#### ABSTRACT

An abstract of the thesis of Shantaya Ijya Rao for the Master of Arts in Teaching English to Speakers of Other Languages presented March 16, 2007.

Title: Reflections: an inside look into teacher decision-making

Everyday teachers make decisions in the classroom. The decisions teachers make all impact students' learning. Teachers are the only ones who know why a particular decision was made. Researchers have attempted to understand how teachers think in regards to their decisions. Furthermore, researchers have used reflection as a tool to facilitate teacher problem-solving. This research shows how reflection can be a window into understanding teacher decision-making. This research utilized two teachers' daily reflections over the course of one academic term (10 weeks) to examine the types of decisions the teachers make, the similarities and differences of the decisions for each teacher, and the reasons each teacher provides for those decisions.

The purpose of this research was to investigate the types of decisions and reasons for decisions the teachers of the Portland Community College and Portland State University Lab School make in their classes. This was a qualitative research study that utilized the grounded theory approach to categorize and analyze the data.

The two teachers of the Lab School were the participants of this study. The study found that the Lab School teachers make decisions without stated reasons and decisions with stated reasons. The study also found that the Lab School teachers made decisions about various topics or categories. There were similarities and differences among the decisions that these two teachers made. The reasons for the decisions they made provided the researcher more insight into why these teachers made the decisions they did. The findings of this research can help other educators to examine and understand their own decisions and reasons for their decisions.

# **REFLECTIONS:**

# AN INSIDE LOOK INTO TEACHER DECISION-MAKING

by

# SHANTAYA IJYA RAO

A thesis submitted in partial fulfillment of the requirements for the degree of

# MASTER OF ARTS in TEACHING ENGLISH TO SPEAKERS OF OTHER LANGUAGES

Portland State University 2007

# Acknowledgements

I would like to acknowledge Kathy A. Harris for her time and availability to serve as my thesis advisor and for her unending motivation and support to me during my thesis writing process; I acknowledge Kim Brown and Dilafruz Williams for their insight, time, and availability to serve on my thesis committee. I would also like to acknowledge God, my family, and friends for loving and supporting me throughout this process.

# **Table of Contents**

i

	List of Tables	
iv	List of Figures	V
I.	<ul><li>Chapter I: Introduction to Thesis</li><li>a. The Developing Teacher</li><li>b. Research Purpose</li></ul>	2 5
Π.	<ul> <li>Chapter II: Literature Review</li> <li>a. Introduction</li> <li>b. Decision-making</li> <li>c. ESL Teachers</li> <li>d. What is knowledge?</li> <li>e. Domains of teacher knowledge</li> <li>f. Researching teacher knowledge</li> <li>g. Acquiring knowledge <ul> <li>i. Experience</li> <li>ii. Reflection</li> </ul> </li> <li>h. Research question</li> <li>i. Conclusion</li> </ul>	7 9 11 13 16 18 18 18 23 25
Ш.	Chapter III: Methodology a. Introduction b. The Study i. Participants ii. Instructional setting iii. Debrief setting iv. Debriefs v. Wait time c. Methods Used i. Qualitative research d. Strategies of Inquiry i. Phenomenology ii. Grounded theory e. The researcher's role f. Ethical considerations g. Data collection strategies h. Data analysis procedures	26 26 27 28 29 29 30 30 30 32 32 34 35 37 37 39

	i. Pilot study	40
	i. Analysis	43
	i. Reasons for choosing	44
	analytical process	
	ii. Step-by-step process	45
	iii. Terminology	47
	j. Individual analysis	49
	i. Main categories	49
	ii. Creating sub-categories	51
	k. Contrastive Analysis	53
	I. In-depth Analysis	53
	m. Reliability	54
	i. Peer review: divide transcript	55
	into utterances	
	ii. Peer review: categorize	55
	decisions without reasons,	
	decisions with reasons, and	
	non-decisions	
	iii. Peer review: sub-	55
	categorization	
IV.	Chapter IV: Results & Discussion	
	a. Introduction	57
	b. Individual Analysis	57
	i. Joy	57
	ii. Lucie	57
	c. Creating Descriptive Categories	58
	i. Decisions without reasons: Joy	58
	ii. Decisions without reasons:	60
		(2)
	iii. Decisions with reasons: Joy	63
	iv. Decisions with reasons: Lucie	66
	d. Non-decisions	69 70
	e. Contrastive Analysis	70
	f. In-depth Analysis	72
	i. Joy	75
	ii. Lucie	82
	iii. Discussion	86
V.	Chapter V: Conclusion	
	a. Answering the research question	87
	b. Research Discussion	88

c.	How teachers can use findings from	92
	this research	
d.	Limitations	94
e.	Suggestions for further research	96
f.	Concluding comments	98
Re	eference list	101
		101

# List of Tables

Table 1: Characteristics of Qualitative Research	31
Table 2: Miles and Huberman vs. my research	39
Table 3: Decision Matrix	40
Table 4: Categories + Examples: Joy	50
Table 5: Categories + Examples: Lucie	51
Table 6: Decisions without Reasons - Creating Categories (Joy)	59
Table 7: Decisions without Reasons - Creating Categories (Lucie)	60
Table 8: Decisions with Reasons - Creating Categories (Joy)	64
Table 9: Decisions with Reasons - Creating Categories (Lucie)	67
Table 10: Non-Decision Examples for Joy and Lucie	70
Table 11: Decisions with Reasons: Joy & Lucie's similar categories	71
Table 12: In-Depth Analysis: Joy's & Lucie's decisions with reasons	74

# List of Figures

Figure 1: Figure 1: Dividing the Transcripts into Utterances	46
Figure 2: Total utterances by category for Joy and Lucie	58
Figure 3: Joy's categories of decisions without reasons	60
Figure 4: Lucie's categories of decisions without reasons	62
Figure 5: Joy's categories of decisions with reasons	66
Figure 6: Lucie's categories of decisions with reasons	69

#### **CHAPTER I**

## **INTRODUCTION TO THESIS**

As the media is often the source of our awareness for what is taking place in the world, films like *Being John Malkovich, The Secret,* and *What the BLEEP do we know?* demonstrate society's hidden desire to look within and examine itself to bring about progress. These films carry us on a journey into the cognitive domain of self and subtly and not so subtly expose the individual's yearning to understand more about how he<sup>1</sup> thinks. These films communicate the need to develop new perspectives in the way we think about the events in our lives and how our thoughts shape the way we live.

Imagine for a moment the *possibility* of stepping into the mind of a teacher to discover the manner(s) in which his knowledge serves him in the classroom and the knowledge *we* could gain from having access to his way of thinking. Just as these films provide a window into examining our approaches to life, so the Lab School<sup>2</sup>—with the plethora of audio-video data of two English as a Second Language (ESL) teachers—provide practitioner-researchers, like myself, a window into examining and re-shaping our approaches to teaching.

<sup>&</sup>lt;sup>1</sup> I chose to use masculine pronouns here because I want to show a diversity of sex in the teaching profession. I will use feminine pronouns throughout the rest of the study because the subjects of the study are female.

<sup>&</sup>lt;sup>2</sup> The National Labsite for Adult ESOL (known locally as the Lab School) is supported, in part, by grant R309B6002 from the Institute for Education Science, U.S. Department of Education, to the National Center for the Study of Adult Learning and Literacy (NCSALL). The Lab School is a partnership between Portland State University and Portland Community College. The school and research facilities are housed at the university while the registration, curriculum, and teachers of the ESL students are from the community college.

## **The Developing Teacher**

The practice of teaching is a complex and integrated art complete with both delightful and challenging experiences. The development of this art begins with an individual's initial experiences in his or her family unit, moves through his or her observational experiences as a learner, and progresses through formal training and a lifetime of teaching experiences. As they move through the teaching process, teachers are often faced with numerous decisions. Decisions may be in response to a request (for example, deviating from a plan to answer a learner's question), or in response to non-verbal cues from the learners (i.e. – noticing that students are confused based on the looks on their faces).

Regardless of the type of decision, all decisions work together to formulate the ultimate teacher duty: to create an environment in which the learner can thrive and grow as he or she moves through the various stages of learning. Educational philosopher, John Dewey (1938), expresses teacher duty in a most eloquent way when he states:

> A primary responsibility of the educator is that they not only be aware of the general principle of the shaping of actual experiences by environing conditions, but that they also recognize in the concrete what surroundings are conducive to having experiences that lead to growth. Above all, they should know how to utilize the surroundings, physical and social, that exist so as to extract from them all that they have to contribute to building up experiences that are worth while (p. 40).

> > 11

One major part of the environment and the learner's experience is the teacher. Each day he or she invites the students into the classroom, conducts the lesson, and makes hundreds or thousands of decisions that all impact the learner experience. The majority of these decisions occur in fractions of a second. Therefore, the duty of a teacher includes not only understanding his or her external environment, but also understanding his or her own internal environment – his or her beliefs and decisions – to feel confident that the decisions he or she is making best benefit the students.

The sheer quantity of decisions that teachers make in such a short amount of time demands that teachers be good decision-makers. To be a good decisionmaker requires the ability to comprehend or foresee the impact a decision will have on the recipient. Becoming a good decision-maker also requires the ability to understand the purpose of a decision. The purpose of a decision is the reason which is drawn from a teacher's knowledge base.

A teacher draws on his or her knowledge base to make an appropriate decision. The knowledge base is made up of various domains of knowledge, including areas of instruction: curriculum, pedagogy, content, learning style, learner educational level, language level, language and cultural background, classroom management, resources, goals, purposes, and values of education (Shulman, 1987; Wilson, Shulman, & Richert, 1987; Carter & Doyle, 1987). The domains of knowledge also contain beliefs relating to the different areas of instruction that teachers build through experience: experiences as a learner himor herself, knowledge enhancing practices such as mentoring, teacher development workshops, collaborative teaching, and reflective teaching. (e.g. Akyel 2000; Crookes 1997; Vanpatten 1997; Woods 1996).

For years, practitioners, theorists, and researchers have been investigating teacher beliefs (e.g. Armour-Thomas 1989; Artzt & Armour-Thomas 1999; Beattie 1995; Lee 2003; Mangubai, et al. 2004). Teacher belief includes but is not limited to ideas underlying expressed thought or decisions. Teacher belief originates in the domains of knowledge that teachers carry as they enter the experiential realm of instruction. It is from the domains of knowledge that they receive the information necessary to make appropriate decisions be they curricular, learner oriented, or classroom oriented. The domains of knowledge supply the teacher with the procedure(s) (the how) for accomplishing the concrete tasks that address learner needs and the reasoning behind the task (the why) so that they understand the reasons for their decisions.

Past researchers have accessed teacher beliefs in different ways. Some researchers have used particular thought-inducing tactics such as think aloud protocols<sup>3</sup> or stimulated recall interviews (e.g. Ericsson & Simon 1998; Aicinena 2000). Others have indirectly gathered beliefs by having teachers engage in reflective techniques (e.g. Phakiti 2003). Reflection has mostly been used as a

<sup>&</sup>lt;sup>3</sup> A think aloud protocol is a thought-inducing technique that requires the participant to verbally express his or her thoughts as he or she conducts an activity.

way in which teachers directly develop or improve their practice because it allows them the opportunity to think through problems. Although important in helping teachers work through their own classroom problems, reflection can also be used as a window into examining teacher decisions in order to better understand teacher decision-making.

## **Research Purpose**

For this research, reflection will be viewed as a window into teacher decision-making. It is not the goal of this research to explore reflection itself. Rather, it is the examination of the content of reflection, specifically teacher decisions. Learning about decisions from teachers is a somewhat elusive task as decisions are rather intangible concepts. However, reflections collected through audio recording allow for a degree of tangibility. Through audio transcripts, the decisions can be stilled and segmented into physical pieces ready for analysis.

The teachers at the PCC-PSU Lab School record daily audio reflections after their classes. Through their audio reflections, they provide other teachers and researchers a glimpse into their own personal views on and experiences in teaching. As teaching is a highly personal art, the Lab School teachers have exposed themselves to a large degree by making their reflections public. The purpose of this research is to describe the decisions of two different experienced ESL teachers as reflected in their audio recorded daily debriefs. My aim is to examine what types of decisions these two teachers make and the reasons they provide for those decisions. I want to see what new insights on decision-making these teachers share for the sole purpose of supporting teacher decision-making. The goal of this research is not to evaluate their teaching or ability to reflect, but to use their reflection as a window into teacher decision-making.

The overall objective of this research is to add to the field of teacher development. I specifically want to reveal the ways in which reflective data such as these can be utilized to help other teachers develop their own decision-making skills. In addition, I hope to assist teachers in gaining a better understanding of themselves as teachers that allows for an awareness of and openness to different teaching perspectives. In relation to the research methodology, it is with hope that other teachers and members of the field may find useful this specific technique for examining classroom decisions and learning about teaching.

#### **CHAPTER II**

## LITERATURE REVIEW

# Introduction

In this section, I review the past research in three areas: teacher decisionmaking, teacher knowledge, and reflection. I discuss the types of decisions teachers make on a daily basis and the importance for teachers to be good decision-makers. From there, I discuss the idea of knowledge as it pertains to decision-making as well as how teachers acquire knowledge – through experience and reflection. I then describe how past researchers have utilized reflection to study knowledge and build knowledge. Finally, I explain how my research serves the field by filling an area of research that has not been explored. I end with the question that is guiding this research.

## **Decision-Making**

In the context of teaching, decision-making begins in the planning process (the curriculum and lesson plan) and carries on through implementation and continuation of subsequent lessons. Decisions can be as simple as choosing to write directions on the board to supplement oral directions or asking a student to help pass out worksheets. Decisions can also be more complex such as deciding to spend a longer amount of time on one chapter because students do not understand a concept fully. The lesson or curriculum would thus be affected. No matter how large or small a decision, the nature of instruction necessitates good decisionmaking.

Areas that teachers must consider when making decisions are: (1) the audience they are teaching (age, sex, gender, culture, race, language, etc.); (2) the cultural and familial backgrounds of their students; (3) the physical and behavioral needs of the students; (4) the philosophy and beliefs of the administration; (5) the range of learning and teaching styles; and (6) the technical facilities available (Kelehear & Davison, 2005).

Teachers not only have to consider these factors when making decisions, but they are expected to (1) keep up-to-date on new and developing issues in the field of education, (2) abide by the rules of the administration in regards to what the administration believes is most important for the students, and (3) know how to balance the administrative philosophy with their own personal teaching philosophy. On a personal nature, teachers must be well-adaptive and utilize their critically reflective skills in order to make appropriate decisions when facing challenge. Critical reflection is the ability to question assumptions and take a look at actions, thoughts, and decisions from an observational standpoint. It involves weighing both sides of a decision prior to making it and doing that in a very short amount of time. These elements happen almost simultaneously, and can be conscious or unconscious.

#### **ESL Teachers**

One critical factor in examining decisions that teachers make is the fact that not all teachers have the same knowledge base and not all teachers make the same decisions. This is due to both the diversity in classroom environment and the personal experiential foundation from which the teacher operates.

For example, a teacher of White, American, high school age students will not necessarily face the cultural implications that an ESL teacher of a culturally mixed student population must face. Furthermore, an ESL teacher of a culturally mixed student population also faces different challenges than an ESL teacher of mixed-level mono-cultural students. The teacher of a mixed student population must consider how to address the language differences that come with each culture. The teacher of the mono-cultural group will not need to consider the variability in language, but will have to consider the mixed-ability levels of his or her students. Moreover, the specific type(s) of knowledge for making decisions within the classroom and the reasons for the decisions will vary from teacher to teacher based on his or her assumptions, experiences, values, and beliefs about what and who they are teaching.

When it comes to teachers, ESL teachers do not necessarily face more significant decisions than teachers of American-raised students. Rather, because they are continuously interacting with students from a variety of backgrounds, ESL teachers must have a greater knowledge base about linguistic and cultural differences, as well as the psychological differences that come with the varied cultures in which ESL students are raised. Not only must they consider the customary differences that American teachers consider (i.e.—individual family culture, sex, race, gender, age, educational background, learning challenges, learning styles, etc.), but they must also consider cultural diversity, variations in discourse style, language background, etc.

These other factors present the requisite for ESL teachers to be good decision makers in all areas of instruction because these factors, in some form or another, are a part of the learners' repertoires of experience and may or may not impact the learning experience inside the classroom. Therefore, the ESL teacher must consider or be aware of these factors because he or she may need to adapt aspects of the lesson or his or her teaching style to meet the needs of the learners.

In this research, I hold that awareness about the types of decisions we make – as teachers – and the reasons for which we make those decisions is vitally important to learner success. The reason for which a decision is made is the foundation that supports the decision. Therefore, understanding the decision as well as the reason is important for learner and educational success. Prior to understanding how knowledge supports a teacher's classroom decisions, however, it is important first to examine what knowledge is.

#### What is knowledge?

There has been continued debate centered on the idea and understanding of *knowledge*. In the past, knowledge was, in one view, seen as something static that could be polished and developed into an attainable truth (Fenstermacher and Sanger, 1998). With the defeat of this belief came an inquiry into whether or not "there is knowledge that is in some sense transcendent, ... that possesses the characteristics of ... truth" (p. 475). In their analysis of John Dewey's approach to the "Problem of Knowledge<sup>4</sup>," Fenstermacher and Sanger summarize the understanding of the two schools of thought: sensationalism and rationalism. The sensationalist, they explain, sees that knowledge comes from our sensory experiences in the world outside ourselves. Furthermore, the rationalist sees that knowledge comes from systematically engaging the mind. In his reaction to the two schools of thought, Dewey—they explain—holds that there is no longer any added value in the disputes between the two schools of thought. Rather, they contend that it is not the "possibility of knowledge, [but] the use we make of it" that is important (p. 470).

The idea of knowledge varies in context. Thus, what may be understood as knowledge in one context may not fit into the idea of knowledge in another context. It is exigent to describe knowledge in a definitive form, but it is possible to understand knowledge through the context of *now*. In other words, knowledge

<sup>&</sup>lt;sup>4</sup> Fenstermacher & Sanger (1998) state that the problem of knowledge, according to Dewey, is "what is knowledge and how is it possible?"

is malleable and conforms to the context in which it finds itself, meaning that we bring to the context of our experience the knowledge we have gained from past experiences and input and utilize our past knowledge in a way that conforms to the present contextual experience.

Take for example an ESL teacher who has primarily experienced teaching Mexican immigrants in American community ESL classes and who is in the process of transitioning to teach English as a Foreign Language (EFL) in an Asian country. Upon initial interaction, she notices a more reserved conversation style among her new Asian students. She would—from her prior experience and based on her initial interactions with the students in her new teaching environment deduce that the approaches she used and expectations she had in her prior teaching environment may not so effortlessly work in her new teaching environment. Thus, the knowledge she gained about culture, conversation style, and fortitude in employing conversational activities in teaching the Mexican immigrants would be transferred and utilized in a new way in the new teaching environment. This particular piece of knowledge would be utilized to the extent of informing a new piece of knowledge: that conversational style varies from culture to culture and that her expectations must also vary from culture to culture. This knowledge would be utilized in helping the teacher reach the decision, in this case, not to expect conversation to flow as freely as it did with her Mexican students. The knowledge gained from her past experience would, thus, impart knew knowledge and help her to develop a new approach for creating ease of dialogue among her more reserved Asian students.

Fenstermacher and Sanger (1998) assert that, "one does not gain knowledge simply by being an observer or a participant, by making things happen or having things happen to oneself. The simple having of an experience may be a sufficient basis for the forming of a belief or of an opinion, but it is not sufficient for laying claim to knowing or having knowledge" (p. 477). Having an experience in the classroom that lends itself to reflection, analysis, and/or a newly formed approach is knowledge in and of itself for it imparts truth (and utility) to the given circumstance as seen in the above example.

Knowledge is not a static entity; rather it is an inseparable part of the whole experience. As defined by Encarta World English Dictionary (online version, 2006), knowledge is the "general awareness or possession of information, facts, ideas, truths, or principles. It is clear awareness or explicit information, for example, of a situation or fact." For this research, knowledge is seen as an idea or belief built through an experience. The experience is both the situation in which pre-existing knowledge is used and the circumstance in which new knowledge is formed.

# **Domains of Teacher Knowledge**

By design, teaching necessitates knowledge in various arenas. In addition to the specific subject of instruction, the practice of teaching naturally summons background awareness in areas such as: psychology, sociology, language, and communication. As stated by Stern (1983):

Psychological ideas and psychological terms are pervasive in present-day thought and it is therefore not surprising to find that language teaching theory and practice, too, are permeated by psychological thinking which can be traced to various branches of psychology and to different schools of thought (p. 291).

Teaching not only necessitates an understanding of these disciplines, but it also calls for an awareness of how these disciplines interact and contribute to our knowledge base as teachers.

In his discussion on the domains of teacher knowledge, Shulman (1987) explains that a teacher must understand the *content* of what he or she is teaching, in addition to possessing *general pedagogical knowledge*, which includes, but is not limited to skills in classroom management and organization. Teachers must also have a grasp of the resources and programs that will serve their students (*curriculum knowledge*), as well as their own personal understanding of what to teach and how to teach (*pedagogical content knowledge*). Finally, they must have an internal repertoire of knowledge about (1) the learners and their characteristics, (2) the educational context within which they teach, and (3) the goals, purposes, and values of education.

Within these domains of knowledge, teachers must sift through the information available, transforming it to fit the needs of the individual class. They

must accurately prepare, represent, select, and tailor the content to the characteristics of classroom environment, integrating the content with their own personal instructional characteristics (i.e.—discipline, humor, questioning, management, etc). Once the content of instruction is implemented, teachers move through the stage of evaluation in order to check for student comprehension and assess their own functioning as a teacher (Shulman, 1987; Wilson, Shulman, & Richert, 1987; Carter & Doyle, 1987; Day, Calderhead, & Denicolo, 1993).

From evaluation, teachers are able to reflect on, analyze, and reconstruct their own performance and the class's performance. The evaluation stage usually takes place inside the teacher's mind. For example, while writing or re-writing the next day's plan, he or she may mentally review the flaws of the prior lesson and adjust or develop his or her original ideas for the next lesson based on that prior experience.

The process of reflection leads teachers to come to new understandings "of purposes, subject matter, students, teaching, and self" (Shulman, 1987, p. 15). These new understandings then come to enlighten and/or transform a teacher's existing body of knowledge. The cycle, as described above, perpetuates as the teacher continues to experience teaching and access and utilize the information at these different stages. This is a naturally occurring process. Teachers teach, experience, evaluate, reflect, and utilize knowledge without needing guidance.

#### **Researching Teacher Knowledge**

Since the early 1900s, teacher knowledge has been an area of interest for learning more about how teachers think. Proponents and researchers have investigated teacher knowledge in various ways. Some researchers have utilized approaches such as narrative inquiry (Beattie 1995); pre-active, post-active, and stimulated-recall interviews (Artzt & Armour-Thomas 1999; Mangubai, et al. 2004); and systematized approaches where participants are consciously and actively engaged in some kind of thought-inducing activity (Lee 2003).

Other researchers have employed think-aloud protocols in order to gather a more profound understanding of how teachers think (Ericsson & Simon 1998). In think-aloud protocols, researchers ask participants to talk out loud as they complete a task designed by the researcher. Some researchers have taken this method further by asking participants to "analyze and explain their own task behavior" (Ericsson & Simon, 1998, p. 184). Still others have engaged in similar thought-generated activities (Aicinena 2000). For example, in order to study the thoughts behind behavior monitoring, Aicinena (2000) asked his teacher participant to express his thoughts every two minutes through a radio transmitter. Phakiti (2003) employed a cognitive-metacognitive questionnaire, in addition to using retrospective interviews, to gather a sampling of participant thoughts.

Although there are various advocates for research on teacher knowledge, there are similarly sufficient skeptics in the field (Ericcson and Simon, 1980; Nisbett and Wilson, 1977). The arguments have been held against the plausibility of judging higher order thought processes. Skeptics have questioned the ability to access these thought processes and have indicated that reports or research on the higher order thought processes may simply be casual conclusions.

It is interesting to note, however, that the skeptics in the area of teacher knowledge are referring to two "commonly used tools for eliciting teachers' thought processes—policy capturing and process tracing" (Armour-Thomas, 1989, p. 34). Both of these tools are methods that require teachers to engage in conscious research-driven activities such as: (1) watching a video recording of a simulated class and making judgments about a particular feature later to be recorded on a Likert scale (*policy capturing*), or (2) think aloud procedures, (3) retrospective interviews, or (4) stimulated recall (*policy tracing*).

It is interesting to note that the researchers in the above studies demonstrate not only a way of extracting teacher knowledge, but also have engaged the participating teachers in reflective techniques. Reflection has both been used as a way of extracting knowledge (i.e. when researchers employ the tool as in the above studies), and as a way of building knowledge (i.e. when reflection is utilized as a personal tool by the reflecting teacher).

## Acquiring Knowledge

# Experience

In the above section, the researchers were focused on extracting thought to learn more teacher knowledge. Other researchers and practitioners have been investigating how teachers acquire knowledge in order to enhance the educational and professional development arenas (e.g. Akyel 2000; Carter & Doyle, 1987; Crookes 1997; Van Patten 1997; Woods 1996).

Specifically within the realm of education, researchers have illustrated that a teacher's knowledge base is built from external influences such as: experiences with school administration, classroom texts, teacher education programs, personal learning experiences, and experience with students of various cultures (Crookes, 1997; Freeman & Freeman, 1994). The external influences combined with the set of values and beliefs that the individual carries all work to form an internal paradigm by which the teacher is governed when functioning within his or her classroom. Another way in which teachers build knowledge is through reflection (Anderson, 2002; Brookfield, 1995; Dewey, 1938; Immel, 1992; Korthagen, 1993; Shulman 1987).

# Reflection

In the broader, original sense, reflection has been defined as "the 'mirroring' of something" (Korthagen 1993). Korthagen (1993) explicates that "[t]he idea of a mirror is helpful, because it makes clear that there are different

mirrors: a rational one, which is often used in teacher education, and other mirrors, which may be more suitable for reflecting non-rational processes" (p. 321). Reflective practice has also been defined as a method that connects thought and action with reflection. It also involves thinking about and critically analyzing one's actions with the purpose of enhancing one's professional practice (Immel, 1992).

Schön (1987) discusses two different types of reflective practice: (1) *reflection-in-action*, simultaneous reflection and action while working, and (2) *reflection-on-action*, looking back on the action or work that occurred. Furthermore, Richards (1990) introduces the terms self-monitoring and self-observation as critical thinking opportunities for teachers to reflect on their teaching. For the purposes of better understanding and monitoring one's behavior, Richards (1990) defines self-monitoring as observing, evaluating and managing one's own behavior systematically (Cited in Armstrong & Frith, 1984, p. 118). Hatton and Smith (1994) state that reflection is principally concerned with finding answers to genuine problems. For this research, I define reflection as a process by which an individual thinks about present or past actions, thoughts, behaviors, etc. in order to develop a better understanding of the present circumstances, conditions, and/or knowledge base.

The act of reflecting allows for the development of new approaches, new ways of thinking, or new decisions to enhance teaching because we are stepping out of the role of practitioner and stepping into the role of observer (Akyel 2000, Carrasquillo 1994, and Guhde 2003). Thinking back on our own practice can lead to an alternate approach to teaching or a dispelling of old stereotypes or beliefs. Sometimes it may simply serve as an outlet to think through implementing a new activity or it may serve as a means to process the reasoning behind the implementation. Reflection can be used in collaboration with other teachers, it can be verbal or written, or it can be a solitary reflexive measure to learn about one's own teaching. While we are reflecting (and questioning our practices) we are allowing for new knowledge to develop through our critical lens.

Akyel (2000), for example, provided her participants the opportunity to engage in collaborative reflection to aid with teacher decision-making. Within the experience of collaboration, her participants discovered new approaches to the problems they were facing in their classrooms. For instance, one of the participant teachers was requested by her students to provide more grammar practice. Akyel illustrates that her participant teacher's instinct to steer away from more explicit grammar practice was due to that teacher's experience with recent readings in the field of English Language Teaching (ELT). That particular teacher's knowledge base was informed by the literature she had read. However, in order to keep with her base of knowledge and illustrate to her students her belief that more grammar practice will not lead to faster language acquisition, the teacher developed the strategy of using a friendlier approach to teaching. She decided that, in order to help the students adjust to her communicative approach to teaching, she would bring in tea for the students to access during the class. The results of this strategy proved successful. The teacher discovered that her students seemed more relaxed. Furthermore, as the inquiry into her teaching progressed, she eventually gave the students more grammar practice for homework. The second participant teacher in this study reached similar conclusions.

Carrasquillo (1994) found that in order to teach different communicative skills, some teachers (after reflecting on instruction-related issues such as: philosophy of teaching, learner development, teaching strengths/weakness, etc.) decided to use new strategies such as: (1) using pictures to introduce vocabulary, (2) asking the students to read silently or aloud, or (3) using physical actions or gestures. In Guhde's (2003) study, after discovering and reflecting on their students' low written and verbal communication skills and the high attrition rate of the ESL students in the nursing program, the teachers implemented a one-on-one tutoring program to aid their students.

The above studies demonstrate how reflection is used to build teacher knowledge. The teachers experience a problem and find a solution to the problem by reflecting. The finding of the solution to the problem is the interaction between the existing knowledge base, the classroom experience, and/or external stimuli (e.g. literature). This interaction imparts new knowledge to the teachers. The new knowledge results in a decision or a solution to the problem in the above cases.

It would be interesting to understand what type of decision the teachers in the above studies made (i.e. – what aspect of teaching was the decision about? Why did the teacher make his or her decision? And, what knowledge does the teacher have that assisted him or her in reaching this decision?). Understanding the types of decisions and the reasons for those decisions is useful because prior to understanding why a teacher makes decisions, we need to understand what types of decisions they do make. After understanding the types of decisions, then it is possible to examine why they make such decisions and ultimately understand if their decisions are meeting the needs of the students (i.e. – if they are reaching their purpose). Furthermore, studying why teachers make certain decisions sheds light on (exposes to a degree) another teacher's knowledge base. This knowledge base is useful both to the teacher making the decision and to other observing teachers.

In the following research, I propose utilizing reflection as a window into teacher decision-making for the purpose of (1) understanding what types of decisions teachers make and (2) why they make their decisions. The second purpose aims to provide more knowledge about the participant teacher's decisions and decision-making in general because participant teachers' knowledge is at the core of the 'why' (their reasons for the decisions they make).

# **Research Question**

In this study, the participants were asked to record their thoughts after each class, however they were not requested to discuss any particular element of instruction. Nor were they asked to highlight or evaluate a particular event that occurred in the classroom. No outside researchers or investigators probe the teachers for specific features or judgments about their teaching and the teachers do not reflect on any simulated vignettes or recordings as have been administered in prior studies. The data collected was solicited, but the content (the information the teachers discussed) was not so strictly controlled. They reflect orally on actual lessons of the day – their own lessons – completely on their own.

This research is a 'marrying' of two particular areas of research: *reflection* and *teacher knowledge*. In the area of teacher reflection, researchers have primarily investigated how reflection can aid teacher problem-solving (Akyel 2000; Carrasquillo 1994; Guhde 2003). Furthermore, in the area of teacher knowledge, researchers have collected teacher knowledge by employing thought-inducing tasks (i.e. – a task that would require a teacher to share his or her thoughts – or knowledge – on a classroom issue). In this research, reflection will be used as a window into examining the types of decisions teachers make and the reasons they give for those decisions (teacher knowledge). The researcher will not employ any thought-inducing tasks, nor will the researcher investigate how reflection is used.

With the awareness that past researchers have utilized more active thought-generating techniques to study knowledge, this research will examine teacher decision-making by describing, analyzing, and interpreting *self-produced* reflections. The goal of this research is to explore the Lab School teachers' decisions by analyzing the types of the decisions and the reasons for those decisions in the reflections the teachers record. The question guiding this research is:

> Given the opportunity to reflect individually, what types of decisions do the Lab School teachers make in their classes and what reasons for the decisions do they provide?

To capture decisions and reasons is somewhat of an elusive task. In this research, decisions and reasons have been stilled through transcripts of audio reflections. The decisions in this research can be stand-alone decisions or decisions with reasons attached (reasons for the decisions).

In the context of this research, *self-produced* reflection simply means that the teachers recorded their thoughts on their own without intervention. As part of the protocol for teaching at the Portland State University (PSU) and Portland Community College (PCC) Lab School, the two PSU/PCC instructors were asked to maintain an audio journal or debrief each day about what took place in each of their classes. They were not given any time limit or particular features to discuss in their audio debriefs. They had the freedom to record for longer, to record whenever they want, and to speak about the features of their lessons however they want.

# Conclusion

In the above section, I have illustrated that teacher reflections can be a means to examine teacher decision-making. Past researchers have shown that reflection is a means to both examine knowledge and a means of developing new insights and new knowledge about teaching. In this research, I illustrate how I have utilized the reflections of my participant teachers to learn more about the decisions teachers make in the course of their day-to-day teaching and the reasons they provide for reaching those decisions. The intent of this research is not only to describe the types of decisions these two teachers make, but also to illustrate how this methodology can be used to assist other teachers in better understanding teacher decision-making – ultimately providing the learner an enhanced learning experience.

# **CHAPTER III**

#### THE METHODOLOGY

## Introduction

In the first section of this chapter, I provide a description of the study, participants, and research environment. This is followed by a full description of the methods used in my research beginning with a description of qualitative research and strategies of inquiry. I then move into my role – as researcher. Finally, I give a description of analytical procedures and then the context in which I used the procedures (each teacher's data).

In the second section, I describe how I collected and chose the data I used for my research along with the analytical procedures I used to examine the data and my reasoning behind using the chosen procedures.

#### The Study

#### **Participants**

The two participants in this research are employed as English as a Second Language (ESL) teachers at Portland Community College's (PCC) Lab School (hosted at Portland State University) and as researchers at Portland State University (PSU). Both are female. Lucie is a non-native proficient English speaker and Joy is a native English speaker. The participant names were pseudonyms chosen by the participants. Lucie obtained her TESOL certificate and Masters in Adult Education from Portland State University. She has 18 years of ESL teaching experience during which she taught all four levels of ESL and a literacy track. She wrote the literacy curriculum for the PCC ESL department and obtained an internal grant for professional development--to enhance teacher learning through peer observation.

Joy obtained her Masters in TESOL from Portland State University. She has 10 years of ESL teaching experience. She has extensive experience teaching integrated skills to all learner levels as well as the immigrant/refugee population. She has developed her own topic-based materials and participated on a committee to develop and pilot a portfolio assessment.

#### Instructional Setting

This research took place at the Portland Community College and Portland State University's Lab School (Principal Investigator, Stephen Reder). The Lab School is a nationally recognized "research center engaged in classroom-based research and professional development in adult ESOL" (Lab School, Instructional Setting, 2005). The Lab School is one of two labsites in the nation sponsored by The National Center for the Study of Adult Learning and Literacy (NCSALL, Lab School Sponsor, 2005). The Lab School hosts two ESL classrooms for low-level adult ESL students (immigrants or refugees) looking to improve their English skills for a variety of purposes. The participants in this research taught two classes daily of two levels<sup>5</sup> (A and B – the two most beginning levels of English) (National Reporting System, Beginning ESL Class Descriptions, 2007). Each class met twice a week for three hours each meeting.

# Debrief Setting

After each class, the teachers individually enter a control room to record their thoughts on the day's lesson. They are usually alone in the room. To record their thoughts, they sit at a computer just inside the control room and wear earphones and a microphone. The teachers use their lesson plans (or a teacher 'elog') as a reference while they record. The audio version of Windows Media Player captures their voices. The data is then saved and later transferred to a database that researchers can access.

Lucie has expressed that she usually speaks from the perspective of someone viewing the video data. She talks about student progress, classroom management issues, things that worked or did not work, and the process of the

<sup>&</sup>lt;sup>5</sup> Beginning ESL Class Descriptions

Speaking and Listening: The individual can understand frequently used words in context and very simple phrases spoken slowly and with some repetition; there is little communicative output and only in the most routine situations; little or no control over basic grammar; survival needs can be communicated simply, and there is some understanding of simple questions.

Basic Reading and Writing: The individual can read and print numbers and letters, but has a limited understanding of print only through frequent re-reading; can write letters, numbers and sight words and copy lists of familiar words and phrases; may also be able to write simple sentences or phrases such as name, address and phone number, as well as write simple messages and letters using use simple punctuation (e.g., periods, commas, question marks); narrative writing is disorganized and unclear and contains frequent errors in writing mechanics (e.g., spelling, punctuation).

lesson (not the lesson plan). Joy has expressed that she usually talks about what she did and whether or not it worked, or how it worked.

# Debriefs

The teachers debrief daily after each class. The debriefs are usually 4-5 minutes in length, sometimes longer. Apart from the requirements of recording after every class and discussing what worked or did not work in the lesson, the teachers were not given any strict guidelines to follow. The information contained in the debriefs is according to what the participants chose to say. The length of recording time varies for each debrief and each teacher and the debriefs for the individual teachers evolved in different ways due to their own personal interpretation of what to reflect on and how to reflect on it. The content of the debriefs has included what the teachers did, why and how they conducted an activity, whether or not certain activities worked, observations, and ideas for future activities.

#### Wait Time

Taking into account any possibility that the length of time that the teachers waited between teaching and debriefing could have affected the content of their debriefs, I asked the teachers to report to me the average length of time they waited before debriefing. Both teachers reported that they usually debriefed within 3-4 hours of teaching. Lucie stated that she records her debriefs the day of the lesson 95 percent of the time. Due to outside constraints, Joy occasionally had to record her debriefs 2 days after the lesson.

Some may argue that length of wait time affects the depth at which a person can reflect. I acknowledge the risks that might constrain a participants' depth of reflection (wait time, fatigue, etc.). However, my research was not limited to judging the usefulness of the data based on the complexity or depth of expression, nor was it evaluative of the decisions based on the wait time. Time does not change the fact that decisions were still produced and reported.

#### **Methods Used**

### Qualitative Research

This research followed a qualitative analysis in which it used a mixed method approach: phenomenological hermeneutic reduction and grounded theory methods of inquiry. This study focused on (1) decisions and reasons for the decisions within the teacher debriefs; and (2) my interpretations of those decisions served from the foundation of what I already know about teaching and my own decision-making process.

This research is qualitative in nature due to the fact that it takes place in a natural setting and evolves in an emergent, unconstrained manner. I represent these features as defined by Creswell (2003) in the table below. I have placed Creswell's characteristics on the left and the characteristics, as they pertain to my

research, on the right. The outline intends to help the reader better understand my

data and research.

# Table 1: Characteristics of Qualitative Research

Creswell's Characteristics	Charact	Characteristics of this Research	
Qualitative research takes place in the natural setting.	1.	The natural setting in this research is the teaching site of the participants and the working site of the researcher.	
Qualitative research uses multiple methods that are interactive and humanistic. The methods of data collection are growing and they increasingly involve active participation by participants and sensitivity to the participants in the study.	2.	The data were collected in a natural manner. The teachers have been recording their thoughts since they began teaching for this project. The proposed research came after knowing this.	
Qualitative research is emergent rather than tightly prefigured. Several aspects emerge during a qualitative study.	3.	The research was emergent as the categories of decisions were not predefined. The data guided the researcher to develop categories of decisions.	
Qualitative research is fundamentally interpretive. This means that the	<b>4.</b> 40	The research was interpretive by nature in that it was described, analyzed,	
	40		

researcher makes an	and interpreted to
interpretation of the	draw conclusions from
data.	the researcher's
	personal point of view.

5.

The qualitative researcher systematically reflects on who he or she is in the inquiry and is sensitive to his or her personal biography and how it shapes the study.

The qualitative researcher adopts and uses one or more strategies of inquiry as a guide for the study (Creswell 2003). 6. Phenomenological and grounded theory strategies of inquiry guided the qualitative procedures.

I discuss my personal

biases as to how they

shape the study.

#### **Strategies of Inquiry**

#### Phenomenology

As a 20th-century philosophical movement, the primary objective of phenomenology is the direct investigation and description of <u>phenomena</u> as <u>consciously</u> experienced. No <u>theories</u> about the causal explanation of the phenomena, preconceptions and presuppositions (Encyclopædia Britannica (online version), 2003). It is "the study of the development of human consciousness and self-awareness as a preface to philosophy or a part of philosophy" (Merriam-Webster Online, 2004). A human science method, phenomenological inquiry is considered a profoundly reflective inquiry into human meaning (van Manen, 2000, ¶2).

The hermeneutic reduction aspect of phenomenology involves "reflect[ing] on one's own preunderstandings, frameworks, and biases regarding the (psychological, political, and ideological) motivation and the nature of the question, in search for genuine openness in one's conversational relation with the phenomenon" (van Manen, 2000, ¶1). In this approach, I practice a candidness to the phenomenon under investigation by describing my own assumptions and interests. It is impossible to completely disregard personal assumptions and interests. Thus, I explain these assumptions and allow for an organic development of the data. I allowed the data to speak to me through a reiterative analytical process (categorized data $\rightarrow$ checked categories and data for reliability $\rightarrow$ recategorized  $\rightarrow$  checked again for reliability) rather than limiting the data to the first assumption or a single mode of interpretation (Mayan, 2001). The actual process of analysis was *organic* in that the data constructed self-imposed categories. The data, whether a single decision or a group of decisions, spoke to a category through the content, detail, or description it held. For example, if the teacher reported that she 'put the students into pairs,' the category of decisions this statement seems to fit into is 'decisions about grouping'. The primary description in the example above is a description about how the teacher grouped the students in the class. Thus, the key words, actions, or detail in the data guided the categories created.

The appropriateness of the phenomenological strategy of inquiry for this research lay in my particular concentration: an examination into the phenomenology of thought (decision-making). In this research, I examined the cognitive domain of instruction. Specifically, I examined teachers' decisions as they reflected on classroom events. How do teachers make decisions in their classes? What can I interpret from their decisions that may serve to enhance my own teaching qualities? How can this make way for greater knowledge about decision-making in the realm of instruction?

I analyzed and interpreted the data specifically according to what I could personally learn about instruction and to that which I believed other teachers could benefit. Given the diversity in these two teachers' reflective natures, I did not treat their debriefs in an identical way. If I attempted to treat their debriefs in an identical way, I would not have adhered to the phenomenological method of research.

Using the hermeneutic approach (interpretation), I allowed key words or concepts in the data to guide my interpretation of categories. I did not constrain my analysis or interpretations by limiting the results that came from the data. The hermeneutic approach for analyzing the data primarily describes my role in relationship to the data—the interpretive researcher. As such, my input is a source of the data in the study.

*Grounded Theory* 

The grounded theory approach in this research lay in the specific way in which I looked at or manipulated the data. As described in Creswell (2003), "[t]wo primary characteristics of [grounded theory] are the constant comparison of data with emerging categories and theoretical sampling of different groups to maximize the similarities and the differences of information" (p. 14). More specifically, I used the open coding method of analysis as described by Strauss and Corbin (1990). In open coding, the researcher closely examines the data at hand and then names and/or categorizes the phenomena derived from the data. To do this, the researcher breaks the data down into discrete parts, examines the data closely, and compares the similarities and differences within the data. During this process, the researcher asks questions about the phenomena as reflected by the data. Furthermore, the researcher questions or explores his or her own assumptions and other's assumptions about the phenomena to reach new discoveries. Thus, the two analytic procedures – the making of comparisons and the asking of questions – are basic to the grounded theory coding process.

In my analysis, I sorted through the teachers' decisions, looked for patterns in the data, and developed categories based on the patterns I discovered in the data. I checked and re-categorized the data more than once. The two teachers in this research are representative of two different styles of decisionmaking. They represent a sample of ESL teachers and their debriefs exemplify a sampling of the different types and styles of decision-making.

#### The Researcher's Role

As the researcher, I have had extensive experience at the Lab School (the place of research) coding and transcribing the activities and dialogue that take place in the participants' classrooms. For two years, I worked as a research assistant in the laboratory in which the participants teach. For my work I watched video data of entire classes from both teachers while I coded the classroom activities that the teachers employed. The classroom activities were assigned descriptive codes (Harris, Reder, & Setzler, 2003).

In addition to my coding experience, I taught English as a Second Language (ESL) for over three years. I taught both beginning and intermediate level students, so my experience coincides to the level that my data relates to (upper beginning, Level B). The classes and levels I taught as a teacher are both similar to and different from the classes and levels taught by the teachers at the Lab School.

My extensive experience observing, coding, and transcribing the participant classes enhanced my awareness, knowledge, and sensitivity to the issues the participants faced. For this study, I brought not only awareness of the participants' individual teaching styles and personalities, but I also brought a profound respect for the participants and an understanding of the vulnerable state in which they place themselves simply by allowing researchers, like myself, to examine a very personal element of instruction, decision-making from reflective debriefs. Furthermore, my personal experiences as an ESL instructor provided a rich foundation from which to conduct this study.

I have not had the experience of transcribing or analyzing the audio debriefs these teachers provide (except through the pilot study). Despite this, I was aware of the fact that by working in the environment in which I conducted the research I brought certain biases that shaped the way I viewed and analyzed the data. I analyzed the data with that awareness. I initiated this research with the insight that teaching is a highly personal art that is met with diverse challenges, responsibilities, and expectations that often compete with a teacher's own personal views and approaches to teaching.

# **Ethical Considerations**

By rendering their personal thoughts and feelings about teaching to be examined publicly, this research placed the two participants in a psychologically and an emotionally vulnerable state. Thus, I tried to respect the rights, needs, values, and desires of the participants by establishing and maintaining open communication with the participants.

#### **Data Collection Strategies**

As the Lab School is a data collection site in and of itself, the data is already available for researchers, like myself, to enter in and propose an agenda for research that falls within the Lab School's standards and educational objectives. For this research, the data was collected during the Winter 2003 term according to Portland Community College's 10-week academic term. I chose to examine Winter 2003 for two primary reasons. First, the data from this term could be used for two purposes: (1) the purpose of my research and (2) the purpose of another investigator's research. The other researcher needed data from this particular term. I decided that by choosing to analyze the data from this term, I could assist her in her data collection while simultaneously utilize the data for my own research.

Secondly, I wanted to examine a time in which the instructors were rather settled in their teaching duties under the controls of the Lab School (i.e.—wearing microphones and being recorded daily). I made the assumption that the first year of instruction at the Lab School was a year of adjustment for the teachers. I also consciously made the assumption that the debriefs during the first year contained more audio/video errors due to the newness of this type of research. Due to this assumption, I eliminated the first year from my analysis.

I also chose to analyze the debriefs for Level B only. I decided on this level because I thought that the teachers would provide more information in their debriefs. The higher-level classes (i.e.—Level B) include more challenging topics, therefore I thought that this could have an influence on the types of decisions and the quantity of decisions they made in their classes. I thought that by analyzing Level B debriefs I would obtain a sufficient amount of data to analyze.

### **Data Analysis Procedures**

I used a display format for analyzing my data. As described by Miles and Huberman (1994), a display is "a visual format that presents information systematically, so the user can draw valid conclusions and take needed actions" (p. 91). In my research, I visually arranged my data by first breaking down the teacher's utterances in smaller units. I then cut up the utterances and sorted them into different piles so that I could get a glimpse of the types and variety of utterances being made. After sorting (or categorizing), I added category titles to the assortments of utterances. I was then able to report and compare, more accurately, what evolved from the data.

Furthermore, as seen in the table below, Miles and Huberman state that displays also,

# Table 2: Miles and Huberman vs. my research

Miles and Huberman	My research in relation to Miles & Huberman
(a) show data and analysis in one	(a) My data and analysis remained
place	in one place – in physical categories.
	(b) The visual format allowed me to
(b) allow the analyst to see where	gain an immediate response from
further analyses are called for	my data because I could read the
	utterances within each category and
	make instant changes, if or when
(c) make it easier to compare	necessary.
different data sets and	(c) I could both compare the

(d) permit direct use of the results in a report, improving the credibility of conclusions drawn (p. 92).

utterances within various categories for one teacher and compare all utterances and categories for both teachers.

(d) The results and discussion sections report the immediate results and conclusions drawn.

#### Pilot Study

Prior to the full study, I completed a pilot study in order to gather an idea about the types of decisions that these teachers made, the way in which the teachers made their classroom decisions, and the general evolution of decisions within a class. For the pilot study, I transcribed four full debriefs (two for each teacher) from classes that were not part of my final data. I separated the debriefs into decisions by bulleting the decisions where I thought that they began. I then cut up the individual decisions into strips of paper, read through them and began constructing piles of similar decisions. I created an assortment of categories based on these piles. The categories in the matrix below are some examples of what I discovered from the pilot study. The actual results are recorded in the next chapter.

#### **Table 3: Decision Matrix**

#### **DECISIONS & CATEGORIES**

Time/Organ Noticing Students What... What... Why How ization or Student Requests <u>she did or</u> <u>she is</u> ... ... <u>had the</u> <u>teaching</u> <u>students</u> <u>do</u>

**TEACHER** *Lucie Joy*  As I analyzed the pilot data, more categories emerged and, upon reanalysis, these categories sometimes transformed due to the nature of the data. The teachers did not talk about the same things in each debrief and they did not always speak about their classes in a similar way. As an example, I have placed two excerpts below illustrating their individual styles.

Joy:

# Lucie:

Okay this is the debrief for Tuesday, February 18<sup>th</sup>, Level B. um instead of doing a 'how are you' chain I asked them 'how were you' so, to practice 'were' and 'was'. So 'how were you yesterday' and then we did the regular date drill. Which I think I'm going to stop doing because I think they got the point. And I'm getting tired of doing it. Okay then instead of the warm up I had planned I wanted to build up to them writing sentences about 'what they did yesterday'. So I elicited past tense verbs um with the question 'what did you do on the weekend'. And so I wrote each verb that they gave me up on the board. Like one student said 'I visited my friend' or 'I went shopping with my sister' or whatever. So I put those verbs up on the board and then for 5 minutes I had them talk with their partner, 'what did you do on the weekend'.

This is the debriefing for January ten 2003 and uh this is about Level B. and it's Friday and I am tired. So hence the yawning and the kind of dazed – but anyway. Um I really liked the way the class went. I'm finding myself getting better and better at having individual uh modules like lessons but they're linked to the previous class, but they're still on their own and I think that's really important to be able to do with adults because of their sporadic attendance. Although most of our students tend to be pretty regular in their attendance. Um I wanted to review personal questions because we did it last time, but they answered it for themselves. Um and as I said in three previous uh recordings of this week, since it's the first week since Christmas vacation I'm going slower, I'm breaking things down further than um I have before and I'm not rushing them into something they cannot do. um the the tasks which I give ... which -are still um more complex than they might be used to.

The above examples illustrate the different ways in which these two teachers speak about their classes. They are also an example of the content or features that these teachers focus on when debriefing. In general, Joy seems to be more concrete, concise, and sequential, whereas Lucie seems to be more theoretical, abstract, and random. Either means of reflecting is beneficial when discussing features about teaching because they each provide key elements of instruction. It is not how they reflect, but what they reflect on that's important to this analysis.

At times while analyzing the pilot data, one decision fit into two categories due to the interconnected nature of decision-making and teaching. If that were the case, I decided on a category in which to place the decision. During the analytical process, I also noticed that many of the decisions were based on reasons that the teachers elaborated on within the debrief. I became very interested in this aspect and therefore developed my initial categories for the actual analysis from this. The categories that evolved were: decisions without reasons, decisions with reasons, and non-decisions (i.e. – observations, personal feelings, partial thoughts, etc.). I provide more detail about each category further on in this chapter.

As I categorized the pilot decisions into a matrix, I asked one or several of the questions below to determine if it was a decision.

(1) Does it pertain specifically to a particular event that took place in the classroom that day?

- (2) Does it specifically pertain to instruction or students?
- (3) Is it a complete decision?
- (4) Can I understand it in relation to what I personally know and have experienced about teaching?
- (5) What did she do?
- (6) Does the decision pertain to 'how to teach' or the students? Or, is it a simple observation?
- (7) Is she describing how she accomplished a task that day (including tasks that arose haphazardly)?
- (8) What is she noticing?
- (9) How can this decision or expression help me and other teachers perform better?
- (10) Are there utterances that follow the decision that explain why the decision was made? (This question was specifically used to locate the reasons within the debriefs).

These questions developed during my initial review of the pilot data. They were internal questions that I was asking myself as I decided to place a decision into a particular category. They were a necessary step in the process of choosing and eliminating data. The pilot study provided me with a firm foundation for what I would discover from my actual analysis. After completing the pilot study, I began my actual analysis which I describe below.

# Analysis

As developed from the pilot study, I decided to (1) complete three different analyses and (2) review each type of categorization three times.

The analyses that I chose were:

- Individual Analysis: I examined Joy's and Lucie's debriefs individually;
- 2. Contrastive Analysis: I performed a side-by-side comparison of their individual results; and
- 3. In-depth Analysis: I examined the decisions with reasons from one entire debrief for each teacher and provided a detailed description of each.

I decided to re-examine each of the above analyses three times because I wanted to maintain consistency with my own decision-making process. Reviewing the data three times contributed to internal reliability of my approach because I questioned my initial assumptions and developed clearer categories out of my reexamination.

Reasons for choosing analytical process

I decided to do the individual analysis first because each teacher revealed a clearly unique and individual style of reflecting; my intention was to discover the categories as they evolved personally from each teacher's style of reflection.

Secondly, I chose a contrastive analysis because I believed that would provide more insight into the individual decision-making process. I would be able to describe the types of decisions that teachers make and the differences between these two individual teachers. By looking at similar categories or non-similar categories from both of these teachers, I could see the major traits that each teacher carries and expound upon them as I wrote the results.

Lastly, I chose the in-depth analysis because it was important for me to provide my interpretation of the data and describe how I thought other teachers could benefit from the data.

#### Step-by-Step Process

To begin, I listened to all of the audio debriefs that the teachers recorded in Winter 2003. I listened to them first in order to see how many of the debriefs were recorded successfully. All together, there were a total of 25 debriefs for each teacher during the term. Out of those 25 debriefs, only 21 debriefs from each teacher were successfully recorded. Out of these 21 for each teacher, I randomly selected 8 debriefs to analyze in further depth. The 8 out of 21 successful debriefs represents 38% of the data for each teacher. The debriefs are representative of the whole term of debriefs—representative by way of exemplifying the variety of aspects of instruction that these teachers individually reflect on.

In my second step, I transcribed the 16 debriefs. I listened to the recorded version from the Toolbox software (Lab School, Toolbox Software, 2005) while I transcribed in Microsoft Word the word-for-word content of the debriefs. After completing the transcription for each debrief, I listened again to the recording as I read through my transcript and made corrections where I had misunderstood, missed or misspelled any part. After the second transcription pass, I needed to construct the debriefs into units ready for analysis. My analysis was on decision-making, so I needed to be able to gain visual access to the decisions in the debriefs. To do so, I separated the decisions in the debrief by adding bullets as described in the pilot study. The figure below illustrates how I moved from a full transcription to an organized version displaying the decisions to be analyzed.

### **Figure 1: Dividing the Transcripts into Utterances**

#### Example:

Okay this is the debrief for level B on Tuesday January 21<sup>st</sup> and it was a little discouraging today. There was pretty low attendance. There were only um twelve students there at the beginning and then eleven students after the break, so that was a little discouraging. I don't know why so many students didn't come if they were confused about the holiday or something. I don't know. Or maybe people are just sick. Okay today I think went pretty well, primarily because I followed my lesson plan.

An example of my division of Joy's debrief:	My reasoning for dividing as shown:
	I kept the initial sentence separate
January 21 <sup>st</sup> and	because it was a simple fact stating the
	date and level of the class. It did not
	have any particular information about

	teaching, nor was it a decision.
it was a little discouraging today.	The second bullet point is a description
	of how she was feeling about the class –
	again, not a decision.
There was pretty low attendance.	The third point is her description about
	the attendance in the class that day –
	not a decision.
There were only um twelve students there at	The fourth point provides more detail
the beginning and then eleven students after the break,	about the attendance.
so that was a little discouraging.	The fifth point is a fairly explicit
	understanding about why she felt
	discouraged (because there was low attendance).
I don't know why so many students didn't	In the sixth point, she provides a
come if they were confused about the holiday	speculation as to why the students did
or something. I don't know. Or maybe people are just sick.	not show up.
Okay today I think went pretty well, primarily	In the seventh point, she gives her
because	general feeling about the day.
I followed my lesson plan.	Finally, in the eighth point, she provides
	a decision about the day: she followed
	her lesson plan (that is why the day
	went well). This is a decision because
	she consciously chose to follow what she
	had planned for that day.

The above example and description illustrate where I separated the debriefs into units. To distinguish between Joy's and Lucie's transcripts, I inserted a parenthesis after each number for Joy and a period after each number for Lucie. While reading through the transcripts, I highlighted the decisions yellow and the reasons for the decisions grey.

# Terminology

In the results that follow, I use the following terminology:

• Decision: For the purpose of this research, a decision is a statement that (in most cases) begins with a subject (I, we, they, etc.), and is

followed by a past-tense verb (had, talked, wrote, etc.) plus a particular topic (time, activity, type of conversation group, etc.). Most importantly, it relates to the present class or a particular aspect of instruction (i.e.—79. *although I really try to make pairs um to be bilingual*). There are cases in which there is no subject or verb, but there is specific content that fits into a category (i.e.—517) *like first and twenty-first or second and twenty-second and so on*; 466) *so to practice 'did you' and 'yes I did' and 'no I didn't'*).

- Reason: A reason is an explanation provided for any decision it can be stated before or after a stated decision.
- Decision without reason: These are decisions that stand alone and have no reason attached to them.
- Decision with reason: These are decisions followed by a reason.
- Decision with 2/3/4 reasons: These are decisions followed by two, three, or four reasons respectively.
- Non-decisions: A non-decision is an utterance that I deemed not relating to a decision. In this case, utterances that I deemed nondecisions were either: incomplete utterances or decisions, conversational fillers such as 'uh' or 'um', or statements that contained little or no content in regards to understanding how to teach (i.e.—327.

and it seemed like was was...; 330. and it's always so rewarding to see. Um that's it).

# **Individual Analysis**

#### Main categories

Using a matrix system, I began my first analysis – the individual analysis. I sorted the decisions first into three main categories: (1) decisions without reasons, (2) decisions with reasons, and (3) non-decisions.

I chose to categorize into these three categories because (1) I wanted to select those statements that revealed something about teacher decision-making, and (2) it was necessary to sort through the type of decisions and narrow down the debriefs into manageable and meaningful parts. I was most interested in decisions that occurred with reasons attached – as discovered in the pilot study. As a logical contrast to the first category, I needed to examine the types of decisions that occurred without reasoning. Lastly, I needed a way of separating the content that was relevant to my analysis and that which was not pertinent to this research – the non-decisions.

I chose to use the matrix display in order to categorize my data because it allowed me to gain a visual perspective of the content of each teacher's debrief. In order to sort, I cut up all of the separated decisions and began sorting them into the categories. I worked with one debrief at a time. As I cut and categorized, I noted down my own thoughts and other points that I thought might be important to the analysis. This categorization did prompt a few changes in my original document. For example, an utterance that I marked a decision, I might have discovered to be a non-decision. So, I made that change immediately upon the discovery - both in the physical categories and in my saved document.

With the visual display, I was able to see what was happening in each of these teacher's debriefs, interpret and draw conclusions from the systematized display into which I was sorting the decisions. For example, I was able to see what types of decisions occur most for each teacher and I was able to see if the decisions within each category were categorized appropriately. I was able to more descriptively illustrate and interpret the decisions and see what naturally emerged from my analyses. The display allowed me to deliver a more general interpretation of how these teachers make decisions in their classes. (See examples of the types of decisions below for each teacher).

The numbers in the table below represent the number of the decision from the individual teacher's transcript (number plus parenthesis for Joy, number plus period for Lucie). I chose the decisions out of the pile randomly to provide the example.

#### Table 4: Categories + Examples: Joy

Categories:	Decisions with reasons	Decisions without reasons	Non-decisions
Examples:	225) But I was trying to elicit from the students where they go every weekend in the community (reason).	442) Then we did I wanted to review the recreation for 'everyone'	342) Okay this is the debrief for level B on Tuesday January 21 <sup>st</sup> (non-decision)
	227) So I made a list of those on the board (decision).	handout (decision)	<ul><li>344) There was pretty</li><li>low attendance.</li><li>(non-decision)</li></ul>

# Table 5: Categories + Examples: Lucie

Categories:	Decisions with reasons	Decisions without	Non-decisions
Examples:	<ul><li>194. But there was no time for that in fact (decision).</li><li>195. I think because of new students throughout until the end of week four (reasons).</li></ul>	reasons 273. the debrief was tell me about your story (decision).	56. I heard people were talking. They were engaged. They talked for quite a while. And. (non-decision)

After completing the initial categorization, I reviewed the non-decisions a

second time and placed them into two piles: decisions I confirmed to be excluded and decisions to be re-analyzed. In order to re-analyze, I sorted the decisions numerically, from beginning to end. I then took the first one and read it in the context of the full debrief. I contrasted it with the surrounding decisions to make my own interpretation about where it fit. I completed this step two more times to ensure overall consistency in categorizing the decisions.

#### Creating Sub-Categories

The second part of the Individual Analysis involved breaking down the two major categories (decisions without reasons and decisions with reasons) into smaller descriptive categories that illustrated examples of decision-making. Individually, I took the decision without reason and the decision with reason categories for each teacher and classified all of the decisions into smaller categories (or groups of different types of decisions).

To categorize, I put the similar decisions into coordinating piles. As I built the collections of decisions and saw a category evolve, I stopped and wrote the name of the category on a note card and placed it on top of the collection of decisions. Again, I reviewed each sub-category three times and made adjustments when I misplaced a decision. At the end of this sub-categorization process, I was able to evaluate the types of decisions each teacher made during the term, the most frequently made decisions for each teacher, and the diversity between each teacher.

Furthermore, in the decisions with reasons category, I decided to separate the decisions according to the number of reasons following it. Thus, I discovered some decisions with one reason, some with two and some with three or more. I chose to examine the decisions with multiple reasons separately because of the complexity of teacher's decision making. Decisions with multiple reasons show us the different aspects of teaching (i.e. – classroom practice, content knowledge, pair work, scaffolding, etc.). They also show us the complexity involved in teacher decision-making. This can be beneficial to novice teachers who are beginning to examine their own decisions and reasons for which they make those decisions. The greater the number of reasons that are associated with a decision the deeper the understanding into that particular decision – both for the reflecting teacher and the researcher. The importance of examining decisions with more than one reason lay in the aim as a whole to understand the various reasons for which teachers make decisions. A decision is not always solely associated with one reason. In this research, the aim is to better understand teacher decision-making.

#### **Contrastive Analysis**

For this step of the analysis, I completed a side-by-side comparison of all of the categories for both teachers. I began by laying out all of the decision without reason sub-categories for Joy and all of the decision without reason subcategories for Lucie in front of me. This display provided me a glimpse into the similarities and differences of the types of decisions made for both participants. From this step forward, one-by-one, I took the similar categories from each participant and compared the decisions within the category. This process allowed me to discover how similar the decisions were between both participants and to understand how each participant expressed ideas within the category so that I could legitimately compare the ideas. I repeated the following steps for the decision with reason category for each teacher.

# **In-depth Analysis**

As the final stage in my entire analysis, I wanted to examine the decisionmaking process in more depth and describe my own interpretation and ideas about the benefits of the analysis for other teachers. I chose this step in my analysis because it connects my research back to myself, as a teacher, and back to the field of ESL. In other words, it answers the question: How can this research serve me, other teachers, and the field?

In order to gather an in depth description of the decision-making process, I examined one whole debrief for each teacher and created a network of analysis for the decision with reasons only. A network of analysis is a display that provides a visual standpoint from which to view data. I chose to examine only the decisions with reasons because they provided more explicit information about the type(s) of decision(s) made. I was also aiming to delve deeper into the analysis. The reasons allowed for a deeper examination.

I read through each debrief individually as I made two nodes or points that referred back to each decision with reason. The nodes are (1) a description of what the teacher said or did, (2) and the conclusions I could draw in reference to how other teachers could learn from the analysis. I chose to highlight these aspects because I believed it was important for the reader to understand my analytical perspective, how I interpret the teacher's decisions, and what I see beyond a simple decision. These points are based on my experiences as a teacher and my personal teacher knowledge.

In Chapter 4, the points from this analysis appear in paragraph form. I first list the decision with reason and write two paragraphs (the two nodes) below each decision. This format provides me the opportunity to see the decision under analysis and examine and re-examine the decision as well as my interpretations of it. The results are recorded in the next chapter.

#### Reliability

In order to establish the reliability of my research findings, I requested the assistance of a peer to check the accuracy of my analysis. A female graduate of the Department of Applied Linguistics at Portland State University – who had no prior experience with or knowledge of the Lab School, the participants, or the data at hand – completed my peer review. For the peer review, I randomly selected two full transcripts (one from each participant in my study).

#### Peer Review: Divide transcript into utterances

I asked my peer to separate a paragraph into utterances based on decisions without reasons, decisions with reasons, and non-decisions. In comparison, I separated Joy's transcript into 19 different utterances. My peer separated the paragraph into 20 different utterances. The similarity between her categorization and my own was 95%. I separated Lucie's transcript into 19 different utterances and she separated the same transcript into 11 different utterances. The percentage of similarity was at 58%.

Peer Review: Categorize decisions without reasons, decisions with reasons, and non-decisions.

Second, I asked my peer to look at a portion of the transcript that I already separated and categorize the utterances according to decisions without reasons, decisions with reasons and non-decisions. There were 16 decisions without reasons, decisions with reasons, and non-decisions in my original analysis. My peer found 12 all together, leaving the percentage of similarity to be 75%.

### Peer Review: Sub-categorization

Third, I asked her look at a select number of decisions without reasons and decisions with reasons for each teacher and place them into the sub-categories that I created in my analysis. My peer's analysis was 92% similar to my own analysis of decisions without reasons. Of the decisions with reasons, my peer only reached a 54% similarity.

The peer review demonstrates that each of us have unique perspectives when it comes to analyzing data and deciding for ourselves what is or is not a decision and what is or is not a reason. While this study does not rely on the reliability of the two researchers, the lower rating raises an interesting question as to why there is a difference that appears in the coding of the data by the two coders (myself and cross-coder). In this research, the analyst perspective is transparent and is part of the analysis and therefore does not threaten the reliability of the research.

# **CHAPTER IV**

# **RESULTS & DISCUSSION**

# **Introduction to Results**

In this chapter, I provide the results for the decisions I found and analyzed from both teachers' transcripts. I describe the results from all three stages of analysis (individual analysis, contrastive analysis, and in-depth analysis) and provide tables with examples to illustrate the results.

# **Individual Analysis:**

Joy

My analysis of Joy's debrief transcript produced a total of 566 utterances of which 208 (37%) were decisions without reasons, 103 (18%) were decisions with reasons, and 255 (45%) were non-decisions. Of Joy's 103 decisions with reasons, there were 64 decisions with one reason (62%), 27 decisions with two reasons (26%), and 12 decisions with three reasons (12%).

Lucie

My analysis of Lucie's debrief transcript produced a total of 561 utterances of which 117 (21%) were decisions without reasons, 130 (23%) were decisions with reasons, and 314 (56%) were non-decisions. Of Lucie's 130 decisions with reasons, there were 78 decisions with one reason (60%), 36 decisions with two reasons (28%), and 16 decisions with three reasons (12%).

The final results are in Figure 1 below. Joy's and Lucie's results are compared side by side and provide a glimpse into the ratio of decisions without reasons, decisions with reasons, and non-decisions between the two teachers.

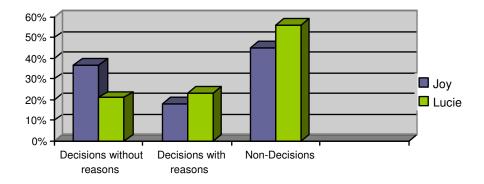


Figure 2: Total Utterances by Category for Joy & Lucie

Overall, Joy had two times as many decisions as Lucie with a total of 311 decisions with and without reasons combined (out of a total 566 utterances). Lucie had 147 decisions with and without reasons combined (out of a total 561 utterances).

### Creating Descriptive Categories

#### Decisions without reasons: Joy

I continued Joy's analysis by creating categories for the 208 decisions without reasons. The categories I discovered are in the table below with the total number of utterances within each category, the actual numbers corresponding to each utterance, and a random example selected from each sub-category.

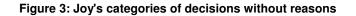
Type of decision:	Total decisions:	Transcript Numbers:	Example:
Decisions about	66 (31%)	5) 30) 37) 39) 43) 51) 63) 64) 65)	39) then we did the
activities (in		82) 87) 90) 97) 126) 132) 148) 158)	writing.
general).		173) 174) 175) 176) 178) 179) 218)	
		232) 241) 247) 263) 264) 265) 267)	
		283) 315) 316) 320) 331) 352) 362)	
		383) 385) 400) 401) 404) 426) 442)	
		447) 448) 450) 453) 457) 462) 464)	
		473) 475) 477) 487) 488) 510) 515)	
		521) 523) 524) 542) 543) 554) 558)	
Type of decision:	Total	Transcript Numbers:	Example:
	decisions:	-	-
Decisions about	47 (23%)	15) 19) 21) 28) 29) 66) 67) 70) 76)	237) then we started
specific concepts:		120) 121) 123) 133) 141) 237) 238)	working on
		250) 286) 287) 289) 292) 294) 301)	prepositions. Where
		306) 313) 318) 372) 380) 424) 427)	are thing. Where is the
		440) 460) 466) 467) 471) 502) 503)	bank? Where is the
		512) 513) 516) 517) 525) 531) 534)	post office?
		535) 536)	
Type of decision:	Total	Transcript Numbers:	Example:
	decisions:	-	-
Decisions about	43 (21%)	36) 57) 60) 73) 75) 83) 88) 92) 96)	219) This is a very
how to conduct		177) 219) 244) 248) 249) 255) 256)	guided writing. (Joy
an activity:		258) 259) 260) 266) 269) 270) 314)	chose to guide the
-		322) 326) 327) 332) 349) 373) 381)	activity)
		398) 399) 402) 438) 444) 469) 489)	-
		507) 514) 544)	
Type of decision:	Total	Transcript Numbers:	Example:
	decisions:	-	-
Decisions about	28 (13%)	17) 33) 44) 95) 119) 154) 170) 200)	Example: 95) After the
timing:		210) 245) 246) 285) 303) 311) 339)	break, I showed them a
-		351) 357) 358) 360) 388) 423) 455)	diagram of my living
		456) 485) 486) 501) 540) 565)	room from my
			v v

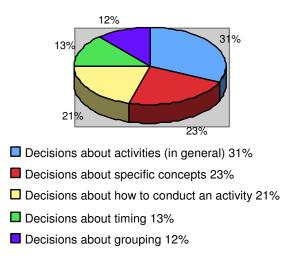
# Table 6: Decisions without Reasons - Creating Categories (Joy)

			and (This category
			included any utterance
			with an expression
			about timing,
			regardless of the
			subsequent content).
Type of decision:	Total decisions:	Transcript Numbers:	Example:
Decisions about	24 (12%)	6) 18) 59) 77) 78) 84) 122) 139)	463) I had them work
grouping		220) 239) 297) 321) 328) 353) 367)	in pairs.
		369) 374) 394) 439) 463) 465) 508)	
		518) 530)	

previous apartment

Figure 3 provides a visual glimpse of the results.





# Decisions without Reasons: Lucie

The analysis for 117 decisions without reasons for Lucie produced the following sub-categories. I provide a more detailed description, which includes:

the total number of utterances within each category, the specific number corresponding to the decision or utterance, and a random example.

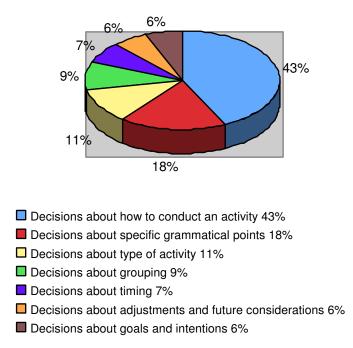
# Table 7: Decisions without Reasons - Creating Categories (Lucie)

Type of decision:	Total decisions:	Transcript Numbers:	Example:
Decisions about how to conduct an activity	50 (43%)	<ul> <li>33. 3. 39. 43. 44. 52. 59. 62. 89.</li> <li>93. 102. 124. 125. 139. 164. 166.</li> <li>167. 168. 173. 185. 192. 238.</li> <li>239. 242. 244. 245. 255. 274.</li> <li>299. 300. 302. 310. 326. 331.</li> <li>332. 336. 337. 346. 376. 386.</li> <li>388. 393. 436. 460. 461. 500.</li> <li>529. 531. 536. 542.</li> </ul>	244. I would put short statements and I would ask them what kind of questions this would be the answer to.
Type of decision:	Total decisions:	Transcript Numbers:	Example:
Decisions about specific grammatical points	21 (18%)	45. 55. 104. 105. 132. 133. 174. 186. 246. 279. 286. 306. 311. 421. 438. 439. 480. 481. 497. 544. 553.	279. um the overall theme today was the past tense.
Type of decision:	Total decisions:	Transcript Numbers:	Example:
Decisions about type of activity	13 (11%)	48. 122. 213. 264. 273. 284. 335. 345. 404. 441. 499. 549. 554.	48. Um let me see and then we had the free reading and um
Type of decision:	Total	Transcript Numbers:	Example:
<b>Type of</b> <b>decision:</b> Decisions about groupings	Total decisions: 11 (9%)	<b>Transcript Numbers:</b> 25. 119. 120. 134. 193. 217. 391. 392. 482. 540. 547.	25. then the following step was to talk to their partner. Um ask the questions of their partner. And uh then write the partner's answer
decision: Decisions about groupings Type of	decisions: 11 (9%) Total	25. 119. 120. 134. 193. 217. 391.	25. then the following step was to talk to their partner. Um ask the questions of their partner. And uh then
<b>decision:</b> Decisions about groupings	decisions: 11 (9%)	25. 119. 120. 134. 193. 217. 391. 392. 482. 540. 547.	25. then the following step was to talk to their partner. Um ask the questions of their partner. And uh then write the partner's answer uh.
decision: Decisions about groupings Type of decision: Decisions about timing Type of	decisions: 11 (9%) Total decisions: 8 (7%) Total	25. 119. 120. 134. 193. 217. 391. 392. 482. 540. 547. <b>Transcript Numbers:</b> 61. 101. 112. 204. 212. 268. 334.	25. then the following step was to talk to their partner. Um ask the questions of their partner. And uh then write the partner's answer uh. <b>Example:</b> um I really want to go over the four skills in the first
decision: Decisions about groupings Type of decision: Decisions about timing	decisions: 11 (9%) Total decisions: 8 (7%)	25. 119. 120. 134. 193. 217. 391. 392. 482. 540. 547. <b>Transcript Numbers:</b> 61. 101. 112. 204. 212. 268. 334. 516.	25. then the following step was to talk to their partner. Um ask the questions of their partner. And uh then write the partner's answer uh. <b>Example:</b> um I really want to go over the four skills in the first period before the break.

6	way I told them re going to do couple of weeks
---	--

Figure 4 illustrates the results, below.





Based on the nature of each teacher's debriefs, I discovered varying results

for both teachers. Each teacher had her own unique style of discussing the

activities for each day. Thus, the results evolved based on the individual nature of the data and style of each teacher's reflection.

These data show that the largest pool of decisions made for Joy was the 'decisions about activities' category and the largest category for Lucie was the 'decisions about how to conduct an activity' category. In other words, Joy most frequently described the types of activities she used in her day's lessons and Lucie most frequently described how she carried out an activity. As an initial point of discussion, Joy demonstrates to other teachers a variety of activities to use in one's lessons and Lucie demonstrates how to carry out an activity (my assumption: assisting other teachers in having a smooth and successful lesson). These two categories are not exclusive to each teacher. There are overlaps. Joy, for example, also had a 'decisions about how to conduct an activity' category, as Lucie had a 'decisions about type of activity' category. Both teachers demonstrated similar types of decision-making within these categories, but one teacher usually predominated for a category. The similar categories for both teachers are listed next in the second stage of the analysis (the contrastive analysis).

#### Decisions with reasons: Joy

Again, for the decision with reason category, I created categories based on each teacher's reasons for her decisions. I asked myself, "What type(s) of reason(s) was she giving for the decision she made?" I illustrate this in the example below:

290) They had to tell their partner what they wrote and then their partner had to agree using 'me neither' (Decision)

293) So agreeing and disagreeing (Reason)

In the above example, I marked 290) as a decision and 293) as a reason. To reach this conclusion, I asked, "Why did she have them tell their partner what they wrote and then have their partner agree using 'me neither'?" The response in 293) gave me my answer. Her reason for 290) was to have her students practice the particular grammatical or conversational aspect: agreeing and disagreeing - 293).

The categories I created from Joy's decision with reason data are listed below.

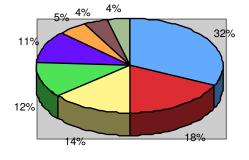
Table 8: Decisions with Reasons -	Creating	Categories	(Joy)
-----------------------------------	----------	------------	-------

Type of decision:	Total decisions:	Transcript Numbers:	Example:
Decisions made to practice a specific grammar point.	34 (32%)	47) 48) 49) 100) 101) 102) 127) 128) 129) 130) 155) 156) 160) 161) 211) 213) 276) 277) 278) 290) 293) 354) 355) 375) 376) 434) 435) 436)	537) Okay so we did a conversation matrix (decision)
		519) 520) 537) 539) 552) 553)	539) So it was to practice calendar type words (reason).
Type of decision:	Total decisions:	Transcript Numbers:	Example:
Decisions about teacher observation or concern for student(s):	18 (18%)	24) 25) 26) 27) 52) 53) 54) 105) 107) 108) 135) 136) 137) 307) 308) 363) 364)	<ul><li>307) And so next time we'll do past and future, (decision)</li><li>308) which they</li></ul>
suden(s).			soo) which they seemed interested in and I always get questions now and again (reason).
Type of decision:	Total	Transcript Numbers: 73	Example:

Decisions about both transitions (category #4) AND specific grammar points (category #1):	<b>decisions:</b> 14 (14%)	55) 56) 335) 337) 338) 340) 365) 366) 391) 392) 528) 529) 547) 548)	<ul> <li>391) Okay first to prepare them for family the family topic, um u- again using 'have' (reason)</li> <li>392) I drew a diagram of my family (decision).</li> </ul>
Type of decision:	Total	Transcript Numbers:	Example:
Decisions about transition only:	<b>decisions:</b> 12 (12%)	12) 13) 14) 71) 72) 79) 80) 143) 144) 214) 215) 216)	71) Then to finish up that section of class (reason)
			72) <i>I did a mixer</i> (decision).
Type of decision:	Total decisions:	Transcript Numbers:	Example:
Decisions about the type(s) of activities (i.e.— top down,	11 (11%)	162) 163) 164) 165) 428) 433) 559) 560) 561) 563)	164) But giving directions is [authentic] (reason)
community building, etc.)			165) and so in the plenary we gave directions (decision).
Type of decision:	Total decisions:	Transcript Numbers:	Example:
Decisions about how to conduct an activity:	6 (5%)	34) 35) 251) 252) 323) 324)	34) <i>then we filled in the map</i> (decision)
			35) to review the information up on the board (reason)
Type of decision:	Total decisions:	Transcript Numbers:	Example:
Decisions about direction (forward or needed change):	4 (4%)	171) 172) 370) 371)	171) I had done so much with there is, there are and maps and prepositions (reason)
			172) I wanted to do something different (decision)
Type of decision:	Total decisions:	Transcript Numbers:	Example:
Decisions to elicit	4 (4%)	225) 227) 378) 379)	378) but here we

something from the students (intention): usually say 'yes I do' or no I don't.' (decision)

379) and it's really to get them used to the ... do support as well (reason)



#### Figure 5: Joy's categories of decisions with reasons

- Decisions made to practice a specific grammar point 32%
- Decisions about teacher observation or concern for students 18%
- Decisions about transitions (category #4) AND spec. grammar pts (category #1) 14%
- Decisions about transition only 12%
- Decisions about the type(s) of activity 11%
- Decisions about how to conduct an activity 5%
- Decisions about direction (forward or needed change) 4%
- Decisions made to elicit something from the students (intention) 4%

## Decisions with Reasons: Lucie

After categorizing Lucie's decisions with reasons and finding the numerical results, I created the following categories for her decisions with reasons. What follows is a description providing the total number of utterances within each category, the number corresponding to each utterance, and a random

example within the category.

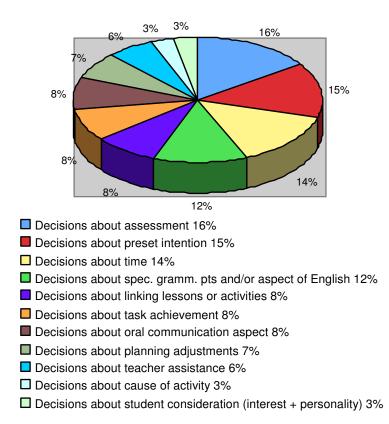
# Table 9: Decisions with Reasons - Creating Categories (Lucie)

Type of decision:	Total	Transcript	Example:
Decisions about	<b>decisions:</b> 20 (16%)	Numbers: 94. 95. 97. 98. 100.	116. and what I wanted them to do
assessment	20 (1070)	116. 117. 187. 188.	was first to do it by process of
ussessment		189. 191. 285. 287.	<i>elimination and</i> (decision)
		447. 452. 472. 473.	cummation and (decision)
		474. 537. 538.	117. then uh see whether they neg-
		+1+. 551. 550.	negotiate meaning uh with a partner
			(reason).
Type of decision:	Total	Transcript	Example:
Type of decision.	decisions:	Numbers:	Example.
Decisions about	19 (15%)	31, 32, 165, 170.	224 I was showing that the gramman
	19 (15%)	171. 172. 175. 176.	234. I was showing that the grammar
preset intention			point we were going to be studying
		177. 234. 236. 389.	and so on and so forth (decision);
		390. 400. 409. 410.	226 I was los dins de su terrarde a sut
		412. 533. 535.	236. I was leading them towards part
			of one of the activities that I had
			planned for today which was "what is
			your dream job" and "what would you
		-	<i>like</i> " (reason).
Type of decision:	Total	Transcript	Example:
	decisions:	Numbers:	
Decisions about	18 (14%)	10. 11. 14. 15. 16.	557. But it's a timed test in a way with
time		17. 18. 90. 91. 194.	one hour for the test and (reason);
		195. 292. 293. 294.	
		492. 493. 557. 558.	558. So I had to stop it after one hour
			and (decision).
Type of decision:	Total	Transcript	Example:
	decisions:	Numbers:	
Decisions about	uccisions.	Numbers:	
Decisions about	16 (12%)	26. 27. 254. 256.	26. last time they responded with 'I'
practice of			26. <i>last time they responded with 'I' and 'my' and</i> (reason);
		26. 27. 254. 256.	
practice of		26. 27. 254. 256. 308. 309. 367. 368.	
practice of specific		26. 27. 254. 256. 308. 309. 367. 368. 369. 370. 371. 373.	and 'my' and (reason);
practice of specific grammatical points and/or		26. 27. 254. 256. 308. 309. 367. 368. 369. 370. 371. 373.	and 'my' and (reason); 27. this time I wanted them to see the difference between 'his' and 'her' and
practice of specific grammatical points and/or aspect of English		26. 27. 254. 256. 308. 309. 367. 368. 369. 370. 371. 373. 374. 375. 523. 525.	and 'my' and (reason); 27. this time I wanted them to see the difference between 'his' and 'her' and 'your' (decision).
practice of specific grammatical points and/or	16 (12%) Total	26. 27. 254. 256. 308. 309. 367. 368. 369. 370. 371. 373. 374. 375. 523. 525. Transcript	and 'my' and (reason); 27. this time I wanted them to see the difference between 'his' and 'her' and
practice of specific grammatical points and/or aspect of English	16 (12%)	26. 27. 254. 256. 308. 309. 367. 368. 369. 370. 371. 373. 374. 375. 523. 525.	and 'my' and (reason); 27. this time I wanted them to see the difference between 'his' and 'her' and 'your' (decision). Example:
practice of specific grammatical points and/or aspect of English <b>Type of decision:</b>	16 (12%) Total decisions:	26. 27. 254. 256. 308. 309. 367. 368. 369. 370. 371. 373. 374. 375. 523. 525. Transcript Numbers:	and 'my' and (reason); 27. this time I wanted them to see the difference between 'his' and 'her' and 'your' (decision).

activities		407. 504. 506.	
			506. that was to bring it all together the future and try to have them use it in a different context talking about their story (reason).
Type of decision:	Total decisions:	Transcript Numbers:	Example:
Decisions about task achievement	Decisions about 11 (8%)	23. 24. 113. 114. 126. 127. 128. 501. 502. 545. 546.	113. in order to find out what the opposite was of certain things (reason);
Type of decision:	Total	Transcript	114. <i>they had to do it with a partner</i> (decision) <b>Example:</b>
Decisions about oral communication	<b>decisions:</b> 11 (8%)	Numbers: 74. 76. 78. 80. 81. 381. 383. 384. 519. 520. 521.	80. I also try to separate people who speak the same language (decision);
aspect:			81. uh there are some people who are very talkative and um and not shy and they will just talk no matter what even though their English might be low (reason).
Type of decision:	Total decisions:	Transcript	Example:
Decisions about planning adjustments	ns about 9 (7%) 289. 290. 291. g 324. 442. 443.	289. 290. 291. 323. 324. 442. 443. 527.	527. Originally this is this was one whole sheet which I cut in half (decision);
<b>T</b>		<b>T</b>	528. because I didn't have enough (reason).
Type of decision:	Total decisions:	Transcript Numbers:	Example:
Decisions about teacher assistance	8 (6%)	34. 35. 257. 258. 456. 457. 458. 459.	257. <i>And to help them do that</i> (reason);
Type of decision:	Total	Transcript	258. <i>I had designed a few questions</i> (decision). <b>Example:</b>
Decisions about cause of activity	<b>decisions:</b> 4 (3%)	Numbers: 297. 298. 424. 426.	424. I had a teachable moment I think it was about 10:15 (reason);
			426. and so I had to do a short lesson about 'will' and on 'going to' (decision).
Type of decision:	Total decisions:	Transcript Numbers:	Example:
Decisions about student consideration	4 (3%)	427. 428. 517. 518.	427. And that was very interesting to some of them (reason);

428. and so I will ... I will tackle it the next time (decision).

(interest + personality)



#### Figure 6: Lucie's categories of decisions with reasons

#### Non-decisions

The non-decision category includes several different types of utterances, but utterances that could not correspond to either of the main decision categories. Utterances within this category range from a simple statement about the date (*Today is February 11, 2003*), to the participant's feelings about events that occurred in the class (*Um I think that was a good activity* **or** *Anyway so I think it*  went very well today and...), to simple observation about the class (*Um I think my class has found its center person or centering person*). Random examples of utterances that are in the non-decision category are as follows:

#### Table 10: Non-Decision Examples for Joy and Lucie

Joy's examples:	Lucie's examples:
112) so that's a little frustrating	325. And u mmm there was lots of parent
115) Today was very heavy on pair work	directions in this in this class.
199) But it's over so	314. it was hard for some people to understand
195) I usually use that text because it is so	what was really asked of them and
simple. Um as a schema setting activity or	320. so they did this
portion of a lesson. And then we get into	60. And um I guess that's what I did
talking about neighborhoods and drawing a	277. That's it for today.
map and so on.	12. But they answered it for themselves.

186) I felt rather forced to do it all after.

187) Also, there's really low energy today in class.

## **Contrastive Analysis**

The contrastive analysis was a comparison of two teacher's decisions with reasons to see if any new ideas, information or knowledge evolved about decision-making. I was hoping to discover something new by comparing two distinctly different styles of reports on decision-making while at the same time, uncover which of Schulman's categories of knowledge were represented. I discussed Schulman's categories of knowledge in Chapter 2. This part of my research provides a simple glimpse of the similarities and differences between these two teachers and their decision-making process. I have displayed only the decisions with reasons categories in the table below. I specifically chose to display this decision group because the final part of the research analysis focuses solely on the decisions with reasons.

## Table 11: Decisions with Reasons: Joy & Lucie's similar categories

<b>Joy</b> 1. Decisions made to practice a specific grammar point	<b>Lucie</b> 1. Decisions about practice of specific grammatical points and/or aspect of English.
2. Decisions about teacher observation or concern for student(s).	2. Decision about student consideration.
3. Decisions to elicit something from the students (conscious intention).	3. Decisions about preset intention.
4. Decisions about how to conduct an activity.	4. Decisions about task achievement.
5. Decisions about transition only.	5. Decisions about linking lessons or activities.
6. Decisions about direction (forward or needed change)	6. Decisions about planning adjustments
7. Decisions about specific grammar points and transitions (#1 and #4 above).	7. Decisions about assessment.
8. Decisions about the types of activities.	8. Decisions about time.
	9. Decisions about oral communication aspect.
	11. Decisions about cause of activity.

This part of the research confirms that teachers share common goals or reasons for reaching decisions. The italicized categories (i.e. – categories 1 to 6) for both teachers are the common categories of decisions. The non-italicized categories (#7 and #8 for Joy and #s 7-11 for Lucie) demonstrate the difference in decision-making for each of these teachers.

This research also shows that while there are commonalities, there remain a variety of differences and perspectives for reaching decisions. It might also be argued that the dissimilar categories demonstrate the type of teaching methodology or approach (i.e. – Joy seems more focused on activity, procedure, and flow of activity – more classroom oriented; while Lucie seems more focused on communication aspects, planning, time, etc. – more 'real world' oriented). Both approaches are highly important in the classroom and both teachers do show various approaches through their reflections, but they each personally lean toward one side.

#### **In-Depth Analysis**

The following section demonstrates the third layer of analysis. This is soto-speak a microscopic look into the decisions these two teachers make in one class period. During the first stage of this analysis, I discussed the two major groups of decisions that appeared in these two teacher's debriefs: decisions without reasons and decisions with reasons. In the second stage of this analysis, I exposed more specific decisions within each of the two major decision groups (i.e. – decisions about timing, decisions about assessment, etc.). The following stage – the third and final stage – exposes the minute decisions that occur on a daily level within each teacher's classroom. These decisions could be decisions the teacher has been thinking about for some time (i.e. – I am teaching them such and such now because I need to test them on this by next week), decisions that they will make based on explicit or implicit feedback from that day's lesson (i.e. – the students were making a lot of mistakes with the "be" verb, so I will review that verb again tomorrow), and decisions they make on the spur of the moment based on contextual cues (i.e. – I let the students practice for longer because they had a hard time getting started OR I veered off course and decided to teach them future tense because they seemed to be ready for it). All in all, the final stage reveals the magnitude of decisions teachers make on a moment-to-moment basis within each class. My impetus for this part of the research was my belief that the final stage makes it easier for the reader to understand the decisions and the reasons for which decisions are being made.

To begin, I randomly selected one debrief for each participant. Joy's selected debrief contained a total of five decisions with reasons (or pairs of utterances). Lucie's selected debrief contained a total of three decisions with reasons (or pairs of utterances). Below, I first list each decision with reason separately in the order that it appeared in the debrief. I then provide two nodes of analysis attached to each decision with reason. The first node is a description of what the teacher is saying or doing and the second node is my conclusion of how the teacher is thinking about her class. Following, I discuss how these decisions

with reasons can serve other teachers in reference to what they exemplify about

teaching, language acquisition, student learning, etc.

# Table 12: In-Depth Analysis: Joy's & Lucie's decisions with reasons

	Joy's Decisions with Reasons	Lucie's Decisions with Reasons
1	<ul> <li>235) They had to tell their partner what they wrote and then their partner had to agree using 'me neither' (Decision)</li> <li>238) So agreeing and disagreeing. (Reason)</li> </ul>	<ul> <li>234. I was showing that the grammar point we were going to be studying and so on and so forth. (Decision)</li> <li>236. I was leading them towards part ofone of the activities that I had planned for today which was "what is your dream job" and "what would you like". (Reason)</li> </ul>
2	<ul> <li>252) And so next time we'll do past and future. (Decision)</li> <li>253) Which they seemed interested in. and I always get questions now and again. (Reason)</li> </ul>	<ul><li>254. Um then I gave them a worksheet</li><li>(Decision)</li><li>256. which was meant to have their work</li><li>and their education lifeline. (Reason)</li></ul>
3	<ul> <li>268) I had projected onto the whiteboard and (Decision)</li> <li>269) so when I was writing them on the whiteboard I could take away the overhead then that writing is still there and so I (Reason)</li> </ul>	<ul><li>257. and to help them do that (Reason)</li><li>258. I had designed a few questions.</li><li>(Decision)</li></ul>
4	<ul> <li>280) And then their homework was to write me a letter about some of the information we had talked about last time. (Decision)</li> <li>282) I think this was to prepare the students for the live action English on the computers that deals with writing a letter. (Reason)</li> <li>283) And eventually when we get into housing problems then. (Reason)</li> </ul>	
5	<ul><li>284) which I think I am going to start next week. (Decision)</li><li>285) Um then we will have some of the base work done. (Reason)</li></ul>	

Moving into the in-depth analysis, I begin with the first decision with reason for Joy as shown in the table above.

Joy

Decision with Reason #1

- 235) They had to tell their partner what they wrote and then their partner had to agree using 'me neither' (Decision)
- 238) So agreeing and disagreeing. (Reason)

# Node I: Description

In the above example, Joy is involving the students in a pair activity in which the students have to practice a particular aspect of communication with their partner. They have to describe to their partner what they wrote in a previous exercise and then their partner has to reply by using *me neither*. This is a part of the entire aspect of communication: agreeing and disagreeing.

## *Node II: Interpretation*

From this example, other teachers can see how one teacher teaches students how to agree and disagree in conversation. The conversational aspect is important because we use it in everyday conversation. It is important for the students to know how to agree and disagree in their conversations with others so that they can (1) transition through a conversation and (2) easily express their opinions to their interlocutor(s). Furthermore, the pair activity provides the students with another person with whom they practice agreeing and disagreeing prior to entering into the real world. In general, pair activities also provide opportunities for the students to engage in conversation – one way to acquire a language.

Lastly, real life experiences are an important aspect in teaching because students can see how the subject or topic is applicable to their lives. By asking the students to share *what they wrote* with their partner, Joy was connecting the activity back to their real life experiences, thus tailoring the lesson to the students' lives. It is important for us, as teachers, to be able to successfully implement activities that serve the students personally. The personal approach can increase the chances that the students will retain it. All in all, this example represents some of this teacher's classroom decisions (i.e. – decisions to practice an aspect of English; decisions to involve the students lives; decisions to group the students in a particular way for communication practice; etc.)

Decision with Reason #2

- 252) And so next time we'll do past and future. (Decision)
- 253) Which they seemed interested in. and I always get questions now and again. (Reason)

#### Node I: Description

In the example above, the decision Joy has made is to work on the grammatical features *past* and *future*. Her intention is to do it *next time*. She states that the students are interested in learning the past and future.

Joy's intent to work on past and future *next time* is because of (1) the prior utterance (not seen in the above example) that the students worked on the *present tense* that day (so the logical sequence would be to follow with past and future), and because (2) she is noticing that the students are interested in learning past and future (seen in 253 above). She has seemingly learned that they are interested in the past and future because of their questions.

### Node II: Interpretation

This is a good example of learning how to tailor your lesson to the interest of the students. In this example, we can see that the teacher has noticed student curiosity about learning the past and future. Other teachers can learn the importance of adapting lessons to the needs of the students. This illustrates how a teacher uses her understanding that learning takes place when a student is ready. Teachers need to be able to recognize this when in the classroom and they need to be able to adapt to student need. In this example, we can see this recognition and adaptability take place.

## Decision with Reason #3

- 268) *I had projected onto the whiteboard and* (Decision)
- 269) so when I was writing them on the whiteboard I could take away the overhead then that writing is still there and so I (Reason)

#### Node I: Description

In the above example, Joy is describing how she displayed information or a worksheet to the students. She used a projector and a whiteboard. She used the whiteboard so that she could write the answers on the whiteboard from the displayed worksheet and then later remove the projected worksheet to see only the answers she had written. The answers could then easily be used in the next activity or erased from the board instead of re-writing the words on the whiteboard from a transparency.

## Node II: Interpretation

This is an example of time management because she did not have to rewrite the same information twice. From this example, other teachers can see the variety of teaching instruments there are available in the classroom and the ways in which they can be used to accommodate time and to assist student learning. This describes decisions made due to time management. Teachers have to think ahead about how best to use the teaching instruments and classroom time.

Furthermore, this example demonstrates the importance of providing students with language support in the early stage of language learning. Beginning students do not always have the language necessary to communicate. Thus, teachers (such as Joy in this example) provide them with the language necessary to complete the activity, practice the aspect of English, and communicate effectively. The teacher may write a group of vocabulary words on the board for the students to practice during the activity. Teachers may hand out slips of paper with the verbs or vocabulary words to the students, or teachers may instruct the students to look at a page in the textbook that lists the vocabulary words, etc.

## Decision with Reason #4

- 280) And then their homework was to write me a letter about some of the information we had talked about last time. (Decision)
- 282) I think this was to prepare the students for the Live Action English on the computers that deals with writing a letter. (Reason)
- 283) And eventually when we get into housing problems then. (Reason) Node I: Description

This example shows one decision with two reasons attached. The first utterance is Joy's decision to give the students homework so they can continue to practice English while away from school. I think that she also chose homework for this activity (writing a letter) because people generally work at various paces to write. Writing requires more time to think, to select appropriate vocabulary, and to organize thought on paper. Furthermore, she was also thinking ahead to prepare the students for work on a computer (which dealt with writing a letter) as well as to prepare the students for an upcoming activity on housing problems. This shows her ability to connect the present lesson to past and future lessons sequentially.

#### *Node II: Interpretation*

This decision provides teachers with an example of scaffolding. Scaffolding is major element of instruction to keep in mind when teachers plan individual lessons and progress from one day to the next and one term to the next. This particular element of instruction is important because it builds on preexisting knowledge. As learners, we cannot learn a new concept before learning concepts that have come before. Thus, when planning lessons, it is important to understand how to structure the activities and the topics in such a way that support students through the learning process. This decision with reason collection clearly demonstrates that Joy was thinking about the homework as it related to the topic in the last class and how it would prepare them for activities in the future.

In addition, this example also demonstrates how teachers can use technology as a tool for learning in the classroom. This is shown by Joy's plan to use the computer in one of the following activities. The computer, in this sense, not only becomes an educational tool for the students to learn how to write a letter, but it also is an element of everyday living. The students will learn the terminology that is needed to understand how to navigate through the webpage on a computer and they have the opportunity to practice it as they accomplish a learning task. Thus, there are two types of learning occurring – language and technology.

#### Decision with Reason #5

284) which I think I am going to start next week. (Decision)

285) Um then we will have some of the base work done. (Reason) Node I: Description

In the above example, Joy's decision is to begin the new previously-stated topic – housing problems – next week. She is projecting this for the coming week because she imagines that she will have accomplished some of the necessary work by that point.

Joy is planning for future lessons and has an idea of what is appropriate and/or necessary for the students. She also understands that she will have to implement activities in between in order to properly prepare them for her projected plan.

#### Node II: Interpretation

This is a continuation of the prior example (#4) that demonstrates the teaching element: sequencing. Teachers can see that it is necessary to plan for the future and also take the steps to reach next week's goal. One final point is the expression I think. This expression shows uncertainty. It is important to understand that sometimes plans are delayed or change due to classroom circumstances. Joy's use of I think shows us that she has the intention of beginning the new topic next week, but she is not guaranteeing that she will begin it next week. Thus, she is demonstrating how a lesson can develop in the moment

or on the spot. This is a definite aspect of teaching. We may make plans with the intention of sticking to them. However, the events that occur in the classroom may call on us to instantly adapt our plans to the needs of the students or the requirements of the environment.

I now move into the two nodes description for Lucie. Her analysis was displayed in exactly the same way: decisions with reasons followed by nodes one and two (description and conclusion, respectively).

Lucie

## Decision with Reason #1

- 234. I was showing that the grammar point we were going to be studying and so on and so forth. (Decision)
- 236. I was leading them towards part of ...one of the activities that I had planned for today which was "what is your dream job" and "what would you like". (Reason)

## Node I: Description

Lucie's intention here is to inform the students about the lesson and her plan for the coming weeks (she stated in 232. *I want to talk about work for the next couple of weeks...*). In addition, the activity that is mentioned in the reason *what is your dream job* and *what would you like* are examples of how the teacher is connecting the lesson back to the students' lives and sequencing activities toward a goal.

## Node II: Interpretation

By informing the students about the day's activities or a projected plan for the coming weeks, teachers can place the students at ease in the classroom. In my experience, students (particularly adults) who are not informed are more fearful and not as excited to learn. By informing the students and providing them with daily objectives, teachers can moderate the fear and instill excitement and motivation in the students. In the above decision, Lucie showed the students the grammar point she wanted to teach them that day. When students are motivated to learn, they learn more. This is also an example of decisions that are made in consideration of student comfort level. She informed the students about the day's lesson typically involves writing a list of activities on the board with a goal or specific objective (i.e. – the students will be able to write a letter using the past tense). At the beginning of class, the teacher usually explains the list of activities and objective to the students.

#### Decision with Reason #2

- 254. *Um then I gave them a worksheet* (Decision)
- 256. which was meant to have their work and their education lifeline. (Reason)

#### Node I: Description

In this example, the decision is simply to give the students a worksheet. Lucie's reason behind giving them the worksheet is for them to draw their lifeline illustrating their work and their education experiences. It is clear that Lucie is preparing the students for completing an activity that requires them to recall their work and education experiences. She is involving the students personally by asking them to incorporate these aspects of their lives into the lifeline. Drawing a lifeline may be the practical goal, but applying it to the students' lives is the goal that may increase the chances of the students retaining the information.

## Node II: Interpretation

This is another example of how teachers can connect the lesson or the activity back to the students. Lucie is activating the students' memories about their education in their home countries. She then requests them to put this knowledge (the memories about their education) into a format (a lifeline).

In addition, one can see that it is probably helpful for the students to have the worksheet in front of them prior to the teacher's explanation. This provides the students with a visual aide that will assist them in understanding the teacher's intent.

### Decision with Reason #3

- 257. *and to help them do that* (Reason)
- 258. *I had designed a few questions.* (Decision)

#### Node I: Description

In the above example, the reason comes before the decision. The decision Lucie made was to *design a few questions*. The reason behind her decision was to assist the student in drawing their lifelines (as described in example #2).

By *designing a few questions* Lucie is prompting the students to think about their work and education experience. She is also engaging the students in learning by questioning them instead of telling them what to do. First the students have to read the question; second, they must understand it; and third, they must answer it and apply the answer to their lifeline. Lucie is also connecting this activity back to the students' personal lives, as originally seen in example #1.

#### *Node II: Interpretation*

In addition to taking this as an example of how to connect the content of the lesson back to the students' lives, teachers can see how they can modify the way in which they solicit information from the students. Sometimes teachers elicit information by directly telling the students what to do. Questioning is another way to help to maintain the students' attention. Questioning in general stimulates the thinking process. Therefore, this is a recommendation to teachers to develop questioning techniques that stimulates student thinking. The more we engage the learner, the greater the chances that they'll remember the language.

# Discussion

The third stage of analysis, above, provides a place from which to examine decisions and reasons in more detail. By dissecting the individual decisions and reasons and seeing how they relate to each other, we can understand more about the decision making process – a process that can take place in a split second in the classroom, but be vital to the progress of the lesson, the students, the teacher and the effectiveness of instruction. I discuss this in more depth in the following chapter.

#### **CHAPTER V**

## CONCLUSION

In this chapter, I discuss the results of my research as they pertain to my research question. Following this discussion, I expound upon the relevance of this research to other teachers, connecting my results and discussion back to past research; I highlight what's important from this research and then explain the limitations of this research and conclude with suggestions for future research.

## **Answering the Research Question**

The research question: *Given the opportunity to reflect individually, what types of decisions do the Lab School teachers make in their classes and what reasons for the decisions do they provide?* informed my research and guided me to discover what evolved from the data versus specifically searching for an answer. The types of decisions teachers make on a daily basis include but are not limited to: decisions about how to conduct an activity, decisions about direction, decisions about assessment, and decisions about time. The reasons for these decisions varied from the goals of providing students opportunities to practice speaking (pair or group work), to connecting the content or activities back to the students lives, and to preparing the students for a subsequent activity.

In this type of research and this area of analysis, there is not one answer that will inform us about the way teachers make decisions. Each teacher is different and each case is different. Through the Lab School the faculty and staff at the PSU/PCC Lab School provide a window through which we can examine this element of instruction and support the field of TESOL.

#### **Research Discussion**

Decisions make up primarily a huge part of our lives. From moment-tomoment, hour-to-hour, day-to-day, or year-to-year our lives we are faced with a number of decisions that assist us in reaching our daily or life goals. Similarly, teachers like Joy and Lucie are faced with daily decisions that all affect the outcome: to provide the students the ability (through language) to communicate competently. In order to be successful at teaching and walk away with confidence knowing that our students have the confidence and ability to communicate and operate in this world, we - as teachers - must be able to make appropriate decisions. In order to know if our decisions are appropriate and effective, we need understand the needs of our students, examine the types of decisions that occur in the classroom and understand our reasons for the decisions we make. Through this research, we have seen that teacher reflections provide a window into understanding decision-making.

Joy's and Lucie's reflections provide a glimpse into the types of decisions they make and the reasons they express for making their decisions. In the first part of the analysis, we saw that both Joy's and Lucie's reflections were over half decisions. From a reflective standpoint, Joy and Lucie engage in classroom decision-making half of the time they are teaching. The question followed: what types of decisions do they discuss in their reflections? Two distinct types of decisions surfaced from the analysis: decisions without reasons or decisions with reasons. I distinguished between decisions without reasons and decisions with reasons because each category represents two different levels of awareness in teaching: the 'what' and the 'why' of understanding. Both novice and experienced teachers can benefit from this research. Novice teachers can gain new knowledge about the particular types of decisions they make on a day-to-day basis. In other words, novice teachers can ask the questions: What types of decisions do I make? Or, how do I structure a particular activity in my class? They can reflect on and with Joy's and Lucie's reflections and then put their reflections into use when they go back into the classroom.

Experienced teachers can gain new knowledge and perspectives from the 'why' or reasoning aspect of these decisions. They may ask: Why do I make suchand-such decisions? Or, what prompted me to make this decision? Experienced teachers may further learn from the means of this research (the reflections) to begin reflecting on their own teaching. Joy's and Lucie's reflections can act as a model or guide for learning how to reflect. The particular act of reading and discussing Joy's and Lucie's reflections affirms new and experienced teachers about their own decision-making processes. Furthermore, Joy's and Lucie's reflections expose teachers to new types of decisions and reasons. Affirmation is important in teaching because it validates a teacher's practices and builds confidence in instruction.

The decisions Joy and Lucie discussed in their reflections sometimes included a reason or two that explicitly supported the decision(s) they made. Sometimes the decisions did not include a reason. Whether or not Joy or Lucie mentioned their reasons does not necessarily mean that there was no reason for the decision. Rather it means that the decisions discovered had no explicit reason stated.

After examining the decisions without reasons and decisions with reasons, I noticed Joy and Lucie were making decisions about a variety of different classroom issues on a daily basis. Despite their own individual style(s) of reflecting, Joy and Lucie made decisions about similar themes. As evidenced by the vocabulary, verbs, or expressions written on worksheets or noted on the whiteboard and also comments in their debriefs referencing student challenges, both teachers demonstrate their understanding of the necessity to support their students' language development with appropriate language or vocabulary. They also consistently incorporate the students' lives and experiences into the lesson as well as consistently engage the students based on their personal interests. Joy and Lucie leverage student knowledge for the basis of new language development and address or add content to the lesson if the students request it all the while building upon previous lessons. Furthermore, both teachers consistently utilize a variety of teaching tools such as worksheets, whiteboard, projector, computer, etc. to enhance and supplement the student learning experience as well as support the their teaching. Joy's and Lucie's understanding and competence of conducting a class and educating students comes not only from their experience and education in the field of TESOL, but it also comes from the knowledge base they obtained from their own prior experiences as a learner in life. These past experiences form the lens that guides us through our present contextual experiences. It is important to note that the lived-experience is the lens from which we operate. We should be aware that the lens often colors our present experiences.

According to Shulman (1987), the knowledge base contains domains of knowledge informed by past experiences. The domains of knowledge include: content knowledge (an understanding of the content or subject area), pedagogical content knowledge (an understanding of what to teach and how to teach), curriculum knowledge (an understanding of the resources and programs that will serve their students), and general pedagogical knowledge (skills in classroom management and organization). In addition to these domains, Shulman says teachers also maintain an internal repertoire of knowledge that includes knowledge about her learners and their characteristics. Depending on the type of decision needed, Joy and Lucie access these domains of knowledge to make the most appropriate decision.

#### How Teachers Can Use Findings From This Research

The domain of knowledge is the foundation to the decisions Joy and Lucie make in their classrooms. It is made up of beliefs about teaching and learning – those beliefs being built from both the teacher's own teaching and learning experiences. It is the source to making appropriate decisions based on prior experience - taking everything into account before deciding on the best action (Crookes, 1997 and Freeman & Freeman, 1994). When we understand the domain of knowledge (or our beliefs about the teaching), we can begin to feel more confident as teachers because we understand why we are making the decision(s) we are. We establish a firm foundation from which to grow and the outcome of our work begins to surface in the classroom. By examining Joy's and Lucie's decisions, we gain access to their domains of knowledge that are supporting their decisions. In other words, we are asking: What is it that the domains of knowledge are telling Joy and Lucie to do and why? We utilize not only the knowledge and decisions of experienced teachers, but also the reasons to benefit our own work, our own decisions, and provide ourselves a new perspective.

The reason tells us the direction we are going and the meaning for our action. The reason gives meaning to the goal. Without understanding where we are going, we are less likely to understand how to get there. Our goal is to give our students the competence to communicate in another language, in various contexts. The decisions we make on a daily and moment-to-moment basis all impact their overall progress and success. Therefore, by understanding the reasons for our decisions, we increase the chances that we are making the best use of students' valuable time. Ultimately, the new knowledge we gain by examining Joy's and Lucie's decisions and reasons can be used to scaffold how pre-service teachers learn to design an optimal learning environment for their students. By examining Joy's and Lucie's decisions and reasons pre-service teachers gain the insight into their own decisions and reasons as they write their own lessons and develop activities to employ in their classes. Pre-service teachers stimulate their own awareness of how they make decisions, what types of decisions they make, and the reasons for the decisions they make. Just as Joy and Lucie scaffold the activities in their classes, pre-service teachers can scaffold their teaching practice with Joy's and Lucie's reflections.

Joy and Lucie understand the content of each lesson. Their knowledge can inform us of the importance of understanding what we are teaching prior to actually transmitting the information to the students. We can learn about the decisions Joy and Lucie are making within each lesson and apply this information directly back to our own decisions in the classroom by – for instance – utilizing self-questioning techniques. This research may prompt other teachers to ask: What types of decisions predominate in my own lessons? Which decisions do I view as most important to my effectiveness of instruction? Are my reasons for the decisions I make similar to those of Joy's and Lucie's? What is my reason for making such-and-such decision? Which categories of Joy's and Lucie's decisions have I not examined in my own instruction? How can these decisions help me to better inform my effectiveness? As an example, we can examine a particular category of decision each week – perhaps, focus on decisions about transition one week and then address decisions about specific grammar points the next week.

Reflection is a tool for examining aspects of our teaching and student learning. We can see that there are at least two styles of reflecting utilized here by Joy and Lucie. There are a variety of other ways to reflect. Joy's and Lucie's reflections are models for other teachers to learn how to reflect and develop their own personalized reflective practice. We may adopt these styles or implement other styles of reflecting to examine our instructional practices. We can learn about teaching by learning about Joy's and Lucie's experiences. We can then take that and apply it to our own experiences in the classroom. Recording our own thoughts and reflecting on our own decisions and reasons is one tool that will assist us in developing our educational practices.

#### Limitations

The data is subject to interpretation and one's own personal frame of reference. Readers may see that my decisions and/or reasons could have been categorized differently and could provide a different angle from which to view the data. Additional perspectives would build on these ideas and enhance the quality of the project and of this type of analysis. For example, a teacher or researcher who is experienced in the K-12 environment may notice different categories of decisions or may notice how the existing categories could be sorted in different ways. Gaining additional perspectives would ultimately enrich this research.

The reliability of this research showed results that both greatly matched and highly differed from my analytical results as researcher. When comparing my peers analysis to my own, there was high percentage of agreement for one teacher and low percentage of agreement for the other teacher. The dissimilarity naturally emphasizes that the analyst brings his or her own bias and interpretations. It is interesting to notate this difference and acknowledge that there is more than one way of perceiving things.

Throughout the analytical process, I discovered a subtle boundary between placing a decision in one category as opposed to another. It was often challenging with respect to my own thought process, the various perspectives I could take about the participants' decisions and reasons, and it was further challenging when examining each decision in context (next to the surrounding dialogue) and out of context (separate from the surrounding dialogue). It was not always easy to place a decision or reason in a category without examining what was around it. The context ultimately defined the category that a decision or reason fit into.

Because there were only two teacher participants in this research, the results cannot be generalized to the entire population of ESL teachers. It represents only those decisions displayed by the participants in this study. As the actual analysis was through my own personal frame of reference in regards to teaching and cognitive analysis, this research was limited to my interpretation of how these teachers make decisions. This research is through my voice versus the voices of the participant teachers.

### Suggestions for Further Research

This research may serve other teachers by exemplifying alternate ways of decision-making and by demonstrating (through analysis) how experienced teachers make decisions. It may serve as a primary example of how to examine one's own classroom decisions, cognitive processes, and the types of knowledge supporting the classroom decisions. Dependent on the teaching environment and circumstance, this type of analysis represents a useful way of examining teacher decision-making. Other researchers can examine the decisions and/or reasons in more detail or focus specifically on one type of decision.

It may be useful to the field to examine the content of the non-decision category – the category that I did not examine in this research. This category contained a great amount of information about the participants' feelings about the class, their teaching philosophy, etc. Understanding Joy's and Lucie's teaching philosophy may provide further insight into their personal teaching practice. It may also provide insight into the field of teaching as a whole.

Furthermore, an examination of the videos that pertained to the classes may reveal other insights. Researching the teachers is one angle to approach this data. There is – however – a great amount of data on the learners in these two teachers' classes. Perhaps this research could be combined with an examination into student learning as it relates to teacher decision-making. Researching student learning would enhance our knowledge and understanding of the effectiveness of our instruction as teachers, for the appropriateness of our decisions directly relates to the success of our students.

This research was completed on female teachers. It would be interesting to examine and/or compare decision-making techniques among male and female teachers. The manner in which a male teacher conducts his class or makes classroom decisions may not vary so much from the way in which these participants make decisions. However, it may reveal certain data about how the students respond to male versus female instructors, and – likewise – how the male versus female teachers respond to their students.

In the area of reflection, it is important to make note that the reflections we saw in this research were unguided. In other words, there was no individual outside of the teachers that was stimulating the teachers' thought processes or reflections. This research not only informs other teachers to be reflective, it can also promote reflexivity in the area of instruction. I could have taken this research further by conversing with Joy and Lucie to uncover how my research informs them about their own practice. In a sense, my research would become a 'mirror' for Joy and Lucie to learn about to themselves as teachers. Finally, it would be interesting to note the Joy's and Lucie's comments on my research and truly see the relationship between what I - as the researcher – perceive and what they as the actual participants see.

These are simply a few suggestions for expanding upon this research. This type of research and the data at hand contain an enormous amount of knowledge that can benefit other teachers and the field of teaching English as a second language. I have only touched on the ocean of knowledge that exists.

## **Concluding Comments**

The impetus for this research was founded in my personal interest to understand what types of decisions teachers make and the reasons they provide for making their decisions – particularly in reference to the knowledge base that supports decision-making. It was important to me to gather a glimpse of how teachers make decisions and the reasons for which they make those decisions because it provided a basis for improving my own decision-making techniques and understanding the teaching process. My intention was also to find a way in which to assist other teachers in the classroom. It was with hope that the analytical technique and the results of this research shed light on the field of teaching English as a second language and assist other teachers in the field.

In the context of teaching – particularly teaching English as a second language – there has been much research done in the area of language acquisition and the learner. While prior research in either a video or audio format may have looked at teacher knowledge or teacher reflection, it is clear to me from my research, literature review, and my time transcribing that to date there has been no digitized audio/visual learner corpus or any digitized corpus of teacher reflections. The Lab School details classroom events, teacher decision-making, student behavior, etc. through audio-video recordings like the PCC-PSU Lab School.

The Lab School research is innovative in that it has provided the field of ESL teaching and teaching in general an enormous pool of data. The teacher's voice is part of these data and is available for research. Having the Lab School as a resource enabled my research and can enable others to come in and conduct other research. Through my research, I learned that Joy and Lucie gained knowledge about their own practice from their time reflecting. This was prevalent throughout the debriefs in that the Joy and Lucie often expressed what they learned. Just as the Lab School encourages teachers and researchers to learn about teaching and language learning through the data, I hope that my research helps other teachers learn about reflecting and decision-making.

Teaching can be one of the most challenging professions due to the number of aspects that are involved (i.e.-content, learning style, classroom management, curriculum, learning environment, etc). It is not simply a transmittance of knowledge from one source to another. Teaching involves psychology, cultural awareness, knowledge of the language acquisition process, quick decision-making, preparation, etc. All of this comes together in one room, the classroom and happens in real time needing immediate response, ability to adapt, versatility, etc. from the teacher. Having recorded classes now allows for not only the eyes of those teaching to watch, reflect, and learn, but also the eyes of the world. We can check our own thoughts, ideas, and assumptions about education to see if what we are saying is congruent with what is taking place in the classroom and we can gain new perspectives to enhance our practice and ultimately enhance the learner experience.

## **Reference** List

- Aicinena, Steve. (2000) Teacher cognition during monitoring behavior: A case study. Physical Educator, (57)1, 27-34. Retrieved June 7, 2004 from EBSCO Host database: http://weblinks3.epnet.com/
- Akyel, Ayse. (2000) Collaboration to explore teaching: A case study report. *TESL Canada Journal*, 18(1), 58-73.
- Anderson, Neil J. (2002) The role of metacognition in second language teaching and learning. Retrieved January 28, 2004 from CAL Digests: http://www.cal.org/resources/digest/0303diaz.html
- Armour-Thomas, Eleanor. (1989) The application of teacher cognition in the classroom: A new teaching competency. *Journal of Research and Development in Education*, 22(3), 29-37.
- Armstrong, S. & Frith, G. (1984) Practical self-monitoring for classroom use. In Jack C. Richards, *The language teaching matrix*. Cambridge: Cambridge University Press.
- Artzt, Alice E. & Armour-Thomas, Eleanor. (1999) A cognitive model for examining teachers' instructional practice in mathematics: A guide for facilitating teacher reflection. *Educational Studies in Mathematics*. 40(3), 211-235.

Beattie, Mary. (1995) New prospects for teacher education: narrative ways of

knowing teaching and teacher learning. Educational Research. 37(1), 53-70.

- Carrasquillo, Angela L. & Song, Feng (1994) A reflection on reflective practice in Teaching English to Speakers of Other Languages. Report : Fordham University : NY.
- Carter, Kathy & Doyle, Walter (1987) Teachers' Knowledge Structures and
   Comprehension Processes. In J. Calderhead (Ed.), *Exploring teachers' thinking* (pp. 147-160). Eastbourne, England: Cassell.
- Creswell, John W. (2003) Research design: Qualitative, quantitative, and mixed methods approaches. Thousand Oaks: Sage Publications, Inc.
- Crookes, Graham. (1997) What influences what and how second and foreign language teachers teach?, *The Modern Language Journal*, 81, 67-79.
- Dewey, John. (1938) Experience and education. New York: MacMillan Publishing Company.
- Encarta World English Dictionary. (2006) Microsoft Corporation. Retrieved 11/4/2006 from http://encarta.msn.com/dictionary\_/knowledge.html
- Encyclopædia Britannica. (2003) Encyclopædia Britannica, Inc. Retrieved 6/13/2004 from <u>http://www.britannica.com</u>
- Ericsson, K. A. & Simon, H. A. (1980) Verbal reports as data. *Psychological Review*, 87, 215-251.

Ericcson, K. A. & Simon, H. A. (1998) How to study thinking in everyday

life: Contrasting think-aloud protocols with descriptions and explanations of thinking. Mind, Culture, and Activity. 5(3), 178-186.

- Fenstermacher, Gary D. & Sanger, Matthew. (1998) What is the significance of John Dewey's approach to the problem of knowledge? *The Elementary School Journal*, (98)5, 467-478. Retreived April 26, 2004 from Communication & Mass Media Complete database: <u>http://weblinks1.epnet.com</u>
- Freeman, David E. & Freeman, Yvonne S. (1994) *Between worlds: Access to second language acquisition*. Portsmouth, NH: Heinemann.
- Guhde, Jacqueline A. (2003) English-as-a-Second Language (ESL) nursing students: Strategies for building verbal and written language skills. Journal of Cultural Diversity, 10(4) 113-117. Retrieved May 9, 2004 from Academic Search Premier database: <u>http://weblinks3.epnet.com</u>
- Hatton, Neville & Smith, David. (1994) Reflection in teacher education: towards definition and implementation. *Teaching & Teacher Education*, 11(1) 33-49.
- Immel, Susan. (1992) Reflective practice in adult education. Retrieved January 30, 2004 from ERIC database: <u>http://firstsearch.oclc.org</u> ED346319

Kelehear, Zach & Davison, Gary. (2005) Teacher teams step up to leadership.

Retrieved December 16, 2006 from WilsonWeb database http://vnweb.hwwilsonweb.com/hww/shared/shared\_main.jhtml?\_requesti d=2787688

- Korthagen, Fred A. J. (1993) Two modes of reflection. *Teaching & Teacher Education*, 9(3), 317-326.
- Lab School. (2005). *Informed Consent*. Portland, OR: Portland State University. Retrieved: October 2, 2005, from <u>http://www.labschool.pdx.edu/</u> research/methods/maelc/consent.html

Lab School. (2005). *Instructional Setting*. Portland, OR: Portland State University. Retrieved: October 2, 2005, from http://www.labschool.pdx.edu/overview/ intro.html

- Lab School. (2005). *Lab school software—ClassAction Toolbox*. Portland, OR: Portland State University. Retrieved: September 29, 2005, from <u>http://www.labschool.pdx.edu/labschoolsoftware.html</u>
- Lee, Penny. (2003) "Feelings of the mind" in talk about thinking in English. Cognitive Linguistics. 14(2/3), 221-250. Retrieved June 7, 2004 from EBSCO Host database: http://weblinks3.epnet.com/

Mangubhai, F., Marland, P., Dashwood, A., & Son, J-B. (2004) Teaching a

foreign language: one teacher's practical theory. Teaching & Teacher Education. 20(3), 291-312. Retrieved June 7, 2004 from EBSCO Host database: http://weblinks3.epnet.com/

- Mayan, Maria J. (2001) An Introduction to Qualitative Methods: A Training Module for Students and Professionals. Alberta: Qual Institute Press.
- Merriam-Webster Online. (2004) Merriam-Webster, Incorporated. Retrieved June 13, 2004 from <u>http://www.m-w.com</u>
- Miles, Matthew B. & Huberman, A. Michael (1994) Qualitative Data Analysis. California: Sage Publications.
- National Center for the Study of Adult Learning and Literacy (NCSALL). (2005). *Lab School Sponsor*. Retrieved October 3, 2005 from <u>http://www.ncsall.</u> <u>net/index.php?id=17</u>
- National Reporting System. (2007). Beginning ESL Class Descriptions. Portland, OR: Portland State University. Retrieved: February 19, 2007, from http://www.swadulted.com/workshops/eslcourse/nrs.html
- Nisbett, R. E. & Wilson, T. D. (1977) Telling more than we can know: Verbal reports on mental processes. *Psychological Review*, 84, 231-259.
- Phakiti, Aek. (2003). A closer look at the relationship of cognitive and metacognitive strategy use to EFL reading achievement test performance. *Language Testing*. 20(1), 26-57. Retrieved June 7, 2004 from EBSCO Host database: http://weblinks3.epnet.com/

PCC/PSU Lab School Website:

http://www.labschool.pdx.edu/overview/intro.html

- Reder, Stephen, Harris, Kathryn, & Setzler, Kristen. (2003) The Multimedia Adult ESL Learner Corpus. TESOL Quarterly, 37(3).
- Richards, Jack C. (1990) *The language teaching matrix*. Cambridge: Cambridge University Press.
- Schön, D. A. (1987) *Educating the reflective practitioner*. San Francisco: Jossey-Bass.
- Shulman, Lee S. (1987) Knowledge and teaching: Foundations of the new reform.
   *Harvard Educational Review*. 57(1), 1-22. Retrieved April 26, 2004 from
   Communication & Mass Media Complete database:
   <u>http://weblinks1.epnet.com</u>
- Stern, Paula & Shavelson, Richard J. (1983) Reading teachers' judgments, plans, and decision making. *Reading Teacher*, 37(3) 280-86.

Strauss, Anselm & Corbin, Juliet (1990) Basics of Qualitative Research: Grounded Theory Procedures and Techniques. California: Sage Publications.

- Van Manen, Max. (2000) Phenomenological Inquiry: Retrieved June 13, 2004 www.phenomenologyonline.com
- Van Patten, Bill. (1997) How langauge teaching is constructed : Introduction to the special issue. *The Modern Language Journal*, 81, 1-5.

- Wilson, S. M., Shulman, L. S., & Richert, A. E. (1987) "150 Different Ways" of Knowing: Representations of Knowledge in Teaching. In J. Calderhead (Ed.), *Exploring teachers' thinking* (pp. 104-124). Eastbourne, England: Cassell.
- Woods, Donald R. (1996) Teaching thinking, problem solving, transference, and the context. *Journal of College Science Teaching*, 26(1) 74-76.