trees	Learn the use of rhyming words in poetry
Rainforest: "The Great Kapok Tree"	Learn about rainforest and its importance to its animal inhabitants	Learn map skills by mapping rainforest locations around the world	Learn to effectively read aloud through the introduction of readers theater
Layers of the Rainforest	Learn about the four layers that make up the rainforest	Make a graphic organizer to compare and contrast the four layers of the rainforest	Learn about compound words
Rainforest Animals: Predators and Prey	Learn about the concepts of predators and prey	Make posters of a food chain and a food web	Learn how to decode long, unfamiliar words using context clues and morpheme analysis
Saving the Rainforest	Learn ways on how to help preserve the rainforest	Create a flyer using Microsoft Word	Learn how to chunk and phrase sentences

## Lesson One

### "The Heart of the Tree"

Time Frame: 1 hour, 30 minutes

Venue: Under the trees along the soccer field

Performance Objective:

Content Objective: Students will read the poem "The Heart of the Tree" by Henry Cuyler Bunner.

Language Objective: Students will learn the use of rhyming words in poetry.

Learning-Strategy Objective: Students will make a poster describing the importance of trees.

Vocabulary:

harmony    shaft        croon        twilight    towering  
treble     heritage    sap         hollow

Materials:

Focus Sheet 1.2: "The Heart of the Tree"

Worksheet 1.1: Words That Rhyme

Worksheet 1.2: How Are Trees Important?

CD or cassette player

CD or cassette tape of "Trees"

poster paper

colored pens

Warm Up: With students sitting on mats under the shade of the trees, they listen to the song "Trees" (lyrics based from the poem by Joyce Kilmer).

Task Chain 1: Reading a Poem

1. The teacher asks the class to observe their surroundings and think of the most obvious benefit they get from trees at the moment.



2. Using a large poster paper, students work in groups (groupings are based on mat-sitting arrangement) to draw their favorite tree and label the parts.
3. The groups briefly discuss with the class why they chose the tree.
4. After the activity, the teacher tells the class that they will be reading a poem about trees by Henry Cuyler Bunner.
5. The teacher gives out Focus Sheet 1.1 and reads the poem aloud, modeling prosodic oral reading. The teacher divides the class by mats, and asks students on each mat to follow her as she reads two lines each time.

### Task Chain 2: Rhyming Words in Poetry

1. The teacher asks the class what they notice about the words at the end of each line.
2. The teacher discusses that many poems use rhymes at the end of lines, either successively or in every other line.
3. The students give examples of rhyming words found at the end of each line from the poem.
4. The teacher gives out Worksheet 1.1 and asks the students, working in groups of four, to think of words that rhyme with the given words in the worksheet.

### Task Chain 3: Making a Poster

1. The teacher asks the students what the author thinks are the uses and importance of trees. The teacher discusses students' answers with the class.
2. Still working in groups of four, students answer Worksheet 1.2. Students brainstorm more ideas on how trees are important.
3. The group makes a poster out of the ideas they generate in Worksheet 1.2.

Homework: Students will make a list of products or material they could find at home that came from trees. Students will also research about rainforests by borrowing a book from the library, searching on the Internet, or making use of other resource materials at home. They should be prepared to share their findings with the class next session.

Assessment:

Formative: The teacher continuously monitors students while they complete group activities and participate in class discussions.

Summative: The teacher asks students to complete Assessment Sheet 1.1 for self-assessment on teamwork. The teacher uses Assessment Sheet 1.2 to evaluate how each team fared in group activities. Scores in Worksheets 1.1 and 1.2 are also added in the overall assessment.

## Lesson Two

### "The Great Kapok Tree"

Time Frame: 1 hour, 30 minutes

Performance Objective:

Content Objective: Students will learn about the rainforest by listening to a story entitled "The Great Kapok Tree."

Language Objective: Students will improve their oral reading fluency through readers' theater.

Learning-Strategy Objective: Students will learn map skills by mapping the different locations of rainforests around the world.

Vocabulary:

rainforest	toucan	boa constrictor
anteaters	sloth	Yanomamo tribe
ecosystem	ancestors	pollinate

Materials:

Focus Sheet 2.1: Animal Word Search  
Focus Sheet 2.2: Readers' Theater Script 1  
Worksheet 2.1: Distribution of Rainforest  
Assessment Sheet 2.1: Listening Rubric  
Assessment Sheet 2.2: Creating a Map Rubric  
Homework Sheet 2.1: Readers' Theater Script 2  
Homework Sheet 2.2: Readers' Theater Script 3  
Homework Sheet 2.3: Readers' Theater Script 4  
Homework Sheet 2.4: Readers' Theater Script 5  
Homework Sheet 2.5: Readers' Theater Script 6  
Supplementary Sheet 2.1: "The Great Kapok Tree"  
wall world map

Warm Up: Students complete Focus Sheet 2.1 by finding the names of rainforest animals in the word search sheet.

### Task Chain 1: Learning about the Rainforest

1. The teacher tells the story "The Great Kapok Tree," modeling prosodic oral reading.
2. The teacher solicits students' reaction to the story. The teacher entertains questions from the listeners.

### Task Chain 2: An Introduction to Readers Theater

1. The teacher distributes Focus Sheet 2.2, a readers' theater script version of "The Great Kapok Tree."
2. The teacher reads the script aloud to the students, encouraging them to join in on the repetitive words marked ALL.
3. The teacher assigns roles to the students.
4. Students mark their parts using a highlighter.
5. Students are given a few minutes to read the script again, familiarizing themselves with their parts.
6. The class reads the story aloud in a readers' theater fashion.
7. The class repeats the process twice.
8. The teacher distributes more readers' theater scripts and assigns groupings for a readers' theater presentation at the end of the unit.

### Task Chain 3: Rainforest Mapping

1. The teacher divides the class into groups of four.
2. The teacher focuses students' attention to the wall map of the world and explains where rainforests thrive.
3. The teacher gives out Worksheet 2.1, poster paper, and colored pens to each group.
4. The class orally reads the instructions at the top of the worksheet.
5. Students follow the directions indicated in the worksheet to create a map of rainforest location around the world.

Homework: Students read and reread their readers' theater scripts to familiarize themselves with their parts. They will have a presentation at the end of the unit.

Assessment:

Formative: The teacher watches for students' appropriate response while telling the story. Students answer Assessment Sheet 2.1 to check their listening skills. The teacher also considers students' behavior during rereading and the introduction of readers' theater.

Summative: The teacher observes students' feedback and level of participation in class and group activities. The teacher uses Assessment Sheet 2.2 to assess students' maps.

## Lesson Three

### Layers of the Rainforest

Time Frame: 45 minutes

Performance Objective:

Content Objective: Students will learn about the four layers that make up the rainforest.

Learning-Strategy Objective: Students will make a graphic organizer to compare and contrast the four layers of the rainforest.

Language Objective: Students will learn about compound words.

Vocabulary:

canopy      emergent layer      understory      forest floor

Materials:

Focus Sheet 3.1: Illustration of Forest Layers

Focus Sheet 3.2: Tropical Rainforest Layers

Worksheet 3.1: Compare and Contrast Chart

Worksheet 3.2: Compound Words

Assessment Sheet 3.1: Overall Assessment Rubric

Homework Sheet 3.1: Reading List

Warm Up: The teacher distributes an orange to each student in the class.

Task Chain 1: The Layers of the Rainforest

1. The teacher focuses students' attention on the vocabulary words written on the board.
2. The teacher asks the class if they have encountered the vocabulary words in their reading. Volunteers share what they know about the words.
3. The teacher explains that the words on the board are layers of the rainforest.
4. The teacher distributes Focus Sheet 3.1 and together with the class identifies the layers.

5. Students read Focus Sheet 3.2 with a partner, discussing their findings along the way.
6. The class rereads the article in Focus Sheet 3.2. This time the teacher leads in the choral reading of the selection.
7. On the worksheet, students draw more animals on the layers of the rainforest.

#### Task Chain 2: Compare and Contrast

1. The teacher explains a compare-and-contrast chart.
2. Students complete the compare-and-contrast chart on Worksheet 3.1 with a partner.
3. While students are completing the worksheet, the teacher draws a big compare-and-contrast chart on the board.
4. Together, the class answers the chart on the board, basing their answers on the completed worksheet. Students also add information to their worksheets from the class's answers.

#### Task Chain 3: Compound Words

1. The teacher refreshes students' memories as to the meaning of "compound words."
2. Students search for compound words in the article.
3. The class answers Part A of Worksheet 3.2 at the same time.
4. The students independently finish answering Parts B and C of the worksheet.

Homework: Students take home one or more books from the reading list or any book pertaining to forest animals and plants and rainforest in general. They should be prepared for class activities and discussion at the next meeting.

#### Final Assessment:

**Formative:** The teacher continuously monitors students' behavior during class discussion and buddy-reading activity.

**Summative:** The teacher uses Assessment Sheet 3.1.

## Lesson Four

### Rainforest Animals: Predators and Prey

Time Frame: 1 hour, 30 minutes

Performance Objective:

Content Objective: Students will learn about the concepts of predators and prey.

Language Objective: Students will learn how to decode long multisyllabic words using context clues and morpheme analysis.

Learning-Strategy Objective: Students will learn to analyze one aspect of animal relationships by creating a food web.

Vocabulary:

predator	tropical	temperature	fascinating
competition	endemic	species	diversity
prey	ecosystem	population	relationship
intruder	adapt		

Materials:

Poster 4.1: Food Chain  
Poster 4.2: Food Web  
Focus Sheet 4.1: Tropical Rainforest Animals  
Worksheet 4.1: Predators and Prey  
Worksheet 4.3: Using Context Clues  
Worksheet 4.3: Base Words  
Assessment Sheet 4.1: Performance Rubric  
Assessment Sheet 4.2: Poster Rubric  
ball of yarn  
poster paper  
colored pens

Warm Up: The class gathers into a circle. One student keeps hold of the end of the yarn as the teacher throws the ball of yarn across the room to another student. The student



then throws it to another one. The process continues until a web has been formed.

#### Task Chain 1: Predators and Prey

1. The teacher pulls on the yarn and asks the students if they feel the pull.
2. The teacher explains that everything is interconnected in the web of life. The teacher discusses the interdependency of animals.
3. The teacher writes the words "predator" and "prey" on the board and asks students if they have know the words.
4. The teacher further explains that a predator is an animal that hunts other animals for food, and the animal being hunted is the prey.
5. The teacher solicits more examples of prey and their possible predators from the students.
6. Students answer Worksheet 4.1 by matching predators to their prey.

#### Task Chain 2: Reading "Tropical Rainforest Animals"

1. While tapping students' prior knowledge about rainforest, the teacher draws a concept web on the board.
2. As the teacher adds more ideas on the concept web, the students share information from the readings and research they did at home.
3. The teacher explains that plants and animals depend on each other in order to survive.
4. The teacher gives out Focus Sheet 4.1.
5. Students read the article in Focus Sheet by pair-discussing the selection along the way.

#### Task Chain 3: Decoding Vocabulary Words Using Morpheme Analysis

1. The teacher writes the vocabulary words on the board.
2. The teacher gives out Focus Sheet 4.2 and discusses the use of context clues as a strategy in finding meaning of words.

3. Students take turns in finding the boldly written words in the text and read the surrounding sentences to find context clues.
4. The class continues the process indicated in the focus sheet until all the vocabulary words are discussed.
5. The teacher distributes Worksheet 4.2.
6. The class completes Exercise A together as the teacher discusses the strategy of using root words and affixes in identifying multisyllabic words.
7. Students complete Exercises B and C independently.

#### Task Chain 4: Food Webs and Food Chain

1. The teacher shows Posters 4.3 and 4.4 to the class, explaining further the relationship of predators and prey through the concept of food chains and food webs.
2. The teacher explains the difference between a food chain and a food web.
3. Students work in groups of four to create posters of possible food chains and food webs.

Homework: Students will research one rainforest animal that is in danger of becoming extinct. They will present their written report and poster at the end of the unit.

#### Final Assessment:

**Formative:** The teacher observes how students participate in the class and group discussions.

**Summative:** The teacher uses Assessment Sheet 4.1 in assessing students' overall performance, and Assessment Sheet 4.2 in grading students' group posters, which will be used for the unit project.

## Lesson Five

### Saving the Rainforest

Time Frame: 1 hour, 30 minutes

Venue: Activities are done in the classroom to accomplish the first and second task chain. The class goes to the computer center to accomplish the third task.

Performance Objective:

Content Objective: Students will learn ways on how to help preserve the rainforest.

Language Objective: Students will learn chunking and phrasing using the lyrics of "Rainforest Rap."

Learning-Strategy Objective: Students will make a flyer using the Microsoft Word.

Vocabulary:

deforestation	microorganisms	species
prescription drugs	pharmaceuticals	timber

Materials:

Focus Sheet 5.1: Disappearing Rainforest Fact Sheet  
Worksheet 5.1: "Rainforest Rap"  
Assessment Sheet 5.1: Creating a Flyer Rubric  
Assessment Sheet 5.2: Class Performance Rubric  
"Rainforest Rap" video

Warm Up: Students hang pictures of endangered animals they are researching on the string across the board.

Task Chain 1: Saving the Rainforest

1. The teacher comments that many animals are endangered as a result of the destruction of rainforests.
2. Students share their ideas on the relationship between rainforest destruction and animal endangerment.

3. The teacher distributes Focus Sheet 5.1 and reads the points suggested on the sheet.
4. After the class rereads the points aloud, there is a discussion on ways to preserve the rainforest.

#### Task Chain 2: Chunking and Phrasing

1. The teacher gives out Worksheet 5.1 and reads the lyrics of "Rainforest Rap" aloud as the students silently read along.
2. The teacher asks the students to read aloud, stopping at each pause. The students mark each pause with a slash.
3. With the slashes in place, the class chorally reads the lyrics.
4. The teacher plays the "Rainforest Rap" video as the students pay attention to the beats and rhythm.
5. The teacher plays it again as the class raps along.
6. The class is divided into groups of four.
7. The teacher distributes another copy of Worksheet 5.1 and challenges each group to chunk the lyrics using the rap rhythm.

#### Task Chain 3: Making a Flyer

1. The teacher shows a sample of a flyer to the class, explaining what it is and what kinds of information it contains.
2. The teacher explains that the students will individually create a flyer using Microsoft Word.
3. On the board, the teacher writes the things (e.g. title) that should be included in the flyer.
4. Students open the computer on Microsoft Word and start to work independently on the project.
5. The teacher assists slow students.
6. The students print their flyers.

#### Final Assessment:

Formative: The teacher takes note of students' participation in class discussion and chunking activity.

Summative: The teacher checks Worksheet 5.1 and uses Assessment Sheet 5.1 to assess the flyer.

APPENDIX B  
UNIT RESOURCE MATERIALS

## Focus Sheet 1.1

### The Heart of the Tree

What does he plant who plants a tree?  
He plants a friend of sun and sky;  
He plants the flag of breezes free;  
The shaft of beauty, towering high;  
He plants a home to heaven anigh  
For song and mother-croon of bird  
In hushed and happy twilight heard-  
The treble of heaven's harmony-  
These things he plants who plants a tree.

What does he plant who plants a tree?  
He plants cool shade and tender rain,  
And seed and bud of days to be,  
And years that fade and flush again;  
He plants the glory of the plain;  
He plants the forest's heritage;  
The harvest of a coming age;  
The joy that unborn eyes shall see-  
These things he plants who plants a tree.

What does he plant who plants a tree?  
He plants, in sap and leaf and wood,  
In love of home and loyalty  
And far-cast thought of civic good-  
His blessings on the neighborhood  
Who in the hollow of His hand  
Holds all the growth of all our land-  
A nation's growth from sea to sea  
Stirs in his heart who plants a tree.

-Henry Cuyler Bunner

Source: Cook (1958).

## Worksheet 1.1

### Rhyming Words

Think of three words that rhyme with each given word below.

- |            |       |       |       |
|------------|-------|-------|-------|
| 1. flower  | _____ | _____ | _____ |
| 2. basket  | _____ | _____ | _____ |
| 3. green   | _____ | _____ | _____ |
| 4. sky     | _____ | _____ | _____ |
| 5. singing | _____ | _____ | _____ |
| 6. river   | _____ | _____ | _____ |
| 7. sooner  | _____ | _____ | _____ |
| 8. grass   | _____ | _____ | _____ |
| 9. less    | _____ | _____ | _____ |
| 10. merry  | _____ | _____ | _____ |
| 11. mister | _____ | _____ | _____ |
| 12. castle | _____ | _____ | _____ |
| 13. little | _____ | _____ | _____ |
| 14. sample | _____ | _____ | _____ |
| 15. light  | _____ | _____ | _____ |
| 16. sun    | _____ | _____ | _____ |
| 17. song   | _____ | _____ | _____ |
| 18. good   | _____ | _____ | _____ |
| 19. sea    | _____ | _____ | _____ |
| 20. land   | _____ | _____ | _____ |

## Worksheet 1.2

### How Are Trees Important?

Brainstorm five ideas on how trees are important other than the ones mentioned in the poem "The Heart of the Tree."  
Draw and label your ideas on the space below.



## Assessment Sheet 1.1

### Self-Assessment: Working with a Team

<u>Attributes</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>
Fulfills Team Role	I fully perform all of the assigned team duties.	I perform nearly all assigned duties.	I perform team duties minimally.	I do not perform assigned team duties.
Shares Information	I relay a great deal of information relating to the topic.	I relay some basic information to teammates, and most of it relates to the topic.	I relay minimal information to teammates, and only some relate to the topic.	I do not relay any of information to teammates.
Cooperates with Other Teammates	I am an active member of the team.	I show some interest with what the team is doing.	I do not mind working with my teammates but wouldn't choose them again.	I am impossible to work with.

Student's Comment: \_\_\_\_\_

\_\_\_\_\_

## Assessment Sheet 1.2

### Group Participation Rubric

Skills Criteria	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>
<u>Helping:</u> The students offer assistance to each other.	None of the time	Some of the time	Most of the time	All of the time
<u>Listening:</u> The students work from each other's ideas.	None of the time	Some of the time	Most of the time	All of the time
<u>Participating:</u> Each student contributes to the completion of the task.	None of the time	Some of the time	Most of the time	All of the time
<u>Persuading:</u> The students exchange, defend, and rethink ideas.	None of the time	Some of the time	Most of the time	All of the time
<u>Questioning:</u> The students interact, discuss, and pose questions to all members of the team.	None of the time	Some of the time	Most of the time	All of the time
<u>Respecting:</u> The students encourage and support the ideas and efforts of others.	None of the time	Some of the time	Most of the time	All of the time

Teacher's Comment: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

## Focus Sheet 2.1

### Animal Word Search

AARDVARK	ANTEATER	ARMADILLO	BABOON
BADGER	BEAVER	COUGAR	FROG
GORILLA	SNAKE	MACAW	PARROT
MONKEY	LEOPARD	OCELOT	PANDA
PANTHER	PORCUPINE	WALLABY	CHEETAH
BOA CONSTRUCTOR	SLOTH	BUTTERFLY	JAGUAR

M	B	O	A	C	O	N	S	T	R	I	C	T	O	R
C	O	U	G	A	R	R	N	A	L	W	A	C	A	M
S	Z	Y	T	F	J	D	R	A	P	O	E	L	I	P
N	W	A	L	L	A	B	Y	O	M	V	B	Z	K	A
U	B	X	J	A	R	M	A	D	I	L	L	O	T	M
S	T	E	E	R	L	B	U	H	A	T	E	E	H	C
E	L	T	A	R	E	G	D	A	B	S	E	I	P	J
T	S	O	B	V	E	Q	K	A	P	N	Y	A	L	A
O	N	R	T	E	E	T	R	K	M	X	N	C	P	G
L	A	R	B	H	W	R	A	W	Q	T	I	K	A	U
E	K	A	O	R	F	L	V	E	H	Q	F	R	N	A
C	E	P	O	Z	L	E	D	E	T	Y	I	D	D	R
O	E	N	I	P	U	C	R	O	P	N	N	G	A	N
A	A	G	R	R	E	T	A	E	T	N	A	Q	R	T
B	A	B	O	O	N	R	A	L	L	I	R	O	G	O
N	O	B	L	M	M	O	N	K	E	Y	S	O	C	M
L	B	U	T	T	E	R	F	L	Y	O	F	R	O	G

## Focus Sheet 2.2

### Readers' Theater Script 1

#### The Great Kapok Tree

by Lynne Cherry

ALL	Jaguar	Boa Constrictor
Narrator 1	Monkeys (4)	Butterfly
Narrator 2	Sloth	Tree Frogs (4)
Narrator 3	Porcupines (2)	Yanomamo Child
Narrator 4	Anteater	Toucan

Narrator 1: One man was walking into the rainforest.

Narrator 2: Moments before, the forest had been alive with the sounds of squawking birds and howling monkeys.

Narrator 3: Now all was quite as the creatures watched the man and wondered why he came. The man stopped and struck the trunk of the tree.

ALL: Whack! Whack! Whack!

Narrator 4: The sounds of the blows rang through the forest. The wood of the tree was very hard.

ALL: Chop! Chop! Chop!

Narrator 1: The man wiped off the sweat that runs down his face and neck.

ALL: Whack! Chop! Whack! Chop!

Narrator 2: Soon the man grew tired. He sat down to rest at the foot of the great Kapok tree.

Narrator 3: Before he knew it, the heat and hum of the forest had lulled him to sleep. A boa constrictor lived in the Kapok tree. He

slithered down its trunk to where the man was sleeping.

Narrator 1: He looked at the gash the axe had made in the tree. Then the huge snake slid very close to the man and hissed in his ear.

Boa Constrictor: Senhor, this tree is a tree of miracles. It is my home, where generations of my ancestors have lived. Do not chop it down.

Narrator 3: A butterfly flew near the sleeping man's ear.

Butterfly: Senhor, our home is the kapok tree, and we fly from tree to tree and flower to flower collecting pollen. In this way we pollinate the trees and flowers throughout the rainforest. You see, all living things depend on one another.

Narrator 4: A troupe of monkeys scampered down from the canopy of the Kapok tree. They chattered to the sleeping man.

Monkeys: Senhor, we have seen the ways of man. You chop down one tree, then come back for another and another. The roots of these great trees will wither and die, and there will be nothing to hold the earth in place. When the heavy rains come, the soil will be washed away and the forest will become a desert.

Narrator 1: A toucan flew down from the canopy.

Toucan: Senhor, you must not cut down this tree. We have flown over the rainforest and have seen what happens once you begin to cut down the trees. Many people settle on the land. They set fire to clear the underbrush, and soon the forest disappears. Where once there was life and beauty only black and smoldering ruins remain.

Narrator 2: Some bright and small tree frogs crawled along

the edge of a leaf. In squeaky voices they piped in the man's ear.

Tree Frogs: Senhor, a ruined rainforest means ruined lives... many ruined lives. You will leave many of us homeless if you chop down this great Kapok tree.

Narrator 3: A jaguar had been sleeping along a branch in the middle of the tree. Because his spotted coat blended into the dappled light and shadows of the understory, no one had noticed him.

Narrator 4: Now he leapt down and padded silently over the sleeping man. He growled in his ear.

Jaguar: Senhor, the Kapok tree is home to many birds and animals. If you cut it down, where will I find my dinner?

Narrator 1: Two tree porcupines swung down from branch to branch and whispered to the man.

Porcupines: Senhor, do you know what we animals and humans need in order to live? Oxygen. And do you know what trees produce? Oxygen! If you cut down the forest you will destroy that which gives us all life.

Narrator 2: An anteater climbed down the Kapok tree with her baby clinging to her back. The unstriped anteater said to the sleeping man.

Anteater: Senhor, you are chopping down this tree with no thought for the future. And surely you know that what happens tomorrow depends upon what you do today. The big man tells you to chop down a beautiful tree. He does not think of his own children, who tomorrow must live in a world without trees.

Narrator 3: A three-toed sloth had begun climbing down from the canopy when the men first appeared. Only now did she reach the ground.

Narrator 4: Plodding so slowly over to the sleeping man, she spoke in her deep and lazy voice.

Sloth: Senhor, how much is beauty worth? Can you live without it? If you destroy the beauty of the rainforest, on what would you feast your eyes?"

Narrator 1: A child from the Yanomamo tribe who lived in the rainforest knelt over the sleeping man. He murmured in his ear.

Yanamamo Child: Senhor, when you awake, please look upon us all with new eyes.

Narrator 2: The man awoke with a start. Before him stood the rainforest child, and all around him, staring, were the creatures who depend upon the great Kapok tree.

Narrator 3: What wondrous and rare animals they were! The man looked about and saw the sun streaming through the canopy.

Narrator 4: Spots of bright light glowed like jewels amidst the dark green forest. Strange and beautiful plants seemed to dangle in the air suspended from the great Kapok tree.

Narrator 1: The man smelled the fragrant perfume of their flowers. He felt the steamy mist rising from the forest floor.

Narrator 2: But he heard no sound, for the creatures were strangely silent. The man stood and picked up his axe. He swung back his arm as though to strike the tree.

Narrator 4: Suddenly he stopped. He turned and looked at the animals and the child. He hesitated.

Narrator 3: Then he dropped the axe and walked out of the rainforest.

Source: Lynne (1998).

## Worksheet 2.1

### Distribution of Rainforests

Rainforests cover only a small part of the earth's surface - about 6%, yet they are home to over half the species of plants and animals in the world. To learn where these rainforests are located, complete the map activity below.

Use the attached map to help you complete the following:

1. Locate the rainforests on each continent in the attached sheet.
2. Color the big map to show where the rainforests are located.
3. Label each of the continents on the big map.
4. Add a key to the map.
5. Add a title to the map.

(Students work on a big map photocopied on a poster paper. Here is the smaller version of the actual map.)

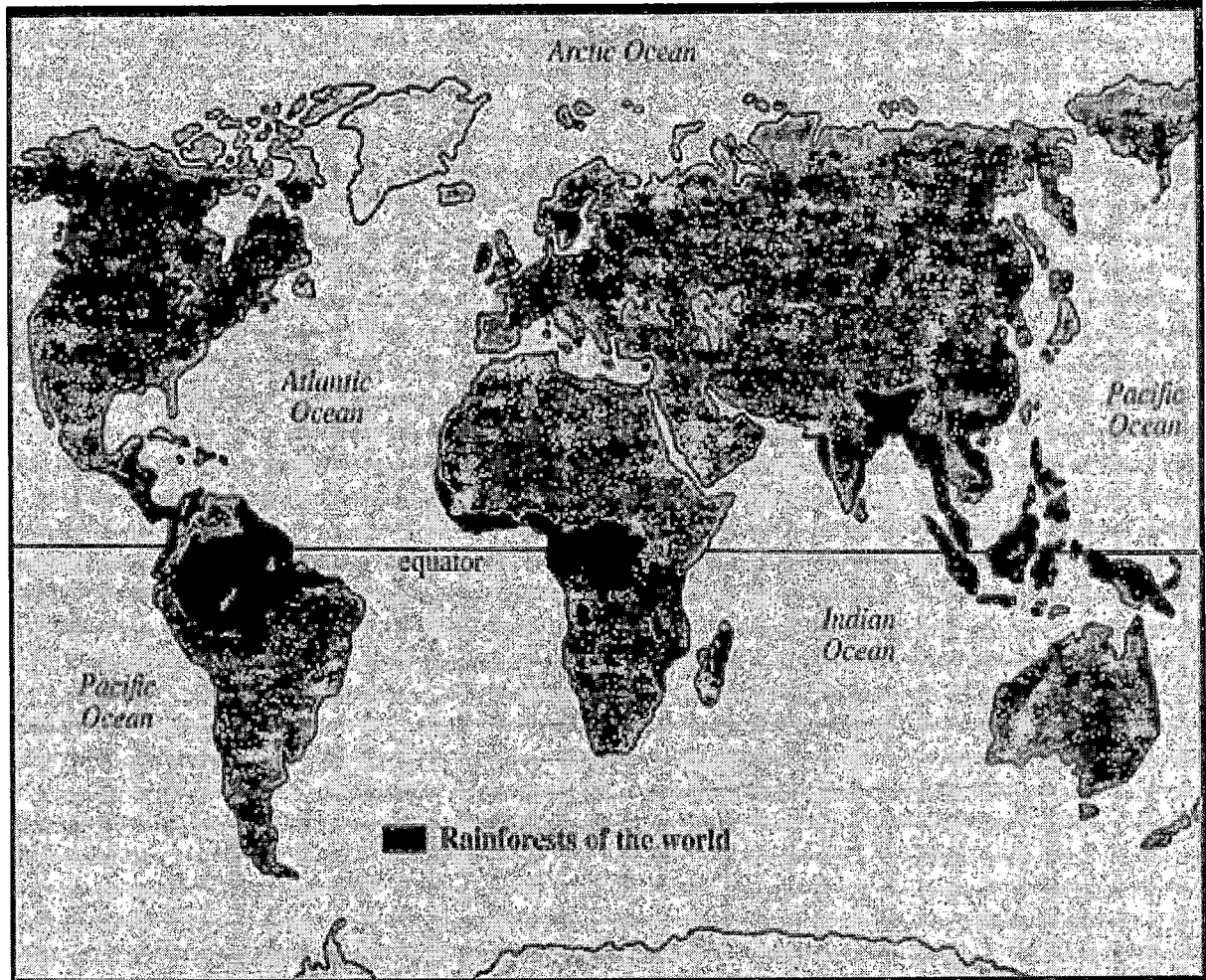


Source: Theodora Maps (2005).



Worksheet 2.1 (continued)

Distribution of Rainforests



Source: Cornish (2005).

## Assessment Sheet 2.1

### Listening Rubric

<u>Criteria</u>	<u>4</u>	<u>3</u>	<u>2</u>	<u>1</u>
I listened attentively to the storyteller.	<u>All</u> of the time	<u>Most</u> of the time	<u>Some</u> of the time	<u>None</u> of the time
I listened to the story without interrupting the teacher.	<u>All</u> of the time	<u>Most</u> of the time	<u>Some</u> of the time	<u>None</u> of the time
I ignored distractions around me.	<u>All</u> of the time	<u>Most</u> of the time	<u>Some</u> of the time	<u>None</u> of the time
I could retell events and describe important information in the story.	<u>All</u> of the time	<u>Most</u> of the time	<u>Some</u> of the time	<u>None</u> of the time

## Assessment 2.2

### Creating a Map Rubric

<u>Criteria</u>	<u>Possible Points</u>	<u>Teacher's Assessment</u>
The title of the poster and the group members' names are clearly indicated on the top of the map.	5	
The locations of the rainforests are clearly identified in different continents using colored pens.	15	
Important countries, continents, oceans, keys, and other landmarks are indicated in the map.	10	
The poster is neat, presentable, and thoughtfully done.	10	
All group members contributed to the completion of the poster.	10	
Total	50	

## Homework Sheet 2.1

### Readers Theater Script 2

#### The Rainforest

Narrator 1  
Narrator 4

Narrator 2  
Narrator 5

Narrator 3  
Narrator 6

- Narrator 1: Good Morning! Welcome to our presentation called, "The Rainforest."
- Narrator 3: The rainforest is a forest of tall trees in a region where it is warm all year and the rainfall is plentiful.
- Narrator 4: Rainforests can be found in regions of Africa, Asia, South America, and Central America.
- Narrator 5: Rainforests stay green throughout the year. There are more kinds of trees in a rainforest than any other area in the world.
- Narrator 6: The tallest trees in the rainforest grow as tall as 200 feet.
- Narrator 1: The tops of the tallest trees form a covering of leaves called the upper canopy.
- Narrator 2: The tops of the smaller trees form a layer called the lower canopy.
- Narrator 3: The trees of the rainforest provide fruit, lumber, and many other useful products including important medicines.
- Narrator 4: Many animals make their homes in the rainforest. Some of these animals spend their lives in the trees and never descend to the ground.

Narrator 5: Bats, gibbons, monkeys, squirrels, parrots, and toucans eat the fruits and nuts found in the upper and lower canopies.

Narrator 6: Several kinds of anteaters, monkeys, opossums, and porcupines also live in the rainforest.

Narrator 1: Some animals live on the floor of the rain forest. Antelope, deer, hogs, tapirs, and many kinds of rodents live on the forest floor.

Narrator 2: Chimpanzees, jaguars, butterflies, spiders, and ants are abundant in the rainforest.

Narrator 3: People have destroyed large areas of the rainforests by clearing the land for farms, cities, and mining.

Narrator 4: Scientists estimate that over 78 million acres of rainforests are destroyed every year.

Narrator 5: The destruction of the rainforest will lead to the elimination of hundreds and thousands of species of plants and animals.

Narrator 1: It is up to all of us to find ways to help save the rainforests.

Narrator 2: We hope you have enjoyed learning about the rainforest.

All: The End.

Source: Blau (2001).

## Homework Sheet 2.2

### Readers' Theater Script 3

The Adventures of Mouse Deer

(Introduction)

Narrator 1            Narrator 2            Narrator 3            Narrator 4

Narrator 1: Today we're going to tell you three stories about Mouse Deer.

Narrator 2: Wait a minute. Did you say "Mouse Deer?"

Narrator 1: That's right!

Narrator 4: I never heard of a "Mouse Deer"! Did you?

Narrator 3: Not me! What is he? A mouse?

Narrator 1: No.

Narrator 2: A deer?

Narrator 1: No.

Narrator 4: Hey, are you trying to trick us?

Narrator 1: No! He's a real animal!

Narrator 3: Yeah? Then how big is he?

Narrator 1: About as big as a cat.

Narrator 2: And where does he live?

Narrator 1: In the jungles of Asia and Africa.

Narrator 4: And what does he look like?

Narrator 1: His legs and tail look like a deer's.

Narrator 2: Well, all right.

Narrator 1: But his face and body look like a mouse's.

Narrator 3: You're tricking us!

Narrator 1: It's true! That's why he's called Mouse Deer!

Narrator 4: Well, maybe we believe you.

Narrator 2: Tell us some more.

Narrator 1: Mouse Deer eats only plants, but lots of animals eat Mouse Deer. To stay alive, he has to be quick and smart. He also has to be tricky—just like Brer Rabbit and Anansi, the spider man from Africa. Mouse Deer even plays some of the same tricks.

Narrator 2: You know what *I* think? I think you're the tricky one!

Narrator 4: Me too!

Narrator 3: That's right!

Narrator 1: No, I'm not! There are lots of stories about Mouse Deer.

Narrator 3: And I bet you want us to believe they're true!

Narrator 1: Of course they are! All stories are true—even if they didn't happen.

Narrators 2, 3, & 4: Huh?

Narrator 1: Mouse Deer has his own song too, and you can help sing it. Here's how it goes.  
"I am quick and smart as I can be.  
Try and try, but you can't catch me!" Now you try it.

Narrators 2, 3, & 4: "I am quick and smart as I can be.  
Try and try, but you can't catch me!"

Narrators 1: Good! Now we're ready to go.

-----

Ending

Narrator 1: And there they are—three stories about Mouse Deer. Now do you believe in him?

Narrator 3: Well . . . .

Narrator 2: Uh . . . .

Narrator 4: We guess so, but . . . .

Mouse Deer: Hey! Who are you?

Narrator 1: Hi, Mouse Deer. We're the narrators. We help tell the stories.

Narrator 3: That's right!

Mouse Deer: Help tell . . . ?! Hey, are you trying to trick me?

Narrator 4: No!

Narrator 2: No!

Mouse Deer: Well, that's good, and you know why?  
"I'm quick and smart as I can be.  
Try and try, but you can't catch me!"  
Bye, now!

Source: Shepard (2005).



## Homework Sheet 2.3

### Readers' Theater Script 4

#### The Adventures of Mouse Deer (Part I)

Narrator 1	Narrator 2	Tiger
Narrator 3	Narrator 4	Mouse Deer

Narrator 1: In our first story, Mouse Deer meets one of his most dangerous enemies. This story is called...

Mouse Deer: Mouse Deer . . .

TIGER: . . . and Tiger.

Mouse Deer: Ready to sing? "I'm quick and smart as I can be. Try and try, but you can't catch me!"

Narrator 3: Mouse Deer sang his song as he walked through the forest.

Narrator 4: He was looking for tasty fruits and roots and shoots.

Narrator 2: Though he was small, he was not afraid. He knew that many big animals wanted to eat him.

Narrator 3: But first they had to catch him!

Narrator 1: Then he heard something.

Tiger: Roar!

Narrator 4: There was Tiger!

Tiger: Hello, Mouse Deer.. I was just getting hungry. Now you can be my lunch.

Narrator 2: Mouse Deer didn't want to be lunch. He looked around and thought fast.

Narrator 3: He saw . . . a mud puddle.

Mouse Deer: I'm sorry, Tiger. I can't be your lunch. The King has ordered me to guard his . . . pudding.

Tiger: His pudding?

Mouse Deer: Yes. There it is.

Narrator 1: Mouse Deer pointed to the mud puddle.

Mouse Deer: It has the best taste in the world. The King doesn't want anyone else to eat it.

Narrator 4: Tiger looked longingly at the puddle.

Tiger: I would like to taste the King's pudding.

Mouse Deer: Oh, no, Tiger! The King would be very angry.

Tiger: Just one little taste, Mouse Deer! The King will never know.

Mouse Deer: Well . . . all right, Tiger. But first let me run far away, so no one will blame me.

Tiger: All right, Mouse Deer, you can go now.

Narrator 2: Mouse Deer ran quickly out of sight.

Tiger: Imagine! The King's pudding!

Narrator 3: He took a big mouthful.

Tiger: Phooey!

Narrator 3: He spit it out.

Tiger: Yuck! Ugh! Bleck! That's no pudding. That's mud!

Narrator 1: Tiger ran through the forest.

Tiger: Roar!



Narrators 1: The wasps all flew out. They started to sting Tiger.

Tiger: Ouch! Ooch! Eech! That's no drum. That's a *wasp nest!*

Narrator 4: Tiger ran away. But the wasps only followed him!

Tiger: Ouch! Ooch! Eech!

Narrator 2: Tiger came to a stream. He jumped in—*splash!*—and stayed underwater as long as he could.

Narrator 3: At last the wasps went away.

Narrator 1: Then Tiger jumped out.

Tiger: Roar!

Narrator 4: He ran through the forest till he found Mouse Deer.

Tiger: Mouse Deer, you tricked me once. You tricked me twice. But now you will be my lunch!

Narrator 2: Mouse Deer looked around and thought fast.

Narrator 3: He saw . . . a cobra! The giant snake was coiled asleep on the ground.

Mouse Deer: I'm sorry, Tiger. I can't be your lunch. The King has ordered me to guard his . . . belt.

Tiger: His belt?

Mouse Deer: Yes. There it is.

Narrator 1: Mouse Deer pointed to the cobra.

Mouse Deer: It's the best belt in the world. The King doesn't want anyone else to wear it.

Tiger: I would like to wear the King's belt.

Mouse Deer: Oh, no Tiger! The King would be very angry.

Tiger: Just for one moment, Mouse Deer! The King will never know.

Mouse Deer: Well . . . all right, Tiger. But first let me run far away, so no one will blame me.

Tiger: All right, Mouse Deer, you can go now.

Narrator 4: Mouse Deer ran quickly out of sight.

Tiger: Imagine! The King's belt!

Narrator 2: He started to wrap it around himself. The cobra woke up.

Narrator 3: Ssssssssssssss...

Narrator 1: It didn't wait for Tiger to finish wrapping.

Narrator 4: It wrapped itself around Tiger.

Narrator 2: Then it squeezed him and bit him.

Narrator 3: Sstt! Ssssssssssssss...

Tiger: Ooh! Ow! Yow! That's no belt. That's a cobra! Help! Mouse Deer! Help!

Narrator 1: But Mouse Deer was far away.

Narrator 4: And as he went, he sang his song.

Mouse Deer: "I'm quick and smart as I can be. Try and try, but you can't catch me!"

Source: Shepard (2005).

## Homework Sheet 2.3

### Readers' Theater Script 4

#### The Adventures of Mouse Deer, Part II

Narrator 1	Narrator 2	Narrator 3
Narrator 4	Mouse Deer	Crocodile

Narrator 1: In our second story, Mouse Deer meets another one of his most dangerous enemies. This story is called,

Mouse Deer: Mouse Deer . . .

Crocodile: . . . and Crocodile.

Narrator 1: One day, Mouse Deer went down to the river.

Narrator 4: He wanted to take a drink.

Narrator 2: But he knew Crocodile might be waiting underwater to eat him.

Narrator 3: Mouse Deer had an idea. He said out loud,

Mouse Deer: I wonder if the water's warm. I'll put in my leg and find out.

Narrator 4: Wait a minute! Stop the story! Mouse Deer said he'd put in his leg?

Narrator 2: What a dumb idea!

Narrator 3: I thought Mouse Deer was supposed to be smart!

Narrator 1: But Mouse Deer didn't put in his leg. Instead, he picked up a stick with his mouth and put in one end.

Crocodile: Chomp!

Narrator 4: Crocodile grabbed the stick and pulled it underwater.

Narrator 2: Mouse Deer laughed.

Mouse Deer: Stupid Crocodile! Don't you know a stick from a leg?

Narrator 3: And he ran off to drink somewhere else!

Narrator 1: Another day, Mouse Deer went back to the river.

Narrator 4: All he saw there was a floating log.

Narrator 2: But he knew Crocodile looked like a log when he floated. Mouse Deer had an idea. He said out loud...

Mouse Deer: If that log is really Crocodile, it won't talk. But if it's really just a log, it will tell me.

Narrator 3: Hold everything! Mouse Deer said Crocodile would be quiet but a log would say something?

Narrator 2: Now, that's really dumb!

Narrator 4: It sure is!

Narrator 1: But then Mouse Deer listened. A rough voice said...

Crocodile: I'm really just a log.

Narrator 2: Mouse Deer laughed.

Mouse Deer: Stupid Crocodile! Do you think a log can talk?

Narrator 3: And off he ran again!

Narrator 1: Another day, Mouse Deer wanted to cross the river.

Narrator 4: He wanted to eat tasty fruits and roots and shoots on the other side.

Narrator 2: But he didn't want Crocodile to eat him first! Mouse Deer had an idea. He called out...

Mouse deer: Crocodile!

Narrator 2: I don't believe this! Mouse Deer called for Crocodile?

Narrator 3: How dumb can he get!

Narrator 1: But then Crocodile rose from the water.

Crocodile: Hello, Mouse Deer. Have you come to be my breakfast?

Mouse Deer: Not today, Crocodile. I have orders from the King. He wants me to count all the crocodiles.

Crocodile: The King! Tell us what to do.

Mouse Deer: You must line up from this side of the river to the other side.

Narrator 4: Crocodile got all his friends and family. They lined up across the river.

Narrator 2: Mouse Deer jumped onto Crocodile's back.

Mouse Deer: One.

Narrator 3: He jumped onto the next crocodile.

Mouse Deer: Two.

Narrator 1: And the next.

Mouse Deer: Three.

Narrator 4: Mouse Deer kept jumping till he jumped off.

Narrator 2: On the other side of the river.



Crocodile: How many are there?

Mouse Deer: Just enough! And all stupid!

Narrator 3: Then he went off singing his song.

Mouse Deer: "I'm quick and smart as I can be.  
Try and try, but you can't catch me!"

Source: Shepard (2005).

## Homework Sheet 2.4

### Readers' Theater Script 5

#### The Adventures of Mouse Deer (Part III)

Narrator 1	Narrator 2	Narrator 3	
Narrator 4	Mouse Deer	Farmer	Dog

Narrator 1: In our last story, Mouse Deer meets his most dangerous enemy of all. This one is called...

Mouse Deer: Mouse Deer . . .

Farmer: . . . and Farmer.

Narrator 1: Mouse Deer loved to eat the fruits and roots and shoots of the forest. But he loved something else even more.

Narrator 4: He loved the vegetables in Farmer's garden.

Narrator 2: One day, Mouse Deer went to the edge of the forest.

Narrator 3: He looked out at row after row of vegetables.

Mouse Deer: Mmmmm... Juicy cucumbers! Yummy yams!

Narrator 1: He started into the garden.

Narrator 4: Snap!

Mouse Deer: Oh!

Narrator 4: His leg was caught in a snare! Mouse Deer pulled and pulled.

Narrator 3: But he could not get away.

Mouse Deer: Oh, no! Farmer will have me for dinner!

Narrator 1: Then he saw Farmer coming. Mouse Deer thought fast. He lay on the ground and made his body stiff.

Farmer: Well, well. Look what I caught. A mouse deer! But he looks dead.

Narrator 2: Farmer pushed him with his foot. Mouse Deer didn't move.

Farmer: Maybe he's been dead a long time. Too bad! I guess we can't eat him.

Narrator 1: He pulled Mouse Deer's leg out of the snare. Then he tossed Mouse Deer back into the forest.

Narrator 4: Mouse Deer landed with a soft plop. Then he jumped up and ran.

Farmer: Hey! You tricked me!

Narrator 2: Mouse Deer laughed.

Mouse Deer: Farmer is smart. But Mouse Deer is smarter!

Narrator 1: A few days passed. Mouse Deer kept thinking about all those vegetables.

Narrator 4: One day, he went back to the edge of the forest.

Mouse Deer: Mmmmm... Tasty gourds! Scrumptious sweet potatoes!

Narrator 2: Then he saw something new.

Narrator 3: It looked like a man. But its head was a coconut, and its body was rubber.

Mouse Deer: A scarecrow! That silly Farmer. Does he think he can scare me with that? I'll show him how scared I am!

Narrator 1: Mouse Deer marched up to the scarecrow. He gave it a big kick.

Mouse Deer: Take this!

Narrator 4: But his leg stuck to the scarecrow. The scarecrow was covered with sticky sap from a rubber tree!

Mouse Deer: Let me go!

Narrator 2: He pulled and he pulled. Then he pushed with his other front leg.

Narrator 3: That leg stuck too.

Mouse Deer: Turn me loose!

Narrator 1: He pulled and he pulled. Then he pushed with his two back legs.

Narrator 4: They are stuck too.

Mouse Deer: Put me down!

Narrator 2: He pulled and he pushed and he pulled and he pushed. But Mouse Deer was trapped.

Narrator 1: Then he saw Farmer. Mouse Deer thought fast.

Narrator 4: But he didn't have any ideas!

Farmer: Well, well. How nice of you to come back.

Narrator 2: He pulled Mouse Deer off the scarecrow and carried him to the house.

Narrator 3: He put him outside in an empty chicken coop.

Farmer: I'll keep you here tonight. And tomorrow you'll be our dinner.

Narrator 1: All that night, Mouse Deer couldn't sleep. He didn't want to be dinner!

Narrator 4: When the sun rose, Mouse Deer just lay there sadly. Then he heard something.

Dog: Why, it's Mouse Deer! So Farmer caught you at last. It serves you right!

Narrator 2: It was Farmer's dog. Mouse Deer thought fast.

Mouse Deer: What do you mean, Dog? Farmer didn't catch me.

Dog: Then why are you in the coop?

Mouse Deer: Because there aren't enough beds in the house. You see, Farmer is holding a feast tomorrow. And I'm the guest of honor.

Dog: Guest of honor? That's not fair! I've been his loyal friend for years, and you're just a thief. The guest of honor should be me!

Mouse Deer: You know, Dog, you're right. Why don't you take my place? When Farmer sees you in here, he'll make you the guest of honor instead.

Dog: Really? You don't mind?

Mouse Deer: Not at all. You deserve it.

Dog: Mouse Deer, you're not so bad after all. Thank you!

Narrator 1: Dog lifted the latch and opened the door.

Mouse Deer: You're welcome, Dog. Enjoy the feast.

Narrator 4: Mouse Deer ran for the forest. Then he watched from the forest edge.

Narrator 2: He saw Farmer come out and stare at Dog. Then he heard Farmer yell.

Farmer: You stupid dog! You let the mouse deer get away!

Narrator 1: Mouse Deer laughed.

Mouse Deer: Farmer will have to find a different dinner now!

Narrator 4: Then he went off singing his song.

Mouse Deer: "I'm quick and smart as I can be. Try and try, but you can't catch me!"

Source: Shepard (2005).

### Assessment Sheet 2.3

#### Readers' Theater Rubric

Rate each criterion on a scale of 1 to 4, with 4 being the highest and 1 being the lowest.

Attributes	1	2	3	4
The student speaks clearly.				
The student speaks loud enough to be heard.				
The student pronounces words correctly.				
The student uses expressions.				
The student uses proper chunking and phrasing in reading the script.				
The student manipulated intonation and pitch to enhance the script.				

Source: Saskatchewan Education (2001).

## Supplementary Sheet 2.1

### The Great Kapok Tree

Two men walked into the rainforest. Moments before, the forest had been alive with the sounds of squawking birds and howling monkeys. Now all was quite as the creatures watched the two men and wondered why they had come. The larger man stopped and pointed to a great Kapok tree. Then he left.

The younger man stopped and struck the trunk of the tree.

Whack! Whack! Whack!

The sounds of the blows rang through the forest. The wood of the tree was very hard.

Chop! Chop! Chop!

The man wiped off the sweat that run down his face and neck.

Whack! Chop! Whack! Chop!

Soon the man grew tired. He sat down to rest at the foot of the great Kapok tree. Before he knew it, the heat and hum of the forest had lulled him to sleep.

A boa constrictor lived in the Kapok tree. He slithered down its trunk to where the man was sleeping. He looked at the gash the axe had made in the tree. Then the huge snake slid very close to the man and hissed in his ear.

"Senhor, this tree is a tree of miracles. It is my home, where generations of my ancestors have lived. Do not chop it down."

A butterfly flew near the sleeping man's ear.

"Senhor, our home is the kapok tree, and we fly from tree to tree and flower to flower collecting pollen. In this way we pollinate the trees and flowers throughout the rainforest. You see, all living things depend on one another."



A troupe of monkeys scampered down from the canopy of the Kapok tree. They chattered to the sleeping man.

"Senhor, we have seen the ways of man. You chop down one tree, then come back for another and another. The roots of these great trees will wither and die, and there will be nothing to hold the earth in place. When the heavy rains come, the soil will be washed away and the forest will become a desert."

A toucan flew down from the canopy.

"Senhor, you must not cut down this tree. We have flown over the rainforest and seen what happens once you begin to cut down the trees. Many people settle on the land. They set fire to clear the underbrush, and soon the forest disappears. Where once there was life and beauty only black and smoldering ruins remain."

Some bright and small tree frogs crawled along the edge of a leaf. In squeaky voices they piped in the man's ear.

"Senhor, a ruined rainforest means ruined lives... many ruined lives. You will leave many of us homeless if you chop down this great Kapok tree."

A jaguar had been sleeping along a branch in the middle of the tree. Because his spotted coat blended into the dappled light and shadows of the understory, no one had noticed him. Now he leapt down and padded silently over the sleeping man. He growled in his ear.

"Senhor, the Kapok tree is home to many birds and animals. If you cut it down, where will I find my dinner?"

Two tree porcupines swung down from branch to branch and whispered to the man.

"Senhor, do you know what we animals and humans need in order to live? Oxygen. And do you know what trees produce? Oxygen! If you cut down the forest you will destroy that which gives us all life."

An anteater climbed down the Kapok tree with her baby clinging to her back. The unstriped anteater said to the sleeping man.

"Senhor, you are chopping down this tree with no thought for the future. And surely you know that what happens tomorrow depends upon what you do today. The big man tells you to chop down a beautiful tree. He does not think of his own children, who tomorrow must live in a world without trees."

A three-toed sloth had begun climbing down from the canopy when the men first appeared. Only now did she reach the ground. Plodding over so slowly over to the sleeping man, she spoke in her deep and lazy voice.

"Senhor, how much is beauty worth? Can you live without it? If you destroy the beauty of the rainforest, on what would you feast your eyes?"

A child from the Yanomamo tribe who lived in the rainforest knelt over the sleeping man. He murmured in his ear.

"Senhor, when you awake, please look upon us all with new eyes."

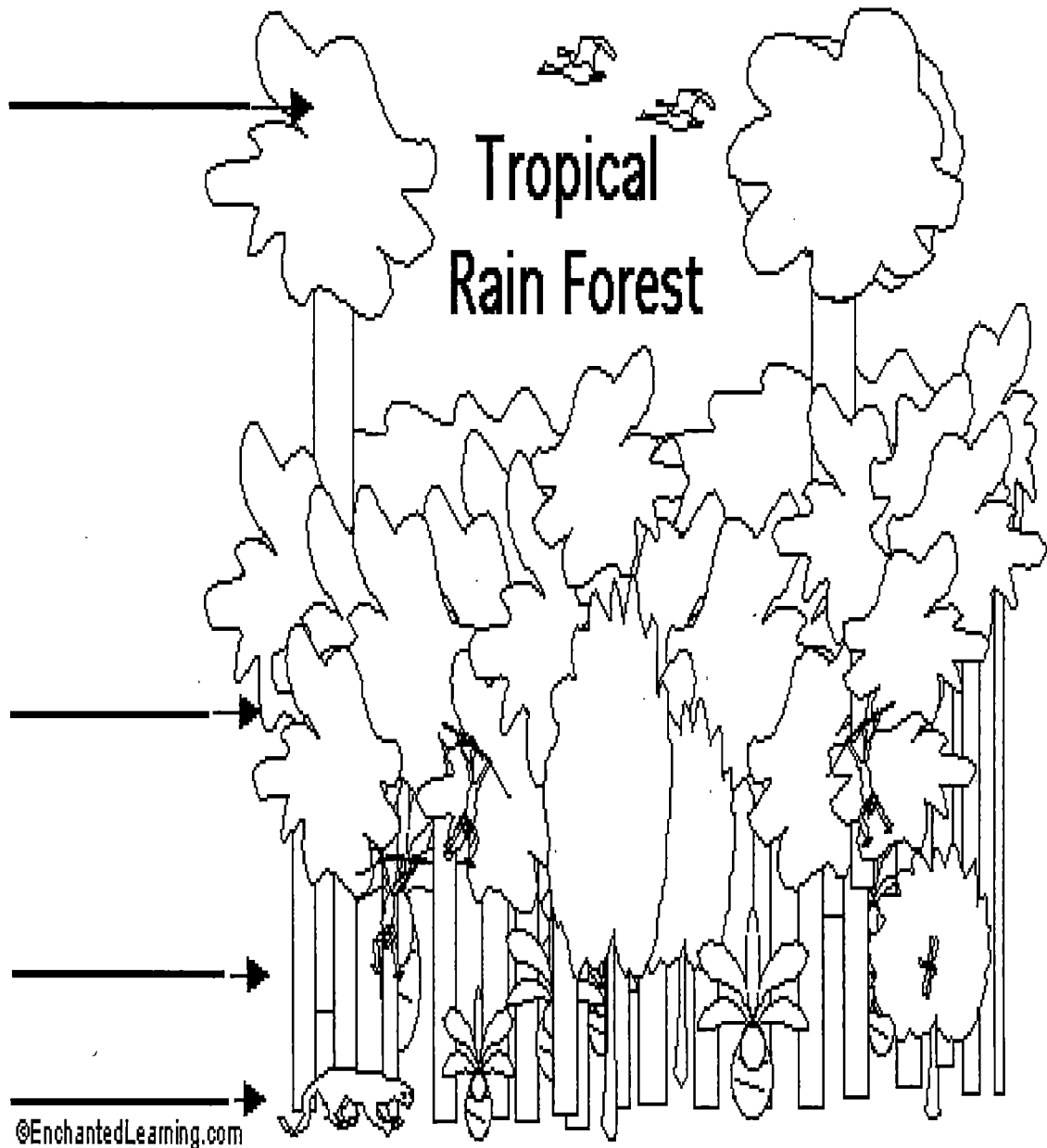
The man awoke with a start. Before him stood the rainforest child, and all around him, staring, were the creatures who depend upon the great Kapok tree. What wondrous and rare animals they were! The man looked about and saw the sun streaming through the canopy. Spots of bright light glowed like jewels amidst the dark green forest. Strange and beautiful plants seemed to dangle in the air suspended from the great Kapok tree.

The man smelled the fragrant perfume of their flowers. He felt the steamy mist rising from the forest floor. But he heard no sound, for the creatures were strangely silent. The man stood and picked up his axe. He swung back his arm as though to strike the tree. Suddenly he stopped. He turned and looked at the animals and the child. He hesitated. Then he dropped the axe and walked out of the rainforest.

Source: Lynne (1998).

Focus Sheet 3.1

Illustration of Rainforest Layers



Source: Enchanted Learning (2005).

## Focus Sheet 3.2

### Tropical Rainforest Layers

Tropical rainforests have four layers:

#### Emergent Layer

The emergent layer is the layer above the canopy. Birds and monkeys live in the emergent layer, which gets the most sunlight. In a rainforest, trees, shrubs, and plants of every kind struggle to reach the light. Emergent trees are very heavy and have almost no side branches below the canopy.

#### Canopy Layer

The broad, irregular crowns of these trees form a tight, continuous canopy 60 to 90 feet above the ground. The branches are often densely covered with other plants and tied together with vines. The canopy is home to 90% of the organisms found in the rain forest, many seeking the brighter light in the treetops.

#### Understory

The understory layer occurs at around 25 meters and is home to thousands of plants, insects and birds. Receiving only 2-15% of the sunlight that falls on the canopy, the understory is a dark place. It is relatively open and contains young trees and leafy herbaceous plants that tolerate low light. Since it is a relatively small place and is very dark and wet, trees there don't grow very tall. Many popular houseplants come from this layer. Mosses, lichens, orchids, ferns, and bird nest ferns grow in the understory.

## Forest Floor

Below the understory is the forest floor. It is dark here because all the other layers have blocked out the sunlight, leaving only 2% to reach the forest floor. It is also the most humid part of the rainforest. There is no grass here. A thin layer of rapidly rotting leaves, twigs and dead flowers covers the underlying soil. Plants like fungi, and animals and insects like ants and termites, as well as worms carry out the work of decomposing this layer of litter.

Sources: Crew (2005); Missouri Botanical Garden (2002).

Worksheet 3.1

Rainforest Layers

<u>Layer</u>	<u>Description</u>	<u>Plants</u>	<u>Animals</u>
Emergent Layer			
Canopy			
Understory			
Forest Floor			

### Worksheet 3.3

#### Compound Words

A. Find the two words that make up each compound word.

1. rainforest = \_\_\_\_\_ + \_\_\_\_\_
2. understory = \_\_\_\_\_ + \_\_\_\_\_
3. ecosystem = \_\_\_\_\_ + \_\_\_\_\_
4. sunlight = \_\_\_\_\_ + \_\_\_\_\_

B. Circle all words that form a compound word with the first word.

- |           |   |         |         |       |
|-----------|---|---------|---------|-------|
| 1. match  | + | box     | maker   | bag   |
| 2. class  | + | teacher | mate    | pen   |
| 3. back   | + | yard    | rub     | spin  |
| 4. sky    | + | high    | scraper | blue  |
| 5. pocket | + | money   | book    | knife |
| 6. bed    | + | rock    | pillow  | room  |
| 7. heart  | + | burn    | ache    | pain  |
| 8. farm   | + | animals | yard    | house |
| 9. tree   | + | fruit   | high    | tops  |
| 10. house | + | plants  | cooking | wife  |

C. Provide the second word to make a compound word.

1. lamp + \_\_\_\_\_ = \_\_\_\_\_
2. \_\_\_\_\_ + man = \_\_\_\_\_
3. \_\_\_\_\_ + woman = \_\_\_\_\_
4. news + \_\_\_\_\_ = \_\_\_\_\_
5. hand + \_\_\_\_\_ = \_\_\_\_\_

**Assessment 3.1**

**Overall Assessment Rubric**

<u>Criteria</u>	<u>Possible Point</u>	<u>Teacher's Assessment</u>
The student successfully and neatly completed the compare-and-contrast chart with a partner.	10	
The student exhibited proper behavior during buddy reading, taking turns in reading and discussing findings with their partner.	10	
The student successfully completed the compound words worksheet.	10	
The student was an active participant in the class discussion, asking questions and sharing ideas.	10	
TOTAL	40	

Teacher's Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



## Homework Sheet 3.1

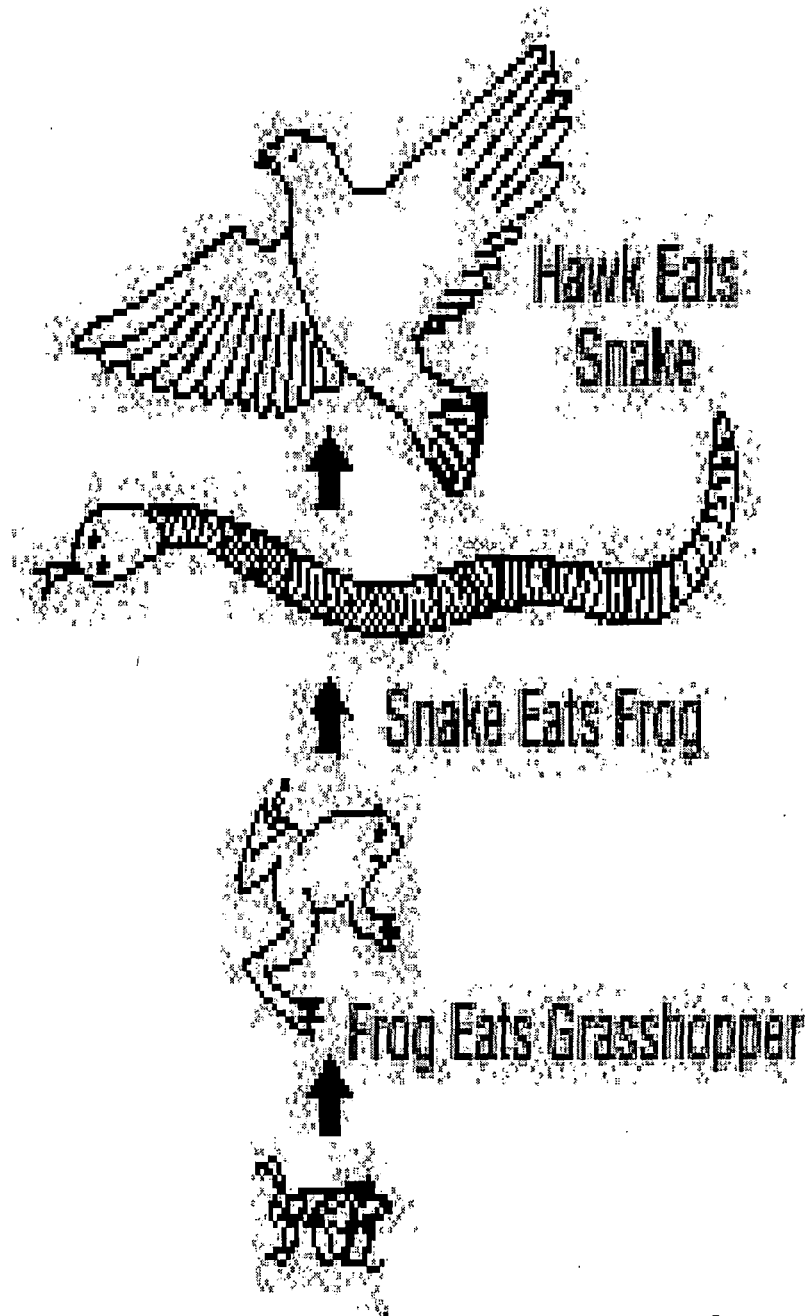
### Reading List

- Berger, M., Berger, G., & Brittingham, G. (1994). Life in the rainforest: Plants, animals, and people. Nashville, TN: Ideals Children's Books.
- Bright, M. (1991). Tropical rainforest. New York: Gloucester Press.
- Canizares, S. & Chessen, B. (1998). Rainforest colors. New York: Scholastic Inc.
- Cowcher, H. (1998). Rainforest. New York: Scholastic Inc.
- Cowley, J. (1999). Red-eyed tree frog. New York: Scholastic Inc.
- Darling, K. (1997). Rainforest babies. New York: Walker.
- De Pauw, D. (1993). In the rainforest. Monterey, Canada: Evan-Moor Educational Publishers.
- Dorros, A. (1990). Rainforest secrets. New York: Scholastic Inc.
- Dunphy, M. (1997). Here is the tropical rainforest. Singapore: Hyperion Paperbacks for Children.
- George, J. C. (1995). One day in the tropical rainforest. New York: HarperCollins Publishers.
- Gibbons, G. (1994). Nature's green umbrella. Singapore: Harper Collins Publishers.
- Forsyth, A. (1995). How monkeys make chocolate: Foods and medicine from the rainforests. Toronto, Canada: Owl Books.
- Jeunesse, G. & Mettler, R. (1994). The rainforest. New York: Scholastics Inc.

- Knight, T. (2001). Journey into the rainforest. Cambridge, MA: Oxford University Press.
- Moore, J. E. (1992). Learning about animals. Monterey, Canada: Evan-Moor Educational Publishers.
- Plotkin, M. (1998). The shaman's apprentice. San Diego, CA; Harcourt Brace & Co.
- Pratt, K. J. (1992). A walk in the rainforest. Nevada City, CA: Dawn Publications.
- Relf, P. (1995). The magic school bus hops home: A book about animal habitats. New York: Scholastics.
- Savage, S. (1997). Animals of the rainforest. Austin, TX; Raintree Steck-Vaughn.
- Silver, D. (1993). Why save the rainforest. New York: J. Messner.
- Stone, L. (1994). People of the rainforest. Vero Beach, FL: Rourke Corporation.
- Stone, L. (1994). Vanishing rainforest. Vero Beach, FL: Rourke Corporation.
- Tanis, J. & Martin, J. 1996. Amazon alphabet. New York : Kingfisher.
- Taylor, B. (1992). Look closer: Rainforest. New York : Dorling Kindersley.
- Tresselt, A. (1992). The gift of the tree. New York: Lothrop, Lee & Shepard.
- Weir, B. & Weir, W. (1993). Panther dream: A story of the African rainforest. New York: Hyperion Books for Children.
- Yolen, J. (1993). Welcome to the green house. New York: G.P. Putnam.

Poster 4.1

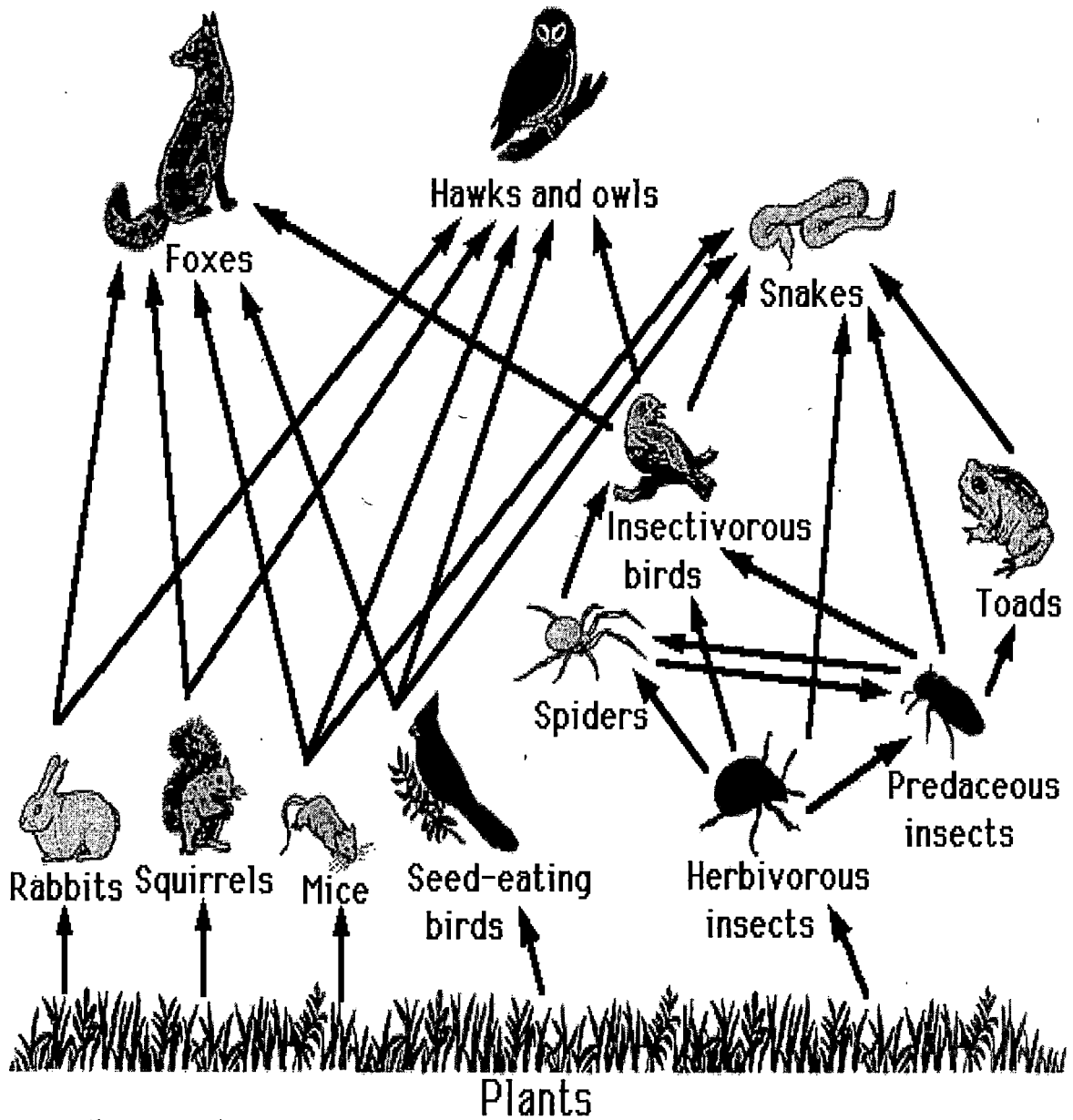
Food Chain



Source: Food Chain (2003).

Poster 4.2

Food Web



Source: Food Web (2005).

## Focus Sheet 4.1

### Tropical Rainforest Animals

Tropical rainforests are home to the largest and the smallest, the loudest and the quietest of all land animals; as well as some of the most dangerous, most beautiful, most endearing and strangest looking animals on earth. You've probably heard of some of them: jaguars, toucans, parrots, gorillas, and tarantulas all make their home in **tropical** rainforests. But have you ever heard of the aye-aye? Or the okapi? There are so many **fascinating** animals in tropical rainforests that millions haven't been named or even identified yet. In fact, about half of all the earth's animal species live in tropical rainforests.

Scientists believe that there is a great **diversity** of animals because rainforests are the oldest **ecosystems** on earth. Some rainforests in Southeast Asia have been around for at least 100 million years. The nearly perfect conditions for life also helped contribute to the great number of species. With **temperatures** constant at 75 -80 degrees F. year-round, animals don't have to worry about freezing during cold winters or finding shade in the hot summers. They rarely have to search for water, as rain falls almost every day in tropical rainforests.

Some rainforest **species** have populations that number in the millions. Other species consist of only a few dozen individuals. Living in limited areas, most of these species are **endemic**, or found nowhere else on earth. The Maues marmoset, a species of monkey, wasn't discovered until recently. Its entire **population** lives within a few square miles in the Amazon rainforest. It's so small, it could sit in a person's hand!

The constant search for food, water, sunlight and space is a 24-hour pushing and shoving match among animals in the rainforest. With this fierce **competition**, you may be amazed that so many different species of animals can all live together. But this is actually the cause of the huge number of different species. The main secret lies in the ability of many animals to **adapt** to eating a specific plant or animal, which few other species are able to eat. Have

you ever wondered, for instance, why toucans and parrots have such big beaks? These beaks give them a great advantage over other birds with smaller beaks. The fruits and nuts from many trees have evolved with tough shells to protect them from **predators**. In turn toucans and parrots developed large strong beaks, which serve as a nutcracker and provides them with many tasty meals.

Many animal species have developed **relationships** with each other that benefit both species. Birds and mammal species love to eat the tasty fruits provided by trees. Even fish living in the Amazon River rely on fruits dropped from forest trees. In turn, the fruit trees depend upon these animals to eat their fruit, which helps them to spread their seeds to far-off parts of the forest.

Have you ever heard of an ant that farms? Or ants that act as security guards? Leaf-cutter, or parasol ants, can rightfully be called the world's first farmers. They climb trees up to 100-feet tall and cut out small pieces of leaves. They then carry these fragments, weighing as much as 50 times their body weight, back to their homes. Sometimes they need to travel 200 feet, equal to an average human walking about 6 miles with 5,000 lbs. on his/her back! These ants don't eat the leaves they have collected, but instead bury them underground. The combination of leaves and substances that the ants produce such as saliva allows a type of fungus to grow. This fungus is the only food that they need to eat.



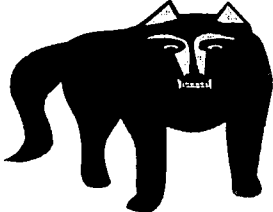
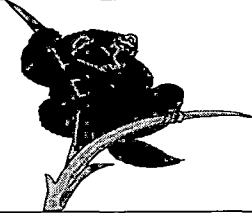
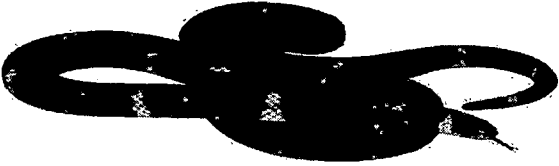

The perfect partnership - Azteca ants live on the Swollen Thorn Acacia Tree, which offers the ants everything needed for survival - lodging, water, and food for themselves and their young. In return, the ants protect the trees from predators. Whenever the ants feel something moving at the foot of the tree, they rush to fiercely fight the **intruder**. They also protect it from vines and other competing plants that would otherwise strangle it. As a result, nothing can grow near these trees. They are the only trees with a built-in alarm system.

Source: Silber & Velton (2004).

# Worksheet 4.1

## Predators and Prey

Complete the chart below by drawing a predator/prey that best fits each entry. It may be a plant or an animal.

Predator	Prey
	
	
	
	
	
	

## Worksheet 4.2

### Using Context Clues

Looking for Words Related to the Word. Here is a strategy for using context clues to understand new words. Here, we look at the word *diversity*, from the article "Tropical Rainforest Animals."

1. READ the sentence with the unknown word. Read a sentence or two around it.

.....  
The constant search for food, water, sunlight and space is a 24-hour pushing and shoving match among animals in the rainforest. With this fierce *competition*, you may be amazed that so many different species of animals can all live together.  
.....

2. LOOK for context clues. What words related to the word can you find?

.....  
There is pushing and shoving in animals' constant search for food, water and sunlight. The phrase *pushing and shoving match* seem to be related to the word *competition*.  
.....

3. THINK about the context clues. What other helpful information do you know?

.....  
*Competition* may remind you of the word *compete*. You compete with your friend who gets to the playground first.  
.....

4. PREDICT a meaning for the word.

.....  
The word *competition* probably means "a match" or a "race."  
.....

5. CHECK the dictionary to be sure of the meaning.

Source: Zutell (2005, pp. 73 & 85).



## Worksheet 4.3

### Base Words

A base word is the main part of a word. For example, in the word existed, the base word is exist. If you look for the word existed in the dictionary, you might have a hard time finding it. You have to look up the base word exist. A shorter base word will often help you find longer words that are related to it.

#### A. Choose the Base Word

Look at each pair of words. Circle the word that is the base word.

1. prey                      preying
2. endearing                endear
3. tropical                 tropic
4. temperature             temperate
5. nature                    natural

#### B. Write the Base Word

Write the base word for each longer word below. You will have to change some endings.

1. population                \_\_\_\_\_
2. existence                 \_\_\_\_\_
3. diversity                 \_\_\_\_\_
4. interested                \_\_\_\_\_
5. competition              \_\_\_\_\_
6. creation                  \_\_\_\_\_
7. living                     \_\_\_\_\_
8. dangerous                \_\_\_\_\_
9. identified                \_\_\_\_\_

10. different \_\_\_\_\_

C. Base Word and Affixes

Identify the base word and the affix in each word. You will have to change some endings for the base word.

Examples: natural = nature + al  
recycle = re + cycle

- 1. existing = \_\_\_\_\_ + \_\_\_\_\_
- 2. discovery = \_\_\_\_\_ + \_\_\_\_\_
- 3. largest = \_\_\_\_\_ + \_\_\_\_\_
- 4. creation = \_\_\_\_\_ + \_\_\_\_\_
- 5. dangerous = \_\_\_\_\_ + \_\_\_\_\_

Source: Zuttell (2005).

## Assessment Sheet 4.1

### Performance Rubrics

<u>Criteria</u>	<u>Possible Points</u>	<u>Teacher's Assessment</u>
The student exhibited comprehension of the concept web and contributed ideas to complete the web in Task Chain 1.	10	
The students successfully completed Worksheet 3.1 and exhibited understanding of the predator-prey concept.	10	
The student successfully completed Worksheet 3.2	10	
The student actively participated in the activity on finding context clues.	10	
Total	40	

## Assessment 4.2

### Poster Rubric

<u>Criteria</u>	<u>Possible Points</u>	<u>Teacher's Assessment</u>
The posters include title and labels (e.g. snake).	10	
Probable participants in the food chain are arranged logically.	10	
Food web is presented in a logical arrangement.	15	
The posters are neat, attractive, and thoughtfully done.	10	
The students effectively worked as a group.	10	
Total	55	

## Focus Sheet 5.1

### Disappearing Rainforest Fact Sheet

- Rainforests once covered 14 percent of the earth's land surface; now they cover a mere 6 percent.
- Experts estimate that the last remaining rainforests could be consumed in less than 40 years.
- One and a half acres of rainforests are lost every second.
- Rainforests are being destroyed because many governments, logging companies, and landowners only see the value of the timber.
- Nearly half of the world's species of plants, animals, and microorganisms will be destroyed or threatened over the next quarter century due to deforestation.
- Experts estimate that we are losing 137 plant, animal, and insect species every single day due to deforestation. That may equal to 50,000 species a year.
- As the rainforest species disappear, so do many possible cures for life-threatening diseases. Currently, 121 prescription drugs sold worldwide come from plant resources, and 25 percent of western pharmaceuticals are derived from rainforest ingredients.
- Most rainforests are cleared by chainsaws, bulldozers and fires for the timber, and then followed by farming and ranching operations.
- There were an estimated ten million Indians living in the Amazonian Rainforest five centuries ago. Today there are less than 200,000.

Source: Taylor (2004).

## Worksheet 5.1

### Rainforest Rap

Ahhh! All the beauty  
The rainforest  
The tropical rainforest

Welcome to the Jungle It's so exciting exotic mysterious  
We are inviting  
You on an adventure so pay attention, please  
Pythons macaw all the other species  
Mammals, insects, birds, bees live under the shelter of  
100-foot trees  
Where living things vary from jaguars to ants  
Home to more than 1/2 of the world's animals and plants  
Trees are high, they don't let in light  
The dark of the jungle makes you think it's always night  
Little sunshine under the trees  
Average temperature is 75 degrees  
The breeze is quite wonderful; you'll see what it's about  
It's fun, it's thrilling, come check it out

Ahhh! All the beauty  
The rainforest  
The tropical rainforest

Now you seen the forest  
So come on and meet these various animals and interesting  
species  
Sloth  
if you seen one before you know it moves slowly  
and has four claws  
Red-eye frog  
Has such a test to cling, they climb vertically,  
I guess that's their thing  
Howler Monkeys, now they have the style  
and their howls can be heard for over 1/2 a mile  
That's a chameleon, waiting awhile  
for its prey to come,  
it's related to the crocodile  
That's a snake, a unique creation;  
They crawl and blend into the vegetation  
That's a tapier

I know of course it looks like a pig,  
but it's more like a horse  
More than one million species to study in all  
Like the jaguar, ocelot, monkeys and macaw  
All of these animals mean so much,  
but we can lose them all if we lose touch  
with the forest  
And all that exists  
Fod the jungle has too much for us to miss

Ahhh! All the beauty  
The rainforest  
The tropical rainforest

We should have some compassion and show some concern  
Because the forest depends on what we learn  
Unfortunately some don't understand  
like people coming in and clearing the land  
It's called deforestation that means horror bulldozers and  
axes clearing the forest  
So many species will never understand  
They are taking their homes by destroying their land  
This process to me is simply a sin  
For the trees give us shelter and plants give us medicine  
Bananas  
Coffee  
Cocoa for chocolate  
Rubber from trees and synthetic rockets  
If we keep cutting like the last few years  
By year 2000 they will disappear

Ahhh! All the beauty  
The rainforest  
The tropical rainforest

Tragically this devastation doesn't have to happen  
That's why I'm on the mic here rapping  
The people of the World Wildlife Fund  
wow they're concerned and get things done  
But we all must reach out so give us a hand  
and remember these tips whenever you can  
First it starts out with education,  
read up on wildlife and conservation  
Write letters to the congressman in your state  
or others in power to promote with the fate

Just get involved it doesn't take a lot of time,  
in fact you can be creative, look I wrote this rhyme  
Come on participate, visit the zoo  
and have a contest in school there's a lot you can do  
It's up to you to keep the forest alive  
and help the plants and animals survive  
So get up get out, let everyone know  
we need to let the animals and the trees grow.

Ahhh!  
All the beauty  
The rainforest  
The tropical rainforest  
We can save the jungle

Source: World Wildlife Fund (2005).



**Assessment Sheet 5.1**

**Creating a Flyer Rubric**

<u>Criteria</u>	<u>Possible Points</u>	<u>Teacher's Assessment</u>
The flyer contains a lot of useful information.	20	
The flyer shows proper headings and format (e.g. font, font size, bullets).	10	
The flyer contains pictures significant to the topic.	10	
The flyer is neatly done and is in good taste.	10	
The student worked quietly and diligently on the project.	10	
TOTAL	60	

Teacher's Comment: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

APPENDIX C

SAMPLE READING FLUENCY ASSESSMENT RESOURCES



Chart 2. Oral Reading Fluency Scale

<u>Score</u>	<u>Description</u>
4	<p>Reads primarily in larger, meaningful phrase groups. Although some regressions, repetitions, and deviations from the text may be present, these do not appear to detract from the overall structure of the story. Preservation of the author's syntax is consistent. Some or most of the story is read with expressive interpretation. Reads at an appropriate rate.</p>
3	<p>Reads primarily in three- and four-word phrase groups. Some smaller groupings may be present. However, the majority of phrasing seems appropriate and preserves the syntax of the author. Little or no expressive interpretation is present. Reader attempts to read expressively and some of the story is read with expression. Generally reads at an appropriate rate.</p>
2	<p>Reads primarily in two-word phrase groups with some three- and four-word groupings. Some word-by-word reading may be present. Word groupings may seem awkward and unrelated to the larger context of the sentence or passage. A small portion of the text is read with expressive interpretation. Reads significant sections of the text excessively slowly or fast.</p>
1	<p>Reads primarily word-by-word. Occasional two- or three-word phrases may occur-but these are infrequent and/or they do not preserve meaningful syntax. Lacks expressive interpretation. Reads text excessively slow. OR reads with excessive speed, ignoring punctuation and other phrase boundaries, and reads with little or no expression.</p>

Source: Pinnell, Pikulski, Wixson, Campbell, Gough, & Beatty (1995).

Chart 3. Multidimensional Fluency Scale: Expression and Volume and Phrasing

Score	Expression and Volume	Phrasing
4	Reads with expression and enthusiasm throughout the text. Sounds like natural language. The reader is able to vary expression and volume to match his/her interpretation of the passage.	Generally well phrased, mostly in clause and sentence units, with adequate attention to expression.
3	Sounds like natural language throughout the better part of the passage. Occasionally slips into expressionless reading. Voice volume is generally appropriate throughout the text.	Mixture of run-ons, mid-sentence pauses for breath, and possibly some choppiness; reasonable stress/intonation.
2	Some expression. Begins to use voice to make text sound like natural language in some areas of the text. Focus remain largely on saying the words. Reads in a quite voice.	Frequent two- and three- word phrases giving the impression of choppy reading; improper stress and intonation that fail to mark ends of sentences and clauses.
1	Reads with little expression or enthusiasm. Reads words as if simply to get them out. Little sense of trying to make text sound like natural language. Reads in a quite voice.	Monotonic with little sense of phrase boundaries, frequent word-by-word reading.

Source: Zutell & Rasinski (1991).

Chart 4. Multidimensional Fluency Scale: Smoothness and Pace

Score	Smoothness	Pace
4	Generally smooth reading with some breaks, but word and structure difficulties are resolved quickly, usually through self-correction.	Consistently conversational
3	Occasional breaks in smoothness caused by difficulties with specific words and/or structures.	Uneven mixture of fast and slow reading.
2	Several "rough spots" in text where extended pauses, hesitations, etc., are more frequent and disruptive.	Moderately slow.
1	Frequent extended pauses, hesitations, false starts, sound-outs, repetitions, and/or multiple attempts.	Slow and laborious.

\* Scores range from 4 to 16. Generally, scores below 8 indicate that fluency may be a concern. Scores of 8 or above indicate that the student is making good progress in fluency.

Source: Zutell & Rasinski (1991).

Chart 5. Oral Reading Fluency Target Rate Norms

Grade	Fall	Winter	Spring
1		10-30	30-60
2	30-60	50-80	70-100
3	50-90	70-100	80-110
4	70-110	80-120	100-140
5	80-120	100-140	110-150
6	100-140	110-150	120-160
7	110-150	120-160	130-170
8	120-160	130-170	140-180

Source: Hasbrouck & Tindal (1992).

#### Steps to Assessing Accuracy and Automaticity

1. Find a passage(s) of approximately 250 words written at the student's grade placement.
2. Ask the student to read the passage for one minute and tape-record the reading. Emphasize that the text should be read aloud in a normal way, and not faster than normal.
3. Mark any uncorrected errors made by the student. Errors include mispronunciations, substitutions, reversals, omissions, or words pronounced by the examiner after a wait of 2-3 seconds without an attempt or response from the student.
4. Mark the point in the text the student has come to after one minute of reading.
5. Repeat steps 1 and 2 with two different passages (optional). If you choose to repeat the process, use the median or middle score for analysis.
6. Determine accuracy by dividing the number of words read correctly per minute (WCPM) by the total number of words read (WCPM + any uncorrected errors). This number will be a percentage. Compare the student's performance against the target norms in Table 1.
7. Determine the rate by calculating the total number of WCPM and comparing the student's performance against the target norms in Table 4.

Source: Rasinski (2004).

## BIBLIOGRAPHY

- Adams, M. J. (1990). Beginning to read: Thinking and learning about print. Cambridge, MA: MIT Press.
- Allington, R. L. (1983). Fluency: The neglected reading goal. The Reading Teacher, 33, 556-561.
- Allington, R. L. (1998). Teaching struggling readers. Newark, DE: International Reading Association.
- Allington, R. L. (2001). What really matters for struggling readers: Designing research-based reading programs. New York: Longman.
- Anderson, C. (2000). Teaching ideas. Reading Online, 54 (3), 256-260.
- Anderson, N. J. (1999). Improving reading speed. Forum, 37 (2), 2-5.
- Anderson, R. C., Hiebert, E. H., Scott, J. A., & Wilkinson, I. A. (1985). Becoming a nation of readers. Washington, DC: US Department of Education, The National Institute of Education.
- Anderson, R. C., Wilson, P. T. & Fielding, L. G. (1988). Growth in reading and how children spend their time outside of school (Technical Report No. 389). Urbana, IL: University of Illinois, Center for the Study of Reading.
- Bafile, C. (2005). Readers theater: Giving students a reason to read aloud. Retrieved May 28, 2005, from <http://www.readingrockets.org/articles/39>.
- Barr, R. & Dreeben, R. (1983). How schools work. Chicago, IL: The University of Chicago Press.
- Beck, I. L. & Juel, C. (1995). The role of decoding in learning to read. American Educator, 19 (2), 21-42.
- Bernhardt, E. B. (1991). Reading development in a second language. Norwood, NJ: Ablex Publishing Corporation.



- Beron, K. J. & Farkas, G. (2004). Oral language and reading success: A structural equation modeling approach. Structural Equation Modeling, 11 (1), 110-131.
- Blau, L. (2001). The rainforest. Retrieved October 17, 2005, from <http://www.lisablau.com/scripts/2001scripts/RainForest.doc>.
- Blevins, W. (1998). Phonics from A to Z. New York: Scholastics Inc.
- Bremer, C. D., Clapper, A. T., & Deshler, D. D. (2002). Improving word identification skills using strategic instruction (SIM) strategies. Improving Secondary Education and Transition Services through Research, 1 (4). Retrieved October 7, 2005, from <http://www.ncset.org/publications/viewdesc.asp?id=720>.
- Burns, P. C., Roe, B. D., & Ross, E. P. (1999). Teaching reading in today's elementary school. Boston, MA: Houghton Mifflin.
- Busching, B. A. (1981). Readers theater: An education for language and life. Language Arts, 58 (3), 330-338.
- Butler, A. & Turbill, J. (1987). Towards a reading-writing classroom. Portsmouth, NH: Heinemann.
- Calfee, R. & Drum, P. (1986). Research on teaching reading. In M. W. Wittrock (Ed.), Handbook of research on teaching (pp. 804-849). New York: Macmillan.
- Cantoni-Harvey, G. (1992). Facilitating the reading process. In P. A. Richard-Amato & M. A. Snow (Eds.), The multicultural classroom (pp. 175-197). Reading, MA: Addison-Wesley Publishing Company, Inc.
- Carbo, M. (1995). Selecting the "right" reading method. Teaching PreK-8, 26 (1), 85.
- Carbo, M. (2005). What principals need to know about reading instruction. Principal-Early Childhood, 85 (1), 46-49.

- Carrell, P. & Eisterhold, J. C. (1987). Schema theory and ESL reading pedagogy. In M. H. Long & J. C. Richards (Eds.), Methodology in TESOL (pp. 218-232). Boston, MA: Newbury House Publishers.
- Chall, J. S., Jacobs, V. A., & Baldwin L. E. (1990). The reading crisis: Why poor children fall behind. Cambridge, MA: Harvard University Press.
- Chall, J. S. (1996). Learning to read: The great debate. New York, NY: McGraw-Hill.
- Cho, K. & Krashen, S. (1995). Becoming a dragon: Progress in English as a second language through narrow free voluntary reading. California Reader, 29, 9-10.
- Clark, C. H. (1993). Teaching students about reading: A fluency example. Reading Horizons, 35 (3), 250-266.
- Clay, M. (1991). Becoming literate: The construction of inner control. Auckland, New Zealand: Heinemann Education.
- Cook, R. J. (1958). One hundred and one famous poems. Chicago, IL: Contemporary Books, Inc.
- Cornish, J. (2005). Rainforest. Retrieved October 17, 2005, from [http://www.cdli.ca/CITE/rainforest\\_distribution.PDF](http://www.cdli.ca/CITE/rainforest_distribution.PDF).
- Crew, G. (2005). Rainforest layers. Retrieved October 18, 2005, from <http://rochedalss.qld.edu.au/rain4.htm>.
- Cunningham, A. & Stanovich, K. (2003). Reading can make you smarter. What Principals Need to Know About Reading, 83 (2), 34-39.
- Cunningham, P. M. (2005). Phonics they use. Boston, MA: Pearson Education, Inc.
- Curtis, M. (1980). Development of components of reading skill. Journal of Educational Psychology, 72, 656-669.

- Daniels, H. (1994). Literature circles: Voice and choice in the student-centered classroom. York, ME: Stenhouse Publishers.
- Diaz-Rico, L. (2004). Teaching English learners: Strategies and methods. Boston, MA: Allyn & Bacon.
- Dowhower, S. L. (1987). Effects of repeated reading on second-grade transitional readers' fluency and comprehension. Reading Research Quarterly, 22 (4), 389-405.
- Dowhower, S. L. (1991). Speaking of prosody: Fluency's unattended bedfellow. Theory in Practice, 30 (3), 158-164.
- Ehri, L. C. & Robbins, C. (1992). Beginners need some decoding skill to read words by analogy. Reading Research Quarterly, 27 13-26.
- Eldredge, J. L. (1995). Teaching decoding in holistic classrooms. Englewood Cliffs, NJ: Prentice Hall.
- Enchanted Learning (2005). Strata of tropical rainforests. Retrieved October 20, 2005, from <http://www.enchantedlearning.com/subjects/rainforest/label/labelstrata.shtml>.
- Fielding, L. & Roller, C. (1992). Making difficult and easy books acceptable. The Reading Teacher, 45 (9), 678-685.
- Free voluntary reading in schools (1993). Emergency Librarian, 21 (1), 33.
- Food chain (2003). Retrieved on October 17, 2005, from [http://www.borealforest.org/school/food\\_chain.jpg](http://www.borealforest.org/school/food_chain.jpg).
- Food web (2005). Retrieved October 17, 2005, from [http://www.agen.ufl.edu/~chyn/age2062/lect/lect\\_28/4007.GIF](http://www.agen.ufl.edu/~chyn/age2062/lect/lect_28/4007.GIF).
- Fountas, I. C. & Pinnell, G. S. (1996). Guided reading: Good first teaching for all children. Portsmouth, NH: Heinemann.

- Freedman, S. & Calfee, R. (1984). Understanding and comprehending. Written Communication, 1 (4), 459-490.
- Frith, U. (1985). Beneath the surface of developmental dyslexia. In Peterson, K. E., Marshall, J. C. and Coltheart, M. (Eds.). Surface dyslexia: neuropsychological and cognitive studies of phonological reading (pp. 301-326). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Gaskins, R. W., Gaskins, J. W., Gaskins, I. W. (1991). A decoding program for poor readers--and the rest of the class too! Language Arts, 68, 213-225.
- Gass, S. M. & Selinker, L. (2001). Second language acquisition. Mahwah, NJ: Lawrence Erlbaum Associates.
- Gillet, J. W., Temple, C. & Crawford, A. N. (2004). Understanding reading problems. Boston, MA: Allyn & Bacon.
- Gough, P. B. Juel, C. & Roper-Schneider, D. (1983). A two-stage model of initial reading acquisition. In J. A. Niles and L. A. Harris (Eds.), Searches for meaning in reading/ language processing and instruction (pp. 207-211). Rochester, NY: National Reading Conference.
- Greenwood, S. C., & Bilbow, M (2002). Word identification in the intermediate and middle grades: Some tenets and practicalities. Association for Childhood Education International. Retrieved October 7, 2005, from [http://www.findarticles.com/p/articles/mi\\_qa3614/is\\_200210/ai\\_n9119496](http://www.findarticles.com/p/articles/mi_qa3614/is_200210/ai_n9119496).
- Gunning, T. G. (1996). Creating reading instruction for all children. Boston, MA: Allyn & Bacon.
- Gunning, T. G. (1998). Best books for beginning readers. Boston: Allyn & Bacon.
- Hasbrouk, J. E. & Tindal, G. (1992). Curriculum-based oral reading fluency norms for students in grades 2 through 5. Teaching Exceptional Children, 24, 41-44.

- Helgesen, M., Gakuin, M. & Sendai (1993). Oral reading--a fresh look. In R. Day (Ed.), New ways in teaching reading (pp. 261-280). Alexandria, VA: Teachers of English to Speakers of Other Languages, Inc.
- Hill, B. C., Johnson, N. J. & Noe, K. L. (1995). Literature circles and responses. Norwood, MA: Christopher-Gordon.
- Hook, P.E., & Jones, S.D. (2002). The importance of automaticity and fluency for efficient reading comprehension. Perspectives, 28 (1), 9-14.
- Hopkins, G. (2003). 'Sustained silent reading' helps develop independent readers (and writers). Education World. Retrieved September 28, 2005, from [http://www.education-world.com/a\\_curr/curr038.shtml](http://www.education-world.com/a_curr/curr038.shtml).
- Hudson, R. F., Lane, H. B., & Pullen, P. C. (2005). Reading fluency assessment and instruction: What, why, and how? The Reading Teacher, 58 (8), 702-714.
- Improving reading rate and comprehension (2003). University of Minnesota. Retrieved September 15, 2005, from <http://www.ucs.umn.edu/lasc/handouts/improverate.html>.
- Irwin, J.W. (1991). Teaching reading comprehension processes. Englewood Cliffs, NJ: Prentice Hall.
- Johnson, D. D. & Baumann, J. F. (1984). Word identification. In P. D. Pearson (Ed.), Handbook of reading research (pp. 583-608). New York: Longman.
- Juel, C. (1988). Learning to read and write: A longitudinal study of 54 children from first through fourth grades. Journal of Educational Psychology, 80 (4), 437-447.
- Kimbell-Lopez, K. (2003). Just think of the possibilities: Formats for reading instruction in the elementary classroom. Reading Online, 6 (6), 1-19.
- Koskinen, P. S., Wilson, R. M., Gambrell, L. B., Neuman, S. C. (1993). Captioned video and vocabulary learning: An innovative practice in literacy instruction. The Reading Teacher, 47, 36-43.

- Krashen, S. (2005). Is in-school free-reading good for children? Phi Delta Kappan, 444-447.
- Kuhn, M. R. & Stahl, S. A. (2000). Fluency: Review of developmental and remedial practices. Retrieved April 20, 2005, from <http://www.ciera.org/library/reports/inquiry-2/2-008/2-008.html>.
- LaBerge, D., & Samuels, S. J. (1974). Toward a theory of automatic information processing in reading. In H. Singer & R. Rudell (Eds.), Theoretical models and process of reading (pp. 548-579). Newark, DE: International Reading Association.
- Laughlin, M. K., Black, P. T., & Loberg, M. K. (1991). Social studies readers theater for children: Scripts and script development. Englewood, CO: Teachers Ideas Press.
- Leppanen, U., Niemi, P., Aunola, K., & Nurmi, J. (2004). Development of reading skills among preschool and primary school pupils. Reading Research Quarterly, 39 (1), 72-93.
- Lieberman, I. Y., Shankweiler, D., Fischer, F. W., & Carter, B. (1974). Explicit syllable and phoneme segmentation in the young child. Journal of Experimental Child's Psychology, 18 (2), 201-212.
- Lightsey, G. E. & Frye, B. J. (2004). Teaching metalinguistic skills to enhance early reading instruction. Reading Horizons, 45 (1), 27-37.
- Lipton, L. & Hubble, D. (1997). More than 50 ways to learner-centered literacy. Arlington Heights, IL: Skylight Professional Development.
- Lynne, C. (1990). The great kapok tree. New York: Harcourt, Inc.
- Lyon, G. R. (1995). Towards a definition of dyslexia. Annals of Dyslexia, 45, 3-27.

- Martinez, M., Roser, N. L., & Strecker, S. (1999). "I never thought I could be a star": A readers theater ticket to fluency. The Reading Teacher, 52, 326-334.
- McGee, L. M., & Richgels, D. J. (2001). Literacy's beginnings: Supporting young readers and writers. Boston, MA: Allyn & Bacon.
- Missouri Botanical Garden (2002). Tropical rainforest layers. Retrieved October 18, 2005, from <http://mbgnet.mobot.org/sets/rforest/explore/layers.htm>.
- Morgan, R. (1992). Distinctive voices: Developing oral language in multilingual classrooms. In P. Pinset (Ed.), Language, culture, and young children (pp. 37-46). London: David Fulton.
- Nagy, N. M., Campeni, C. E. & Shaw, J. N. (2000). A survey of sustained silent reading practices in seventh-grade classrooms. Reading Online, 4 (5). Retrieved September 26, 2005, from <http://www.readingonline.org/articles/art%5findex.asp?HREF=/>.
- National Center for Education. Reading and writing habits of students (1997). Retrieved October 01, 2005, from <http://nces.ed.gov/pubs98/98003.pdf>.
- National Reading Panel Report (2000). Teaching children to read: An evidence-based assessment of the scientific literature on reading and its implications for reading instruction. Washington, DC: National Institute of Literacy.
- Neuhaus Education Center (2004). Reading fluency. Retrieved May 20, 2005, from [http://www.neuhaus.org/PDF/Fluency\\_description.pdf](http://www.neuhaus.org/PDF/Fluency_description.pdf).
- Oakley, G. (2003). Improving oral reading fluency (and comprehension) through the creation of talking books. Reading Online, 6 (7). Retrieved October 1, 2005, from [http://www.readingonline.org/articles/art\\_index.asp?HREF=oakley/index.html](http://www.readingonline.org/articles/art_index.asp?HREF=oakley/index.html).

- Parks, C. (1994). Closed captioned TV: A resource for ESL education. ERIC Digest. Retrieved October 01, 2005, from <http://www.ericdigests.org/1995-1/tv.htm>.
- Perfitti, C. (1985). Reading ability. New York: Oxford University Press.
- Pflaum, S. W., & Pascarella, E. T. (1980). Interactive effects of poor reading achievement and training in context of learning disabled children. Reading Research Quarterly, 16, 138-158.
- Pikulski, J. (1998). Teaching word identification skills and strategies: A balanced approach. Boston, MA: Houghton-Mifflin Company.
- Pinnell, I. C. & Fountas, G. S. (1998). Word matters: Teaching phonics and spelling in the reading/ writing classroom. Portsmouth, NH: Heinemann.
- Pinnell, G. S.; Pikulski, J. J., Wixson, K. K., Campbell, J. R., Gough, P. B., & Beatty, A. S. (1995). Listening to children read aloud: Oral fluency. Washington, DC: U.S. Department of Education, National Center for Education Statistics. Retrieved October 21, 2005, from <http://nces.ed.gov/pubs95/web/95762.asp>.
- Rasinski, T. V. (1994). Developing syntactic sensitivity in reading through phrase-cued texts. Intervention in School and Clinic, 29(3), 165-168.
- Rasinski, T. V. (2003). The fluent reader: Oral reading strategies for building word recognition, fluency, and comprehension. New York: Scholastic.
- Rasinski, T. (2004). Assessing reading fluency. Retrieved October 10, 2005 from, [http://www.prel.org/products/re\\_/assessing-fluency.htm](http://www.prel.org/products/re_/assessing-fluency.htm).
- Rasinski, T. V. & Padak, N. D. (2001). From phonics to fluency. New York: Longman.
- Reed, I., & Limon, G. (2005). Choral reading. Retrieved September 26, 2005 from, <http://www.learner.org/channel/workshops/hslit/session5/teaching/>.



- Ringbom, H. (1987). The role of the first language in foreign language learning. Clevedon, England: Multilingual Matters.
- Ritchey, K. D. (2004). From letter names to word reading: The development of reading in kindergarten. Reading Research Quarterly, 39 (4), 374-376.
- Rood, S. (2000). Improving reading rate and comprehension. Retrieved October 15, 2005, from [http://www.longwood.edu/learning/05-26 040LD/speedread.htm](http://www.longwood.edu/learning/05-26%2004OLD/speedread.htm).
- Rosenshine, B., & Stevens, R. (1984). Classroom instruction in reading. In P. D. Pearson, P. Mosenthal, M. Kamil, & R. Barr (Ed.), Handbook of reading research (pp. 376-391). New York: Longman Publishers.
- Royer, J. M., & Sinatra, G. M. (1994). A cognitive theoretical approach to reading diagnostics, Educational Psychology Review, 6, 81-114.
- Rudell, R. B. (1999). Teaching children to read and write: Becoming an influential teacher. Needham Heights, MA: Allyn & Bacon.
- Samuels, S. J. (1979). The method of repeated readings. The Reading Teacher, 32, 403-408.
- Samuels, S. J. (1987). Factors that influence listening and reading comprehension. In R. Horowitz & S. J. Samuels (Eds.), Comprehending oral and written language (pp. 295-325). San Diego, CA: Academic Press, Inc.
- Samway, K. D., & Whang, G. (1996). Literature study circles in a multicultural classroom. York, ME: Stenhouse.
- Saskatchewan Education (2001). Readers theater reading scale. Retrieved on October 17, 2005, from [http://www.saskschools.ca/curr\\_content/rbtboxes/rforest/unit/lesson6.html](http://www.saskschools.ca/curr_content/rbtboxes/rforest/unit/lesson6.html).
- Schreiber, P. A. (1980). On the acquisition of reading fluency. Journal of Reading Behavior, 12, 177-186.

- Schreiber, P. A. (1987). Prosody and structure in children's syntactic processing. In R. Horowitz & S. J. Samuels (Eds.), Comprehending oral and written Language (pp. 243-270). San Diego, CA: Academic Press, Inc.
- Seger, J. (2003). The way it sounds out loud: The importance of prosodic perception and performance in spoken and printed prose. Unpublished master's theses, University of New Hampshire. Retrieved April 20, 2005, from <http://pubpages.unh.edu/~ngn/theses/seger.htm>.
- Shepard, A. (2005). The adventures of mouse deer. Retrieved October 19, 2001, from [www.aaronsherp.com/extras](http://www.aaronsherp.com/extras).
- Silber, S., & Velton, W. (2004). Tropical rainforest animals. Retrieved October 16, 2005, from [http://www.rainforestheroes.com/kidscorner/rainforests/s06\\_animals.html](http://www.rainforestheroes.com/kidscorner/rainforests/s06_animals.html).
- Sloyer, S. (1982). Readers theater: Story dramatization in the classroom. Urbana, IL: National Textbook Company.
- Stahl, S. A. (1992). Saying the "p" word: Nine guidelines for exemplary phonics instruction. The Reading Teacher, 45, 618-625.
- Stahl, S. A., & Murray, B. A. (1994). Defining phonological awareness and its relationship to early reading. Journal of Educational Psychology, 86, 221-234.
- Stanovich, K. E. (1984). The interactive-compensatory model of reading. A confluence of developmental, experimental and educational psychology. Remedial and Special Education, 5, 11-19.
- Stanovich, K. E. (1986). Matthew effects in reading: Some consequences of individual differences in the acquisition of literacy. Reading Research Quarterly, 21 (3), 360-407.
- Stanovich, K. E., & West, R.F. (1989). Exposure to print and orthographic processing. Reading Research Quarterly, 24, 402-433.

- Stanovich, K. E. (1992). Are we overselling literacy? In C. Temple and P. Collins (Eds.), Stories and readers (pp. 209-231). Norwood, MA: Christopher-Gordon.
- Taylor, L. (2004). The healing power of rainforest herbs. Garden City, NY: Square One Publishers, Inc.
- Theodora maps (1999). World map. Retrieved October 15, 2005, from [http://www.theodora.com/new/world\\_maps.html](http://www.theodora.com/new/world_maps.html).
- Tompkins, G. E. (2003). Literacy for the 21<sup>st</sup> century. Upper Saddle River, NJ: Merrill Prentice Hall.
- Torgesen, J. K., Rashotte, C. A. & Alexander, A. W. (2001). Principles of fluency instruction in reading: Relationships with established empirical outcomes. In M. Wolf (Ed.), Dyslexia, fluency, and the brain (pp. 333-355). Timonium, MD: York Press.
- Trelease, J. (2001). The new read-aloud handbook. New York: Penguin.
- Tserdanelis, G., & Wong, W. (2004). Language files (9<sup>th</sup> Ed.). Columbus, OH: The Ohio State University Press.
- University of Minnesota (2003). Improving reading rate and comprehension. Retrieved September 15, 2005, from <http://www.ucs.umn.edu/lasc/handouts/improverate.html>.
- Vacca, R. T. (2000). Word study strategies at the middle grades. New York: William H. Sadlier, Inc.
- Vellutino, F. R., & Scanlon, D. M. (1987). Phonological coding, phonological awareness, and reading ability: Evidence from a longitudinal and experimental study. Merrill-Palmer Quarterly, 33, 321-363.
- Walberg, H. J., & Tsai, S. (1984). Reading achievement and diminishing returns to time. Journal of Educational Psychology, 76 (3), 442-451.
- World Wildlife Fund. Rainforest rap. Retrieved October 21, 2005, from <http://www.worldwildlife.org/>.

Wylie, R., & Durrell, D. (1970). Teaching vowels through phonograms. Elementary English, 47, 787-791.

Zutell, J. (2005). Word wisdom. Columbus, OH: Zaner-Bloser, Inc.

Zutell, J., & Rasinski, T. V. (1991). Training teachers to attend to their students' oral reading fluency. Theory Into Practice, 30, 211-217.