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HOW CAN GIVING STUDENTS VOICE IN A THIRD THROUGH SIXTH  
LEARNING DISABLED CLASSROOM FOSTER ACTIVE ENGAGEMENT AND  
STUDENTS CONTROL OVER THEIR LEARNING?

By  
Sarah M. Furlong

A Thesis

Submitted in partial fulfillment of the requirements of the  
Master of Science in Teaching Degree  
of  
The Graduate School  
at  
Rowan University  
June 19, 2008

Approved by \_\_\_\_\_  
Advisor

Date Approved June 19, 2008

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## ABSTRACT

Sarah M. Furlong

### HOW CAN GIVING STUDENTS VOICE IN A THIRD THROUGH SIXTH LEARNING DISABLED CLASSROOM FOSTER ACTIVE ENGAGEMENT AND STUDENTS CONTROL OVER THEIR LEARNING?

2007/08

Dr. Madden

Master of Science in Teaching

This study looks at the impact on learning classroom where students are encouraged to share their voice. Student questions are used to create units of study that frame what students want to learn. The study takes place in a self-contained Learning Disabled classroom with fifteen students ranging in third through sixth grade. The study is completed during two separate instructional units, one in science and another in social studies using a Questions Curriculum. Student questions about specific topics are used to create subsequent lessons on the topic. During the study student artifacts including worksheets and pictures of bulletin boards are collected. Reflections are recorded in a teacher research journal and at the completion of both of the units of study interviews are given to eleven students in the classroom. The research design is qualitative, specifically teacher research. Data sources are triangulated to arrive at credible and valid findings. The study reveals that providing an outlet for student voice enables students to become more engaged in their learning.

## ACKNOWLEDGEMENTS

I wanted to thank all of my students for their hard work; without them this study would not have been possible. I also wanted to thank the Collaborative Education professors, Dr. Majorie Madden, Dr. Paul Fitch, Dr. Janet Moss, Dr. Joan Finch and Dr. Susan Brown. Without all of your support I would not have made it through these past few years. Lastly, I would like to thank my family for their never ending support. I would not have made it this far without you.

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## CHAPTER 1

### Introduction

#### Welcome to First Grade

I walk into the first grade classroom. The desks are arranged in pairs. The walls have informative posters for the numbers, alphabet, and general classroom rules. No student work is on display or any thematic or seasonal decorations. The blinds on the windows are down so only small streaks of sunlight can sneak into the classroom.

Slowly students begin to trickle into the classroom. Their mornings are routine: unpack backpack, sign into class, choose a lunch option, complete board work. Once all of the students have begun their seatwork I begin to circulate the classroom. All I hear is the rhythmic breathing of the students and the occasional adjustment of a chair. The students are copying their weekly spelling words five times and follow with a sentence using each word. Not very engaging for first graders.

Teaching is passing out practice sheets and showing one or two examples on the board. Frustration sets in when a student does not understand how to complete his or her work. Story time consists of a story and a question and answer session. No student input is allowed, only answers to specified questions. Social studies and science seem unimportant; they are rotated on a monthly basis. A story is read relating to the current topic and then a center is created to supplement that topic.

“Time for group work” the teacher announces. I am excited! I will finally see the students working with one another. I am quickly disappointed. “Group work” is students

sitting together *silently* completing an assigned center. Not what I normally think of as group work.

As my practicum in this placement continues, I begin to get to know the students and interview four of them. I question them about the class to try and understand their attitudes towards the teacher's methods. The consistent responses from all four students are that Mrs. B is boring and they *never* do anything fun.

### My Story

Focusing on a topic of interest was not easy for me. I knew that I wanted a topic that would be meaningful to me when I become a teacher. I wanted to research something that would have a positive impact on my future teaching and improve the quality of my classroom for students. I found so many things that I was interested in and that I wanted to research. I kept thinking back to my past experiences and my current experience. My first thought was to focus on special education but that thought was so broad. I looked through various education journals to broaden my knowledge. I came across the article "In Search of Students' Voices" by Yvonna S. Lincoln. The article immediately had me thinking of my current placement in a self-contained classroom. I thought how can one provide opportunity for student voice in a similar setting, where the classroom needs to be so structured and individualized for each student? I thought about creating an environment that could be easily differentiated to meet the different needs of students.

After one student commented how much he liked a paper cup I made, we began to practice origami together. One of his strengths seemed to be working hands on with materials and he really began to excel. He was learning the importance of following



directions and as time passed he began to assist one of his classmates in creating different paper objects. Although we did not do this all day, this gave the student an incentive to complete his work during the day and a sense of accomplishment when he finished various projects.

As I questioned the lack of student voice in my special education placement and wondered what else I could bring to the classroom, I thought about the school as a whole. My internship placement was in a school with a warm, friendly environment for all who walked into its doors. Student work was displayed throughout the building, whether on bulletin boards or encased in frames on the walls. Morning announcements were run by students, and opportunities to share pieces of work were given to students on the morning announcements. Safety monitors roamed the hallways at the beginning and end of each day. Older students were given a sense of responsibility and independence and younger students saw a positive thing to strive for. Not only did the school encourage student voice through out the building, it encouraged a sense of community. This sense of community seemed to invite students to be open and honest with one another, thus providing a forum for student voice.

While I was involved in the practicum that I discussed in my introduction, I did not expect the experience to leave an impact that might positively impact my teaching. I was frustrated with the dull routine of the classroom. Part of my class required that I create a unit and teach lessons to the students. When my partner and I taught to the class, it was the first time I saw a whole class discussion. The students were engaged in our lesson and our assessment showed that the students retained what they had been taught. Rereading Lincoln's article (1995), this placement quickly popped into my mind. The

environment did not provide students with open forums for discussions nor provide them with opportunities to question their own learning. The experience in the first grade classroom with which I began my chapter gave me an awareness of a setting that did not seem to help learners become successful. I learned that students must be given the opportunity to show adults that they can construct their own knowledge. And I began to understand that completing worksheets and copying notes from the board would not help to engage the learners in the classroom nor play to the strengths of individual students.

So, how could I engage students and foster their voices in the classroom? This question perplexed me for quite some time. There did not seem to be great deal of research available on student voice and even less on studies implemented in the classroom fostering student voice. Eventually I found my way to a “Questions Curriculum” (*Center for Inspired Teaching, 2007*). The idea of using a “Questions Curriculum” was given to me by my thesis advisor, Dr. Madden, after she had seen the implementation of one at The Coalition of Essential Schools Fall Forum in 2007. I read more about this innovative “Questions Curriculum: and believed that I had found a way to study the possibilities and power of allowing students’ voice in my classroom.

#### Research Problem and Question

Student voice in classrooms today is often nonexistent (Carpenter, 2003). Yet, student voice allows teachers to give students “responsibility for their own motivation and learning” (Lincoln, 1995, 89). For student voice to exist in the classroom, teachers must be willing to listen to what students have to say. Without listening to and encouraging student voice, students are left powerless in the classroom. They have little or no control over their own learning, which often leaves students bored and disengaged

in the classroom (Smyth, “Drop-Out”,2006). Therefore my question becomes: How can giving students voice in the classroom foster active engagement and control over their learning?

### Purpose Statement

Does fostering student voice in the classroom make school more enjoyable for students? When I asked that question I then had to ask myself whether or not school is supposed to be fun. The answer to this question is more complex than many realize. Students go to school to learn. Without an education students cannot be successful in life. To help students become successful, teachers must actively engage their students in their learning. Additionally, in order to engage students in the curriculum teachers must get to know students and choose topics of study that students find engaging and often times, fun. Furthermore, active engagement asks for activities that play to the academic capabilities and strengths of the students in the classroom. To actively engage students, teachers must learn to *listen* to the voices of students, which Allison Cook-Sather coins ‘student voice’ (2006). When teachers hear what students have to say they can create assignments, lessons, and units that students can enjoy, ultimately enhancing their engagement in successful learning.

The most important element in foster student voice is the belief that children can construct their own knowledge “rather than receiving it in finished form from the teacher or the textbook” (Carpenter, 2003, p29). By listening to students’ voices we invite student knowledge into the classroom. Listening allows teachers to become more aware of students’ interests, educational needs, and academic skills, which in turn helps more appropriate and engaging lessons to be designed. Why might this be important in a

classroom? One reason may be that teachers focus more student's thinking rather than on correct answers and are better able to encourage thinking processes that may otherwise be overlooked (Carpenter, 2003). A variety of strategies can achieve this and be used in any classroom setting. A few include small group and whole group discussions, problem-centered activities, asking open-ended questions, and providing wait time for responding to questions (Carpenter, 2003).

What is student voice? Cook-Sather suggests that student voice “signals having a legitimate perspective and opinion, being present and taking part, and/or having an active role ‘in decisions about an implementation of educational policies and practice’” (Holdsworth, 2000, p. 355)” (362). By breaking down this definition into smaller pieces one can better understand and recognize the importance of student voice in the classroom. All students should have a “legitimate perspective and opinion” in the classroom. Students are the ones who are there to learn and at any age they can reflect and share feedback about their learning. “Being present” does not only mean sitting in the classroom. It means that students are aware of what is going on in the classroom and that they are included in the activities in some way or another. To foster this, students must be given the opportunity to have an active role in their learning. This should be done by giving students an opportunity to voice or express their own knowledge and become actively engaged in their learning (Carpenter, 2003). All of these aspects should be incorporated to assist students in making decisions regarding “education policies and practices.” On a school-wide level students may be part of student council or committees to improve the conditions of the physical surroundings of the school (Fielding, 2006). In

an individual classroom, students can take shared responsibility of their learning by helping to develop units of study and constructing new knowledge together.

Lincoln discusses various reasons why researchers may want to listen to and study student voice (1995). First, researchers see the social and legal importance of listening to children. Adults recognize the importance of children and acknowledge that children will become our future. Giving students the opportunity to have their own voice will help prepare them for the decisions they will make later in their lives, which could impact the dynamics of our culture today. A second reason to listen to student voice is scientific; studying how students learn. As so many researchers have suggested, we all do not learn the same way. With the knowledge that school makes such an impact on the life of students, teachers must learn to adjust the teaching to the needs of different learners. Another reason to listen to students is the political importance of student voice. If we want students to function in a democratic society as the mature, we need to provide them with opportunities to understand democracy in action. Allowing students to make decisions regarding their own education gives them the opportunity to be involved in democratic decision making (Lincoln, 1995). Lincoln (1995) argues also that listening to student voice can positively affect teachers, even help them find their own voices (1995).

When teachers are told to listen to their student voices, what do they think? They think they must *listen* to their students. That is exactly true. Providing the opportunity for student voice to be spoken in the classroom, must also include listening to what students have to say. It is important to realize that listening in this sense is not just hearing what students have to say, but using what students have to say to improve their academic environment and learning; “The two most common ways of describing

listening to teach are in terms of content or building curriculum around students' interests and understanding the meanings students bring to their statements and problem solving" (Schultz, 2003, p. 168). We must listen closely to what students have to say to adapt our classrooms and our curriculum. Listening to student voice pushes teachers to reflect and to act on that reflecting.

This idea of reflecting and acting lends itself naturally to critical teaching. As Wink suggests, "Critical pedagogy is to name; to reflect critically; to act" (2000, p. 23). First, a problem or situation must be stated, or named. Second, the teacher must then reflect critically to determine the best course of action. Lastly, action must be taken and something must be done to adjust what was named. Much of what Wink has to say about teaching with critical stance, "seeing beyond", (2000, p. 29) is what teachers must do to listen to and effectively use student voice in the classroom. Critical pedagogy allows teachers to see the classroom, students, and the surrounding environments more widely and deeply, thus allowing for a better understanding of benefits to students in the classroom. As already stated, part of critical pedagogy is to reflect. Once teachers reflect on what students have to say and the different things they learn about them, then teachers can "act." Teachers can create classrooms that meet the needs of different learners and make a positive and comfortable atmosphere for all students to work together in. It is important to note that even though critical pedagogy is important to this study, the study is not centered on critical pedagogy nor does critical pedagogy guide this study. But the connection to critical pedagogy *cannot* be forgotten.

## Organization of the Thesis

This research study consists of five chapters devoted to better understanding of the power of student voice in the classroom. This first chapter provides background on the development of the thesis, from my first thoughts to a discussion of important literature written on the topic. The second chapter is an extension of the Purpose Statement discussed previously. The chapter discusses research relevant to the study. Chapter three is two-pronged; first, it details the context of the study and secondly, it describes the actual research design. The fourth chapter discusses the different sources of data collected and analyzes and interprets the data. The final chapter closes the study. It provides the reader with a complete summary of all of the findings and discusses conclusions of the study. Most importantly, chapter five discusses the implications that this study offers to those in the education field.

## CHAPTER 2

### Literature Review

“If we keep in mind that we want our students to believe they have the right to speak and that what they say has the potential to affect the future of the conversations, we are more likely to invite them to converse with us, rather than just questioning them with predetermined answers in our heads.” (cited from McVittie, 2004, p. 502)

What can be done in classrooms today to encourage student engagement and learning? This question will never have a true and definite answer (Cook-Sather, 2006). Educators and researchers around the globe have opposing views on what strategies should be used in the classroom and how these various strategies should be applied (Cook-Sather, 2006; Fielding, 2006). Ever-changing laws by the government often hinder the implementation of different classroom techniques, as schools are forced to focus on standardized testing scores. Everyone has a different list of qualities that make a good teacher. But who is creating these lists and these strategies? Who are researchers questioning to see what improvements can be made in the way students are taught? It seems that many, but not all, have forgotten to ask the most impacted persons of all, the students, “the [students] are in a very real sense, the primary stakeholders in their own learning process we do not necessarily listen to them” (Lincoln, 1995, p. ). As teachers we must learn to listen and hear what our students have to say about their learning in order to teach students to the best of their abilities.



Since the late 1980s and into the 1990s research has been done on the impact of student voice in the classroom (Cook-Sather, 2006; Hatchman, 2001; Smyth, “Education Leadership”, 2006). By listening to student voice in classroom, teachers allow students to share their opinions and views with one another and teachers. Offering students the chance to voice their views and opinions provides a learning opportunity for other students, as well as teachers. Providing opportunities for student voice to be heard does not happen automatically, teachers must make it happen. Most importantly, teachers must *listen* and *hear* what students have to say and use that information to improve the classroom environment (Carpenter, 2003). Critical pedagogy and constructivism are just two theories that blend well with student voice and bring similar strategies to the classroom. Manifestations of these theories that are critical to student voice are student-centered learning, co-constructing student learning, and active engagement.

“Teaching is what teachers do. Learning is what students do. Therefore, students and teachers are engaged in different activities” (Smyth 294). This is a common thought heard and spoken in education today, which seems narrow-minded. Those who hold this belief will not open their classroom and their students to new possibilities in learning, thus going against the ideals of student voice, constructivism, and critical pedagogy and student engagement. Yes teachers do teach. Yes, students do learn. But is that all either of them do? One would hope that all teachers realize that this is not the only thing that happens in a classroom. Students talk, teachers talk, students listen, teachers listen, students learn, teachers learn. When teachers learn from students, students are teaching. Through constructivism students and teachers construct knowledge; they are both teachers and learners working with one another. Critical pedagogy pushes teachers “to

name; to reflect critically; to act” (Wink, 2000, p.23). With the combination of these two theories in the classroom student voice is pushed to the forefront of students’ learning. Thiessen has suggested that, “student voice has become the clarion call for change in how we understand, respond to, and work with students” (2001, p. 352).

### Student Voice

What is student voice? Student voice is a hard term to be defined explicitly. Researchers will have yet to agree to one exact definition of the term. For the purposes of my research I use Cook-Sather’s definition that has paved the way for a better understanding of the term. She suggests that ““voice” signals having a legitimate perspective and opinion, being present and taking part, and/or having an active role “in decisions about and implementation of educational policies and practice” (Holdsworth, 2000, p. 355)” (2006, p. 362). This idea suggests that students have the capability, and more importantly, should be given the opportunity to have a more active role in their learning. Cook-Sather’s definition can even go as far as sharing the idea that “student voice lies in the clear grasp of the kinds of insights young people can offer teachers and other staff about what makes for effective teaching and learning” (Fielding, 2006, p. 305).

How does student voice make for effective learning? Student voice gives students the opportunity to express their opinions, ideas and feelings to classmates and teachers. Providing this type of atmosphere makes for a more secure and trusting classroom which encourages learning. It enables students to comfortably share their ideas and ask questions (Smyth, 2006). It gives students ample opportunities to learn about one another and learn from one another. Student voice makes for effective teaching by giving

teachers a remarkable opportunity to take the things heard by students and create a more engaging classroom environment. By listening to student voice, teachers learn about students' personal cultures, their likes and dislikes, and the different ways they learn. Using these different aspects of students' lives in classrooms can help to encourage all students' engagement in their own learning "(Hatchman, 1999). Teachers must allow students to make choices "about how they learn and present their knowledge" (Schultz, 2003, p. 38). Students must be provided with a variety of materials and resources so they can work to construct their own knowledge. Although many may think this sounds simple enough, different strategies should be implemented that encourage student voice.

Teachers encouraging student voice must be patient. They should avoid putting restricting time lines on students. It is imperative to teach students the importance of discussion and dialogues in and out of the classroom. "The schools for which I am arguing are the places that involve young people in that reflection and dialogue, places where our humanity emerges from and guides our learning together" (Fielding, 312). When teachers teach students the importance of dialogue and conversation in the classroom, they must remember to allow space for both, and to work together to reflect individually and as a whole (Fielding, 2006).

There are various things that can be implemented in a classroom that would encourage student voice, and many of these are strategies from different theories and perspectives in education. Teachers should encourage social and interpersonal relationships, perhaps by providing peer mentoring or tutoring. School wide student led programs, such as students leaders, help students become successful leaders by sharing their voice (Fielding, 2006). An important aspect of encouraging student voice is to

allow students to judge and critique educators, so those that are impacted the most by educators, have a say in how they are being taught (Fielding, 2006). Student-led discussions and cooperative learning are additional strategies that can be used to foster student voice in the classroom (Smyth, 2004). Implementing different strategies in the classroom will help foster student voice, but student voice cannot be positively used by a teacher if he or she does not *listen* to students' voice.

### Listening to Student Voice

“But if you really listen to them they’ll tell you how to teach them” (as cited in Hatchman, 2001, p.3)

Student voice in the classroom gives students and teachers alike opportunities to learn. Students and teachers begin to learn about one another, learn more about themselves and learn what helps them become stronger learners. Students begin to understand one another and relate to different events in each others lives. Teachers are also given this amazing opportunity to take what students are telling them and use it in the classroom, which can provide for more engaged students. To create this type of atmosphere is not simple. For a teacher to successfully use student voice, it is imperative that a teacher *listen* to his or her students.

“ Listen: v. 1. To make an effort to hear something. 2. To pay attention” (American Heritage, 2001, p. 494). This dictionary definition provides one with a background on what it means to listen, very simply put. In a classroom a teacher must “listen” as defined to what students have to say. To listen to student voice though, entails more than just making “an effort to hear something.” To listen to student voice, teachers must not only listen to the students but be “willing to... honor these voices” (Schultz,

2003, p. 89). To listen to student voice teachers must learn who students are. Teachers must understand the different local contexts students come from. Teachers need to understand that each child is a complex individual with different background and cultures. As teachers begin to understand this and hear these differences through student voices they can successfully develop ways to teach to all students (Schultz, 2003). Teachers no longer follow the traditional methods of teaching by following a pre-planned curriculum and following texts but by listening to student voice teachers can now go “beyond a script” (Schultz, 2003, p. 171). Katherine Schultz states it perfectly, “The two most common ways of describing listening to teach are in terms of content or building curriculum around students’ interests and understanding the meanings students bring to their statements and problem solving” (2003, p. 168). So as teachers, we must learn to understand our students and develop our curriculum around students’ interests and capabilities to engage them. When teachers begin to understand what causes students to think how they think and how they go about solving their problems, they will truly be listening to student voices.

#### Educational Theories and Perspectives

The principles behind student voice intertwine with various educational theories and practices. Many of the ideas of these different practices can benefit teachers who want to create a classroom open to student voice. These theories and perspectives offer strategies that can help create a classroom that opens space for student voice and forces teachers to listen to student voice. Constructivism is one theory that argues that students *can* and *should* construct their own learning in the classroom (source?). With that definition alone, constructivism paves the way for student voice in the classroom.

Constructivism allows students to construct their own learning in the classroom. The most important element in constructivism is the belief that children can construct their own knowledge “rather than receiving it in finished form from the teacher or the textbook” (Carpenter, 2003, p29). By listening to students’ voices we enable them to construct this knowledge. Listening will allow teachers to become more aware of students’ interests, educational needs, and academic skills which in turn help teachers create more appropriate and engaging lessons to be designed. Why might student voice be important in a constructivist classroom? Carpenter discusses how understanding constructivism allows teachers to focus on “student’s thinking rather than on correct answers enables teachers to encourage thinking processes that may otherwise be overlooked” (30). This is done by a variety of strategies that can be used in any classroom setting. A few include small group and whole group discussions, creating problem-centered activities, asking open-ended questions, and providing wait time for responding to questions (Carpenter, 2003).

Student centered learning and learner-centered learning are two very similar and overlapping theories that also connect to student voice. For the purposes of my study, the two of them will be considered the same; just different terms used by different authors. Smyth (2006) discusses how learner-centered policy, which I relate as student centered, must allow for students to be heard and be given the involvement in actual decisions that will impact their learning. When teachers listen to their students then they are making the students the center of the classroom, and humanity, (Smyth, 2006; Schultz, 2003). One of the first studies done in the late 1940s on student centered learning developed key characteristics that define it:

1. Creating students' trust that they could express opinions and questions openly without endangering their relationship with other students and the teacher.
2. Emphasis upon discussion, with much student-to-student discussion rather than lecture or question-answer participation.
3. Concern about getting deeper learning rather than simple memorization of facts and definitions.
4. More emphasis on student choice and intrinsic motivation for learning; less on test/grade-driven learning.
5. More emphasis on student goals for learning and relating teaching to these goals.
6. More emphasis upon attitudinal and affective outcomes.
7. Concern about student misconceptions and getting those cleared up (Landum, 1999, p. 144).

These ideas are not all practiced in classrooms, but they should be to create more positive classroom environments. The teacher must listen to student voice to help create trust within the classroom environment so students feel free to express themselves and their opinions (Landrum, 1999). All of these points overlap the ideas of student voice. As student voice connects teachers to other pedagogies and their manifestations such as critical pedagogy, student centered, active engagement, and constructivism; teachers practice "good" pedagogy in the classroom. The ideas Haberman has created help to explain what good teachers are and what they do. These ideas by Haberman show the impact on the student in his or her classroom environment rather than show what a teacher may do. Here, (as cited in Smyth, 2006) is the list of things that exemplify good pedagogy of teachers when students:

- are involved with issues they regard as vital concerns;

- are involved with explanations of human differences;
- are being helped to see major concepts, big ideas, and general principles and not merely engaged in the pursuit of isolated facts;
- are involved in planning what they will be doing;
- are involved with applying ideals such as fairness, equity, or justice to their world;
- are actively involved in doing things rather than watching;
- are directly involved in a real-life experience;
- are actively involved in heterogeneous groups;
- are asked to think about an idea in a way that questions common sense or a widely accepted assumption, that relates new ideas to ones learned previously, or that applies an idea to the problems of living;
- are involved in redoing, polishing, or perfecting their work;
- are involved in reflecting on their own lives and how they have come to believe and feel as they do (Smyth)

These different things that show that teachers are creating successful environments for students to learn take time to build. They cannot be done automatically and must be thought about carefully and reflected upon time after time.

This idea of reflecting and acting finds itself imperative in critical pedagogy. As Wink suggests, “Critical pedagogy is to name; to reflect critically; to act” (2000, p. 23). First, a problem or situation must be stated, or named. Second, the teacher must then reflect critically to determine the best course of action. Lastly, action must be taken and something must be done to adjust what was named. Much of what Wink has to say about teaching with a critical stance, “seeing beyond”, (2000, p. 29) is what teachers must do to listen to and effectively use student voice in the classroom. Critical pedagogy allows



teachers to see the classroom, students, and the surrounding environments more widely and deeply, thus allowing for a better understanding of benefits to students in the classroom. As already stated, part of critical pedagogy is to reflect. Once teachers reflect on what students have to say and the different things they learn about them, then teachers can “act.” Teachers can create classrooms that meet the needs of different learners and make a positive and comfortable atmosphere for all students to work together in.

### Respect and Rights

Through out the literature regarding student voice a common word has had important impact on meanings. To completely understand student voice we must understand these two words and the impact they have. Rights and respect (Cook-Sather, 2006; Fielding, 2006; Thiessen, 2006) coincide with student voice, without these two ideals there can be no student voice neither spoken nor heard in classrooms (Cook-Sather, 2006).

Rights “appeal to higher ethical and moral principles” (Cook-Sather, 2006, p. 372). Students have the right to share their voice in the classroom. Not only should this be inherent in every classroom and every school in the country, but it is part of our constitution. Now the constitution, as applied in the classroom, only provides for ‘freedom of speech’ with safeguards to protect students, but it still gives students the freedom of speech. What the constitution does not give is the ability for student voice to be heard. This can only come from a school or from an individual classroom. The second term Cook-Sather discusses in accordance with student voice is rights. “If we keep in mind that we want our students to believe they have the *right* to speak and that

what they say has potential to affect the future of conversations, we are more likely to invite them to converse with us, rather than just questioning them with predetermined answers in our head” (McVittie, 2004, p. 502).

## CHAPTER 3

### Research Methodology

Chapter 3 includes a description of the context of the study and a discussion of the research design. . The final section of this chapter discusses the procedures of the study. This section summarizes the parts of the study, listing data sources and discussing what the collected data suggests. Overall, Chapter 3 introduces the reader to the study and what the reader should expect in the remaining chapters.

### Context of the Study

Deptford Township, the third largest in the county, is located in Gloucester County New Jersey. Its school district, Deptford Township Schools, has six early childhood/elementary schools, a middle school, a high school, and a special needs schools. These schools help to meet the needs of about 4,400 students. Deptford Township Schools take great pride in their use of technology to enhance the quality of learning for its students.

Good Intent Elementary School is a second through sixth grade elementary school housing over 400 students. According to the *New Jersey State Department of Education 2006-2007 School Report Card*, there are 395 students enrolled in the school. According to the *Report Card*, 96.5% of the students speak English as a first language at home. The average classroom size is 20.8 students and students are engaged in instructional time for five hours and forty-five minutes each day. School days begin at 9:00 am and conclude and 3:30 pm. The total per pupil expenditure for the 2006-2008 school-year was

\$11,011, lower when compared to the state average of \$13,071. In the 2007-2008 school year there are two second grade classrooms, 4 classrooms each for third, fourth, fifth, and sixth grades, and one Learning Disabled self-contained classroom at Good Intent.

My study takes place in the Learning Disabled self-contained classroom. The professionals in this classroom include the classroom teacher, a classroom paraprofessional, and a one-on-one paraprofessional. There are fifteen students in this classroom ranging from third grade to sixth grade. The majority, 9, of the students are in fifth grade while 2 students are in third grade, 1 student is in fourth grade, and two students are in sixth grade. Three fifth graders are mainstreamed for instruction during the day in the subject areas of Math, Language Arts Literacy and Health. Of the fifteen students, thirteen have returned their permission slips. All but one of the parents has agreed to their child being involved in the study. These three remaining students will remain involved in the classroom lessons because it is a curriculum-guided project, but their artifacts and pictures will not be used and they will not be interviewed at the conclusion of this unit.

All fifteen students in the classroom have Individual IEPs. Two of the students are classified as Emotionally Disturbed; one student is classified as Other Health Impaired; one student is diagnosed Autistic, but is highly functioning; one student is diagnosed with Asperger's Syndrome. The remaining students are diagnosed as Specific Learning Disabilities or Communications Impaired. Two students have been diagnosed with Attention Deficient Hyperactivity Disorder, but at the time of the study neither had been on medication. Two students are English Language Learners and receive daily instruction for thirty minutes. Four students receive counseling once a week and four

students also receive Occupational Therapy, OT, once a week. Seven students receive speech instruction either once or twice a week.

### Research Design

This study uses qualitative research methods to collect and analyze the data. Qualitative research has many different characteristics that make using this research method applicable to this study. “Emphasis on human-as-instrument” and “data collection in natural settings” (Maycut & Morehouse, 1994, p. 48) are the two characteristics that are significant to this study. “Emphasis on human-as-instruments” means that the researcher will study people, in this case students in a second grade classroom, and will observe and question the students to collect data. Since qualitative research calls for the collection of data in natural settings, teacher research allows teachers to do this very well. Teacher research, a specific type of qualitative research to be used in this study, uses an “emic, or insider’s, perspective” (Cochran-Smith & Lytle, 1993, p. 43). Teacher research allows teachers to study their teaching and their students’ learning and change their practices to generate the most powerful classroom possible. (Cochran-Smith & Lytle, 1993). Furthermore, as Cochran-Smith and Lytle (1993) have discussed, teacher researchers question and discuss the classroom with students thus allowing students to become “empowered as knowers” (43). Using teacher research allows me, as the researcher, to study the impact of student voice in the classroom.

What I want to learn, and to tell others, from this study, is how creating a “Questions Curriculum” encourages student voice to be heard in the classroom and begins to shape and influence student learning. Without the assistance of qualitative research collection techniques this would be very difficult. Data collection methods that

are used for this study include student interviews, student observations, my teacher research journal, and student artifacts. Student interviews allow me to get to know my students on a more personal level and listen to what they have to say. As I begin to know my students they become more comfortable in sharing their opinions in the classroom setting. Observations allow me to see if students are speaking and making decisions.

Recording in my research journal allows me to see how well I am listening to the voices of my students and using what they have to say to adjust the inner workings of the classroom. Recording in my research journal also helps me to see how well I am listening to the voices of my students and using what they have to say to adjust the inner workings of the classroom. Using a research journal enables me to record any observations of my students. As I analyze my data I use the research journal to see any changes in myself and my students and how using a “Questions Curriculum” affects their learning and interest. These observations in my research journal begin when I first enter the classroom, in February, and continue until I end my placement, in May. The teacher research journal must be used through out the entire placement because it allows me to see changes in my students, changes in myself, and changes in the classroom. Furthermore, the teacher research journal becomes a place where I can record different attitudes towards learning for our topic of study. Student artifacts are the most influential evidence in this research. They help show the effort put forth by the students, their interest in the topic, and their understanding of the unit of study. Although I plan on beginning my research collection immediately upon entering the classroom, the bulk of the data is collected during the end of my placement, in April, while the research is being completed.

To complete this research, I must obtain permissions from a variety of sources. I must obtain permission from the Institutional Review Board (IRB) and the principal of my cooperating school. Lastly, I must be receive permission from the parents of the students in my classroom. The parents must be informed of the study and agree to the use of any student artifacts, photographs, or audio tapes that may be used in the study. The students are interviewed at the completion of my study to determine their attitudes about the things they have learned during these units and the activities they have participated in.

### The Study

There are two parts to this study, spanning two subjects, science and social studies. Mini-units are created for both parts of the study. For the science unit the class investigates the rainforest and for the social studies unit, the class studies the creation of government in the United States. The study of the rainforest is part of our classroom study of the six biomes of the world. The biomes study is created to meet the interests of the students, the environment and animals, as well as cover the New Jersey Core Curriculum Content Standards (NJCCCS). The students are given the opportunity to decide the order of the biomes we study. During the rainforest lessons, their questions, which I learn by using a K-W-L chart, help me create the subsequent lessons. A K-W-L chart is a graphic organizer that has three parts. The first part, the “K” is when students share what they *know* about the topic; the “W” has students ask questions and share what they *want* to know about the topic; lastly, the “L” has students discuss what they have *learned* about the topic, in this instance the rainforest. The questions they have regarding the rainforest are then turned into lessons and activities to answer these questions.

The second mini-unit, on a social studies unit is also used to meet the NJCCCS for social studies. This mini-unit follows the last social studies chapter, which was on the Revolutionary War. I pose the following question to the students: “The Americans won the war and their freedom from the British. Now what happens?” As a class I want to develop a government. Using the questions they have during discussions we create a government and form the parts that the class feels is most significant. The questions are also be used to help guide the teacher about the government so the students have a better understanding of our government and our democratic ideals.

This chapter discusses the methodology of the study – its context and research design. Chapter 4 looks at each of the data sources and analyzes the data. Chapter 4 also discusses similar findings across the two units of study, The Rainforest and Making Your Own Government. Finally, the Questions Curriculum is analyzed to see its impact on student voice it has and how students learn when they are answering their own questions.



## CHAPTER 4

### The Findings

What is student voice? And what happens in classroom where student voice is invited in and validated? In this study, I encourage student voice through a “Questions Curriculum” (*Center for Inspired Teaching, 2007*), as well as other resources. This chapter analyzes the data sources discussed in Chapter 3. This chapter first looks at the findings from the unit, The Rainforest, and secondly, from the unit, Making Your Own Government.

The data from the rainforest unit discussed first. The first section, Generating Student Questions, includes the whole class and individual K-W-L charts, which drive the unit. This section is followed by Sample Lessons. Here I describe the Rainforest Unit as well as two specific sample lessons. The next section of The Rainforest Unit answers the question: Do Student Questions Drive Learning? In this section I look at all of my student artifacts and interview questions and analyze my findings. Lastly, I analyze the data collected through the student interviews, under the Final Interviews sections.

Following The Rainforest unit discussion, I address the Making Your Own Government unit of study. Making Your Own Government begins with the section, Generating Student Questions. Here I discuss how the students come up with their questions that are used to create their unit. Listening to Student Voice follows this section. It discusses the lessons, the ways student voice is apparent and how the students’

questions are answered. The final section describes how the two units, The Rainforest and Making Your Own Government, answer the essential question of my entire study: How can giving students voice in the classroom foster active engagement and control over their learning?

## The Rainforest

### Generating Student Questions

The beginning of my thesis and the introductory lesson to The Rainforest unit is the K-W-L chart. Students first shared all of their prior knowledge about the rainforest with one another. Then the students share any questions they have about the rainforest. I note in my teacher research journal that “students needed small amounts of prompting – specific animals, things you know but what to know more about.” These are the only prompts the students needed while asking the questions. As a class we brainstorm questions. Students each write at least one question down, which is then transferred to the K-W-L chart (see Appendix A). The list of twelve questions the students create is as follows:

1. How many types of trees are there?
2. Are there caves?
3. What do we get from the rainforest?
4. Do people live there? (Who, how, do they have electricity?)
5. What about snakes, what types, sizes, what do they eat?
6. How many trees get cut down a year?
7. What are specific types of crops and insects?
8. Do the people kill animals for food?

9. Why doesn't it snow and why does it always rain?
10. What types of animals live there? What types of insects?
11. Where does the medicine come from? What types of medicine?
12. Are there flying fish or x-ray fish? What other types of fish?

Following the creation of these questions, my problem becomes: How can I use these questions to create a unit on the rainforest?

### Sample Lessons

To create a unit from student questions I need to create lessons relevant to the NJCCCS and the school's curriculum, which answers the questions. Each lesson may not be intended for a specific question, but in some way answers questions that the students have listed. Further, it is important to keep the lessons engaging, so students remain on task. I use a variety of outlets to answer the questions. Students work in groups, have classroom discussions, research information on the computer, and complete reading comprehension pages. My goal is to keep the lessons varied so students do not become bored or easily distracted.

The lessons the students engaged in during the Rainforest unit include:

1. K-W-L chart – students complete the “K” and “W” sections of the chart  
(Appendix A)
2. Biome Characteristics worksheet – students work together in groups to research the rainforest on the internet (Appendix B)
3. 4 Layers of the Rainforest – students worked together to determine which layer of the rainforest was which

4. Reading Comprehension A – whole-class lesson, the class completes the given handouts together (Appendix C)
5. Products from the Rainforest – students have an opportunity to observe and discuss different items that come from the rainforest
6. Reading Comprehension B whole-class lesson, the class completes the given handouts together (Appendix D)
7. *The Great Kapok Tree* – students read the story and complete the given graphic organizer – small-group work (Appendix E)
8. People of the Rainforest – students use a printout from the internet to answer questions about people that live in the rainforest (Appendix F)
9. K-W-L chart – students complete the “L” section on the K-W-L charts (Appendix G)

The bulletin boards (Appendix H) were created in conjunction with the lessons. The bulletin board with the information on it was created with the information learned in lesson 2, Biome Characteristics. The second lesson was created after the lesson about the four parts of the rainforest. Both bulletin boards were student created.

Descriptions of a couple of these lessons are described in the following paragraph. The paragraphs also describe how the lessons answer students’ questions. These lessons show how I use the students’ questions to create a meaningful curriculum.

#### Sample Lesson One

For this lesson I brought in a variety of items that come from the rainforest for the students to observe. I want the students to see that many of the items we use come from rainforest. And as I review my teacher research journal I notice how excited the students

were during the lesson. They cannot believe that chocolate and gum come from the rainforest. They question me about where in the rainforest these products come from and how we are able to get them. The students remember these two products right away when we went to complete the “L” of the K-W-L chart. This shows me that things that students can relate to, especially things that they enjoy or find surprising, are easier to remember.

### Sample Lesson Two

Another lesson involves the students researching on the internet for different things about the rainforest. The students find and list animals located in the rainforest, which includes the river dolphin. When the students learn that river dolphins live in the rivers of the rainforest they are surprised and comment to me that they did not know dolphins lived in the rainforest. I agree with them and we view pictures of the river dolphins to see the difference from dolphins found in the oceans. One student particularly took to this small fact about the river dolphin. I had made note numerous times of this student’s lack of interest in coloring and drawing: important, because most of the class really enjoys any chance to either color or draw. But, after he learns about the river dolphins, he does draw a picture of the river dolphin and color it (see Appendix D). This illustrates his fascination with river dolphins. Moreover, given the opportunity to explore an animal of interest suggests an increase in motivation to learn and remember new information.

A day or so after the students individually complete their own K-W-L chart; a student observes the classroom K-W-L chart and remembers the river dolphins. He asks me to add them to our chart. Once again the students chatter about the river dolphins in

the rainforest. These examples demonstrate to me that the students seem to retain the information that they find interesting. And important to this study, the things the students find interesting are those that they have asked questions about in the beginning of the unit: What different types of animals live in the rainforest? What products do we get from the rainforest?

Do Student Questions Drive Learning?

The lessons above show specific examples where the questions become the force behind the lessons. Below is a table showing the “W” questions the students have and then whether or not they have learned the answer, the “L” column. The third column tells what lesson reviews this information and which of the information students absorb. At the end of the rainforest the unit, the K-W-L chart provides me with the information that the students have learned.

TABLE 1 – CLASSROOM K-W-L CHART

Question students had (“W”)	Was it responded to on the “L” of K-W-L chart?	Do any student artifacts show the learned information?	Yes in Both Columns (mentioned during “L” and shown in student artifacts)
1. How many types of trees are there?	No	Yes	
2. Are there caves?	No	No	
3. What do we get from the rainforest?	Yes	No	

4. Do people live there? (who, how, electricity?)	No	Yes	
5. What about snakes, what types, sizes, what do they eat?	Yes	No	
6. How many trees get cut down a year?	No	Yes	
7. What are specific types of crops and insects?	Yes	Yes	X
8. Do the people kill animals for food?	Yes	Yes	X
9. Why doesn't it snow and why does it always rain?	No	Yes	
10. What types of animals live there? What types of insects?	Yes	Yes	X
11. Where does the medicine come from? What types of medicine?	Yes	Yes	X
12. Are there flying fish or x-ray fish? What	Yes	No	

types of fish?			
Total "Yes" (Learned)	7	8	4
Percent Yes	58.3%	66.7%	

On the preceding table, seven-twelfths, or 58.3%, of the questions the students have on the "W" are responded to, by the students, on the "L." Two-thirds, or 66.7%, of the questions have answers of responses shown on student artifacts and worksheets. From the six questions the students responded to on the "L" section of the K-W-L chart, four of them overlap with the information they have learned when I analyze the student artifacts. Only one question, question number 2, has not been answered either on the "L" or by student artifacts. Eleven-twelfths, 91.6%, of the questions are either learned, the "L" or shown mastery in the student artifacts. The following two tables details more explicitly student mastery. The first table quotes the "L" the students come up with that are summarized onto the classroom K-W-L chart (Appendix C). In this table, the students' comments on the "L" section explain how they were able to answer their original "K" questions.



TABLE 2 – STUDENT STATEMENTS ON “LEARNED” SECTION OF K-W-L CHART

Question Asked by Students “K”	Statement on K-W-L chart
3. What do we get from the rainforest?	“gum comes from the rainforest”; “cocoa beans, chocolate”
5. What about snakes, what types, sizes, what do they eat?	“snakes hide in the trees and vine to catch their prey”
7. What specific types of crops and insects?	“cocoa beans, chocolate” “different fauna (animals) and flora (plants)”
8. Do the people kill animals for food?	“people kill animals for food”
10. What types of animals live there? What types of insects?	“there are poisonous tree frogs”; “bearded pig”; “there are nice birds and reptiles”; “different fauna (animals)”; “river dolphins live in the rainforest rivers”
11. Where does the medicine come from? What types of medicine?	“you can boil bark to make medicine”
12. Are there flying fish or x-ray fish? What types of fish?	“different fauna (animals)”

In TABLE 2, the statements made by students may not show complete mastery. For example, “different fauna (animals)” shows that they know the term but it also says that the students now know new animals that live in the rainforest. For question number 8, students ask if the people kill animals for food. On the “L” they respond that “people

kill animals for food.” Although simply said, this does answer the students’ question and further mastery for this question is shown in TABLE 3.

TABLE 3 shows the student artifacts that demonstrate mastery of each question in the “KK” column. The specific pieces of evidence are listed here and samples of each of the student artifacts can be found in the Appendix.

TABLE 3 – STUDENT ARTIFACTS DEMONSTRATING LEARNED INFORMATION

Question Asked by the Students “K”	Student artifact title	Appendix Where Items Located
1. How many types of trees are there?	Bulletin Boards; Reading Comprehension worksheet A	C; H
4. Do people live there? (who, how, electricity)	“Peoples of the Rainforest” worksheet	F
6. How many trees get cut down a year?	Reading comprehension worksheet A	C
7. What are specific types of crops and insects?	Bulletin Boards ; “Biomes Characteristics” worksheet	B; H
8. Do the people kill animals for food?	“Peoples of the Rainforest” worksheet	F
9. Why doesn’t it snow and why does it always rain?	Bulletin Boards	H

<p>10. What types of animals live there? What types of insects?</p>	<p>Bulletin Boards ; “Biomes Characteristics” worksheet; <i>The Great Kapok Tree</i></p>	<p>B; E; H</p>
<p>11. Where does the medicine come from? What types of medicine?</p>	<p>Reading comprehension worksheet B</p>	<p>D</p>

These artifacts show the effort and work each student puts into answering his or her questions.

The bulletin boards are created by the students and show the various animals the students learned live in the rainforest as well as illustrations of these animals. The bulletin boards also show the different facts learned by the students about the rainforests. The worksheets provide examples of work completed by the students and the responses indicated information that they gained from the lessons.

#### Final Interviews

I conduct interviews with each of the students at the conclusion of the unit. I ask each student the following set of questions:

- How old are you? Are you male or female?
- Did you enjoy learning about the rainforest? About all of the biomes? Which biome was your favorite?
- Did you walk away with more information than usual after learning about all of the biomes? What about just the rainforest?

- As we discussed the biomes did you ever look up information on your own, whether in the library or at home?
- Do you still have any unanswered questions left about any of the biomes? About the rainforest?
- I used a K-W-L chart to introduce the rainforest. I tried to use the questions you had to make each lesson. Do you think that this was helpful in your learning? Why or why not?

Although I ask the same questions of every student, I do not always repeat word for word. As special education students, some students need more detailed questions and more prompting; some need to be reminded about the different activities they have completed. Although, I modified the questions according to each student needs, I basically ask the same questions. Some students function at a higher level when responding, while other students need more prompting and verbal cues to remember the lessons they had previously learned. I try to ask deeper-thinking questions, but that was not completely successful. Many of the questions require one or two word answers so I then ask students to explain further. The explanations are sometimes limited and often consist of “I don’t know.” Therefore, the way my questions are asked, allowing for one or two word answers, limit the answers I received. I provide and ask for further explanations for each question: however student responses suggest that rewording on my part may lead to fuller answers, more representative of student learning. Another possible explanation for the brief student response may be that these special education students simply have not learned to fully articulate their understanding of new information.

The following table reports responses to the interview questions. The table abbreviates the questions in and adjusts them so each question can be answered by yes or no. For example, during the interview I ask students which biome was their favorite to study. For the purposes of this study I am interested in seeing how many students chose the rainforest as their favorite biome. So for purposes of giving this table easier readability, I record how many students said the rainforest was their favorite biome, instead of each biome the students choose.

TABLE 4 – STUDENT INTERVIEWS – THE RAINFOREST

Question	Yes	No	I don't know
Did you enjoy learning about the biomes	10	--	1
Was the rainforest student's favorite biomes?	7	4	--
Did you learn a lot of information?	9	--	2
Did you look up information on your own?	5	--	6
Any unanswered questions?	3	7	1
Did you like the K-W-L chart?	9	--	2

The interviews are not strictly about the Rainforest, as I wanted to look at the using the Questions Curriculum against the schools' curriculum. When I ask students

what they learned about the biomes, eight of the students mention things specifically about the rainforest. Some of the ideas the students mention to me include that there is medicine found in the rainforest, there are different species of frogs and snakes, information about the people who live there, and that species go extinct everyday because of people cutting down the rainforest. Even though the students did not verbalize all of this information to me at the conclusion of the unit on the rainforest for the “L” section of the K-W-L chart, many students were able to share with me information, which was not mentioned in the “L” section of the K-W-L chart. This furthermore demonstrates their learning and mastery of the rainforest unit. These facts the students learn come from questions that they have asked during the “W” stage of the K-W-L chart. Other information that the students share with me is also found on the “L” section of the chart, and it allows me to see the long-term retention of information which is especially important and meaningful for students in a Learning Disabled classroom.

I ask my students which biome was their favorite to study to determine any connection between the Questions Curriculum and the students’ favorite unit. My results, illustrated in TABLE I, show that seven out of the eleven students, 63.6%, choose the rainforest as their favorite biome study. The students retain information that is not mentioned in the “L” section of the K-W-L chart because they are interested in the subject. This is illustrated by the questions the students ask at beginning of unit, when we created the K-W-L chart. I noted in my weekly reflection, that “They [The students] really enjoyed doing the stuff with the rainforest and were not happy when we moved onto the Tundra on Friday.”

So I pose my opening question again: Do student questions drive learning? In this instance yes. Through student artifacts and the information the students complete on the K-W-L chart, the students' questions drove their learning. All but one of the twelve questions is answered during the Rainforest unit. The sample lessons discuss the interest the students expressed in the lessons and that their engagement and fascination the things they are learning. The interviews provide me with even more information regarding the students' knowledge not mentioned on the K-W-L chart. The findings suggest that the students retain the information because of their interest in it. The students' interests stem from the creation of their questions. They seem to remember that information because it is what they wanted to learn expressed at the beginning of the unit.

### Making Your Own Government

#### Generating Student Questions

The information on the social studies unit of Making Your Own Government is limited. My information comes from two days of writing by the students on the laws they want to make, four days of classroom discussions, an observation report from my clinical supervisor, and entries in my teacher research journal. Although this information is limited it supports my findings from the rainforest unit. This unit begins by asking the students: What happened to America after we won the Revolutionary War? What must the people do?

We begin by reading the students' social studies textbook; this aligns the unit with the NJCCCS, most specifically those standards for fourth grade social studies. During the next lesson has students complete a K-W-L chart of what they *know* is necessary in making a government. Although we have just read the text, the students appear to have

little interest in discussing the text and did not seem retain much information. My teacher research journal notes that the students struggle during the lesson the day before, while reading the text. Their responses include “I’m bored” and “I don’t want to learn history.” One student asks me “Why don’t we do anything fun anymore?” When I ask him what was fun, he says, “The rainforest.”

To create the K-W-L chart I ask the students what they know about our country’s first government? It takes probing for the students then mention that laws needed to be made. The students create a list of things, and writes down what they know, the “K” column of the K-W-L chart. I then ask the students what they want to know about making laws and what questions they may have when forming their own government. Some of the questions the students come up were: “Who makes the laws? “How do you vote,” “What age do you have to be?” and “What type of laws do we make?” In this unit the following discussions and lessons all center around one question: “What types of laws do we make?”

#### Listening to Student Voice

As I review my student artifacts it seems that one question the students have is the main focus of most of our classroom discussions. The question, “What type of laws do we make?” dominated the students’ discussions while we create our own government. The students are very interested in making laws. The first day of creating our laws the students generate a list of topics, including laws that “stop hurting people, homes for everyone, protect animals, respect one another, and people can speak different languages but must speak English.” The students enthusiastically write their beliefs about what



government should provide for people. Students work in groups and come up with beliefs about the rights people should have, below is an example of one group's thinking:

"I believe in god I believe that god will give home to poor or homeless people. I believe in kindness I believe that people will have warm kind heart and will stop killing. I believe that people shouldn't have guns or knives. We believe in healthy animals should not be homeless. Children shouldn't have a curfew it should be 12:00."

This sample provides evidence of the effort and thought that the students put into their response. Some of the group's ideas are then later used in a whole-group discussion as the class begins to make laws. Other groups have similar and overlapping ideas. There seems to be a very apparent student voice, which this student artifact shows. Student voice is not always *guided* by a Questions Curriculum during the Making Your Own Government unit in the same manner as the Rainforest unit. Making Your Own Government is guided by one essential question the students pose: "What laws do we make?" Numerous students make comments and write about protecting animals and the environment. This provides me with insight into the students and their compassion for animals. When I provide students opportunities to brainstorm different ways to protect animals, the students fully participate, all eager to share ideas. The students come up with the idea of not allowing animals to be hunted, no fishing should be allowed, having aquariums to protect animals, and to stop cutting down the forests. When suggestions are made about stop cutting down forests, one student comments that we need to stop because "in the rainforest animals become extinct everyday because the trees are cut down."

Allowing student voice in the classroom is important, even though I did not believe that the students enjoyed this activity nor learned from it, I was quickly proven

wrong. One student commented that this activity is a good idea because “when I grow up it’s good to know how to vote and law-making.” This observation is powerful; the student recognizes the importance of the activity and the connection to real-life; her ideas and voice are validated and heard in the classroom.

For one lesson students had an hour long class discussion, no pencils or papers, just talking. For approximately thirty-five minutes the students talk about irrelevant topics for laws; robots, no school, and other things. In the last twenty minutes of the discussion we finally are able to achieve a successful discussion, with students debating at times. The class conversation focuses on whether or not people must speak English to live in this “new” government. The students were in control of this conversation. I was there to guide and prevent any arguments. The students begin to “develop a sense of community – forming their own government.” I have not thought about the impact of this comment, but what else is government but a community.

The student interviews ask about their interest in the Making Your Own Government. The students were asked the following questions.

- We did not have the opportunity to complete Making Your Own Government. As I did with the rainforest, I tried to create these lessons based on the questions you and your classmates came up with on your second K-W-L charts. What have you thought about creating our own government? Did you enjoy it? Could I have done anything to make it better?

Below, Table 5 records the students’ responses to Making Your Own Government.

TABLE 5 – INTERVIEW QUESTION – MAKING YOUR OWN GOVERNMENT

Question	Yes	No	I don't know
Did you like Making Your Own Government?	9	1	1

As shown in Table 4, all but two of the students respond that they like this activity. This is surprising to me because during the activities the students did not seem very excited, especially at the start of each lesson. I questioned one student about it,

Me : Everyone didn't seem to like it so much [Making Your Own Government]

Student A : Nah, I liked it

Me : What did you like about it?

Student A : You can say what you wanna say and really make a law

Other students, like Student A, like the activities because their voice is really heard in the classroom, as they create the laws and rules. The students debate with one another and are able to create laws. The students really seem to enjoy activities when they have the opportunity to debate with one another. Three students mention specifically during the interviews that they like Making Your Own Government because they can debate and talk about the laws. The students also comment that they really appreciate the opportunity to share their own responses and feel their voices are heard. Student A's comments above confirm this for me. Five other students also comment that they like the Making Your Own Government because they make the laws.

#### So What Does All of This Data Mean?

Using a Questions Curriculum in the classroom allows students to see that their voice is heard in the classroom. During the rainforest unit, the students are able to see

that the questions they ask are answered during the lessons after the K-W-L chart is completed. Table 1 shows that more than half of the classroom population interviewed felt that the rainforest is their favorite biome to study. This links the use of the questions curriculum, where we began with questions, to a high level of student engagement and interests. At the conclusion of the Rainforest unit students shared feedback from seven of their twelve questions on the “W.” Various student artifacts provide me with more evidence that demonstrates student learning on four other questions, the “W.” That totals to eleven of the twelve, 91.6%, questions the students have been answered during the Rainforest unit. Using a Questions Curriculum impacts the students and allows them to see the progress of their learning through the K-W-L chart. The Questions Curriculum provides students the opportunity at the *beginning* of the unit of study to use their voice. Their voices provide the input which guides the entire unit. I listened to their questions and their interests, using both to create each lesson. Consequently, my student seems to suggest that when students see the impact their voice has in the curriculum they become more engaged in their learning.

Student interest is not immediately apparent during the Making Your Own Government unit as it was during the Rainforest unit. Notes are made in my teacher research journal of the seemingly lack of student interest in the lessons. Each time a new lesson begins the students seem to not want to be bothered. For each lesson it takes a few minutes to encourage and gain student participation. I did not that, though the students were hesitant to participate, students eventually warmed up and became engaged in the discussions. After the unit came to a close the interviews inform me that nine of the eleven students interviewed, responded to my questions, saying that they like to debate

with one another and make their own laws. Furthermore, my supervisor notes that the “class interest was high.” This is meaningful because it comes from an outsider’s perspective who has only visited the classroom a small number of times. Although these activities are often limited to discussions, they engage the students increasingly because every student is given opportunities to share their opinions, whether verbally or written on a piece of paper. My supervisor also notes that the students “developed a sense of community forming their own government.” When providing opportunities for student voice to be heard by all members of the classroom, a sense of community develops.

Overall, both units of study provide students with an opportunity to express their voice in the classroom and recognize that it is heard. Student interest is high when students see the connections to the things that they are interested in. The students retain information on the facts that they are curious about and that they had originally create questions about, as shown in the student interviews. Using a Questions Curriculums is a successful technique because it allows the students to see their questions from the start of a unit and keeps student interest high throughout the study. Students were able to answer eleven of their twelve questions and this shows them that they ask important questions as well.

The closure of this chapter leads to the final chapter, Chapter 5. Chapter 5 summarizes the findings analyzed in Chapter 4. Chapter 5 also discusses the limitations of the study. Furthermore, Chapter 5 presents what I have learned from the study, the future implications of this study and my recommendations for further research.

## CHAPTER 5

### Conclusion

This study looks at what happens in a self-contained learning disabled classroom when students are provided with an outlet for their voice. The students' voices are *listened* to and used to direct instruction. Using a Questions Curriculum makes it possible to hear what questions students have to say in regards to specific topics of study. This chapter discusses the importance of study's findings for educators and recommendations for implementing this or similar studies in other classrooms. But, before I discuss the conclusions and implications of this research it is helpful to note the limitations of this particular study.

### Limitations

Like many studies, my research faced several limitations. First, I was a student teacher, and as a student teacher limitations were immediately placed on me: I had someone else to answer to, my cooperating teacher. Although he was accomodating and supportive, it was at times difficult to get the things I wanted accomplished. I also walked into the classroom halfway through the school-year in January. Thus, I needed time to get to know the students and create an environment where they felt comfortable sharing their voice with me. Another limitation set upon me immediately was the splitting of my time between two classrooms. My time in the third through sixth grade learning disabled classroom was limited to no more than three and half hours a day. Depending on specials and programs at the school some days it was limited to one hour

of teaching time. These restrictions immediately impacted my study and prevented me from having complete access and control over my study.

When the students and I began our Making Our Own Government unit of study, the study was interrupted by the NJASK test. Twelve of the fifteen students were in the fifth and sixth grades and were required to take the test at the end of April. The test lasted for four days. The test affected the study because the students took the test at the time I was scheduled to be in the classroom. My schedule would not allow me to switch my times during that week so I lost four days to the NJASK testing. The week before the testing, I was able to complete some of the Making our own Government unit of study, but the students was preparing for the NJASK and that was more important than my study. Immediately upon the completion of the NJASK testing was my last day of student teaching. Unfortunately the Making your own Government unit of study was not completed in the classroom. Although it was not completed it still provided me with important evidence towards the positive impact of inviting student voice into the classroom.

#### Significance of the Data

So why then, is all of the data discussed and analyzed in Chapter 4 important? Student voice is the answer. The data provides evidence for the importance and necessity of encouraging and providing space for student voice in the classroom. Not only must students be offered outlets for their voice but it is imperative that teachers *listen* to those voices. Student voice is meaningless if it is not used to guide students' learning and to engage students. Student voice provides the teacher with a source or way in to encourage students in their academics. A Questions Curriculum encourages student voice in the

classroom. Introducing an instructional unit with a K-W-L chart helps to organize the thoughts and ideas of students. Using a Questions Curriculum, ask the questions and lessons are structured around their questions. And as students ask more questions throughout the unit, they gain many opportunities to visually see the impact of their voices. They, in a sense, drive the curriculum for it is their questions that frame the learning.

This study takes place in a Learning Disabled self-contained classroom. The results of this study in this classroom are powerful. All students have the capability to share their voice. It is up to us, the teachers, to make sure we encourage this. No matter the classroom setting it is imperative to provide space for student voice; in doing so we better understand our students and make their learning more meaningful and powerful.

#### What I Learned

Student voice is critical for an open classroom environment. Students need to feel comfortable in their surroundings and must be shown that everything they say is heard and matters. Like I have previously mentioned, a Questions Curriculum is helpful in finding a way to invite student voice into the curriculum. What I learned from this study is that there are more than one ways to implement a Questions Curriculum. During the Rainforest unit all of the lessons were guided by the twelve questions that students asked on the K-W-L chart. The Making Your Own Government used one question to continue the discussion about governments. Both were successful in listening to student voice, but in different ways. Neither one is more important or better than the other. The biggest difference was that the Making Your Own Government unit was created on a day by day basis. The discussions and work completed the day before led to the next lesson, a truly



constructivist approach. The lessons were not specific and were mostly discussions about making laws and the students led the lessons.

### Future Implications

Educators must provide outlets to enable student voice. Does this mean every unit of study should be centered on a Questions Curriculum? No, but every study of unit should be created thinking about students' voices. Educators must take the time to reflect upon what students have to say about their learning and learn from each experience they have with students. When teachers provide space and offer support for expressing student voice, teachers gain the confidence of their students and make them feel comfortable sharing their thoughts. They provide a positive environment and allow the classroom to become a community instead of just a place to learn. The classroom then becomes a place where potentially each person can learn from one another.

It must be made clear that using a Questions Curriculum is not the only way to encourage student voice. It is just one example of how to provide space in a classroom and how to use student voice. Using a Questions Curriculum is helpful early in the year when teachers and students do not know each other very well. This method allows the teachers to encourage the students to open up and feel free to share their questions and ideas. When the unit of study is then guided by the student questions, they can see that what they say actually has an impact on what they learn, thus encouraging students to share their voice through out the entire year.

Providing space for student voice in the classroom helps to develop a sense of community. After I thought about this in regards to the social studies unit, I wonder how it was developed during the science unit. I revisited that unit and reflected on student

work and behaviors. As students completed artwork of different animals in the rainforest, they hung them on a bulletin board in the hallway. The students worked together to create this rainforest scene (see Appendix H) and the first few times the class passed by it they commented on it and expressed pride. I also thought back to a conversation I had with two students who were upset by too many pictures being put onto the bulletin board. They were able to share their opinions with me, and eventually the rest of the class because I had willingly provided them a comfortable space in which to share. I think back to the Making Your Own Government when students wrote down their beliefs about laws and shared with the rest of the class:

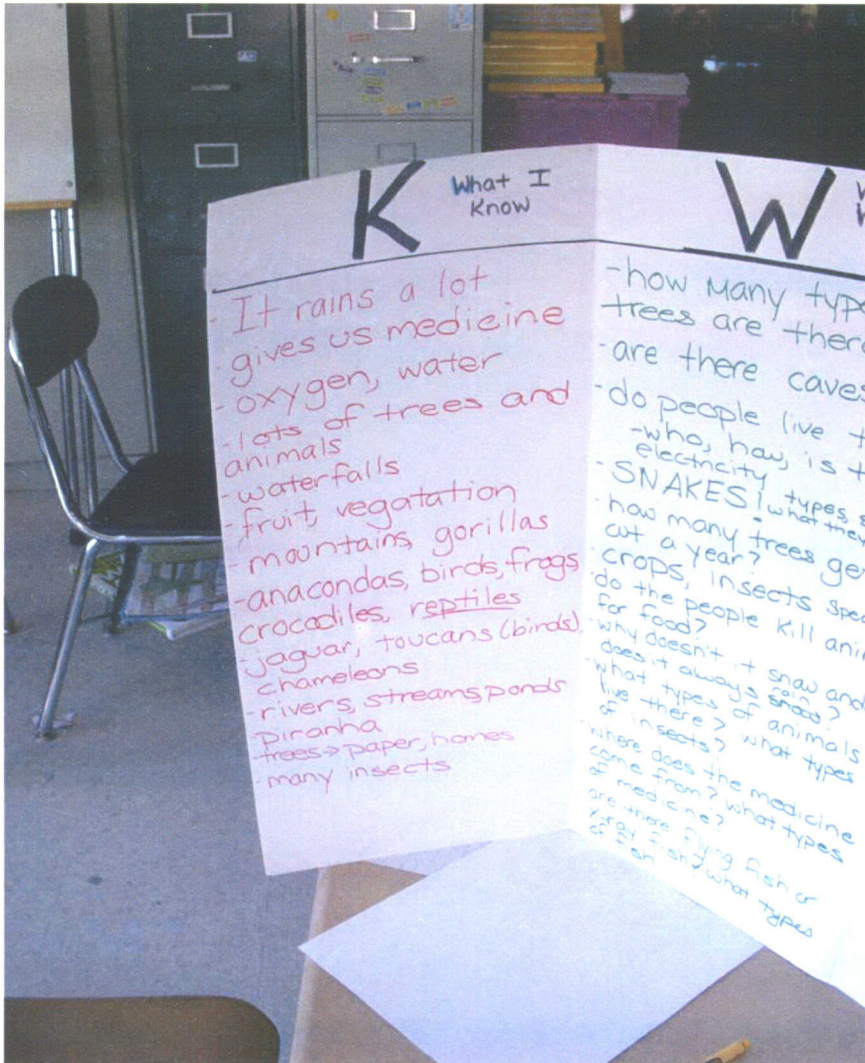
“I believe in god I believe that god will give home to poor or homeless people. I believe in kindness I believe that people will have warm kind heart and will stop killing. I believe that people shouldn’t have guns or knives. We believe in healthy animals should not be homeless. Children shouldn’t have a curfew it should be 12:00.”

Student voice is a powerful thing in the classroom. It is up to teachers to use it to create open environments where students feel comfortable sharing their voice. Teachers must also take the time to *listen* and then *reflect* on what students have to say to make it a better experience for all involved.

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APPENDIX A  
K-W-L CHART 1



# K

What I Know

- It rains a lot
- gives us medicine
- oxygen, water
- lots of trees and animals
- waterfalls
- fruit, vegetation
- mountains, gorillas
- anacondas, birds, frogs
- crocodiles, reptiles
- jaguar, toucans (birds)
- chameleons
- rivers, streams, ponds
- piranha
- trees → paper, homes
- many insects

# W

What I Want to Know

- how many types of trees are there
- are there caves
- do people live there
- who, how, is it
- electricity
- SNAKES! what types are there
- how many trees get cut a year?
- crops, insects
- do the people kill animals for food?
- why doesn't it snow and does it always rain?
- what types of animals live there?
- what types of insects?
- where does the medicine come from?
- what types of medicine?
- are there flying fish or ray fish?
- what types of fish?

Appendix B

Biome Characteristics worksheet

Name: Iyanna

Biome Characteristics

Rain Forest Biome

1. Climate Lots of rain, humidity, Warm  
Temperatures.

1a. Temperature temperature - cool  
tropical rain

1b. Precipitation temperature - about 100 inches  
tropical - 80-400 inches

2. Flora half of all the plants in the  
entire world are found in the rainforest  
bambo, eucalyptus tree, cocontree, coffee,  
sugarcane, bananas.

3. Fauna Type of Animals in the rainforest  
most are endangered species reptiles,  
amphibians, birds

4. Soil \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Appendix C  
Reading Comprehension A



Name Rebecca

Date \_\_\_\_\_

SCIENCE  
EXTENSION

## The Temperate Rain Forest

You already know about the tropical rain forests of Brazil. You may not know about a different kind of rain forest right on the mainland of the United States. It's the temperate rain forest of the Olympic Peninsula of Washington State.

The tropical rain forest is hot. The temperate rain forest is cool. However, both types of rain forests have one thing in common. They both get lots of rain. Washington's rain forest gets 370 cm (146 in.) of rainfall each year. In winter, rain pours from the sky almost every day. All this rainfall provides good conditions for the growth of huge trees and other plants.

The temperate rain forest grows in layers, as the tropical rain forest does. The temperate forest has three layers, though, instead of a tropical forest's four or five. The tallest layer of the temperate rain forest is the canopy. Giant conifers make up the canopy. In fact, these conifers are often much taller than the trees in the canopy of the tropical rain forest. Canopy trees in the temperate rain forest can grow to be 100 m (328 ft) tall—taller than a 25-story building. The bases of some of them are so big around that it would take 12 adults with arms outstretched to reach around one tree.

The branches of the canopy trees block out the sun. Underneath, it is dark, cool, and damp. Vines and air plants hang from tall tree branches. Underneath the canopy, smaller trees grow, too. They are mainly deciduous trees that reach 20 m (66 ft) in height. Their branches are often covered with green moss.

The lowest layer of the forest contains many young trees, bushes, and ferns. Fallen tree logs rot on the forest floor. The logs and the ground are covered with spongy moss.

Many animals live in the temperate rain forest, but not as many kinds as in the tropical forest. They include hawks, owls, woodpeckers, and squirrels that live in the trees. Mice, voles, chipmunks, snakes, and insects live in and around the fallen tree trunks. Such large animals as elk and bears roam the forest, too.



Use with pages E18–E29.

(continues)

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Name: \_\_\_\_\_

PAGE 2

The temperate rain forest ecosystem is very old. It has taken more than 1,000 years for the forest to look as it does. That is why it is called "old growth" forest.

Some of this temperate rain forest is protected. It is inside Olympic National Park. Trees within national parks cannot be cut down. However, much of this forest is on national forestland, which is not protected. Trees in national forests are often cut. In fact, most of this type of old growth forest in national forests has already been cut down.

The trees are cut because the timber is valuable, but cutting the trees destroys the forest ecosystem. Many people are working hard to save tropical rain forests. Temperate rain forests need protection, too.

### THINK AND WRITE

1. What do temperate and tropical rain forests have in common? How are they different?

Both forests get a lot of rain and have many trees. They have different numbers of layers. The temperate forest have deciduous trees.

2. How are forests on national parklands different from forests on national forestlands? How has that difference affected the old growth forest?

Trees in national parks cannot be cut down. National forestland are not protected so they will get cut down.

3. The United States government has encouraged nations like Brazil to preserve their tropical rain forests. Why might the people of Brazil think this is a strange request for the United States to make?

Appendix D  
Reading Comprehension B

Name Garrett Date \_\_\_\_\_

**CURRICULUM  
CONNECTION**

## Health

### RAIN-FOREST SECRETS

For centuries, people have used folk remedies to treat colds, heal wounds, aid sleep, and help with many other common problems. These remedies might come from the leaf of a certain plant that grows by a stream or the bark from a common tree. Recently scientists have found that many of these ancient cures do indeed work. Now researchers are looking for other plants that can be used to treat some of our most serious diseases.

One of the best places to look for plants that can be used as medicines is the rain forest. Here there are more kinds of plants and animals than any other place in the world.

One plant found in tropical rain forests is an evergreen known as the cinchona tree. The bark of this tree has been used for centuries to prevent malaria, a serious disease that affects many people in warm, damp regions around the world. In the past, people boiled the bark to make a tea that was used as a medicine. Today, cinchona trees are grown in Indonesia, India, and the Philippine Islands, and their bark is harvested to make quinine, a medicine used to treat malaria. Although quinine can now be made in laboratories, the natural product is sometimes more effective.

Knowing that many medicines are made in laboratories, you might wonder why plants from the rain forest are important. There are many reasons. For one, like quinine, some drugs that come from plants work better than the same drug made in a laboratory. Second, not all drugs that come from the rain forest have yet been made in laboratories. Third, a large number of folk medicines are still unknown to modern medicine. Fourth, and most important, many plants from the rain forest live nowhere else. If we allow the rain forest to be destroyed, these plants will be lost forever. Just as many animals are in danger of becoming extinct, many plants face the same danger.

But there is another reason to try to save the rain forest. We often forget that the rain forest is home to people who live much as they have for hundreds, if not thousands, of years. When the rain forest is destroyed in order to grow crops and graze cattle, the culture of these people is also destroyed. Just as Native Americans lost their land, their culture, and often their lives, people of the rain forest could also be destroyed. One way to help them survive is to employ them to find and collect plants. In this way, the

*(continues)*

Use with pages E18–E29.

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Name \_\_\_\_\_

bounty of the forest can be used to improve our lives as well as the lives of the people who live there.

**THINK AND WRITE**

1. Why is the rain forest a good place to look for plants that might be used as medicines?

The rain forest is a good place to look for plants that might be used as medicines because there are many different types of plants and animals living there.

2. Large numbers of drug companies make medicines. Why do we need plants from the rain forest?

The rain forest is a good place to look for plants that might be used as medicines because there are many different types of plants and animals living there.

3. How is bark from the cinchona tree used?

The bark from the cinchona tree is used to make quinine, which is used to treat malaria.

4. Suggest some ways we can obtain rain-forest plants to use for making medicines without destroying the rain forest.

Plant parts for research plants

5. Research other plants of the rain forest that can be used to make medicines. Make a list of the ones you discover, or write in more detail about the one that interests you the most.

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

APPENDIX E

*The Great Kapok Tree*

## The Great Kapok Tree

Who	What	Why
Two men entered the forest	One man pointed to the tree	They were going to chop down the tree
The mice	The smaller man started to chop down the tree	Disturbance
The boa constrictor	The smaller man started to chop down the tree	Because it was his home
Jaguars	Said not to chop down the tree	Because it was their home
A troupe of monkeys	Said not to chop down the tree	Because it was their home
Ants	Said not to chop down the tree	Because it was their home

Name: Carol / Nature.

APPENDIX F

Peoples of the Rainforest worksheet



## Peoples of the Rainforest

TU

1. What types of pets do the people of the rainforest keep?

frogs, baby, birds, toucans,  
parrots, macaws, chickens monkey,  
pigs, alligators, snakes

2. Why do the people not have walls on their homes?

It doesn't get cold here and we  
don't need much privacy at all

3. Do the children that live in the rainforest play games or with toys that are similar to those you play with? What do they play with?

yes swimming girls like  
to play with their handmade dolls

4. What types of foods found in the rainforest do are eaten? What ways may food be cooked?

They eat deer monkey birds. They make  
bread taprac cereal for manioc. boiling  
barbecuing smoking

5. How do the people in the rainforest travel?

feet and our canoes

Appendix G

K-W-L Chart

# K

What I Know

- It rains a lot
- gives us medicine
- oxygen, water
- lots of trees and animals
- waterfalls
- fruit, vegetation
- mountains, gorillas
- anacondas, birds, frogs
- crocodiles, reptiles
- jaguar, toucans (birds)
- chameleons
- rivers, streams, ponds
- piranha
- trees → paper, homes
- many insects

# W

What I Want to Know

- how many types of trees are there?
- are there caves?
- what do we get?
- do people live there?
  - who, how, is there electricity?
- SNAKES! <sup>types sizes</sup> <sub>what they eat</sub>
- how many trees get cut a year?
- crops, insects <sup>specific types</sup>
- do the people kill animals for food?
- why doesn't it snow and why does it always snow?
- what types of animals live there? what types of insects?
- where does the medicine come from? what types of medicine?
- are there flying fish or X-ray fish? what types of fish?

# L

What I Learned

- there are poisonous tree frogs
- gum comes from the rainforest
- you can boil bark to make medicine
- there are nice birds and reptiles
- a lot of land gets cut down everyday
- snakes hide in the trees and vines to catch their prey
- cocoa beans, chocolate, bearded pig
- there are 4 layers - canopy, emergent, understory, and forest floor
- different fauna (animal) and flora (plants)
- people kill animals for food
- always wet there
- river dolphins in the forest rivers

05.29.2008 17:16

Appendix H  
Rainforest Bulletin Board



# Rainforest

	Tropical Rainforest	Temperate Rainforest
<b>Climate</b>	rainy, warm, moist, and wet	cool and wet
<b>Temperature</b>		
<b>Precipitation</b>		
<b>Flora</b>		
<b>Fauna</b>		
<b>Soil</b>		

*Handwritten notes and drawings are scattered throughout the page, including a grasshopper at the top left, a colorful striped shield-like shape at the top right, and a drawing of a grasshopper on a leaf at the bottom right. Marginal notes include 'Goroo likes bark vultures', 'the falls', 'the world of the rain forest', and 'the world of the rain forest'.*

APPENDIX I

Student Drawn Picture – River Dolphin

