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# Technology Use as Transformative Pedagogy: Using Video Editing Technology to Learn About Teaching

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Technology Use as Transformative Pedagogy:  
Using Video Editing Technology to Learn About Teaching

by

Michelle Macy

A dissertation submitted in partial fulfillment  
of the requirements for the degree of  
Doctor of Philosophy  
Department of World Languages  
College of Arts & Sciences

and

Department of Secondary Education  
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## **Dedication**

I dedicate this dissertation to Nikhil, my son. He has been the ultimate reason for me to move ahead and complete this degree. I am constantly amazed by his intelligence and curiosity, and I hope to instill in him the desire to learn that my own mother imparted to me. He has brought so much love and laughter into my heart, and has reminded me how to play and to notice the beautiful details of every day. With every passing moment, his amazing light shines brighter, and my love for him grows even stronger. I hope I can make him as proud of me as I am of him.

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## **Abstract**

Within the paradigm of Sociocultural Theory, and using Activity Theory as a data-gathering and management tool, this microgenetic case study examined the processes - the growth, change, and development – engaged in by student-teachers in a foreign language education program as they worked together to complete an activity. The activity involved digital video recording and editing, mediators which were intended to facilitate the iterative review of and subsequent reflection and action upon the content of the video during its creation.

By investigating the process of contextual interaction between learners and the mediational elements of their environment as the activity progressed, this study intended to further understanding of preservice teacher development in at least two important ways. The aims of this study were to discover a) tangible evidence of cognitive transformation (development in the form of regulation), as well as b) aspects of professionalization into a community of skilled second language teachers (as evidenced by activity).

The present study took place in a graduate-level foreign language/TESOL education practicum course. The activity involved the making of a digital video to explain and exemplify a given second language instructional approach, as well as the rationale behind and methods of targeting a specific language skill. Using theoretical constructs previously shown to be effective in the pedagogy of teacher preparation, the creators of this task endeavored to design a socially- and artifact-mediated activity with

the potential to broaden and deepen student-teachers' pedagogical and professional knowledge.

The student-teachers failed to engage in meaningful dialogical or critical reflection as they engaged in the task, and made no perceptible regulative movement. What ultimately was revealed in the case of the study participants was a disconnect between the intentions of the core-task designers and the outcomes effected by the student-teachers. The data gleaned from this close examination of student-teacher processes was revelatory in terms of the quantity and types of factors that appeared to significantly impact the outcomes of the project. These factors have the potential to inform the process of translating socio-cultural theory into pedagogical practice, and may be of interest to anyone involved in the development of student-teachers, including those who design or deliver preservice teacher curricula.

Discussed are the possible explanations for the disconnect between the designers and administrators of the activity and the participants in the study. Also considered are the implications for second language teacher education programs and their curricula in terms of the application of socio-cultural constructs to learning tasks and environments.

Recommendations include increased scaffolding by the course professor through direct guidance, as well as by structuring tasks to facilitate students' ability to collaborate and to perceive and resolve the conflicts, contradictions, and tensions that arise during the course of the activity.

## Chapter I

A growing interest in the efficacy and consistency of teacher preparation in the United States has emerged over the last several decades, sparked by concerns as to the quality of the nation's teachers by stakeholders at all levels of society. In the nineteen eighties, these concerns were reflected in *A Nation at Risk* (1983), an influential report by the National Commission on Excellence in Education. The findings therein, along with the subsequent recommendations and follow-up reports, posed many questions about the profession of teaching, which generated an increased call for teacher preparation research and a national board to oversee professional standards for teaching. Two decades later, another federal-level report (Spellings, 2006) was issued by the Spellings Commission on the Future of Higher Education that shifted the focus to the effectiveness and consistency of instruction at post-secondary institutions, and called for increased innovation in instruction, as well as greater accountability relating to standards and accreditation of academic programs. Recently, reforms specifically targeting the improvement of teacher preparation programs have been encouraged through federal legislation and the Race to the Top Program ("American Recovery and Reinvestment Act," 2009). These federal initiatives have influenced the current body and direction of research on the preparation of teachers, the development of state and national standards for student-teachers and the post-secondary programs that prepare them, as well as the push for institutions to undergo rigorous accreditation procedures.

As researchers in recent decades (see Cochran-Smith, Feiman-Nemser, & McIntyre, 2008; Cochran-Smith & Zeichner, 2005; Darling-Hammond & Bransford, 2005a; Darling-Hammond & Bransford, 2005b; T. Russell & Loughran, 2007) have examined many aspects of teacher development in the interest of gaining additional insight into teacher preparation processes and outcomes, one important area of focus has been the pedagogy of teacher development. How to successfully teach prospective teachers is of crucial interest to those who design teacher preparation courses and their related activities.

Interest in the pedagogy of teacher preparation is indeed reflected in research (see Hoffman-Kipp, 2003; Loughran, 2006; Schön, 1983, 1987; Shulman, 1986, 1987, 2004), but it is also vigorously measured in the multiple sets of research-based and expert-designed standards in which the student-teacher is required to demonstrate competence. These standards exist often at the institutional, state, and national levels, and are validated by both public and private agencies. It is important to note that these standards often gauge what the student-teacher is able to “do” prior to entering full-time service. Generally, the competencies in question are determined through the assessment of student-teacher *products* that are produced as part of the course and fieldwork required in a teacher preparation program.

The majority of research in the pedagogy of teacher preparation has focused on the impact of a variety of methods, technologies, and approaches on the products of student-teachers (and the satisfaction of the standards reflected therein). Of interest in the present study, however, are the *processes* engaged in by the student-teacher in the course of producing such a product. Rather than merely measuring the end product as evidence

of knowledge, understanding, and meeting a given standard, it is important to examine how a student-teacher moves through the complex and iterative process of comprehending, at varying degrees of depth, a set of pedagogical ideas intended to be learned and applied through the production of the product. The process, then, becomes the source of information on how a student-teacher may come to understand and apply a set of pedagogical concepts to generate a product, the final quality of which is ultimately used to gauge whether or not a given standard intended to measure the skills of student-teachers has been satisfactorily met.

This study was situated in a foreign language education program at a Research I university in the southeastern United States. This program had successfully undergone SACS (Southern Association of Colleges and Schools), NCATE (National Council for Accreditation of Teacher Education), and state accreditation processes. As such, student-teachers in the foreign language education program were required to meet the standards associated with each of these agencies, as well as those established by the College of Education at the university. These standards were considered to be met through the successful completion of specific courses and their associated assignments and projects.

The present study examined the development of foreign language student-teachers as they produced a particular standards-based product assigned as a project within a specialty-specific course. Grounded in sociocultural theory, this study took an activity-based, sociocontextual, and technology-mediated perspective in an attempt to reveal aspects of the iterative and incremental processes by which student-teachers might come to know, understand, and apply a given pedagogical approach.

## **Overview and Context of Research Problem**

Meta-analyses of recent educational research (see *Teacher Preparation*, 2006) have begun to reveal important sites of convergence in the data on teacher preparation programs, pedagogies, and outcomes. Educational scholars and policy-makers at multiple institutional levels have developed these nexuses into bases for sets of standards aimed at assuring the quality of the professional performance of student-teachers and the programs that prepare them for the classroom. In view of the currently established goals for student-teachers, as stated throughout the multiple sets of standards, it is essential to note that many teacher development programs gauge the attainment of these standards through the assessment of *products* (i.e. “core tasks”) produced by student-teachers during their course of study. Assuming that we know something of the end goals, then, the questions arise: “What of the processes used to reach those goals?” and “What are the means by which student-teachers and their instructors attain those ends?”

### **The Pedagogy of Teacher Preparation**

Grossman (2005) broadly characterizes the pedagogy of teacher development as necessarily encompassing both instructional techniques as well as the interactions between instructors, students, and the course content. Techniques and interactions include the nature of instructional discourse, the chosen instructional strategies, the representations of the content, as well as the relationships between teachers and students and how they shape what prospective teachers learn. In addition to instruction and interaction, Grossman also includes tasks and assignments as “a crucial ingredient in the pedagogy of teacher education, as they focus students’ attention on particular problems of practice and introduce...ways of reasoning or performing” (p. 426). In the field of second



language teaching scholars have, over recent decades, begun to explore what teachers of foreign/second languages should know (Freeman & Johnson, 1998; Tarone & Allwright, 2005), as well as to develop various conceptualizations of teacher knowledge (e.g. Richards & Nunan, 1990). The latter tend toward outcome/product-based notions of what it means to be a good teacher. This is, however, not quite the same concept as what pedagogies teacher educators should employ so that their student-teachers can best acquire this knowledge.

### **Pedagogical Approaches in Teacher Preparation**

The pedagogy of teacher development has traditionally been, at least in the United States, “focused primarily on the uses of various pedagogical approaches or instructional strategies” (Grossman, 2005). The focus of many studies has been on the effects of particular pedagogical approaches on student-teacher beliefs and practices (Clift & Brady, 2005). More recently, in the face of the accountability movement, research interests have turned to the eventual outcomes of student-teacher learning of specific pedagogical approaches (Cochran-Smith & Zeichner, 2005) – outcomes that are measured against institutional, state, national, and organizational standards.

Within the domain of the pedagogy of education, many specific instructional approaches have been examined. The most ubiquitous, but by no means the only, pedagogical approaches adopted for use in teacher education include laboratory experiences, including microteaching and computer simulations, case methods, video and hypermedia materials, portfolios, and practitioner research (Grossman, 2005). It is in these widely accepted approaches that the large majority of systematic studies have been conducted.

## **Teacher Development in the Course of a Pedagogical Approach**

Pedagogy in the preparation of teachers, however, has many more dimensions than a mere list of potential instructional approaches. How student-teachers should be taught involves complex developmental processes and interactions. As such, researchers have begun to closely examine “how individuals, institutions, programs, and ideas are interrelated” (Clift & Brady, 2005; Johnson, 2009). Examining teacher development curricula and pedagogical approaches themselves, and their eventual outcomes on student-teachers, is indeed important. It is, however, also intriguing to explore, within the domain of the pedagogy of education, the *development process* of student-teachers throughout the implementation of specific instructional approaches. By doing so, we can understand more about how these approaches function to impact student-teachers’ understandings *during* the learning process.

### **Products *versus* Processes**

It is, therefore, of interest to examine how student-teachers evolve and develop during the application of common pedagogical approaches utilized by teacher educators in teacher preparation programs. Such research can inform the design of programs, courses, and activities as teacher educators continue to hone their efforts in bringing about what are viewed to be crucial changes in student-teacher beliefs and practices, which are expected to ultimately lead to improved student performance.

Within the domain of teacher education pedagogy, it is essential that researchers examine the fundamental processes by which student-teachers deepen their understanding of key pedagogical concepts, begin to see how those concepts fit into the reality of teaching, and enter into membership in their professional community. In other words, it

is important to learn more about *how* student-teachers develop their knowledge from that of novices to that of beginning-level professionals in their field. Teacher preparation programs are, therefore, faced with the challenge of helping their student-teachers cultivate their knowledge from mere *comprehension of concept* into *concept application*, and eventually to creative, original, and masterful levels of expanded *concept development and use*.

To accomplish such learning goals, it is essential that teacher preparation programs oblige student-teachers to engage in complex, higher-order cognitive functions as they encounter and interact with program curricula. So much so, that both institutions and the agencies that evaluate and accredit them have been developing sets of demonstrable standards as a means of raising the bar in education programs beyond the level of factual knowledge. The teacher preparation program in which the present study took place was located within a College of Education at a Research I university in the southeastern United States. The college had developed its own set of standards, which tied into state and national standards. The three sets of standards evolved to focus on skills that extended far beyond factual knowledge on the part of student-teachers. For example, the college standard “Reflection, Analysis, and Inquiry” tied into the state standard on “Continuous Improvement” and “Critical Thinking”. Both of these sets paralleled the national standard “Critical Thinking and Problem-Solving”. Obviously, there are multiple ways that those who design curricula to prepare teachers might meet and promote these application-oriented standards. For example, the foreign language education program involved in the present study did so by emphasizing learner-centered pedagogical models. The curriculum encouraged student-teachers to employ reflective

and cooperative learning approaches, as well as engage with mediational items with the potential to promote critical thought, such as technological tools.

### **Purpose of the Study**

The present study took place in a graduate-level foreign language education practicum course. The focus of the research was on the *processes* - the growth, change, and development – engaged in by a group of student-teachers as they completed one of the core tasks in the course. The task involved the making of a digital video to explain and exemplify a given second language instructional approach, as well as the rationale behind and methods of targeting a specific language skill. Rather than looking only at the final products of these student-teachers’ learning as evidence of having met, at least to some degree, one or more of the standards targeted by the core task, this study attempted to examine their journeys to understanding.

In their book, *Teacher learning in language teaching*, (1996) Freeman and Richards assert that “in order to better understand language teaching, we need to know more about language teachers...what they know about language teaching, how they think about classroom practice, and *how that knowledge and those thinking processes are learned through formal teacher education...*” [italics mine] (p. 1). Particularly in reference to the latter, Florio-Ruane (2002) called for increased complexity in studies of teacher preparation. She stated that “...the study of...teacher education needs additional light from fields concerned with the social and cultural organization of thought and learning. Moreover, it needs a focus on the explicit preparation of teachers” (p.210). As such, research in teacher preparation pedagogy that focuses on the multifaceted nature of how student-teachers evolve their understandings from those of novices toward those of

professionals can provide valuable information to those responsible for their development. The more teacher educators are aware of the *processes* involved in their student-teachers' growth of understanding, the more finely-tuned teacher preparation curricula can be, which in turn may better meet the required standards.

Using Sociocultural Theory as a theoretical foundation, Activity Theory (AT) as a data-gathering and management tool, and Exploratory Practice (EP) as a principled reasoning behind the pedagogy, this study examined the processes engaged in by student-teachers in a foreign language education program as they worked together to complete an activity in which digital video recording and editing were required. Sociocultural Theory provided a paradigm in which the researcher might examine the social, cultural, and historic (*genetic* – see below) aspects of student-teacher cognitive change from object- to other- to self-regulation, and internalization of emerging higher mental processes. The framework of AT, a socioculturally-based method, allowed the researcher to take into consideration the *context* in which novice teachers might develop their knowledge. In AT, learning and development occur as a result of external and internal tool use. Mediation through tools, particularly language, in addition to specific artifacts, and interaction within a community, are what bring a learner to internalize knowledge. The frameworks used in AT to describe the aforementioned were particularly well-suited to describe and manage the highly interactive and complex data on foreign language teacher development and pedagogical growth as the study participants worked through a technology-oriented, tool-specific mediated activity in an interactive, collaborative context. Exploratory Practice provided a principled reasoning behind the pedagogy used by the developers of the core task in which the student teachers engaged in the present

study. In addition, since EP places its emphasis on “*understanding* rather than *problem-solving*” [emphasis in original] (Allwright, 2005), it allowed the researcher to grow to understand the processes by which student-teachers attempted to come to their own understandings.

It should be noted that since the 1960s, many studies involving video use in teacher education have focused on student-teacher reactions to and reflections on either self-made (see Acheson, 1964; A. R. Davis, 1970; Goldman, 1969; Sherin, 2004; Sherin & Han, 2004; Wang & Hartley, 2003) or instructor-/commercially-made (see Copeland & Decker, 1996; Merseth & Lacey, 1993; Pape & McIntyre, 1993) video of teaching practices.

This study, however, required student-teachers to create their own explanatory and illustrative videos. Rather than reacting to received data supplied by their instructors, they were to create their own. What’s more, in addition to the reflective practices expected around the self-made student teaching videos traditionally used in methods courses, the student-teachers had the opportunity to view and review, select and delete, revise and discuss. The present study focused primarily on the latter, examining processes as evidence for learning and understanding, rather than focusing solely on products, or merely on student-teacher reflections about those products.

Also important to the present study was the notion of “reflection” or “reflective practice”, a frequent line of inquiry in teacher preparation (Bartlett, 1990; Boud, Keogh, & Walker, 1985; Boud & Walker, 1993; Dewey, 1933; Freeman & Richards, 1993, 1996; Loughran, 1996; Loughran & Russell, 1997; Schön, 1983, 1987; Tremmel, 1999; Wallace, 1991). The importance of reflection in this study was in its connection to

critical thinking and cognitive change. This was of particular interest in light of discussion among researchers as to the problematic nature of reflection, in that there may be considerable variation in its operation and quality (Boud & Walker, 1993; Fendler, 2003; Orland-Barak, 2005; Sparks-Langer, 1992).

In sum, the purpose of this study was to examine, in a multifaceted manner, the learning processes engaged in by a set of student-teachers as they completed a technology-based activity designed to promote quality reflection, higher mental processing, internalization of concepts, and satisfy in a meaningful way the standards this core task was designed to achieve.

### **Research Questions**

**Q1: What cognitive transformations took place, if any, when student-teachers in a foreign language education program used video editing technology to learn about teaching?**

This study explored the nature of beginning teacher cognition in the study participants. This was reflected in the observations of strategic behaviors and mediational means as they occurred during a technology-oriented instructional activity focused on pedagogic strategies.

**Q2: What was the nature of the pedagogic transformations, if any, that took place when student-teachers in a foreign language education program used video editing technology to learn about teaching?**

This study examined the developmental movement of beginning teachers from externalization to internalization of pedagogic concepts. This was reflected in the observations of strategic behaviors and mediational means as they took place

during a technology-oriented instructional activity focused on pedagogic strategies.

## **Limitations**

### **Location of the Study**

This study was conducted throughout a semester-long, foreign language education practicum course. The course was designed to improve and solidify the pedagogical knowledge and practices of Masters-level preservice foreign language teachers in a large research-one-university College of Education. This course was chosen because the interest and support of the research at hand by the instructor provided extensive access to participants, as well as cooperation in the implementation of the activity to be used as the unit of analysis in this study.

### **Study Participants**

The number of participants was limited to those in a graduate-level foreign language education practicum course who consented to participate in the study. The student-teachers who acted as participants in the study were derived from multiple national, cultural, and linguistic backgrounds. The native-language backgrounds of the student-teachers included English and Spanish (Cuban, Dominican, & Puerto Rican varieties), and their languages of specialty included Spanish, Latin, & German. Two of the participants already possessed university-level second language teaching experience. All of the student-teachers were required to engage in a minimum thirty-six hour practical field experience during the semester in which this study was conducted. Among the participants, comfort and experience with technology use ran the full gamut from self-described “technology-phobic” to technology-fanatic. The eight participants were sub-



divided by the instructor into three working groups that were formed on the basis of geographic distribution. Fortunately for the researcher, all graduate student-teachers enrolled in the practicum course that semester consented to participate in the study, though one participant withdrew very early-on from the course, leaving seven remaining participants to complete the course of the study.

Ultimately, the researcher decided to focus the inquiry on just two of the seven participants. This decision was made for a number of reasons, the most important of which was that the chosen two were the ones who most closely followed the instructions regarding how the task was to be carried out.

### **Institutional and Researcher Bias**

**Standards.** As with any research, there are biases on the part of the researcher, as well as those imposed on the researcher by the setting in question. In the case of this study, the principal investigator, as well as the institutional and political entities that shaped the setting in which the study took place, held the belief that the majority of the standards by which student-teachers' pedagogical competencies were gauged were valid, research-based goals, that if met in the spirit in which they were written, would indeed improve the outcomes of a teacher preparation program.

**Reflection and Reflective Practice.** The principal investigator who conducted this study agreed with and believed in extensive pedagogical research results, which indicated that engaging learners in reflection improved learning outcomes. In particular, the researcher believed that the *type* of reflection effected must take the learner beyond "technical reflection" (see Definitions and Chapter 2), to "practical reflection", and if possible, to "critical reflection" in order to engage higher order thinking processes. She

believed that critical reflection was fundamental to deep, meaningful learning and understanding, which might then be extended by the learner beyond the immediate learning situation, and applied to new and unique future contexts.

**Constructivist Principles in Education.** The researcher in the present study held the belief that the learner, the educator, and the educational setting were all products of extensive cultural-historical development, and as such, could not be examined from a viewpoint external to these processes. In addition, the researcher was of the opinion that the co-construction of knowledge by student-teachers in a learner-centered, expertly guided setting had the potential to lead them into a dynamic and evolutionary Zone of Proximal Development (ZPD) (see Definitions and Chapter 2), which held the potential to produce the depth of learning mentioned above under “Reflection and Reflective Practice”.

### **Definition of Terms**

#### action

In Activity Theory, an activity is made up of actions, which are guided by conscious goals.

#### activity

At the macro-level of Activity Theory, the unit of analysis is the activity. The activity is guided by a motive, which is the human need that gives rise to the activity.

#### Activity Theory (AT)

Not strictly a “theory”, AT is based in sociocultural thought, and is a way of thinking about and graphically representing the collective work relationship in an activity between an individual and a) the artifacts, tools, and signs of his/her environment, b) the

community in which the individual performs work, c) the rules of the work environment, and the division of labor in the work environment. The distinctions between activity, action, and operation became the basis of Leontiev's model of activity.

#### core task

In the College of Education involved in this study, a core task was an assignment in a compulsory course within a degree program determined by expert faculty to meet one or more of the required federal, state, and/or institutional standards.

#### digital video (DV)

Video captured in digital, rather than analog, format.

#### Exploratory Practice (EP)

An approach to teaching and research that designs activities for learners that will promote reflection, and which can be fairly unobtrusively studied by a researcher-practitioner. Unlike Action Research, it is focused on understanding a situation as it is, rather than change and its outcomes.

#### genesis

In Vygotskian terms, this is the study of the process of development "in all its phases and changes" (Lantolf & Thorne, 2006, p. 28). Within genetic research Vygotsky distinguishes four domains: Phylogenesis (the development of a group of organisms); Sociocultural History (the cultural-historical development of mind of a sub-group of organisms); Ontogenesis (the overall development of an individual); and Microgenesis (moment-to-moment development) (see Cole, 1990 for an extensive explanation of these four levels of development).

### internalization

As per Vygotsky, this is the notion that learners first employ mediational tools and signs in their external world to accomplish a task. Gradually, as they master the tools and signs (increasing self-regulation), they eventually appropriate them as psychological tools, the result of which is actual cognitive change in the learner. It must be made clear that this is not believed to be a pure and direct transference of external to internal. Rather, in this process of object- to other- to self-regulation, the information or skill is “internalized”, and along the way it is personally transformed for the individual in his or her own mind. Wertsch (1998) states that “the process is one of taking something that belongs to others and making it one’s own” (p. 53) (see also Bakhtin, 1981).

### learner

A term used generically to refer to anyone engaged in learning.

### microteaching

A method of practice teaching in which student-teachers present short versions of lessons to their classmates for practice, feedback, and evaluation. Microteachings can be live or on videotape.

### operation

In Activity Theory, an action is made up of operations. An operation is guided by the conditions required to achieve the goal. Operations at first require conscious effort, but can grow to be routinized and automatic.

### regulation

Regulation refers to the development of metaconscious thought – that is, the higher and culturally organized cognitive functions that are under the voluntary control of

an individual. It is believed that this occurs as one “regulates” one’s mental activity by using mediators (artifacts, other people, private speech, etc.).

#### object-regulation

When an individual obtains the information s/he needs to regulate thinking from an object. A person at this stage of regulation has not yet internalized the concept in question.

#### other-regulation

When an individual obtains the information s/he needs to regulate thinking from another individual or group of individuals. A person at this stage of regulation may have partially internalized the concept in question, but still requires assistance from another individual.

#### self-regulation

When an individual obtains the information s/he needs to regulate thinking from within through reflection and metacognitive strategies. Considered the highest form of mental processing, and the point at which someone has fully internalized a concept and made it his/her own knowledge.

### Sociocultural Theory

In brief, the view that human development and cognitive change (i.e. learning at higher mental functional levels) develops out of social interaction within a given historical and cultural context, which helps people to move from object- to other- to self-regulated thought and control.

#### standards

In this paper, standards referred to the explicit goals put forth by a variety of agencies for students, student-teachers, teachers, and educational institutions to meet.

student

A term exclusively reserved to mean the future students taught by the student-teachers in the present study in their eventual practice.

student-teacher

An individual enrolled in a formal teacher preparation program in a college of education within a university. This term was used in place of other, related terms within the literature, such as “preservice teacher”, “teacher candidate” and “learner-teacher”, in order to avoid confusion.

teacher development (Crandall, 2000; Wallace, 1991)

A process of teacher preparation seen to incorporate and go beyond the notions of “teacher education” and “teacher training”. It holds that student-teachers must be active in their learning and play a role in their own development. To this end, teacher preparation programs must engage student-teachers in activities involving acute reflection and awareness-raising, opportunities to adapt practice accordingly, as well as meaningful collaboration with others throughout the preparation program. This approach falls more into a constructivist paradigm, whereby ideas about teaching are co-constructed and reconstructed by the student-teachers under expert guidance, often with an understanding of the cultural-historical contexts in which their own learning and teaching take place. (see also Bailey, 1992; Edge & Richards, 1993; Flowerdew, Brock, & Hsia, 1992; Freeman & Richards, 1996; Sachs, Brock, & Lo, 1996; Woodward, 1991)

teacher education

The most traditional form of teacher preparation, “teacher education” (as distinguished from “teacher training” or “teacher development”) is a problem-oriented approach that involves raising the student-teacher’s intellectual awareness of “theoretical principles underlying particular practices” (Widdowson, 1997). Delivery of this type of preparation falls more squarely into a positivist paradigm, whereby ideas and behaviors can be taught and practiced through top-down instructional means. The student-teacher receives the information on various theories and methods, and may then be required to practice and demonstrate specific behaviors associated therewith, often in relatively decontextualized settings. It regularly involves delaying the application of the theories studied until the student-teacher can acquire actual classroom experience, which commonly occurs only at the very end or after the completion of the teacher preparation program.

#### teacher preparation

This study will use the term “teacher preparation” as an umbrella term for all types of preservice education, training, and development.

#### teacher training

An expanded form of “teacher education”, teacher training attempts to instill in student-teachers the requisite “skills to apply [their] knowledge to the practice of language teaching, with a limited opportunity to observe and practice [a given] theory in actual classrooms or simulated contexts such as microteaching (Crandall, 1998). While still falling into a positivist paradigm, teacher training is more solution-oriented, given that learner-teachers are offered “practical techniques to cope with predictable events”

(Widdowson, 1997), while the “training” aspect gets at the notion of the importance of linking theory to practice prior to full-immersion in the classroom setting.

### Zone of Proximal Development (ZPD)

This is a term of Vygotskian origin “which is the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers” (Vygotsky, 1978, p. 86). In other words, the stage at which someone can know/accomplish something with the support of another that s/he could not do alone.

### **Organization of the Study**

There are five chapters in this study. Chapter I provides an introduction to the study by outlining the overall rationale and purpose of the study, the research questions, the limitations and assumptions, and definitions of terms. Chapter II is dedicated to a review of the literature regarding teacher and language teacher preparation issues, such as pedagogies, learning theories, standards and accountability, and tool use. Chapter III details the procedures of the study, instrumentation, data collection, and analysis. This includes the study’s location and participants, the theoretical underpinnings of the approach to the design and focus of interest, as well as that of the proposed unit of analysis. Chapter IV offers a description of the findings of the study. Finally, in Chapter V, the implications of the results of the study are discussed, followed by recommendations for further research, policy, and practice.



## **Chapter II**

This chapter examines the literature related to the present study in the area of foreign language teacher preparation and teacher preparation research. Traditional and recent pedagogical approaches in foreign language teacher preparation are outlined along with their supporting rationales. These include an explanation of the fundamental differences between the ideas of teacher education, training, and development. The concept of teacher development is then considered in light of cognitive and social constructivist theories of learning. Subsequently discussed is the notion of reflection and reflective practice in teacher preparation. Highlighted are ways in which constructivist and reflective approaches parallel and overlap in the ideas a) that learners must move from simplistic and shallow understandings of concepts to those that are increasingly complex, critical, and contextually-situated; b) that this movement is triggered through iterative exposure to content, dialogue with others, and interaction with or creation of related artifacts, and c) that knowledge becomes implicit in an individual as it is increasingly internalized at differing levels of complexity. These pedagogies and their foundations are connected to the specifics of the present study. Also discussed is the notion of using a product- versus a process-oriented approach in assessing a student-teacher's progress in learning and professionalization. Finally, the theoretical foundations of the core task and the research study are presented in order to provide a clearer context for the study, as well as to support the methodological approaches described in Chapter 3.

## **Teacher Preparation**

In order to situate the present study, it is important to outline the contextual factors that explicate the research being pursued. An essential area of explanation must be on teacher preparation, and the views thereof held by those involved in the creation of the setting in which the study took place. Discussed below is a brief history, including the shift from a positivist tradition to a constructivist approach in teacher preparation, as well as the paradigms adopted in the current research setting.

### **Theories of Teacher Education and Training**

Since the historical approaches to teacher preparation follow them quite well, we shall begin by noting Widdowson (1997) and Crandall's (2000) distinctions between language *teacher education*, language *teacher training*, and language *teacher development*. According to Crandall, language *teacher education* "addresses the development of language knowledge and language teaching and learning", while language *teacher training* "emphasizes the development of skills to apply this knowledge to the practice of language teaching, with a limited opportunity to observe and practice that theory in actual classrooms or simulated contexts such as microteaching" (Crandall, 1998). Widdowson distinguishes the two by deeming teacher education a problem-oriented approach that involves raising the student-teacher's intellectual awareness of "theoretical principles underlying particular practices", and teacher training as solution-oriented, meaning that student-teachers are offered "practical techniques to cope with predictable events" (1997). "Education" and "training", by these definitions, are separate types of preparatory instruction, and are both deemed essential to any teacher preparation program. On one hand, the "education" aspect certainly is the most traditional and

frequently employed approach, favoring a top-down, theoretical type of teaching and learning. The “training” aspect, on the other hand, gets at the notion of the importance of linking theory to practice prior to full-immersion in the classroom setting. This more recent approach to teacher preparation comes out of the work of researchers like Schön (1983; 1987) who hold strong beliefs that student-teachers must be given ample opportunities to apply the theories they are learning about before they can truly absorb their significance. Both teacher education and training, however, fall more squarely into a positivist/behaviorist paradigm, whereby ideas and behaviors can be taught and practiced through top-down instructional means, and learning occurs as a reaction to external stimuli. The individual student-teacher is the recipient of the information, and is then “trained” (in a most athletic sense) to use the theories and methods that have been taught.

### **Theories of Teacher Development**

More recently, however, researchers in teacher preparation, such as Edge and Richards (1993) and Woodward (1991), have discovered another key aspect to successful teacher preparation. This is the notion that in order to fully assimilate the “education” and the “training” provided in a program, student-teachers must be active in their learning and play a role in their own development. Acute reflection and awareness-raising is an oft-cited means to this end (see more on reflection below). As such, Crandall (2000), basing her work on Wallace (1991), proposes the term *teacher development* as a distinctive term referring to this third process in which student-teachers play a role in their own development by actively reflecting on and adapting practice. She states, “...neither traditional education nor training are sufficient; also needed are

opportunities for teachers to reflect upon their beliefs and practices and to construct and reconstruct their personal theories of language teaching and learning (Bailey, 1992; Flowerdew et al., 1992; Freeman & Richards, 1996; Sachs et al., 1996).” Teacher preparation, then, must extend beyond top-down, positivist notions of teaching and learning in order to reach levels of understanding that will extend beyond the university experience and into student-teachers’ eventual real teaching contexts.

**Theories of cognitive constructivism.** This latter viewpoint on the goals of teacher preparation comes out of the cognitive constructivist school (see Ausubel, 1968; Bruner, 1960, 1966, 1971; Dewey, 1933; Piaget, 1972), which suggests that external stimuli activate the cognitive processing of information, which in turn can actually change cognitive structures. These changes in cognitive structure are what produce modifications in the student-teacher’s understandings and resultant behaviors, i.e. learning.

Cognitive constructivism is based on two different senses of "construction." First, there is the idea that people learn by actively constructing new knowledge, rather than by passively receiving information provided by external sources. Second, constructivism asserts that people learn with particular effectiveness when they are engaged in "constructing" personally meaningful artifacts (e.g. computer programs, animations) (Clark, 1999).

Of the cognitive constructivists, Jerome Bruner’s work is of special importance. This is due to its weighty impact on current approaches to teaching and learning, as well as the resilience of these ideas, even as Bruner himself has evolved his own views toward a more social constructivist paradigm (see below). One of Bruner’s key ideas is his

notion of the importance of iterative teaching and learning. He denoted this as the “spiral curriculum”, which is one that revisits “basic ideas repeatedly, building upon them until the student has grasped the full formal apparatus that goes with them” (1960, p. 13).

Another concept of Bruner’s is one that epitomizes the whole cognitive constructivist paradigm - education as a process dependent upon the active construction of knowledge within the individual:

To instruct someone... is not a matter of getting him to commit results to mind. Rather, it is to teach him to participate in the process that makes possible the establishment of knowledge. We teach a subject not to produce little living libraries on that subject, but rather to get a student to think mathematically for himself, to consider matters as an historian does, to take part in the process of knowledge-getting. Knowing is a *process* not a product (1966, p. 72) [italics mine].

Foreign language teacher preparation from a cognitive constructivist perspective involves what Crandall (2000) calls an “interpretivist approach”, which encourages student-teachers to reflect upon, critique, and revise their views of what teachers do in differing contexts. This approach involving teacher inquiry and reflection is “now viewed as important to the development of language teaching theory and appropriate language teacher education” (Crandall, 2000).

**Theories of social constructivism.** In addition to Crandall’s reflective and cognitive constructivist view of the definition of “teacher development”, this study will augment the definition with the notions set forth by the social constructivists – particularly the sociocultural concepts proposed by Lev Vygotsky (1978). As the term

“social constructivism” implies, theorists believe that social interaction among learners is important for cognitive change (i.e. learning). The Vygotskian school insists on the idea that learning moves from the external (social and cultural) to the internal (cognition) by means of mediating tools, the most important of which is language. Rowe and Wertsch (2004) summarize Vygotsky’s contributions as follows:

- Cognition must be understood developmentally (i.e., genetically) in terms of its genesis and subsequent development at individual and cultural levels of analysis.
- Cognition is ‘mediated’ by semiotic mechanisms, the most powerful of which is language.
- Certain cognitive processes (such as voluntary memory, problem-solving, self-regulation, etc.) have their origins in social activity and interaction. (p. 538)

To understand this, it is important to break it down into its fundamental concepts. First, like the cognitive constructivists, the social constructivists believe that external stimuli result in the cognitive processing of information, which in turn changes cognitive structures (i.e. learning).

Humans actively modify the stimuli they encounter, utilizing them as instruments to control surrounding conditions and to regulate their own behavior. Vygotsky’s investigations tried to establish how people, with the help of instruments and signs, direct their attention, organize conscious memorization, and regulate their conduct. The essence of human behavior resides in its mediation by tools and signs. Tools are oriented outward, toward the transformation of the physical and

social reality. Signs are oriented inward toward the self-regulation of conduct itself (see Vygotsky, 1978) (Blanck, 1990, p.45).

When discussing the Vygotskian school of thought, the term more commonly employed is “sociocultural”. This is because of the belief that the tools and signs used by individuals to mediate their environments are more than what they appear to be at face value. Behind each tool there is human history and culture. At the most general level, that humans use tools and signs to “act indirectly on the world...and to communicate adaptively advantageous modifications to subsequent generations” (Cole, 1990, p. 92) appears to be a pervasive behavior of our species. Not all cultures within our species, however, employ the same tools and signs, in a similar manner, in like contexts. Every culture is the product of its own history. Since tool and sign use helps to regulate human thought processes, dissimilarities in their use will produce variations in thought processes (ways in which different peoples process information and memory, form concepts and interpret the world around them). What’s more, individual experience must be considered, as every person has his/her own unique history. A person’s background drives personal needs and motivations to use particular tools and signs to mediate his/her environment in specific ways. At the microgenetic level (see below), how a tool or sign might influence the development of individual psychological processing during a particular activity is of interest. In sum, sociocultural theory is about historically- and culturally-determined mediational processes that both govern and arise from practical activity.

Of all the tools and signs humans use for control, Vygotsky came to believe that the most important of all was language. Language is unique in that it bridges the external

and the internal worlds of the individual, and helps to organize consciousness. It not only continually converts the external to the internal and vice versa, it actually transforms the external as it internalizes (the knowledge changes the cognition of the individual, and the individual personalizes the knowledge). In Vygotsky's words, "as soon as speech and the use of signs are incorporated into any action, the action becomes transformed and organized along entirely new lines" (Vygotsky, 1978, p. 24).

Bakhtin, a contemporary of Vygotsky and another member of the sociocultural school, emphasized the need to study language in terms of utterances – phenomena that are inseparable from the contexts in which they are made. Utterances are produced by individuals who have a "will' or 'intention,' as well as an 'accent' or 'timbre' ...[that also] reflect the intention and accent of other voices" (Wertsch, 1990). Bakhtin states:

The word in language is half someone else's. It becomes "one's own" only when the speaker populates it with his own intention, his own accent, when he appropriates the word, adapting it to his own semantic and expressive intention. Prior to this moment of appropriation, the word does not exist in a neutral and impersonal language (it is not, after all out of a dictionary that the speaker gets his words!), but rather it exists in other people's mouths, in other people's contexts, serving other people's intentions; it is from there that one must take a word and make it one's own (Bakhtin, 1981, p. 117).

Language then, does not occur in a vacuum or in a random manner. Instead, "any utterance is a link in the chain of speech communication" (Bakhtin, 1986, p. 84). It is a part of a dependent and mutually reflective system of communication within a genre of social speech, which is embedded within group and individual activity.



Language as a mediating tool is tied to a second important tenet of the socioculturalists: the belief that social interaction, especially with more knowledgeable others, is crucial to learning. This is because the interaction helps the learner to eventually internalize the “tools and rules” of thought and behavior (the shared knowledge of a culture) required to function in a given context. “Vygotsky argued that there is an inherent relationship between external and internal activity, but that it is a *genetic* or *developmental* relationship in which the major issue is how external processes are *transformed to create* internal processes” (Wertsch & Stone, 1985, p. 163, italics in original). At first the learner develops *self-control* with respect to the “tools and rules”, in that s/he is able to apply them “in the relative absence of external monitors and structures” (Díaz, Neal, & Amaya-Williams, 1990). Later, the learner becomes capable of *self-regulation*, which differs from self-control in that there is a “flexible adjustment of behavior to changing situations and also in the active use of reflection and metacognitive strategies” (Díaz et al., 1990). Self-regulation, then, is not just the internalization of the “tools and rules” of thought and behavior, it is the cognitive growth that results from the process of first engaging with external mediators (such as objects and other people), and then with internal mediators (such as reflection). Vygotsky (1978) writes:

"Every function in the [learner's] development appears twice: first, on the social level, and later, on the individual level; first, between people (interpsychological) and then inside the [learner] (intrapyschological). This applies equally to voluntary attention, to logical memory, and to the formation of concepts. All the higher functions originate as actual relationships between individuals" (p. 57).

The journey toward self-regulation is about “increasing mastery of and eventual independence from the stimulus field, accompanied by increasing mastery over [one’s] own behavior” (Díaz et al., 1990). This “developmental progression...is indeed a culturally determined social process, that is, an interpersonal process that becomes internalized as an intrapsychological function” (Díaz et al., 1990). Moll (1990) states that Vygotsky believed that “higher psychological processes develop in [learners] through enculturation into the practices of society; through the acquisition of society’s technology, its signs and tools; through education in all its forms” (p. 1). “Society” may of course be thought of in large-scale terms, but may also be thought of as smaller sub-sections of people within a larger society, such as ethnic, interest, and professional groups, each with their specialized sets of technologies, tools, and signs (e.g. language). Thus, self-regulation, or consciousness, is the outcome of socialization (particularly with a more-skilled other – see ZPD below), rather than biological processes. It implies an ability to engage in higher mental processing – conscious awareness, selective attention and perception, and voluntary memory – and is thought to be key in meaningful learning, long-term memory storage, and ability to access and apply knowledge in novel contexts. It should not be forgotten, however, that this higher mental processing is bounded by the historical and cultural contexts in which the individual proceeds toward self-regulation.

Another key feature of social constructivist thought is what Vygotsky called the Zone of Proximal Development (ZPD), a supportive concept in the above-mentioned “developmental process”. If a person is at a given level of cognitive development at a specific time, then the ZPD is their immediate potential for learning additional information. Moving from one’s actual development into the next stage (or zone) of

understanding is best achieved through social interaction and collaboration. It was Vygotsky's belief that "maturing or developing mental functions must be fostered and assessed through collaborative, not independent or isolated activities" (Moll, 1990, p. 3). Vygotsky defines the ZPD as "the distance between the actual developmental level as determined by independent problem-solving and the level of potential development as determined through problem-solving under adult guidance or in collaboration with more capable peers" (Vygotsky, 1978, p.86). In Jerome Bruner's (1985) understanding, the ZPD is the period during the development process when a

tutor or aiding peer serves the learner as a vicarious form of consciousness until such a time as the learner is able to master his own action through his own consciousness and control. When the [learner] achieves that conscious control over a new function or conceptual system, it is then that he is able to use it as a tool. Up to that point, the tutor in effect performs the critical function of "scaffolding" the learning task to make it possible for the [learner], in Vygotsky's words, to internalize external knowledge and convert it into a tool for conscious control (p. 24).

In essence, the ZPD is the area of development within reach of a learner that exceeds what the learner can attain alone, and which is achieved by working in collaboration with another, more-knowledgeable person. In the words of Moll (1990), the "zone makes possible 'performance before competence'" (p. 3). The ZPD allows the learner to be an active participant in his/her own education, rather than merely a passive recipient.

Pedagogy that encourages an environment in which learning processes *lead* development

(Blanck, 1990) allows learners to, not only receive what is presented to them, but to elaborate on it and make it their own.

Some research since Vygotsky's time also supports approximately equal-level peer-to-peer collaboration as being effective in the ZPD. It should be noted that such collaboration involves active involvement and motivation to construct joint or group solutions to problems. Tudge (1990) and Slavin (1987) have found that under these conditions, collaborative learning is different and more effective than cooperative learning or peer tutoring.

### **Reflection and Reflective Practice**

Preservice teacher training, education, and development may take place in a variety of contexts and in a variety of ways, but there is a consensus in at least a few core aspects of recent preservice teacher preparation research. One of the primary shifts in beliefs about effective foreign language teacher preparation has been a move away from more traditional, top-down approaches to models that involve future teachers in deeper reflective processes. Crandall (2000) states:

Reflection on experience provides a means for prospective ... teachers to develop more informed practice, making tacit beliefs and practical knowledge explicit, articulating what teachers know and leading to new ways of knowing and teaching. Long ignored, ... reflection [is] now viewed as important to the development of language teaching theory and appropriate language teacher education.

The interest in engaging student-teachers in reflection while learning to teach (Bartlett, 1990; Dewey, 1933; Freeman & Richards, 1993, 1996; Gore & Zeichner, 1991;

Ingvarson, Meiers, & Beavis, 2005; Richert, 1990; T. L. Russell, 1997; Schön, 1983, 1987; Valli, 1993; Zeichner, 1983, 1996; Zeichner & Liston, 1987), and forming them into ‘reflective practitioners’ (Crandall, 1994; Freeman, 1998; Wright, 1987) is well-established in the literature. As such, it has been included as a key component of learning-to-teach theories in the works of notable theorists as far back as John Dewey (1933).

[T]he assumption that acquisition and exercise of intelligent capability requires conscious contemplation has remained powerful in teacher education, ...sustained by recent emphases on teacher thinking, cognitive-constructivist influences and [others’] promotion of reflection in professional learning (Tomlinson, 1999b).

Indeed, in Ingvarson et al.’s (2005) research on the impact of teacher preparation on student-teachers’ knowledge, practice, outcomes, and efficacy, they discovered that “[t]he most important influence on reported impact on practice, apart from knowledge is...the extent to which individual programs provide many opportunities for *active learning* and *reflection* on practice” (p. 14, italics theirs). The most effective programs led teachers to actively reflect on their practice and compare it with high standards for professional practice....They provided time for teachers to test new teaching methods and to receive follow-up support and coaching...They included activities that led teachers to deprivatise their practice and gain feedback about their teaching from colleagues (p. 15).

As such, reflection and reflective practice are included as part of teacher preparation programs nationwide. While the importance that student-teachers engage in reflection

appears to be widely accepted, defining “reflection” and determining its quality, however, has been, and continues to be, a topic of debate among theorists and practitioners.

**Defining reflection in teacher preparation.** Many definitions have been proposed, as well as guidelines and taxonomies for determining types or levels of reflection. For example, Dewey (1933, p.9) described reflective thought as engagement in “active, persistent and careful consideration”, that it must be based on evidence, and that it should be able to inform future action (E. A. Davis, 2006).

One of the most influential contributors to the topic of reflection in teacher preparation has been Donald Schön (Schön, 1983, 1987; 1995) with his notions of technical rationality, reflection-in-action and reflection-on-action. By technical rationality, Schön means “a context-free view of knowledge that overemphasizes knowledge gathered through a scientific method in a linear, often formulaic manner” (Bushnell & Henry, 2003). Technical rationality is a positivistic means of matching theoretical information to behavior, and lacks in depth of understanding of “complexity, uncertainty, instability, uniqueness, and value-conflict” (Schön, 1983, p. 39). In his reflection-in-action concept,

The practitioner allows himself to experience surprise, puzzlement, or confusion in a situation which he finds uncertain or unique. He reflects on the phenomenon before him, and on the prior understandings which have been implicit in his behaviour. He carries out an experiment which serves to generate both a new understanding of the phenomenon and a change in the situation (Schön, 1983, p. 68).

Reflection-in-action holds within it the idea of “thinking on one’s feet” – rapidly processing a situation according to the contextual needs of the moment, and making use of ideas and techniques “on-the-fly”. It also encompasses the notion of implicit knowledge that the student-teacher has not yet had occasion or need to make explicit, but which s/he possesses nonetheless.

Reflection-on-action returns to the more commonly held idea of metacognitive awareness raising of knowledge that occurs separate from the action, allowing time to explore from a distance the details of the events that occurred. This separate process allows the student-teacher to form questions, hypotheses, and potential plans for future action, which can then be tested, and again reflected upon.

Boud, et al. (1985) conceive reflection as a process that ties experience (including behavior and emotion) to changes in perspective, and subsequent commitment to action and application. For proper reflection to take place, there must be some distance from the experience in order to reflect on it.

Returning to experience can be seen as an important function in learning because it counteracts a serious shortcoming in experiential learning:

[W]e can make false perceptions, false implications and in the end false learning.

Through this process of reflection, false perceptions can be detected and the learner can view the experience from other perspectives and have the possibility to look at the event in a wider context compared to the more concrete context in which it was situated (Høyrum, 2004, p.446).

Boud, et al. (1985) also believe it is important in the return to experience to attend to emotions connected to the event under consideration. Seeing beyond negative feelings

can provide a more rational interpretation of what happened, and recalling positive emotions can “provide the learner with the impetus to persist in what might be very challenging situations and ... might facilitate the learner’s freedom to move to different perspectives of ...experience” (Høyrup, 2004). Finally, they encourage what they call “re-evaluation” during reflection:

Re-evaluation involves re-examining experience in the light of the learner’s intent, associating new knowledge with that which is already possessed, and integrating this new knowledge into the learner’s conceptual framework. It leads to an appropriation of this knowledge into the learner’s repertoire of behaviour (Boud et al., 1985, p. 27).

Loughran (2002) argues that student-teachers can engage in either reflection or *effective reflection*, but that the latter is the only one likely to have much long-term impact on student-teachers, since it is the only form that engages them actively as learners. He states, “Simply being encouraged to reflect is likely to be as meaningful as a lecture on cooperative group work” (p. 33). He explains, however, that “[e]ffective reflective practice is drawn from the ability to frame and reframe the practice setting, to develop and respond to this framing through action so that the practitioner’s wisdom-in-action is enhanced and, as a particular outcome, articulation of professional knowledge is encouraged” (p.42). Tomlinson (1999a) echoes Loughran here that if

conscious forms of strategic knowledge are indeed to inform action and, still more crucially, to become consolidated within the student-teacher’s repertoire of action dispositions, then they must...be given ample...opportunity for repeated attempts at the implementation strategies, i.e. at ‘doing’ them, but with provision of



feedback, analysis and guidance sufficiently close to the action to influence it effectively (p.540).

In Mezirow's (1990) work, learners are encouraged to extend their thinking to critical reflection. In so doing, learners can become aware of the historical, social, cultural, and political contexts within which an event has occurred. In critical reflection the individual challenges the validity of his presuppositions, and is concerned not with the how or the how-to of action, but with the why, the reasons for, and the consequences of what we do (Mezirow, 1990). When this level of reflection is met, Mezirow believes that the level of learning is deepened and the learner can actually be transformed. "Reflection may imply reconstruction of knowledge, but critical reflection may imply changes in the very psychological mechanisms that constitute the basis of our interpretations of the world" (Høyrup, 2004).

"Perspective transformation is the process of becoming critically aware of how and why our presuppositions have come to constrain the way we perceive, understand, and feel about our world; of reformulating these assumptions to permit a more inclusive, discriminating, permeable and integrative perspective; and of making decisions or otherwise acting on these new understandings. More inclusive, discriminating permeable and integrative perspectives are superior perspectives that adults choose if they can because they are motivated to better understand the meaning of their experience" (Mezirow, 1990, p. 14)

Such critical awareness can then lead the student-teacher to actively reframe future action in an effort to promote better learning for themselves and their students once equity and social justice issues have been taken into account.

It should be noted at this point that several theorists (see particularly Schön's concept of knowing-in-action 1983; 1987) have toyed with the idea that student-teacher reflection can also involve some implicit learning. “In contrast to applying technical or scientific rationality” (Hatton & Smith, 1995) when considering a given event, a more “tacit knowledge is derived from the construction and reconstruction of professional experience” (Hatton & Smith, 1995). This involves the notion of the “professionalization” of a student-teacher. Hatton and Smith (1995) state that this intuitive understanding and/or internal and immediate reflection-in-action and subsequent adjustment of behavior

may be characterised as part of the artistry or intuitive knowledge derived from professional experience (Gilson, 1989) and includes engaging in a reflective conversation with oneself, shaping the situation in terms of the reflector’s frame of reference, while constantly leaving open the possibility of reframing by employing techniques of holistic appraisal” (Alrichter & Posch, 1989).

Tomlinson (1999a) questions the near-exclusive emphasis on conscious thinking and learning in teacher education, and calls for researchers to attempt to “grapple with the difficult issues of balance and interplay between implicit and explicit facets of processing” (p.533). He argues that it is time to more closely examine implicit learning

“not just passively, but by seeking to harness such features as the ‘exquisite sensitivity’ connectionist studies point to in human awareness. Along with other aspects of transfer and generalisation, these may have important lessons for us to take to teacher preparation, especially if they can be combined with

complementary ideas from recent work in Activity Theory and sociocultural psychology” (p.534) (See below for more on AT).

Finally, the notion that reflection occurs on an individual level is clear in most theories. What is more implicit, however, is the idea that interaction with others brings very valuable dimensions to the reflective process. Høyrup (2004) notes that “the core processes of reflection – critical opinion sharing, asking for feedback, challenging groupthink, learning from mistakes, sharing knowledge and experimentation – only can be realised in processes of interaction.” An atmosphere of trust is an important consideration when having individuals reflect interactively. For truly productive reflection to emerge, it must occur within “a culture that makes it possible for people to be challenged constantly without fear of retaliation” (Raelin, 2002). Rogers states that “the reflective process appears most likely to be successful when both individual and environmental factors are managed so that the context provides an appropriate balance of challenge and support” (2001). Table 1 (adapted from Høyrup, 2004) considers reflection from an interactive perspective. It is important to note that individual and interactive reflection are complimentary, rather than mutually exclusive. Amobi’s (2006) summary of Roger’s (2002) work on reflection ties the element of continuity to interaction:

The two elements that make an experience educative are interaction and continuity. Interaction with another person or event brings about change, a sense of disequilibrium that causes one to make sense of the experience. Continuity is closely linked with interaction: it entails the accumulation of meanings from past

Table 1

*Interactive perspectives in reflection*

<b>Reflective Processes</b>	<b>Interactive Setting</b>
Situation – collaborative culture	Encouraging a culture of reflection. A climate of trust, support, and visibility of feedback processes.
Separation – distance from experience	Stepping back from events to ponder the meaning of what transpired.
Action – inquiry and experimentation	Sharing of design ideas. Collective planning, analysis, and decision making. Interaction during experimentation, feedback, and revision processes. Synthesizing different kinds of experience and sharing knowledge.
Feeling – attention to emotions	Attending to emotions concerning the problem, as well as those related to the group environment (particularly anxiety related to disclosure of ideas, potential errors, or fear of threatening common values).
Critique – seeking out assumptions (critical reflection)	Challenging groupthink and breaking through assumptions. (Difficulties may arise as internal and external group power relations are exposed and questioned).

experiences that are brought to bear on the meaning-making of a new experience.

The sources of information for meaning-making of experience are not limited to the lessons gleaned from past experience; they include one’s knowledge about the world and the knowledge of more knowledgeable others.

It is to be noted here that the previous two concepts presented in relation to reflection – implicit learning and interaction – are related to key notions in social-constructivist theories of learning. The Vygotskian concepts of object-, other- and self-regulation, the role of learning mediators, and the Zone of Proximal Development echo the views on “effective” reflective processes. Also, what Alrichter and Posch call “a

reflective conversation with oneself” (1989), Vygotsky (1986) called “egocentric speech,” now better known to modern scholars as “private speech”. For Vygotsky, private speech is the mechanism by which learners bridge external information to internal cognitive processes. “[P]rivate speech operates as an intermediate stage of development between social speech and inner verbal thought, into which it is transformed” (Berk, 1992). As such, it is a potential window into what will become implicit thinking. “The same language that mediates social interaction between individuals is used to mediate cognitive activity within individuals” (Díaz & Berk, 1992, p. v). Though Vygotsky and others have primarily examined this phenomenon in children, there is recent evidence that “the strategic cognitive uses of language for self continue throughout the lifespan” (John-Steiner, 1992 p. 285). Though apparently less frequent in older learners, private speech does appear to be used by adults, particularly when faced with new and/or difficult tasks, and in greater amounts when the speaker is in less inhibited contexts (John-Steiner, 1992). That private speech acts as a bridge between social language and inner language emphasizes the initial need for external interaction as the impetus for learning.

In sum, most recent definitions of quality reflection involve the individual interacting with others in a “low-risk” environment to a) define a problem (or as per Seibert and Daudelin (1999), engage in a ‘developmental experience’); b) connect the problem to past experience; c) elaborate “the meaning of ideas in relation to one another” (Høyrup, 2004); d) form a plan for future action; e) test assumptions; and f) reconsider events through a continuous feedback process.

**Taxonomies of reflection in teacher preparation.** Faced with an as-yet imperfect set of concepts, teacher educators and researchers of teacher education pedagogy are interested in promoting in student-teachers an advanced form of reflection during their studies that may continue to function as they engage in actual teaching practice. Amobi (2006) suggests that teacher educators at least choose a “rendition of reflection [that] positions the student-teacher not just as a consumer but also as a co-creator of the knowledge of and about teaching.” Identifying what advanced reflection on the part of a student-teacher looks like isn’t easy. It is difficult as a teacher educator or researcher to precisely measure the depth and degree of reflection engaged in by a particular learner, since any evidence thereof cannot be observed directly, but rather must be ascertained through secondary means, such as clues in discourse and/or performance/products. Davis (2006) suggests looking for indicators, such as “the integration of ideas about multiple aspects of teaching, such as learners and learning, subject matter knowledge, assessment, and instruction...[as well as] how analytic the reflection is.” She agrees with Hatton and Smith (1995), who themselves were heavily influenced by Dewey, van Manen (1977), and Schön, that in trying to understand and identify the nature of student-teacher reflection, it is important to recognize that there may be several types of reflection. Hatton and Smith (1995) identify four main types of reflection, but insist that they are developmental, not hierarchical. “Their ...taxonomy includes technical rationality, reflection-on-action (descriptive, dialogical, and critical reflection), and reflection-in-action” (E. A. Davis, 2006). These descriptors match fairly evenly with the work of Baxter Magolda (1999) who also proposed four developmental phases of epistemological growth: 1) absolute knowing, 2) transitional knowing, 3)

independent knowing, and 4) contextual knowing (Bushnell & Henry, 2003). First, technical rationality, or absolute knowing, refers to what student-teachers often do at the beginning of their preparation experiences – that is, they consider their most basic skills and competencies as they relate to received knowledge on theory and research. This corresponds to the Vygotskian notion of “object-regulation” – a particular locus of control that is unlikely to activate the ZPD and promote much internalization of concepts. Next, reflection-on-action encompasses three subtypes: descriptive, dialogical, and critical reflection. Descriptive and dialogical reflection correspond to Baxter Magolda’s (1999) transitional knowing and independent knowing, respectively. In descriptive reflection, the student-teacher goes beyond a mere report of an event, and attempts to provide some evidence or rationale for the actions that have occurred. Dialogical reflection often includes interaction with another, and involves consideration of alternate explanations and points of view. Critical reflection, as noted above in the discussion of Mezirow’s work, puts the action under consideration into a historical, social, cultural, and political context, which can lead to a new awareness that allows the student-teacher to re-approach a teaching event with ideas for enhancing positive social change, encouraging equity, and promoting greater social justice. Critical reflection aligns well with Baxter Magolda’s (1999) concept of contextual knowing. The latter two forms of reflection correspond to Vygotsky’s concept of “other-regulation” at which point the learner is able to move into his/her ZPD and internalize some of the concepts, but only with the help of and interaction with others. Finally, reflection-in-action is the “thinking-on-one’s-feet” concept that was first proposed by Schön (1983), and which is a type of reflection that occurs on the spur of the moment. This type of reflection is thought to occur when an

individual accesses knowledge that has already been internalized, through either explicit or implicit means of learning. This knowledge is retrieved and made use of more on an intuitive level, than a metacognitive one. This notion matches Vygotsky's level of "self-regulation" – a more fully automatized, internalized level of higher mental processing.

Table 2 summarizes Hatton and Smith's (1995) and Baxter Magolda's (1999) taxonomies. It bears repeating here that neither taxonomy is considered to be hierarchical in that one form of reflection is deemed superior to another, or that a learner should strive for one kind of reflection and dispense with the others. Rather, these taxonomies are viewed as developmental in nature. For example, a learner may be more likely to pursue technical rationality first in the reflective process before attempting critical reflection. This does not imply, however, a type of linear slope where one type of reflection occurs prior to another until an endpoint is reached. Instead, these types of reflection are thought to occur in more of an upward spiral fashion, in that they are revisited iteratively at increasingly complex levels of understanding and development. Rogers (2001) echoes this view:

The process of reflection does not always have a defined beginning and end. Thus, it should be viewed as continuous, much like an ever-expanding spiral in which challenging situations lead to reflection and ultimately to new interpretations or understanding. These new understandings may then lead to new challenges and additional reflection. Each new experience with reflection should lead the individual to broadened and deepened understanding, an enhanced array of choices, and a more sophisticated capacity to choose among these choices and implement them effectively.



Table 2:

*Summary of Hatton & Smith's and Baxter Magolda's taxonomies of reflection*

Reflection Type and Nature		Possible Content
Hatton & Smith (1995)	Baxter Magolda (1999)	
<p><b>Technical Rationality</b>            Technical (decision-making about immediate behaviors or skills) drawn from a given research/theory base, but always interpreted in light of personal worries and previous experience.</p>	<p><b>Absolute Knowing</b> Knowledge is external to self, factual, and absolute.</p>	<p>Beginning to examine (possibly with peers) one's use of essential skills or generic competencies as applied in controlled, small scale settings.</p>
<p><b>Reflection-on-action</b></p> <p><b>Descriptive</b>            Descriptive (social efficiency, developmental, personalistic) seeking what is seen as 'best possible' practice.</p> <p><b>Dialogical</b>            Dialogic (deliberative, cognitive, narrative), weighing competing claims and viewpoints, and then exploring alternative solutions.</p> <p><b>Critical</b>            Critical (social, reconstructionist), seeing as problematic, according to ethical criteria, the goals and practices of one's profession.</p>	<p><b>Transitional Knowing</b>            Knowledge can be held by everyone and is relative and personalized.</p> <p><b>Independent Knowing</b>            Knowledge comes from within and is not about <i>what</i> (facts, right answers) but about <i>how</i> (ways of thinking, supporting positions with data and reasoning). Knowledge is a process, often involving hearing the voices of others and debating ideas. (Haynes, 2006)</p> <p><b>Contextual Knowing</b>            Knowledge built through a process of reasoning based on socially-constructed judgments and values, which are ever open to reconsideration and reinterpretation.</p>	<p>Analyzing one's performance in the professional role (probably alone), giving reasons for actions taken.</p> <p>Hearing one's own voice (alone or with another) exploring alternative ways to solve problems in a professional situation.</p> <p>Thinking about the effects upon others of one's actions, taking into account social, political, and/or cultural forces (can be shared)</p>
<p><b>Reflection-in-action</b>            Contextualization of multiple viewpoints drawing on any of the other types of reflection applied to situations as they are actually taking place.</p>		<p>Dealing with on-the-spot professional problems as they arise (thinking can be recalled and then shared with others later).</p>

Again, in Vygotskian terms, the movement from “object-” to “other-” to “self-regulation” also shifts back and forth from moment-to-moment, although it is expected that over time, self-regulation will eventually be the outcome.

**Applying Reflection in Teacher Preparation.** In spite of the difficulty of pinning down an exact definition of quality reflection, it remains a key component of teacher preparation programs. The NCATE Standards, for example, require of programs that they “encourage collegiality, reflective practice, continuous improvement, and collaboration among educators, learners, and families” and of preservice teachers that they be able to “reflect on practice, and act on feedback” (*NCATE Standards*, 2006 p.4). Also, ACTFL/NCATE Standard 6a stipulates specifically that student-teachers engage in “reflection as a critical tool for growth”, and that ideally they should “systematically engage in a reflective process for analyzing student work and planning future instruction...[and] identify possibilities of classroom-based research to inform practice” (*ACTFL/NCATE*, p. 36). Note that in both instances, student-teacher reflection is called for, but in no instance in either document is it defined. In addition to the problems associated with precisely defining it are the difficulties of priming and persuading student-teachers to engage in reflective practice in such a way as to promote real learning – challenges which fall squarely in the lap of teacher preparation programs to resolve. Dawson (2006) states:

In practice, efforts to promote teacher reflection often fall short for a variety of reasons (Fendler, 2003). These reasons include, but are not limited to, prospective teachers merely focusing on the logistical issues associated with teaching, ignoring the contextual factors in school-based environments, displaying shallow

thought unaccompanied by action (Zeichner, 1996), and failing to reflect in systematic and intentional ways (Dana & Silva, 2003).

What's more, an additional challenge lies in getting student-teachers to carry on with deep reflection into practice after graduation.. "Teacher educators may focus on the tools to survive in the classroom and meet the requirements for the label "highly-qualified teacher" without simultaneously instilling the tools for self-renewing growth and reflective thinking (Amobi, 2006).

### **Research and Implementation**

There have been changes not only in the theoretical approaches to teacher preparation, but also its actual practice. As such, research findings appear to favor the concepts delineated above under the present study's conceptualization of the term "teacher development".

Rather than present methods and approaches that future teachers must simply absorb and imitate, where they are merely "passive recipients of transmitted knowledge" (Crandall, 2000), there has been a move toward more learner-centered models of teacher preparation. In these models, there is a shift away from "transmission, product-oriented theories to constructivist, process-oriented theories of learning, teaching, and teacher learning" (Crandall, 2000). Wideen, Mayer-Smith, and Moon (1998), in their meta-analysis of ninety-three empirical studies on learning to teach state that, based on their findings, "traditional programs of teacher education have little effect upon the firmly held beliefs of ...beginning teachers". They found, however, that successful programs were ones that innovated and involved student-teacher reflection and collaboration. Examples include Hollingsworth (1992) who examined the positive role of conversation in learning

to teach, Johnston (1994) who found that dialogue was needed in practicum in order for student-teachers to develop self-awareness in their teaching, and Schneider & Ammon (1992) who examined the evolution of pedagogical understanding in their student-teachers, whose thinking best developed through conflict (a key notion of Activity Theory – see below). Successful teacher preparation, then, appears to correspond with approaches in the cognitive and social constructive epistemologies. Wideen et al. (1998) state:

...in fact, constructivist theory has provided the new conceptual ideology for many in teacher education, both in how research is undertaken and in program development. Following the conceptual lead of researchers such as Driver, Asoko, Leach, Mortimer, and Scott (1994) and von Glaserfeld (1987), proponents reject the positivist view that meaning can be passed from teacher-educator to learner-teacher. Beginning teachers construct their own knowledge about teaching (p.161).

In summary, based on current thinking, a quality teacher development program is epistemologically located within a paradigm that is constructivist and process-oriented, where learners have multiple opportunities to make transfers from theory to practice, are highly reflective, are active participants in the construction of meaning (in learning by reconstruction), and collaboratively problem-solve at levels just beyond their current levels of understanding. The program, course, and core-task under examination in the present study were developed in accordance with this model.

## **The Context of the Study**

The teacher educators involved in developing the foreign language education curriculum pursued by the participants in this study designed the program and its course content to foster teacher education and training, as well as development. Within each course they designated a set of fixed core tasks, which the students were required to successfully complete. Each task was aligned with the preservice standards set forth by the college, the state, and the various secondary education accreditation agencies. These tasks were designed to further not just factual knowledge and offer opportunities to put theoretical concepts into practice, but also to encourage quality reflection, often through the social construction of knowledge and artifacts.

### **The Course and Core Task**

The course in which the present study took place was the graduate level of the Foreign Language Practicum. One of the primary aims of this course was to prepare student-teachers for their final internship experience in the foreign language education program. As such, student-teachers were encouraged to take this course in the semester immediately preceding the final internship. The course included both university- and field-based work.

The “core tasks” were a key means at this particular university of assessing student-teacher competencies related to the standards across the various evaluative agencies. The present study concerned itself with a single core task encompassed within the Foreign Language Practicum. For the graduate students taking this course, a video project was required as one of the assignments (see Appendix A for Assignment Description).

The Practicum video project was completed in groups, each of which chose as topics both a ‘best-practice’ teaching strategy and a second language skill. Each group was to research the foundations and rationales behind the topics, then videotape an explanatory segment (getting at the notion of “education”). This was to be accompanied by brief classroom practice-based samples of the strategy and of the skill as supporting evidence (getting at the notion of “training”). While videotaped microteaching is a long-observed practice in teacher preparation, the unique feature of this task was to be the compilation and editing processes involved in making the final “film”, which was designed to be shown to and further instruct their undergraduate peers. This latter feature was deemed important by the course designers because it was thought to hold the potential to move the student-teachers out of the technical rationality type of reflection. The need to iteratively consider their explanations and examples and to discuss and actively choose and edit specific exemplary video clips was believed to foster descriptive and dialogical reflection, moving them into ever new Zones of Proximal Development. Finally, the project instructions and rubric required the student-teachers to consider and present their topics in light of varying contexts. They were to analyze the possible diverse needs, abilities, proficiencies, and backgrounds of students, which was meant to encourage critical reflection. In the end, the multiple types of reflection coupled with the social interaction with and construction of artifacts was intended to promote in the student-teachers a broad, deep understanding of their topics. As mentioned above, the idea was to have student-teachers take information that they had been presented in previous courses and elaborate on it in order to make it their own. The ultimate goal was

to help them to become self-regulatory and thoughtful in their applications of these approaches once in actual practice.

The completed “movie” was assessed based on a rubric (see Appendix B), which the student-teachers were given in advance. When successfully completed, the student-teachers responsible were considered to have met the requirements of this core task. Receiving a passing grade on this assignment then implied that a given student-teacher had met the standards (national, state, and in-house) designated for this core task by the teacher educators in the program. The evaluation of the end-product of this task, therefore, carried a great deal of weight as a measure of the cognitive/psychological change (i.e. learning), and the pedagogic transformations (i.e. professionalization) deemed necessary for future success on the part of the student-teacher.

### **The Research**

It is the opinion of this researcher, however, that the final product alone does not provide a complete picture of the student-teachers’ learning. It is, after all, only the outcome of the task. Many learning theorists believe that learning lies in the *process* of creating the product. The end may justify the means, but according to teacher preparation research, as discussed above, the means is where most of the learning is taking place. As such, the *processes* need to be examined in order to understand the *types* and *levels* of understanding and change taking place. Information such as this is crucial to teacher educators who may wish to create and tweak learning environments that promote multiple types of reflection and ensure levels of understanding that will eventually translate into practice for the student-teachers involved. Without an understanding of the processes engaged in by student-teachers in completing a task, teacher educators cannot

be completely certain that the task itself is designed in the best way possible to promote the best type of learning possible. This is consistent with Vygotsky's views that learning is not a state of being, but rather a process.

The program, course, and core task involved in this study were created by teacher educators with sociocultural constructivist views, who were aiming for the student-teachers therein to engage in increasingly complex, reflective tasks designed to eventually promote deep understanding of concepts and self-regulative professional skills. How to conduct research on learning in such an environment is well-stated by Rowe and Wertsch (2004):

Vygotsky postulated that uniquely human psychological processes ('higher mental processes') must be studied as they originate and develop in social activity. The approach that has developed from Vygotsky's work can be characterized as the *developmental analysis* of how processes that originate in *social action* shaped by *semiotic mediation* (primarily language) are *transferred to the individual plane* and shape *higher mental processes* (p. 539, italics in original).

It is, therefore, just such a research approach that was undertaken in the present study, affecting its design, research questions, and selection of instrumentation and analysis procedures (see Chapter 3 for details on methodological implementation).

**Case Study.** It should be noted that one means of accommodating the research requirements of context-based development over time is through qualitative inquiry, which offers methodological approaches that do not purport to isolate the researcher or the participants from the surrounding context or from one another. Researcher bias and



subjectivity are understood to be not just inevitable, but important by most qualitative researchers. In the 20<sup>th</sup> century version of the hermeneutic tradition, the Heideggerian view is that “[k]nowledge is always perspectival and situated. There is no escape to an absolute view without presuppositions. Human knowledge is always an interpretative clarification of the world, not a pure, interest-free theory” (Hjørland & Nicolaisen, 2005). Knowledge in context is also an important notion in social constructivist theories, and encourages a kind of “effective” reflection on the part of the researcher.

The most appropriate research strategy is one that can best respond to the purpose of the study and the related research questions. Marshall and Rossman (1995) offer a guide (p. 41) to aligning the study purpose and questions to appropriate research strategies. In the instance of both exploratory and descriptive research – as is the situation in the present study – this guide deems case study to be the strategy of choice. Case study is the collection and presentation of detailed information about a particular participant or small group, frequently including the accounts of subjects themselves. A form of qualitative descriptive research, the case study looks intensely at an individual or small participant pool, drawing conclusions only about that participant or group and only in that specific context (Becker et al., 2005). This also corresponds to the Vygotskian notion of genetic analysis (see below).

**(Micro)Genetic Analysis.** One of Vygotsky’s four domains of human development toward higher mental functioning is known as ‘microgenesis’, which is defined as the “moment-to-moment changes of understanding when performing a task” (Dong, 2004-2006). From this concept emerges the notion of microgenetic research designs, which can aid the researcher in studying change processes and individual

differences in development. Lavelli, et al. (2005) endorse and explain microgenetic research designs as being

specially aimed to allow the researcher to closely observe *processes of change*, instead of *products*. As the name implies, microgenetic designs are focused on the *microgenesis* of development, that is, on the moment-by-moment change observed within a short period of time...(p. 42, italics in original)

From a sociocultural point of view, microgenetic analysis also serves an important function as a “dynamic assessment of a [learner’s] ‘zone of proximal development’” (Lavelli et al., 2005, p.44), which has implications for practice. What’s more, learning more about the small, microdevelopmental mechanisms and conditions that produce development leads to increased understanding of more long-term, macrodevelopmental changes in an individual.

**Exploratory Practice.** Note Vygotsky’s notion that cognitive development (i.e. learning) occurs during periods of problem-solving, particularly in socially-mediated contexts, as well as Leontiev’s beliefs that larger problem-solving is interspersed with multiple periods of contradiction, conflict, or tension, and that these “turning points” are the opportunities at which development may take place (more on this in AT below). How researchers, particularly those also in the role of practitioners, go about examining and understanding these microgenetic processes have varied from Schönian reflective practice to Nunan’s (see Nunan, 1996; 1997; Schechter & Ramirez, 1992) concepts of action research. For those who take a reflective approach on the part of the practitioner and/or the student-teachers, the goal is to think about action in order to understand it. The action research approach, on the other hand, is less about understanding, and more

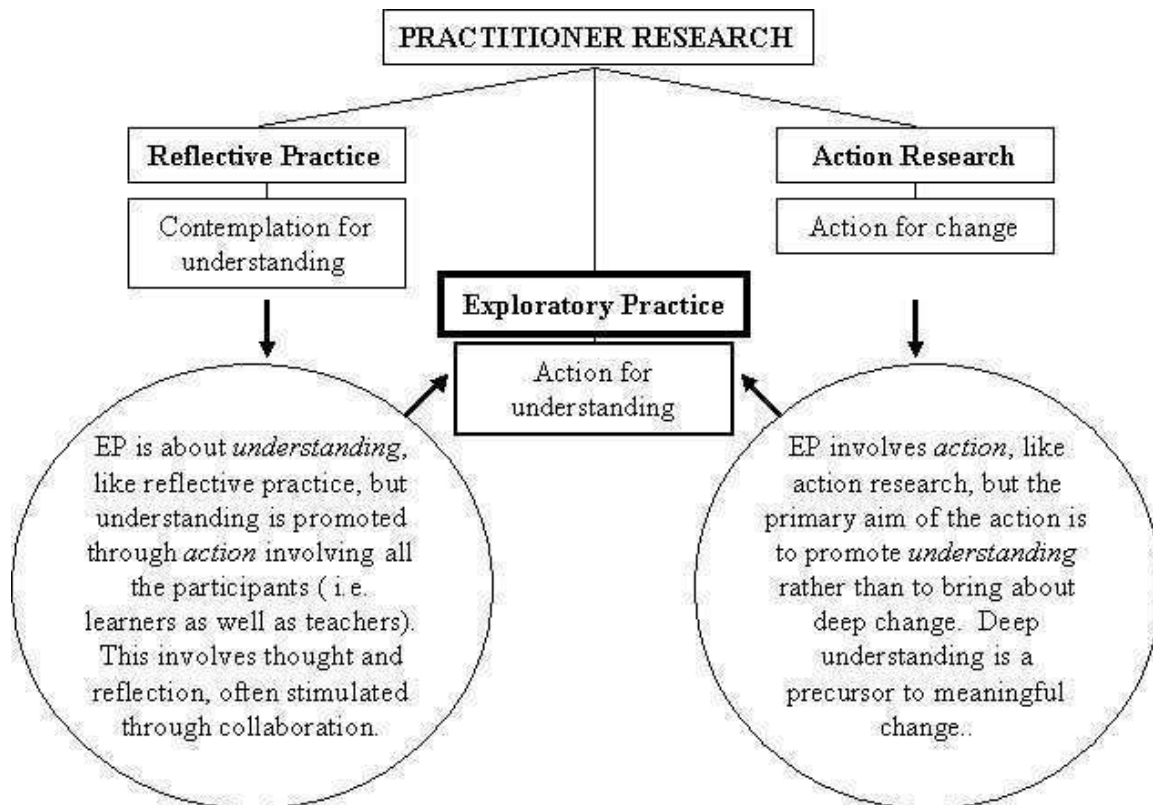


Figure 1: How Exploratory Practice relates to Reflective Practice and Action Research

Models (EP, 2006)

about doing in order to solve a problem. In the action research perspective, a problem is identified which requires solving, and the practitioner and/or student-teachers embark on a path of innovation as a means of changing things, hopefully for the better. Dick Allwright (see Allwright, 2003a; 2003b; 2005; Allwright & Lenzuen, 1997; EP, 2006; Tarone & Allwright, 2005), however, has proposed a third option for practitioner-researchers. In Allwright's view, both thought and action are required in order to gain understanding, as seen in Figure 1. Action provides the setting for microgenetic study of processes, which leads to understanding. Allwright sees research, not as problem-oriented, but "puzzle"-oriented (not everything happening in a classroom is, after all, a problem, but it is still important to gain access and understanding of what is occurring).

Allwright calls his approach Exploratory Practice (EP), since it is concerned with the exploration of processes for the purpose of improving understanding of what is happening in a given situation. Also important to Allwright's EP is the notion, which coincides with sociocultural theory and case study approaches that observations should occur in a natural setting. The research should occur as part of normal classroom activities, imposing minimally on the naturalness of the setting, as well as on the behaviors of those involved. Allwright's EP offers "a sustainable way of carrying out classroom investigations that provides ...teachers (and potentially the learners also) with a systematic framework within which to define the areas of ...teaching and learning that they wish to explore, to refine their thinking about them, and to investigate them further using familiar classroom activities, rather than 'academic' research techniques, as the investigative tools" (Allwright & Lenzuen, 1997, p. 73).

Since the goal of this study was to understand process, rather than seek out and test possible solutions to perceived problems, EP provides a means of pursuing this goal by the researcher and participants being both active and reflective.

**Activity Theory.** Any study that proposes to examine and describe complex processes requires a way to make meaning out of the data gathered. It is the belief of this researcher, and of the program designers in which this study is conducted, that a socially- and artifact-mediated, collaborative environment contributes to learning. The framework for the data analysis of a study conducted in such a context must be one suited to organizing data from the research of the social construction of knowledge. Among the research frameworks available for handling this type of data, Activity Theory offers a lens through which to examine the concept of process in learning. This is because it

allows the researcher to consider how a learner interacts with the elements of a given context en route to a goal, which is an important aspect of cognitive development in the sociocultural paradigm.

Activity Theory has been used to study areas such as ergonomics (Bedny & Karwowski, 2004; Engeström, 2000), human-computer interaction research (see Bannon & Bødker, 1991; Bødker, 1991; 1996; Nardi, 1996), information systems design (see Iivari & Lyytinen, 1998), computer supported cooperative work (see Kuuti, 1991; Kuuti, 1992), artificial intelligence (Star, 1996), and healthcare (Engeström, 1993). Since Activity Theory is relatively new to educational research, it offers a view into learning processes that may have been heretofore as yet relatively unexamined. Some work has been done in the areas of education (Cook, Smagorinsky, Fry, Konopak, & Moore, 2002; Flavell, 2001; Hung, Tan, & Koh, 2006; Pearson, 2005; Roth & Lee, 2007) and inservice teacher development (D. L. Russell & Schneiderheinze, 2005). A handful of researchers have paired activity theory with teacher preparation (Grossman, Smagorinsky, & Valencia, 1999; P. Grossman & McDonald, 2008; Putnam & Borko, 2000; Utley, 2006). Daniels (2004), however, poses a strong argument for the use of AT by researchers in teacher development when he says:

activity theory provides an important perspective on the problem of developing practices which are frequently observed to be desirable but remain difficult to develop... [A]ctivity theory directs attention to points of integration that might not otherwise be considered... For many educators it provides important tools for the development of an understanding of pedagogy. Importantly, this body of theoretical work opens up, or rather insists upon, a pedagogic imagination that

reflects on the processes of teaching and learning as much more than face-to-face interaction or the simple transmission of prescribed knowledge and skill (p.121).

It is important to note that the term “Activity Theory” is a somewhat misleading translation of the original Russian. “Activity” here refers to the German and Russian meanings of the words *Tätigkeit* and *dejatel’nost*, respectively, which translate as “doing in order to transform something”, rather than a more general interpretation of action (Kuuti, 1996). AT is also not a formal theory, “a plausible or scientifically acceptable general principle or body of principles offered to explain phenomena” (“*theory*”, 2006). It is, rather, “a collection of basic ideas for conceptualising both individual and collective practices as developmental processes” (Mwanza & Engeström, 2005). As such, it is a flexible, yet consistent *a priori* framework, which allows for greater generalization and comparison, making it a “powerful and clarifying descriptive tool” (Nardi, 1996, p. 7).

***Origins and theoretical underpinnings of activity theory.*** While perhaps not yet used extensively to examine teacher development, Activity Theory has been emerging and evolving over many decades. AT’s original manifestations are located in early 20<sup>th</sup> century Soviet psychological theories that were concerned with the roles of culture and history in human consciousness and cognition. The principle groundwork was laid by Lev Vygotsky, who was profoundly influenced by the works of Kant, Hegel, Marx, and Engels (Kuuti, 1996). Led by Vygotsky, they worked together to “discover the way natural processes such as physical maturation and sensory mechanisms become intertwined with culturally determined processes to produce the psychological functions of adults” (Luria, 1979). They felt that traditional behaviorist and psychoanalytic approaches to psychology at that time did not go far enough in the explanation of human

consciousness. They suggested that previous researchers had tried to emulate other fields in making psychology an exact science, and in so doing, were confined to looking at mental activity as something occurring solely “within the organism”. This view of consciousness, as previously explored by the likes of Pavlov, Freud, Piaget, and Dewey seemed inadequate to Vygotsky and his adherents. The socialist influences of these Soviet researchers’ time and place led them to consider “collective” and “cooperative” labor and its products, and how the individual functions within a work system rather than independently of history, culture, and other people. Alexander Luria wrote, “It seems surprising that the science of psychology has avoided the idea that many mental processes are social and historical in origin, or that important manifestations of human consciousness have been directly shaped by the basic practices of human activity and the actual forms of culture” (Luria, 1976).

In their new paradigm, the Soviets concluded that, once a motive and a goal have been identified, any attempt to carry out a task begins with an individual’s pre-existing notions of things and tools, both of which have been shaped by the surrounding society/culture. Both internal and external structures, then, already have focus, scope, and direction before an individual begins, physically and/or cognitively, to set about any task. In addition, the task itself is not accomplished in a vacuum. One is likely to select and carry out a series of actions as a means of attaining an object. These actions will likely involve tool use as well, and may even involve cooperation with other people. It is important to consider at this point that, for the Vygotsky School, the actions, tools, and people are all also products of history and culture. In Vygotsky’s words, “Historical and social experience are not in themselves different entities, psychologically speaking, since

they cannot be separated in experience and are always given together... [T]heir mechanisms are exactly the same as the mechanism of consciousness, since consciousness must be regarded as a particular case of social experience” (Vygotsky, 1925). This said, Vygotsky arrived at the conclusion that consciousness and cognition were best studied in context, since much more seems to be at play than just the individual.

As for cognition and learning then, members of the Vygotsky School went on to say that people engage their consciousness when they have a motive to accomplish an object (goal). Note that again in this instance there is an awkward translation from the Russian of the concept of “object”. In AT, the object is like the object of a game (i.e. the goal or the objective). This consciousness undergoes a transformation as people undertake actions that they believe will accomplish the object, both through internal mental (intramental) engagement with the problem, as well as external (intermental) engagement with tools (particularly language), and often, other people. This model proposes that actions are motive-driven, object-oriented, and artifact-mediated, as well as carried out in a socio-cultural context. What’s more, all of these forces working together can lead to conscious awareness, which enhances cognitive processes, and therefore increases knowledge – learning is, therefore, transformative. Social interaction, then, is the source of the development of higher mental processes in the individual. Human activity is extraordinarily complex, therefore researchers must consider that explanation cannot be atomized into individual elements, but rather must include the rich web of interconnected ideas and actions that take place in the complexity of social contexts. Thus, key elements of their work that have contributed heavily to Activity Theory are: 1)



the importance of looking, not just at individual consciousness in the abstract, but consciousness as a product of one's cultural-historical foundations; 2) consciousness as a product of social interaction; and 3) consciousness as something that is mediated by external events.

After his untimely death, Vygotsky's work on activity was continued and expanded on by his colleagues who pursued their own extensions of his foundational work, such as Luria, Zaporozhet, Galperin, Bozhovich, Lisina, and Davydov (Lompscher, 2006). Among these colleagues who were inspired by his work was Alexei Leontiev. Leontiev's contributions played a significant role in the present forms of AT. His studies of animals and humans led him to note that those with apparent higher mental functions engage in multiple "actions" (which are made up of "operations" and driven by a "motive") as a means to eventually reach an "object" (goal). The "actions" by themselves appear disconnected from the "object", but combined are the means to the end goal. The compound "actions" that result in the attainment of an "object" constitute an activity, which is ultimately the unit of analysis. What is different, however, about AT is that the activity as unit of analysis also includes a minimal meaningful context in which the activity takes place. As such, "the object of our research is always essentially collective even if our main interest is individual actions" (Kuuti, 1996 p.26).

***The structure and function of an activity.*** At the most expanded level, an *activity* is the overall structure of "doing directed to an *object*" (Kuuti, 1996 p. 27, italics mine). The object of an activity is, essentially, its objective or goal. An object can be "a material thing, but it can also be less tangible (such as a plan) or totally intangible (such as a common idea) as long as it can be shared for manipulation and transformation by the

participants of the activity” (Kuuti, 1996 p. 27). A *subject* cannot attain an object without the mediation of some kind of *artifact* or *tool* (i.e. people use tools in order to accomplish goals).

This concept of mediation is key in the works of the Soviet psychologists Vygotsky, Leontiev, and Luria. It is the idea that artifacts (e.g. instruments, signs – including language, procedures, machines, methods, laws, tools, etc.) (Kuuti, 1996) are used to mediate between elements of an activity. For example, a person cannot directly bring about an object. Rather, s/he must make use of (even creating or transforming) some kind of artifact in order to bring the object into being. In addition, the artifacts themselves are the products of the cultural-historical contexts in which they are created, and as such, their functions and uses are limited, thus impacting the potential influence on the object. In the words of Engeström (1999), “[m]ediation by tools and signs is not merely a psychological idea. It is an idea that breaks down the Cartesian walls that isolate the individual mind from the culture and the society.” The use of these artifacts, in the eyes of Vygotsky, is significant to higher order learning. “Because this [mediating artifact] possesses the specific function of reverse action, it transfers the psychological operation to higher and qualitatively new forms and permits the humans, by aid of extrinsic stimuli, *to control their behavior from the outside*” (Vygotsky, 1978 p. 40, italics in original). Engeström (1999) summarizes: “The idea that humans can control their own behavior – not ‘from the inside’, on the basis of biological urges, but ‘from the outside’, using and creating artifacts.” A basic model, as conceived of by Engeström (CHAT, 2005), can be seen in Figure 2.

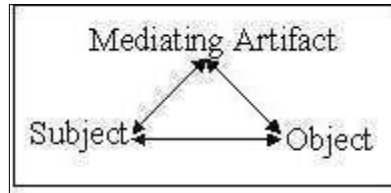


Figure 2: Basic Model of Activity

Any given object of an activity, however, may be attained through different actions, which depend on the situation. There may be, therefore, more than one way to reach a given object. Leontiev wanted to create a model (Figure 3) that would include the shorter-term processes that make up an activity (actions and operations), as well as the features that guide each level. At the macro-level there is the whole activity, which is guided by a motive. The motive is the human need that gives rise to the activity, for example, cooking a meal. An activity is made up of actions, which are guided by conscious goals. An example of an action may be choosing a recipe or purchasing the

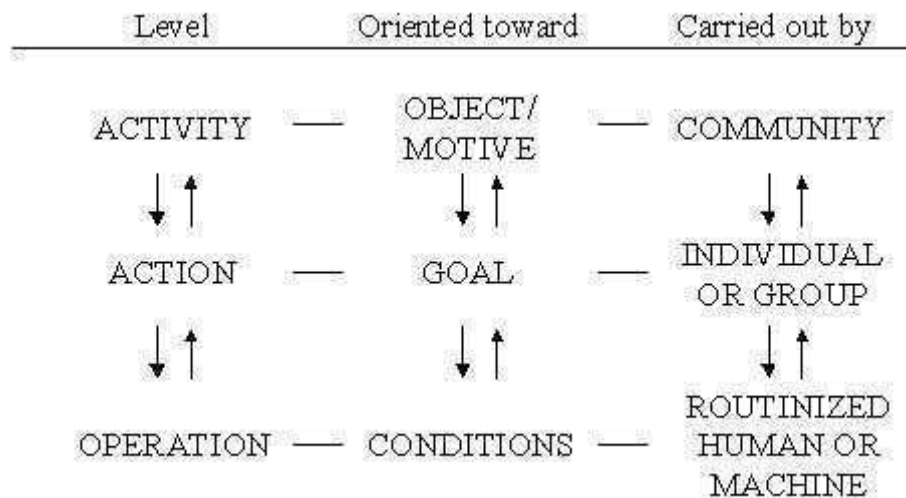


Figure 3: Leontiev's hierarchical levels of activity

necessary ingredients. Finally, an action is made up of operations. An operation is guided by the conditions required to achieve the goal, such as julienning carrots or caramelizing onions. Operations at first require conscious effort, but can grow to be

routinized and automatic, such as learning to shift a standard transmission on a car. There is a constant flux between the levels and what guides them resulting in a dynamic system. When an activity is complete - that is, the object is attained - then the object is transformed into an *outcome*. Engeström (1987, p.78) developed Leontiev's concepts into the well-known triangular model used throughout AT-based research (Figure 4). In this second-generation model, additional contextual factors affecting and mediating the activity are accounted for, such as instruments and tools, rules and requirements, the individual and his/her community and co-workers, and division of labor.

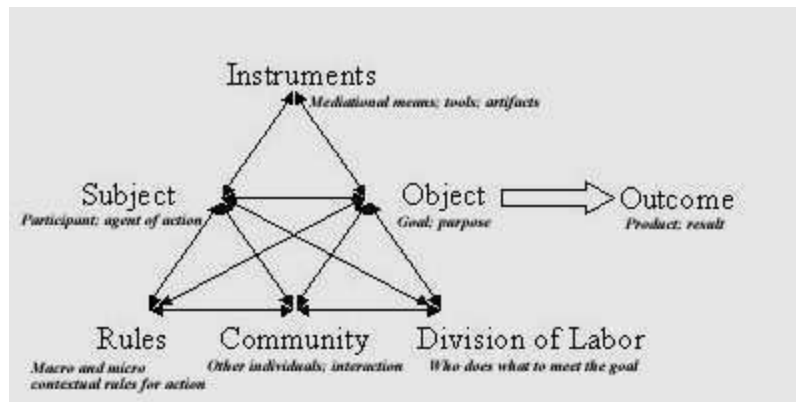


Figure 4: The Structure of a Human Activity System – Second Generation

In practice, a given individual's work activity system may look something like the collaborative unit plan activity designed for a student-teacher in Figure 5. As seen in Figure 5, the outcome of the activity is a potentially dynamic target produced by an individualized, contextual, and flexible system. Adding yet an even more flexible feature to the model of the system is a means of reflecting the key notion that change and development (i.e. learning, or in Vygotskian terms, object- to other- to self-regulation) on the part of the subject depends largely on the recognition and resolution

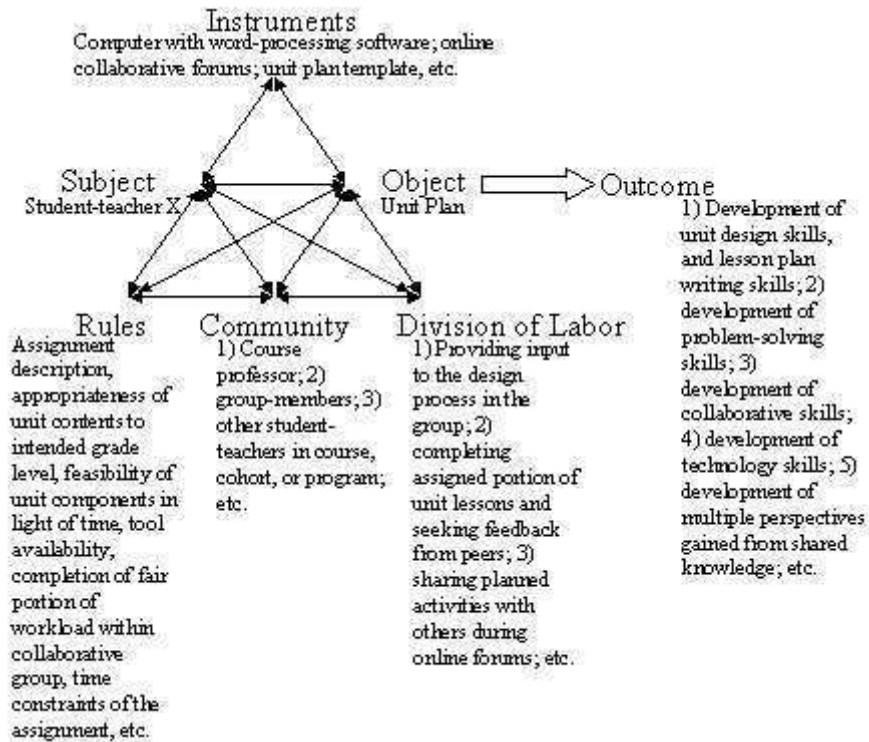


Figure 5: Sample Structure of a Unit Plan Writing Activity for Student-Teachers

of tensions, conflicts, and contradictions that arise in the system as it is executed.

Engeström (CHAT, 2005) states that internal contradictions are the “driving force of change and development in activity systems.” The tensions, conflicts, and contradictions that arise in a system are important for researchers to note, since they are the turning points at which development is poised to occur. These difficulties are usually represented in the models with a solid (indicating a resolved conflict) or a dashed (indicating an unresolved conflict) arrow in an activity system. Figure 6 shows where conflicts arose at different points in an activity system, and whether or not they were resolved. Another feature of the activity system that can be represented in the model is change in the object over time caused by tensions and conflicts in the system. Russell and Schneiderheinze (2005) explain this concept clearly in their own study of an inservice training project:

Transformation of the object in a work activity system can occur in four ways: widening, narrowing, switching, and disintegrating. Widening of the object relates to the object expansion while narrowing refers to object contraction. Switching involves a shifting of the object in response to tensions in the system, and disintegrating refers to fragmenting or splitting of the object.

Note that Figure 6 also shows where one of the key conflicts for this particular subject – time – was not able to be resolved, and resulted in the subject having to narrow the scope and detail in his/her object.

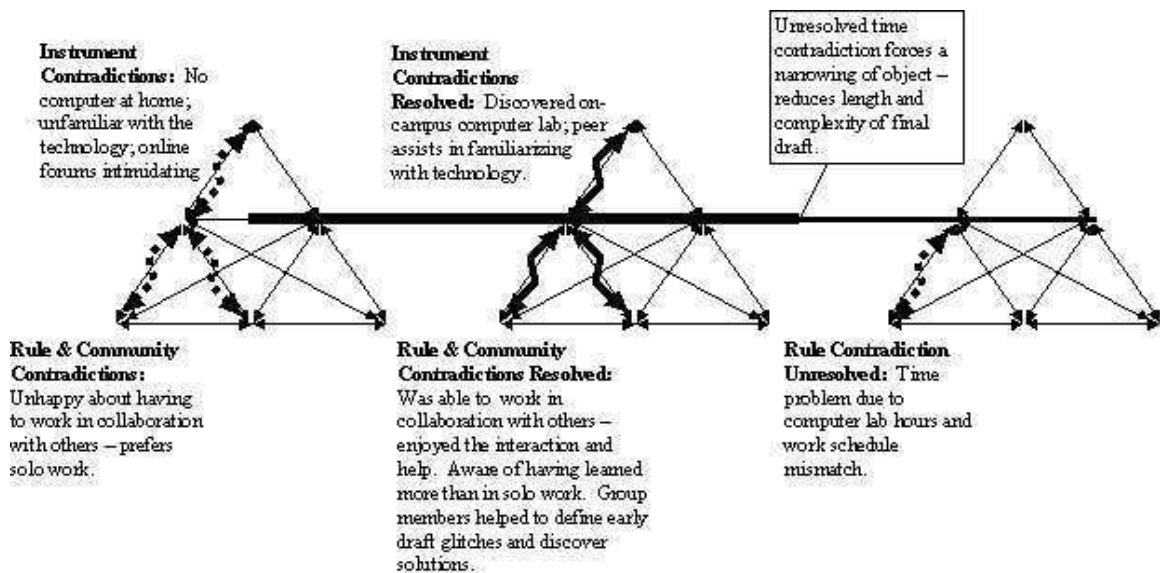


Figure 6: Tensions, Conflicts, and Contradictions in a Sample Activity System

As researchers and theorists continue to explore the possibilities of AT, new questions have arisen in terms of accounting for networks of interacting activity systems. Engeström has proposed a two-dimensional model of how activity systems might interact, as seen in Figure 7. Of course, this model simply shows the potential interaction between two systems, while in reality interactions are likely to occur among multiple systems.

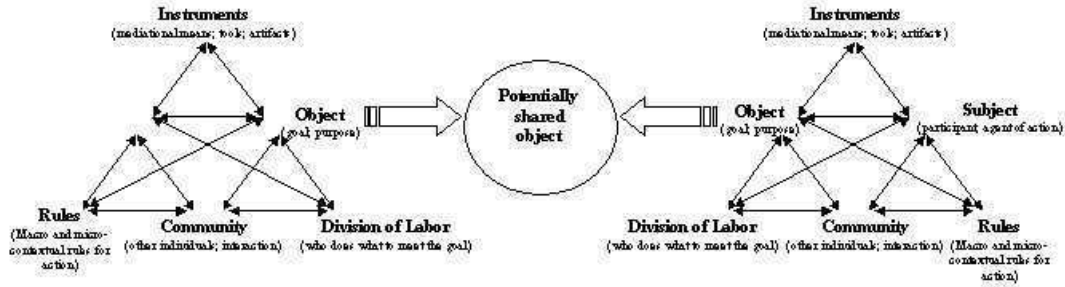


Figure 7: Two Interacting Activity Systems As Minimal Model for Third Generation AT (CHAT, 2005)

While the path to self-regulation and internalization have typically been the focus of those pursuing Vygotskian research, there are additional concepts set forth by Vygotsky, Leontiev, and Luria, which have only recently come to light. These are the notions of *creation* and *externalization* that can arise from internalization, setting up a cyclical pattern of learning and creating. (Many works in Soviet psychology were suppressed until the early 1990s. For an entire collection of translated Russian works that deal with creation and purposeful externalization, see Lektorsky, 1990). Engeström (1999, p. 26) states, “the most important aspect of human activity is its creativity and its ability to exceed or transcend given constraints and instructions...There has been very little concrete research on creation of artifacts, production of novel social patterns, and expansive transformation of activity contexts.”

### Organization of the Research Procedures

In the next chapter are presented the methods of data collection and analysis which hope to get at the above questions concerning the processes engaged in by student-teachers as they complete a given standards-driven core task. The measures and instruments presented hope to reveal something of the quality of reflection and degree of individual movement from other- to object- to self- regulation.

### Chapter III

By investigating contextual interaction between learners and the mediational elements of their environment as an activity progressed, this study intended to further understanding of teacher development in at least two important ways. The aims of this study were to discover a) tangible evidence of cognitive transformation (development in the form of regulation), as well as b) aspects of professionalization into a community of skilled second language teachers (as evidenced by activity).

Traditional, positivistic methods of investigation involve attempting to observe a subject/phenomenon in isolation from other extraneous variables, including the researcher's own subjective views. "Vygotsky pointed out that such a method could **allow the experimenter only to observe a given phenomenon in its finished, habitual state**" (Blunden, 2001, bold in original). The present study, however, was concerned with *process*, rather than product. The focus of interest was in uncovering "the *genesis* of a phenomenon — how and under what conditions it was brought into being, and through what stages and forms it developed" (Blunden, 2001, italics in original). As such, this study did not attempt to isolate phenomena, but rather attempted to explore them in their natural complexity. Situated within sociocultural theory, the present research was concerned with context and consciousness – the social bases of knowledge construction. In such a study, data evolved from social constructs developed through the relationships among the researcher, research participants, research context (including its historical antecedents), and the means of data collection (Smagorinsky, 1995, p. 192).



## **Research Design**

### **Sociocultural Theory as Research Orientation**

The present study was a socioculturally-oriented investigation that embraced a constructivist view that knowledge is embedded in, defined by, and developed within culturally and historically-determined social conventions. An exploration of knowledge development *processes* within highly a contextualized social experience required a research paradigm that could accommodate considerable complexity, while at the same time still reflect individual human perceptions and change from a microgenetic perspective.

### **Case Study as Data Acquisition Method**

This study's research questions were directed toward discovering more about the processes in which the student-teachers engaged, as well as identifying important behaviors, structures, and turning points with the potential to contribute to their cognitive and professional development. Case study allowed for the learning process to be viewed more holistically, which tied in with the sociocultural paradigm. As such, the investigator was not a neutral entity in the research – rather, she was a participant observer that was even occasionally drawn into the activity as a mediational artifact.

### **Microgenetic Case Study Design**

Discovering more about the processes in which the student-teachers engaged also involved learning about the mechanisms and conditions with potential to produce development. An additional requirement to the case study approach was a method for studying change while it was occurring.

Combining the holistic nature of case study with microgenesis in a sociocultural paradigm allowed for the creation of information about the process of change in individuals and those to whom they were connected in a given situation.

### **Exploratory Practice as Pedagogical Reasoning**

The fundamentals of Exploratory Practice served as the principled reasoning behind the pedagogy employed in the present study. The researcher acted in the role of guide for the portion of the course involving the core task. As such, the researcher was a participant-observer, embedded in the social interaction in the learning context, thus conducting the research in an integrated manner. Observing student-teachers' actions as they progressed through an activity, and noting the occurrences of and responses to (including reflective moments) turning points, brought sociocultural theory, microgenetic case study, and EP together as a means to explore the phenomena that occurred in the activity.

### **Activity Theory as a Structural Framework for Data Collection and Analysis**

The nature of a case study of a complex social context required a system for making meaning out of the data by providing structure. AT provided a means of organizing the multiple, interrelated sociocultural constructs and their interactions in an activity system, such as the core task (see below) involved in the present study. By using the multi-noded AT model (*CHAT*, 2005), the researcher was able to organize the microgenetic observations and examine them for patterns of relationships with potential to lead to developmental change over time during the work activity. This particular framework permitted the researcher to record intersections of consciousness and activity, and the potential turning points for development.

In order to investigate the learners' processes and uses of mediational tools throughout the activity, the present study recorded participants' interactions with one another and the artifacts at their disposal as a means of providing insight into their short-term development during the learning task. The elements of the "Activity" (in Engeströmian terms) were 1) the student-teachers and their groups, 2) the rules (directions) of the activity as a subset of the rules within their current academic setting, 3) interaction with one another, the professor, and the researcher, 4) the wide range of reference materials at their disposal, and finally, 5) the technological equipment with which they created and completed the activity.

### **Methodological Overview**

Sociocultural theory, then, provided the backdrop for all sub-selections of methodological approaches in this study. Contained herein were the key Vygotskian concepts of

genetic method, [regulation,] mediation, internalization, and the zone of proximal development, [as well as an] additional concept, activity, which was discussed by Vygotsky in several of his writings, [and which] has recently emerged as a theory in its own right—activity theory (Lantolf & Thorne, 2006, p.18).

Case study was the approach chosen by the researcher as the best means with which to observe the activity in question, and to identify the moment-by-moment changes signifying potential turning points for development. In addition, credence was given to Allwright's notion of Exploratory Practice as an appropriate means for a researcher/practitioner to conduct a study in a minimally invasive way, while using the

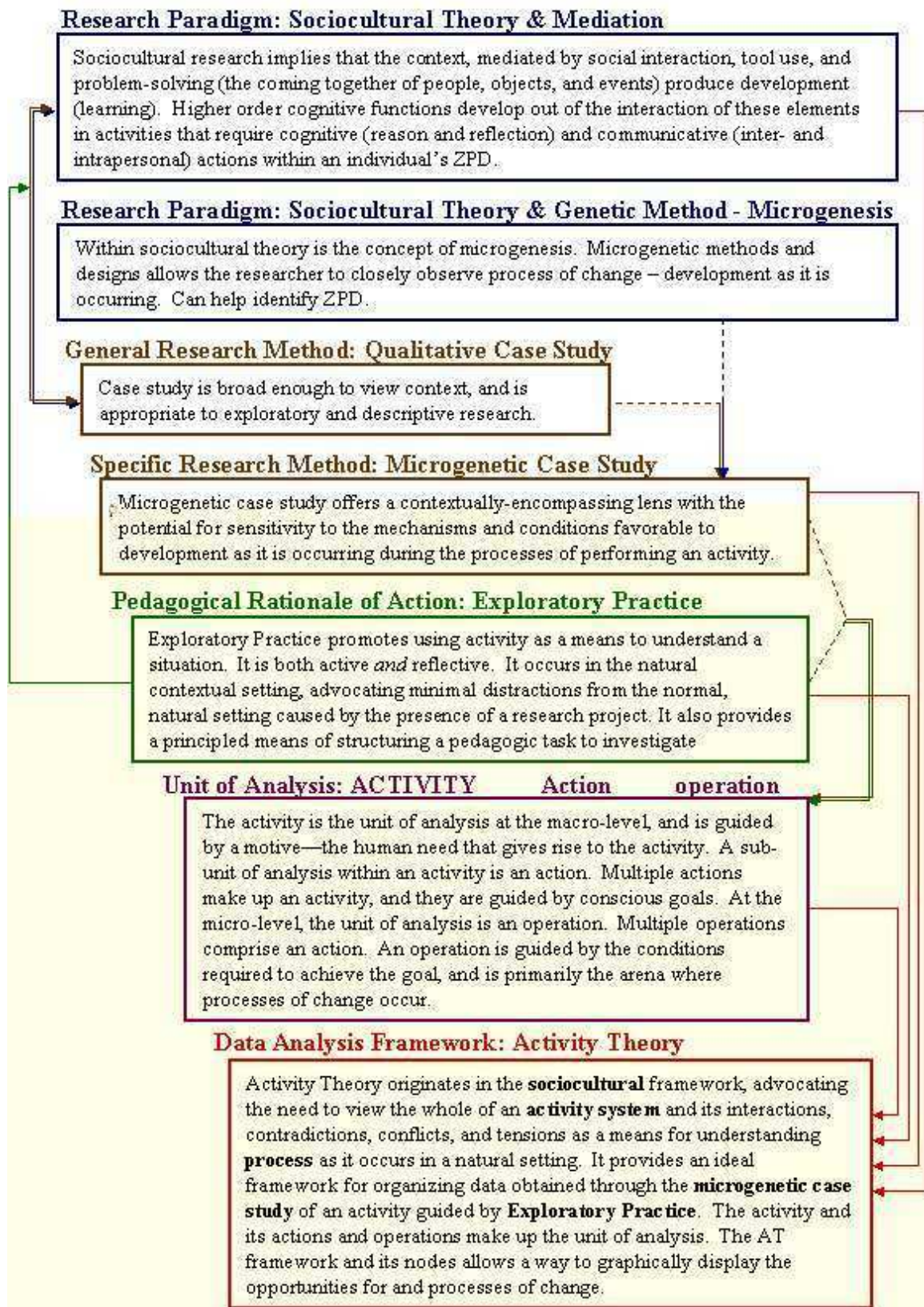


Figure 8: Overview of Methodological Foundations for the Present Study

activity as the bridge to understanding. In addition, EP provided a principled means of structuring the creation of a pedagogic task to investigate, as was the case with the activity that was the focus of this study. An overview of the relationships between these concepts is presented in Figure 8.

### **Research Setting**

The study was integrated into a *Practicum in Foreign Language/ESOL Teaching* course, taught in the College of Education at a large, southeastern, Research I university. The Practicum was designed to prepare student-teachers for their final internship. As part of their preparation, the course required a 36-hour field experience, and several assignments designed to heighten the student-teachers' awareness of the requirements and realities of the classroom, as well as reinforce their professional knowledge. The semester-long class met in a regular classroom in the College of Education on Monday evenings from 5:00 p.m. to 7:50 p.m. Due to fluctuating enrollments, this course was taught jointly with its undergraduate equivalent, *Practicum in Foreign Language Teaching in the Secondary School*, meaning that both undergraduate and graduate student-teachers attended the same class, though their assignments differed. The overall class size was relatively small, with undergraduate student-teachers in the majority. The number of graduate-level student-teachers present was eight at the outset, but early on dropped to seven when one left the foreign language education program to pursue a degree in another area of secondary education. In the semester in which the research was conducted, the course was taught by an experienced foreign language education instructor. The majority of her experience in education had been in teaching second language methods courses, as well as some experience teaching the *Technology in the*

*Foreign and Second Language Classroom* course. As such, she was extremely well-versed in the content of the required core task (see below), as well as with the technology required to complete it. She had never, however, previously taught the Practicum course.

### **The Core Task – Design and Purpose**

As previously mentioned, the foreign/second language education program in the College of Education implemented a number of strategies designed to meet institutional/programmatic accountability requirements. In addition to these institutional requirements, this program was designed to maximize opportunities and offer ample support for the student-teachers enrolled therein to meet their own sets of preservice teacher standards. One of the program's strategies developed to accomplish these goals was the establishment of core tasks within each program course. These tasks were connected to specific state standards, which corresponded to those at the national and college levels. They were implemented in an effort to maintain continuity and quality in content and requirements across time, instructors, and/or course delivery methods.

The core task that was the focus of this investigation was a video project required only of the graduate level student-teachers in the course. The student-teachers were to form small groups for the project. Each group was then asked to choose one each from a list of foreign/second language teaching strategies, as well as a list of linguistic skills necessary to foreign/second language learner proficiency. The groups were then asked to make a two-part instructional video explicating their topics in depth for the undergraduate students in the course.

The concept behind the task was to expand on the traditional components of teacher education and training by attempting to create a setting that would better promote

development. The task designers were aware that all the students in the Practicum course had already been exposed, throughout several previous courses, to the concepts at hand. The basics of the strategies and linguistic skills, then, were assumed to be familiar topics for everyone in the class. Graduate student-teachers in particular were thought to be entering the practicum course having already previously understood and reflected upon these concepts at least at the level of ‘technical rationality’ (see Table 2 above). There was also the assumption by the core task designers that perhaps the student-teachers may have even achieved some self-regulation in their internalization of the concepts through iterative exposure to them at a basic level of comprehension and use.

The core task, then, was designed to ‘develop’ the student-teachers’ existing knowledge and skills (learned through previous education and training). Building on their prior knowledge, the student-teachers were to define and explicate the concepts, as well as offer clips of themselves enacting them in a classroom setting. In order to *develop* the student-teachers’ understandings, however, the project also required that their ‘definitions’ be expanded beyond the basic textbook material into explanations of the foundations of the theoretical premises behind the practices/skills in question. They were to include the socio-historical contexts in which the practices developed, and came to be viewed as appropriate and desirable in the modern foreign/second language classroom. By requiring them to be able to explain the foundations of their topics, the task designers hoped to push the student-teachers into a mode of more complex ‘descriptive reflection’ (see Table 2 above) as they worked to translate their ideas into the video medium. In this manner, they were expected to go beyond what they had learned previously, not just reiterating ‘received knowledge’, but engaging in a bit of scholarly research and coming

to a more complex, situated understanding. Having to present this new information in a comprehensible fashion to their peers was intended to solidify this knowledge (moving from object- to other-, and possibly to self-regulation) by exposing gaps in their understanding as they as they worked to put this information into words, text, and video.

Next, the requirement that the project be completed in groups was an attempt to engage the student-teachers in ‘dialogical reflection’ (see Table 2 above). The reflective dialogue and resulting variations in perspectives and ideas were intended to raise conflict, tension, and contradiction between different student-teacher’s interpretations as they worked together to build clear explanations of their topics for their video. These problematic moments, according to theories of ‘effective’ reflection and sociocultural learning, would hold the potential to advance the student-teachers’ understandings, or in Vygotskian terms, access the ZPD. The act of working through these conflicts would get the student-teachers to expand and deepen their knowledge as they compared, confirmed, and adjusted their perceptions.

By having them consider their topics as having become relevant to their field within a given socio-historical context, the core-task developers also hoped the student-teachers might engage in ‘critical reflection’ (See Table 2 above). Critical reflection was also the goal of the aspect of the core-task that required the student-teachers to provide explanations in their video of “when, why, and with whom” the use of the strategy or the focus on the specific language skill would be appropriate, inappropriate, or problematic. The student-teachers were asked to consider whether their chosen teaching strategy or linguistic skill would be the *best* strategy to employ or a *required* skill to be taught in *all* instructional situations with *all* students. As with the subject matter, the student-teachers



had previously been exposed to the concept of individual differences in terms of students' cognitive development, learning styles, motivation, attitude, etc. Modifications and accommodations for students with different types of special needs and/or English and second language proficiency levels (including heritage learners in the foreign language classroom) were also topics in previous and concurrent courses.

In spite of prior exposure to the concepts at hand, each of the types of reflection mentioned above can be engaged in iteratively at increasingly complex levels of understanding and development. For example, one may engage in dialogical reflection on a given topic on multiple occasions with a variety of people, each iteration holding the potential to deepen understanding. The core-task developers intentionally chose the production of an instructional video with the expectation that the nature of video editing would require the student-teachers to engage iteratively with the content and footage. Unlike traditional "record-view-critique" approaches to student-teacher-made video, the product would not be created as a single, unedited video clip. It was believed that the components of the final video would have to be viewed repeatedly in the process of creating, selecting, cropping, and organizing the final product. What's more, the selected clips would need to exemplify and reinforce the detailed explanations of the specific practices assigned to a given group. This would mean multiple viewing of the same teaching video, and numerous opportunities for critique, debate, and revision – including the chance to research the topics more thoroughly, or even to record new video should existing footage be inappropriate or inadequate. Descriptive, dialogical and critical reflection would all be key in making the presentation come together, and iterative exposure to the materials during their creation, selection, and organization would

offer the student-teachers ample opportunity to discuss, reflect, critique, and make changes.

From an anecdotal perspective, in the researcher's past experience as a professor of the Practicum course, each group of student-teachers reacted to, approached, and accomplished the video core task in a very different manner. Although there was considerable individual variation in the processes chosen by the student-teachers, in each instance the end products met the parameters of the assignment requirements.

Particularities materialized in a variety of forms, such as a) extremes in the technological literacy required and in the levels of comfort therewith; b) creative uses of features of the technologies to emphasize particular pedagogical points; c) creative, and often humorous, uses of self-made video clips to illustrate examples and non-examples of appropriate teaching strategies; d) differences in the choices of "storylines" the groups felt were necessary to illustrate their topics; and e) wide variations in skills and interests in working cooperatively to complete the project.

The core-task, then, was designed to place in the student-teachers' path obstacles/conflicts which would require them to use the tools, rules, and people at their disposal as they were forced to consider basic concepts in foreign/second language education in new and more complex ways. The nature of the technology-mediated delivery format for the project was considered important to the process due to the iterative nature of watching, selecting, formatting and editing video, which would offer multiple opportunities for discussions, questions, clarifications, changes, and enhancements. The task was intended to expand and deepen the student-teachers' knowledge and understanding (i.e. learning, or in Vygotskian terms, object- to other- to

self-regulation), as well as enhance their contextual awareness of appropriate application (i.e. professionalization).

### **The Core Task – Preparation**

The video project was introduced to the student-teachers during the first class meeting. The professor of the course discussed it as part of the required course assignments listed in the syllabus, and indicated where the student-teachers would find detailed instructions online for this and all other required tasks. Toward the end of the second session, the undergraduate student-teachers were dismissed and the researcher was invited in to go over the instructions and requirements of the video project again in more detail. The student-teachers were told by the professor that the researcher was there for two purposes: 1) to act in the role of an extra guide to whom they would have access throughout the semester for any additional help they might need in order to complete the project; and 2) that the researcher would like to conduct a study with them related to the core task. The student-teachers were told that the researcher was, like the professor, fully versed in the requirements of the course, the core-task, the technology, and the subject matter, and that she would be available to help anyone with their project, regardless of whether they decided to participate in the study. The researcher then explained the study, and its purpose and basic procedures.

The researcher then provided the student-teachers with hand-outs (See Appendix C) designed to help them prepare for, plan, and execute the task. These included step-by-step instructions on the use of the digital video camera and the video editing software. The researcher made clear that she had already made arrangements with the staff of the state-of-the-art technology center housed within the college for the student-teachers a) to

check out equipment (laptops with DV editing software, DV cameras, tripods, etc.) as needed, and b) to make use of work space at the center where they would have access to a staff of technology experts for any technical support they might want. Also included in the handouts was an explanation of storyboarding, along with several blank storyboards for the student-teachers to use in planning their project. Finally, the researcher provided a calendar that included recommended dates for completing different stages of their project, and dates and times when they could reserve space in the technology center to meet and work. The researcher also noted a four-week window near the start of the semester when she would be available to work with their individual groups to prepare for the activity phase of the project, such as making a plan and storyboard, discussing content, reviewing/tutoring them in the use of the technology, etc., and encouraged them to schedule time with her for this purpose.

### **The Participants**

The eight graduate student-teachers initially registered in the Practicum course were all female and between the ages of 25 and 41. They were all seeking certification as Foreign Language teachers, three of which were focused in Spanish, four in Latin, and one in German. Three of the participants had no previous teaching experience of any sort, two had some experience as language tutors, one had two and a half months of classroom experience as a substitute Spanish teacher, and one had one semester of classroom experience teaching beginning-level Spanish at the university level. Only one had experience as a language tutor (one and a half years), as a primary level Spanish teacher in a private school (two years), and as a beginning-level Spanish instructor at the university (one and a half years).

All eight student-teachers agreed to participate in the study. Within the first two weeks of class, however, one of the Latin Language Education majors decided to drop the course and, therefore, to remove herself from the study. The participants all signed consent forms agreeing to participate in the study, to be videotaped, and that they understood the steps taken to protect their privacy, and the limitations thereof. Of course, participants were made fully aware of the possibility of opting out of the study at any time with no repercussions for doing so.

The students self-selected one another for grouping, basing their decisions primarily on residential geography to make scheduling and meeting easier. Two participants joined together because they both lived in a smaller city approximately forty-five minutes west of the university, and two others joined because they both lived near the university. The remaining three were drawn together as outliers in terms of distance – one living one and a half hours to the east, one living two hours to the northeast, and one living two hours to the northwest. The first two also happened to have in common that they were both Spanish language education majors, and that they both had experience teaching at the university level. The second pair had in common that they were both Latin education majors with no prior classroom teaching experience. The triad was diverse with Latin, German, and Spanish language education majors, one with no experience, one with tutoring experience, and one with a brief classroom teaching experience.

As previously stated, the pool of participants was narrowed to one group because they were the only ones who followed the instructions in terms of process. Specifically, they were the only ones who worked on the task over time, and since the researcher was

interested in *process* rather than *product*, the two groups that were eliminated provided little data on cognitive change and professionalization over time through multiple opportunities to review, reflect on, and adjust their content and its presentation.

### **Procedural Overview**

Data collection began once the study participants had been established. First, background data was collected on each of the participants. Next, each individual was interviewed prior to beginning the activity. Then, the researcher planned to work with the student-teachers as a practitioner-guide as they prepared for their task (See Appendix A for Video Project Instructions). Data collected during these first three phases was intended to provide background information on the participants, possibly revealing some initial contradictions, conflicts, and tensions that were present as the student-teachers began the video editing activity.

The next, and most significant phase of data collection was during the actual editing process as the student-teachers worked to create their videos. In this period, the researcher videotaped, collected field notes, and informally engaged with the student-teachers as they did the video editing activity. Data collected from the videotaped recordings were transcribed and analyzed in terms of a) the themes that emerged over time; b) the potential developmental turning points brought about by contradictions, conflicts, and tensions, and their resolutions or non-resolutions; and c) the strategic behaviors and use of language indicative of regulative activity engaged in by the participants. Finally, the researcher conducted post-interviews in order to clarify researcher conclusions of activity features, in addition to individual interpretations of activity outcomes.

## Measures and Instruments

The primary instrument in any case study is, of course, the practitioner/researcher. Guided by the theoretical orientation of the study, she determines the questions to be answered, the data collected that she believes will answer those questions, the selection of instruments used to gather the data, as well as how to interpret the accumulated data. As previously stated, the researcher, in the role of participant-observer, was not a neutral entity. Rather, from a sociocultural perspective, she, like all of the other mediational tools, individuals, and rules involved, was a product of the sociohistorical/cultural milieu in which the study took place. In order to mitigate this bias as much as possible, the researcher attempted to triangulate the data by examining multiple sources of information with a variety of lenses, enhancing trustworthiness through the credibility, transferability, dependability, and confirmability of the findings.

### Trustworthiness

Qualitative inquiry, such as was pursued in this study, is subject to questions of soundness and value, just as is true in the positivistic paradigm. Lincoln and Guba (1985) refer to this as the “truth value” (p. 290) of a study – that is, “its applicability, consistency, and neutrality” (Marshall & Rossman, 1995, p. 143). The constructs typically associated with the conventional quantitative paradigm are internal validity, external validity, reliability, and objectivity. Lincoln and Guba (1985), offer alternative constructs that roughly match these concepts, but which are better matched to the qualitative paradigm – credibility, transferability, dependability, and confirmability.

**Credibility.** Credibility is, essentially, about the believability of the research findings to those involved in the study. In the sociocultural paradigm, reality is created

and acted upon within a given cultural-historical system, meaning that truth exists for the actors therein. “Since ... the purpose of qualitative research is to describe or understand the phenomena of interest from the participant's eyes, the participants are the only ones who can legitimately judge the credibility of the results” (Trochim, 2006). In the words of Lincoln and Guba (1985), the research must be “credible to the constructors of the original multiple realities” (p. 296).

Achieving high credibility in a study requires systematic and disciplined inquiry, and, according to Patton (1999):

depends on three distinct but related inquiry elements:

- rigorous techniques and methods for gathering high-quality data that are carefully analyzed, with attention to issues of validity, reliability, and triangulation;
- the credibility of the researcher, which is dependent on training, experience, track record, status, and presentation of self; and
- philosophical belief in the value of qualitative inquiry, that is, a fundamental appreciation of naturalistic inquiry, qualitative methods, inductive analysis, purposeful sampling, and holistic thinking (p. 1190).

Rigorous techniques and methods mean that the researcher must make sufficient observations and record adequate quantities of data in order that others, both expert inter-raters and study participants may judge the quality of the results, while reaching consensus as to their meanings. The researcher must devote enough time to making “persistent observations” (Lincoln & Guba, 1985), as well as collect high quality data from a wide enough variety of sources as to make triangulation possible.



In the present study, credibility was sought a) by the researcher taking an active role in the class as a “participant-observer” over the course of the semester, offering adequate time and access to gather quality data; b) through audio and video recordings of events, along with field notes, which allowed the researcher to iteratively review data for confirmation of emergent patterns, themes, and problems; c) by collecting data from a variety of sources, such as a questionnaire, interviews, and unsolicited verbal protocols recorded through audio or video, which allowed for triangulation of findings; d) by requiring expert inter-raters to review and negotiate the meanings of the data; and finally, e) by involving participants in “truth and accuracy” negotiations and confirmations.

As for inter-rater reliability, two separate raters were enlisted to examine and code a substantial segment of data. Both held expertise in the area of second language teacher preparation, both as teacher educators and as experienced researchers in the field. In both instances, the researcher provided a segment of data along with a very brief training on the application of the codes. The raters were then tasked with independently reviewing and coding. When they had completed the task, the researcher and the raters discussed points of difference, and, in several instances, were able to develop intersubjectivity on the discrepant items. Most often, lack of agreement was due to either the researcher or the rater overlooking an opportunity to apply a code. In some instances, however, there was genuine disagreement on the codable meaning of an utterance in question. For the first inter-rater, the first independent round of coding produced a percentage agreement of 83 percent, which increased to 87 percent after discussion. For the second inter-rater, the first independent round of coding resulted in an 84 percent agreement level, which increased to 94 percent after discussion. These rates of agreement between the researcher

and two independent coders lent increased credibility to the researcher's interpretations of the data.

The credibility of the researcher is a key feature in the credibility of a study. This is important, since the researcher is a primary instrument in data collection, and must, therefore, be as dependable as possible as a tool for research.

Of additional significance to establishing the credibility of the researcher, is the importance of revealing (as consciously as possible) what the researcher brought to the study. First, a researcher may improve reporting accuracy and reduce bias if s/he he has had some prior training as a qualitative observer, which was the case in this study. In addition to qualitative training and practice, as a former instructor of the Practicum course, this researcher also held intimate knowledge of the setting in which the study was conducted. This knowledge may have been a dual-edged sword in that, on one hand, it certainly influenced the direction of the study and the findings of interest. On the other hand, however, it may also have helped to reduce "noise" in the data, since some patterns were likely already established anecdotally in the researcher's mind from having worked in previous semesters with student-teachers on the core task involved in this study. It was intended that researcher bias in this instance would be minimized through quality data collection, triangulation, and other-rater verification.

As Patton (1999) stated, credibility also is greatly improved when the researcher rigorously prepares for a study. In terms of physical preparation for the present study, first, there was rigor in case selection, which involved

explicitly and thoughtfully picking cases that [were] congruent with the study purpose and that [would] yield data on major study questions. (Patton, 1999, p. 1197).

In addition, the researcher was intimately familiar with the situation and questions to be studied, having not only taught the course and guided the core task several times, but also having collected and analyzed informal field notes and video data about the activity in question. As such, the study questions, setting, participants, and procedure were subject to some prior fieldwork, and appeared to merit additional study. The initial instrumentation was also already prepared, including the field-tested questionnaire, a set of foundational questions for the pre-interview, and the means for digital video collection (see below). The framework for identifying higher order thinking was established and tested in a similar setting by Herrington and Oliver (1999) in their study, *Using situated learning and multimedia to investigate higher-order thinking*.

Patton's (1999) quote of Louis Pasteur: "In the fields of observation, chance favors the prepared mind," sums up the mental, intellectual, and psychological dimensions of prior preparation. In the present study the researcher was a) prepared to make the observations at the designated times; b) trained in qualitative inquiry, and c) a firm believer in the value of inquiry within interconnected, complex socially- and artifact-mediated contexts.

**Transferability.** Case study is by nature quite particularistic, making it difficult to generalize one's findings to other contexts or settings. In qualitative research, the degree to which transfer or generalization is possible is known as transferability. While difficult, transferability is not impossible, and any degree to which it can be done

enhances the trustworthiness of the study. From the researcher's perspective, thoroughly "describing the research context and the assumptions that were central to the research" (Trochim, 2006), collecting detailed data (sometimes called thick description), and finding multiple points of triangulation enhances transferability.

By doing so, ... those who make policy or design research studies within those same parameters can determine whether or not the case[s] described can be generalized for new research policy and transferred to other settings, while the reader or user of specific research can see how the findings tie into a body of theory (Marshall & Rossman, 1995, p. 144).

In the present study, attempts to enhance transferability were made primarily through the constructs of Activity Theory, which provided a common vocabulary and a simple, but powerful hierarchy for describing activity that was concerned with the development and function of individual consciousness, while emphasizing naturalistic study (Nardi, 1996). The assumptions and framework of AT can be used in multiple research contexts, allowing for simplified comparison across cases. The classroom context, participants, and core task parameters were also thoroughly described, as well as the sociocultural theoretical precepts that frame the study. Video and audio data and their transcriptions and coding provided abundant detail, and triangulation of the data it was hoped would "strengthen the study's usefulness for other settings" (Marshall & Rossman, 1995, p. 144).

**Dependability.** Another issue in qualitative research is the *dependability* of a study, rather than its positivistic cousin *reliability*, which assumes that a study should be replicable. Since qualitative inquiry takes place under particularistic circumstances, and

since within the approach lies the “assumption that the social world is always being constructed, the concept of replication is ...problematic” (Marshall & Rossman, 1995, p. 145). What a researcher can do to enhance the dependability of the research to make it as useful as possible for its consumers is to “account...for all the changing conditions in whatever is being studied as well as any changes in the design of the study that were needed to get a better understanding of the context” (Brown, 2005). In order to best be able to describe any changes that arise in the study context, and how they may have affected the researcher’s approach, Brown recommends three means of enhancing the dependability of a study: use of overlapping methods, stepwise replications, and inquiry audits.

In the present study, overlapping methods (questionnaires, observations, interviews, recordings, etc.) were intended to “create overlapping (and therefore cross-validating) data” (Brown, 2005). Stepwise replications were effected by gathering data over the course of the whole semester to aid “in examining the consistency of the data and interpretations over time” (Brown, 2005). Finally, an inquiry audit took place by enlisting outside raters to “verify the consistency of agreement among data, research methods, interpretations, conclusions, etc.” (Brown, 2005).

**Confirmability.** An additional means of enhancing the trustworthiness of a qualitative study is through confirmability. Essentially, the researcher must reveal the data on which she based her interpretations and results. This is so the consumer of the research may examine the data for him/herself and confirm the conclusions drawn by the researcher. “Thorough record keeping and preservation of data for potential inspection are crucial to this strategy” (Brown, 2005).

In the present study, the researcher enhanced her credibility by presenting and appending data (e.g. exemplary transcripts, field notes, instructions, etc.) in the final report. (Please see excerpts in chapters four and five, as well as the appendices). The researcher also employed additional raters to corroborate her interpretations of the data, in addition to obtaining participant verification of researcher understandings.

### **Instrumentation**

As discussed above under “trustworthiness,” triangulation was an important component to this study. Triangulation was pursued by varying the types of data collected, and by using a variety of lenses with which to examine that data. Table 3 overviews the connection between the research questions, instrumentation, data collection, and analysis.

**Questionnaire.** Background data were gathered for each participant starting with a questionnaire distributed at the very beginning of the study. There were two components to this questionnaire. The first form (See Appendix D) asked the student-teachers to: a) provide basic contact information; b) identify and rate their language proficiencies (by skill); c) indicate the language they intended to teach; d) note the type and describe any previous teaching experience; e) specify the type and provide information on their previous foreign language education experience; and f) state their expectations of the Foreign Language Practicum Course. In the second portion, (See Appendix E) they were asked to complete a survey of their technology skills, which had them rate their perceived skills, anxieties, interests, and experience with a variety of technologies. They were also asked to state their perceptions of the likelihood that they would use a given technology in their future classrooms. This information was gathered

Table 3:

*Overview of research questions and related instrumentation*

<b>Research Questions</b>	<b>Data-Gathering Instrument</b>	<b>Unit of Analysis</b>	<b>Data Provided</b>
<b>Q1: What cognitive transformations took place, if any, when student-teachers in a foreign language education program used video editing technology to learn about teaching?</b>	Background Questionnaire	Factual Information	<ul style="list-style-type: none"> <li>• Demographic Data</li> <li>• Student-Teacher Experience</li> <li>• Teacher Experience</li> <li>• Technology Experience</li> </ul>
	Field Notes	<ul style="list-style-type: none"> <li>• Dialogic Episodes</li> <li>• Operations defined as strategic behaviors representing examples of movement between object-other- or self-regulation</li> </ul>	<ul style="list-style-type: none"> <li>• Supplementary background to video &amp; audio data</li> <li>• Record of salient events in non-video or audio-taped sessions</li> </ul>
	Semi-structured interviews – audiotape		<ul style="list-style-type: none"> <li>• Supplementary background to video &amp; audio data</li> <li>• Stimulated prediction and recall of events for clarification</li> </ul>
	Videotaped activity sessions		<ul style="list-style-type: none"> <li>• Thematic Data</li> <li>• AT Model Data</li> <li>• Behavioral data</li> <li>• Linguistic data</li> </ul>
<b>Q2: What was the nature of the pedagogic transformations, if any, that took place when student-teachers in a foreign language education program used video editing technology to learn about teaching?</b>	Background Questionnaire	Factual Information	<ul style="list-style-type: none"> <li>• Demographic Data</li> <li>• Student-Teacher Experience</li> <li>• Teacher Experience</li> <li>• Technology Experience</li> </ul>
	Field Notes	Themes/ categories/ prompts as evidenced by thick description for operations within Activity System nodes.	<ul style="list-style-type: none"> <li>• Supplementary background to video &amp; audio data</li> <li>• Record of salient events in non-video or audio-taped sessions</li> </ul>
	Semi-structured interviews – audiotape		<ul style="list-style-type: none"> <li>• Supplementary background to video &amp; audio data</li> <li>• Stimulated prediction and recall of events for clarification</li> </ul>
	Videotaped activity sessions		<ul style="list-style-type: none"> <li>• Thematic Data</li> <li>• AT Model Data</li> <li>• Behavioral data</li> <li>• Linguistic data</li> </ul>

in order to provide background information on the participants, including preliminary biographical and motivational data. Also of interest were responses that might indicate any conflicts, contradictions, or tensions, particularly with the mediational tool of technology (specifically DV and DV editing).

**Field notes.** The researcher also made use of field notes as a means of a) recording data that might have been missed by other means, and b) corroborating data gathered by other means. They served as an initial guide for identifying emergent patterns and themes, and allowed the researcher to record questions about the activity that could be followed up on in the post-interviews and in the discussion segment of the final report.

**Recorded interviews.** A semi-structured pre-interview was conducted with the participants prior to their beginning work on the video project. A set of questions was designed *a priori* in order to provide a basic structure to the interview across participants. While these questions guided the interviews of all the participants, the researcher did allow for flexibility in participant-lead responses and follow-up questions, e.g. some student-teachers provided lengthy responses and/or tangential information, while others were quite succinct. One purpose of the pre-interview was to get to know the student-teachers somewhat before they began the process of creating the videos. Another, more important aspect to the pre-interviews was an attempt to look for any initial conflicts, contradictions, or tensions at any of the AT node points. Finally, the interview gave the researcher the opportunity to follow up on the data provided by the student-teachers in the questionnaires, allowing for clarification and confirmation.



A semi-structured post-interview was also carried out with the participants after the object was met and the outcomes had become more evident. Again, a set of questions was constructed prior to the interviews, based on observations made throughout the activity across all participants, as well as follow-up questions regarding particular individuals. As with the pre-interview, the researcher allowed enough flexibility for the participants to be able to voice thoughts and feelings that might offer additional insight into the activity.

**Recorded activity.** Since the activity system was the primary focus in this study, during the activity phase when the most crucial microgenetic data were collected, the participants were videotaped and their dialogue transcribed as they engaged in the project process. In each case, two cameras were focused on the student-teachers; one in front of them to capture voice, nonverbal, and paralinguistic data, and one just behind as back-up data for the first, as well as to capture additional information not visible from the first camera. This was so that fine detail might be collected and submitted for iterative visual and auditory re-analysis. During transcription, the researcher made every effort to transcribe all audible and/or intelligible speech, make note of pacing and silences, and record salient nonverbal and paralinguistic data (see Data Display below).

### **Data Management**

Qualitative data are often “contradictory, subjective, unruly” (Wolcott, 1994, p. 26), and notoriously voluminous. As such, they must undergo a certain degree of processing before they can be subjected to interpretation. “Raw data...must be processed before they are available for analysis” (Miles & Huberman, 1994, p. 51), that is to say, organized and written up into an “intelligible product” (p. 51). This product can then “be

read, edited for accuracy, commented on, coded, and analyzed...”(Miles & Huberman, 1994, p. 51).

The overall view of data analysis in this study was based on the models and recommendations of Miles and Huberman (1994), who offer a system of qualitative analysis, which incorporates generally accepted practices. Their view is that there must be “three concurrent flows of activity: data reduction, data display, and conclusion drawing and verification” (p.10). Their system was well-suited to a qualitative microgenetic case study of this type, which required concurrent, iterative, and flexible data analysis. This was due to the cross-examination of data with multiple instruments and the nature of emergent problems, patterns, and themes.

### **Data Reduction and Display**

First, data reduction is a means of coping with the mass of data collected, from which meaning must be made. Data reduction “refers to the process of selecting, focusing, simplifying, abstracting, and transforming the data that appear in ...field notes or transcriptions” (Miles & Huberman, 1994, p.10). Data reduction spans the life of the entire project, from the planning phases up until the final report is produced. As such, in this study, data reduction began even before data collection occurred, merely as part of the decisions the researcher made as to theoretical framework, research questions, and the like. Miles and Huberman (1994) refer to this phase as “anticipatory data reduction.” Then, “[a]s data collection proceeded, further episodes of data reduction occurred (writing summaries, coding, teasing out themes, making clusters, making partitions, writing memos)” (Miles & Huberman, 1994, p. 10). Finally, data reduction continued past the time of data collection, until the final analysis was complete.

The second concurrent flow of activity, as per Miles and Huberman (1994), was data display, which is “an organized, compressed assembly of information that permits conclusion drawing and action” (p. 11). The above-mentioned NSF publication (Directorate for Education and Human Resources: Division of Research Evaluation and Communication, 1997) explains that:

A display can be an extended piece of text or a diagram, chart, or matrix that provides a new way of arranging and thinking about the more textually embedded data. Data displays, whether in word or diagrammatic form, allow the analyst to extrapolate from the data enough to begin to discern systematic patterns and interrelationships. At the display stage, additional, higher order categories or themes may emerge from the data that go beyond those first discovered during the initial process of data reduction.

**Questionnaire.** Due to the quantity of data reported in the technology portion of the questionnaire, efforts were made to reduce them into more useable form. First, the responses to the technology questions were graphed by technology type for each individual participant. This allowed the researcher to make comparisons related to type of technology for a given individual. Next, this information was again reduced to a single graph that compared all of the variables across all of the technologies for a single participant. This was to clarify the comparisons related to technology type for a single person. Another set of graphs was then created to view each type of technology by the six variables and the seven initial participants. This was done to ease comparison of the participants’ views toward each type of technology (See Appendix F).

The student-teacher's personal background information, including gender, age, foreign/second language education background, previous teaching experience, language proficiencies, summary of relevant technology skills, and self-described expectations of the Foreign Language Practicum Course, was moved into a Data Summary Form (see Appendix F for the participants included in the study). In addition, a breakdown of a student-teacher's overall views on technology, and specific views on the use of digital video cameras and editing software were included in the form. Also added were a summary and a full quote of the written "expectations of the Foreign Language Practicum course" that was elicited in the questionnaire. The Data Summary Form was made to simplify, clarify, and somewhat standardize the presentation of this preliminary background data across participants.

Next, in light of the sociocultural paradigm, understanding as much as possible about what participants, as products of their society, culture, and experience, were bringing to the project was important. Participant data were reviewed for evidence of background experience and motivation as a means of establishing background on an individual student-teacher. The preliminary tools, rules, and people acting as mediators for the student-teacher in the planned activity were then examined for potential contradictions, conflicts, and tensions.

**Audio and video recordings. *Transcription.*** The researcher made detailed, verbatim transcriptions of the tape-recorded pre- and post-interviews with individual participants, as well as the video-taped group-based editing sessions. In addition to the audible words found in normal speech, the transcriptions also included disfluencies such as interjections, false starts, filler words, and discourse markers, such as reformulations,

stressing, and backchanneling. In the event that the participant did not speak loudly enough for the researcher to hear, the word “inaudible” was transcribed. When the researcher was unable to determine the exact word(s) used by a participant, the word *unintelligible* was transcribed. Miles and Huberman (1994, p.56) note that “transcriptions often erase the context along with some crucial nonverbal data. What you ‘see’ in a transcription is inescapably selective.” Also noted in the transcriptions, therefore, were prominent paralinguistic cues, such as speech speed, loudness, and inflection. In addition to verbal data, the researcher also attempted to record salient non-verbal behaviors by the participants – as perceived by the researcher. Such behaviors included gestures, body orientations, facial expressions, and eye gazes. Emphasis should be placed here on the word *salient*, since it was not the intent of the researcher to reflect in the transcript an exhaustive account of all paralinguistic and non-verbal behaviors in order to do an in-depth semiotic analysis. Rather, they were included as a means of providing additional context in hopes of increasing the accuracy of the researcher’s interpretation of meaning and intent in the participants’ speech given the ‘inescapably selective’ nature of qualitative data extraction and reduction (See Trustworthiness above). Finally, the researcher also attempted to include in the transcripts information about the passage of time. Time markers were placed in the transcriptions at one-minute intervals, as were spaces relative to the length of silences and salient movements. Gaps in speech were reflected by the use of ellipses for short pauses, spacing between words for longer breaks, and spacing between lines for the longest silences.

*Dialogic Episodes.* The transcripts were then broken into dialogic episodes in order to set up an initial unit of analysis – the dialogic episode being an utterance the

beginning and ending of which is marked by a change in subject (Bakhtin, 1981; Moro, 1999; Wertsch & Stone, 1985).

These episodes were labeled by topic, and then their content was briefly summarized. The entire text of the transcripts was moved into a table format in order to give additional visual clarity to the boundaries between episodes, as well as to provide textual space for recording information about the episode.

*Integration of field notes and memos.* Field note data was then merged into the table to match time markers to events occurring when notes were made. The researcher also used this space to memo throughout the analysis process.

*Coding for themes.* Based on the topics and summaries of the dialogic episodes, the researcher created a set of codes (See Appendix G) that represented themes that emerged in the data. The transcribed data were then coded and the results were recorded in the table of dialogic episodes.

*Coding for conflict, contradiction, and tension.* The dialogic episodes also provided markers of actions and operations taking place during the activity. These were reviewed and noted in the table for salient points of conflict, contradiction, and tension.

*Coding for regulation.* (See Regulatory Analysis below).

*Coding for Regulatory Behavior.* Next, the researcher reviewed the dialogic episodes for evidence of regulation in the behaviors of the participants. In an effort to label their actions as object-, other-, or self-regulative, the researcher followed the regulative category definitions presented in Table 5 below.

*Coding for Regulatory Language.* Finally, the student-teachers' language use was then examined for evidence of regulation. These linguistic behaviors were coded in the

transcripts as productive, constructive, or destructive, with a separate notation for private speech. (See Appendix H for an example of the table of coded data).

### **Data Analysis**

The third concurrent flow of activity necessary to this analysis was conclusion drawing and verification. The researcher made decisions about the meanings of the data, “noting regularities, patterns, explanations, possible configurations, causal flows, and propositions” (Miles & Huberman, 1994, p.11), all while attempting to maintain a healthy level of skepticism and openness to alternative views. As the data accumulated and the conclusions amalgamated, meanings gained clarity and improved the researcher’s confidence in their legitimacy. These conclusions, however, had to be “*tested* for their plausibility, their sturdiness, their ‘confirmability’ – that is, their *validity*” (Miles & Huberman, 1994, p.11, italics in original). This was accomplished by a) the researcher iteratively reviewing and checking notes; b) calling for “argumentation and review among colleagues to develop ‘intersubjective consensus’”(Miles & Huberman, 1994, p.11), that is, inter-rater reliability; and c) participant verification that the researcher did indeed correctly interpret individual language and actions.

### **Thematic Analysis**

For the thematic analysis, the researcher followed the procedures outlined by Miles and Huberman (1994), including first-level coding, second level coding (creating pattern codes), memoing (general thematic derivation), and developing propositions (see Coding for Themes above). “First-level coding is a device for summarizing segments of data. Pattern coding is a way of grouping those summaries into a smaller number of sets, themes, or constructs” (Miles & Huberman, 1994, p. 69). While coding, the researcher

became aware of broader themes by, often abruptly, perceiving connections between the codes. These perceptions were briefly recorded as “memos”. “Memos...tie together different pieces of data into a recognizable cluster, often to show that those data are instances of a general concept...They are one of the most useful and powerful sense-making tools at hand” (Miles & Huberman, 1994, p.72). The researcher was then able to perceive a number of key themes, which offered important insights into the participants and their relationships with the artifacts and people involved in the activity.

### **Activity Theory Analysis**

Largely guided by the themes, the researcher then focused on points of conflict, tension, or contradiction between the participants, tools, rules, community members, division of labor, object (goal), or outcomes involved in the activity. As previously explained, in Activity Theory conflicts, tensions, and contradictions are theorized to be important points for potential development. The thinking and problem-solving required to resolve these difficulties are what opens the door to a learner’s Zone of Proximal Development. The points of conflict, and whether or not the participants were able to resolve them, were the basis of a set of models that graphically represented Vanessa and Paula’s potential for cognitive change and whether or not they were able to actualize it.

### **Regulatory Analysis**

Regulation concerns an individual’s locus of control, that is, where s/he gets the information to regulate thinking (Frawley, 1997). In Vygotsky’s (1978) experiments, child learners, when confronted with a problem that was just beyond their ability to solve alone, exhibited a variety of strategic behaviors to gain control through mediation and internalization. They made direct verbal appeals to an artifact (p. 30), the experimenter



for help (p. 29), and to themselves (p.27). Learning, according to the Vygotskian school, is first *object*-regulated, then becomes *other*-regulated, before it is *self*-regulated.

The goal was to reveal evidence of movement away from object- or other-regulation (that which occurs on the semiotic and interpersonal level) towards self-regulation (that which occurs on the intrapersonal level). Evidence of such movement would have indicated student-teacher microgenetic growth in the ZPD (Erben, 2001) which, according to Vygotskian sociocultural theory, would have been an indicator of cognitive development.

Holzman (1996) explains how Vygotsky's concept of the movement from other- to self-regulation can be mapped:

The well-known...claim of Vygotsky's—that all higher psychological processes appear on the interpersonal level first and then on the intrapersonal level—is taken seriously by... researchers: They ask, how? What is the process by which the [learner] comes to 'internalize'? Also from Soviet psychology comes the procedure, the 'microgenetic' approach. For Vygotsky, the way to discover what something is [is] to study its history. As Soviet psychology has developed, this has become the 'genetic' approach, the study of process. One form of the genetic approach is the microgenetic one, where the transition from inter- to intrapersonal can be charted over the course of a relatively brief interaction (p. 80).

The present study made use of just such a microgenetic approach, and charted this movement based on previous models proposed by Wertsch (1979; 1980; 1985), Aljaafreh and Lantolf (1994), and Erben (2001). Wertsch's model was created around child

development in accordance with Vygotsky’s own work. In his 1979 model (see Figure 9), Wertsch determined four levels in the transition from other- to self-regulation:


	<b>Other-Regulation</b>	1) The child fails to interpret the adult’s utterances in terms of the goal of putting the puzzle together.
		2) The child understands that the adult’s utterances are connected to the task in some way but does not have the same understanding of the task and communicative situation to make full use of these utterances.
		3) The child has taken over some of the responsibility in the task (e.g., asks “Where does the black one go?”) and can follow rather implicit directives that the adult uses (e.g., after the child asks, “Where does the black one go?” the mother says, “Where’s the black one go on <i>this</i> one?”).
	<b>Self-Regulation</b>	4) The child is able to complete the puzzle without any assistance from the adults.

Figure 9: Wertsch’s (1979) Four Levels of Transition from Other- to Self-Regulation

From there, Wertsch (1980) noted that other- to self-regulation corresponded to the degree to which intersubjectivity was shared between more and less competent participants. Rowe and Wertsch (2004) summarize:

[D]uring learning activity, a transfer of competence – or the transfer of strategic responsibility (Wertsch, 1979, p. 12) – from expert to novice occurs. In the process, both the learner and the activity are transformed (Cole, 1985; Vygotsky, 1978). In order for this transfer and transformation to take place, both the learner (novice) and the teacher (expert) must be active partners in the dialogue surrounding an intersubjectively agreed upon task” (p.551).

In his 1985 work, Wertsch delves further into the topic of the degree of intersubjectivity required to produce change (move the learner into the ZPD), diverging from Vygotsky’s notions of intersubjectivity as the primary path to intermental functioning. “Effective communication, he claims, comes about through partial, not complete, intersubjectivity; the tension of the incompleteness is a factor that leads to successful joint cognitive activity” (Holzman, 1996, p. 81). In his 1998 work, *Mind as Action*, Wertsch states:

While few would dispute that increasing intersubjectivity is one dimension along which ...development occurs, several investigators have begun to argue that research focusing on this issue is missing some essential aspects of interaction and change. As Matusov (1996, p. 26) has argued, a single-minded focus on intersubjectivity, where intersubjectivity is understood as sharing common understanding, may 'limit researchers to study only consensus-oriented activities and to focus on processes of unification of the participants' subjectivities.' In a similar vein, Smolka, de Goes, and Pino (1995) have argued that some of the most important developmental landmarks for [learners] may arise through conflict rather than consensus (p. 118).

This notion goes hand-in-hand with Leontiev's concept of a need for contradiction, conflict, and tension within an activity system to spur on cognitive change.

Aljaafreh and Lantolf (1994) adapted Wertsch's model to their own needs in a second language learning context. Like Wertsch, they were interested in evidence of a learner moving "away from reliance on the tutor, or other-regulation, and towards reliance on the self, or self-regulation" (p. 470). They determined this by noting the "frequency and quality of help that the learner elicited from the tutor in the correction of the same error in subsequent episodes in the same tutorial session and in subsequent tutorials" (p. 470). From their data, they were able to elicit five general levels, which parallel Wertsch, indicating transition from intermental to intramental functioning. Aljaafreh and Lantolf (1994) were then able to further reduce these five levels to three general stages of development:

The first stage, encompassing levels 1 through 3, represents other-regulation in which the learner must rely in some way on another individual in order to perform. Without help from someone else, the individual is not able to notice or correct his or her errors. The next stage is partial self-regulation, encompassing level 4. At this stage learners are fully capable of detecting and correcting their own mistakes without outside feedback: their performance, however, is not automatized. The third, and final developmental stage, is that in which the learners' performance, including corrective behavior, is completely self-generated and automatized and mistakes emanate from legitimate slips of the tongue...rather than from incomplete learning (pp. 470-471).

Erben's (2001) model of transition from other- to self-regulation closely parallels that of Aljaafreh and Lantolf, with adjustments for his participants as, not just language learners, but student-teachers in a foreign language education program learning about pedagogy through the medium of a second language.

In the present study, the researcher consulted all three models of indicators of other- to self-regulation, and adapted Erben's (2001) version as a basis for a new model for use in analysis in the present study. This new model (Table 4) was heavily adapted with regard to the notions presented in Activity Theory as they might manifest themselves throughout a task aimed at student-teacher development.

These general levels were broad enough to allow for analysis of multiple constructs, such as cognitive change around pedagogical knowledge, technology use, and professionalization of behavior or language.

Table 4:

*Five levels of transition from intermental to intramental functioning*

<p style="text-align: center;"><b>Level 1</b></p> <p>The student-teacher is not aware of the need for or able to execute an operation or action (within the existing conditions and/or at the level of a conscious goal), even with intervention from a more knowledgeable peer. At this level, the student-teacher does not have a sufficient basis from which to interpret the more knowledgeable peer's moves to provide help, and likely has no awareness that there is a problem, conflict, or contradiction. The more knowledgeable peer must assume full responsibility for carrying out the operation or action in order to continue the activity. Rather than providing corrective help, the more knowledgeable peer's task is to explain why and how s/he is carrying out a given operation or action and merely begin the process of co-constructing the ZPD with the student-teacher.</p> <p style="text-align: center;"><b>Level 2</b></p> <p>The student-teacher is aware of the need for the execution of an operation or action but cannot carry it out, even with intervention. The same is true for resolution of conflicts and contradictions. This indicates some degree of development, but in contrast to level 1, an opening is provided for the more knowledgeable peer and the student-teacher to begin negotiating the feedback process and for the student-teacher to begin to progress toward self-regulation. The more knowledgeable peer must explain how to carry out a given operation or action. The help required tends to be explicit rather than implicit.</p> <p style="text-align: center;"><b>Level 3</b></p> <p>The student-teacher is aware of the need for the execution of an operation or action and is able to carry it out, but only under other-regulation. The same is true for resolution of conflicts and contradictions. The student-teacher understands the more knowledgeable peer's intervention and is able to react to the feedback offered. The levels of help needed to carry out a given operation or action move toward being more strategically implicit. The level of intersubjectivity between the student-teacher and more knowledgeable peer/expert is higher than at levels 1 or 2.</p> <p style="text-align: center;"><b>Level 4</b></p> <p>The student-teacher aware of the need for the execution of an operation or action, is able to carry it out with minimal, or no obvious feedback from the more knowledgeable peer/expert, and begins to assume full responsibility for choosing and/or performing particular operations or actions within the activity. However, development has not yet become fully intramental, since the student-teacher often chooses operations and actions based on flawed assumptions, and/or performs operations and actions with inaccuracies. S/he may still need the more knowledgeable peer to confirm the appropriateness of decisions or correctness of work produced, and/or to help resolve conflicts and contradictions. Abbreviated directives are not always understood. The student-teacher may even reject feedback from the more knowledgeable peer when it is unsolicited.</p> <p style="text-align: center;"><b>Level 5</b></p> <p>The student-teacher becomes consistent in correctly performing operations and actions across contexts within the activity. In most cases, the individual's behavior at the operational level is automatized, the student-teacher has no problem following abbreviated directives. Whenever aberrant performance does arise, however, noticing and correcting of conflicts and contradictions do not require intervention by someone else. Thus, the individual is fully self-regulated.</p>
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**Behavioral regulation.** Getting at the notions presented in Table 4 above, a contextually modified version of Erben's (2001) regulative category definitions (see Table 5) was used to investigate the behaviors of the participants as they engaged in activity system operations. This allowed the researcher to examine instances of object-, other-, and self-regulation that arose in the audio/video data, which gave insight into which concepts the participants were able to internalize.

Table 5:

*Regulation category definitions (adapted from Erben (2001)).*

<b>Situation</b>	<b>Object-Regulated (code: OBJ)</b>	<b>Other-Regulated (code: OTH)</b>	<b>Self-Regulated (code: SLF)</b>
<b>When faced with conflict, contradiction, or tension within an operation or action...</b>	<ul style="list-style-type: none"> <li>The student-teacher was controlled by pedagogic source material, and strict interpretation of the core task instructions. S/he was satisfied with what was decided and produced by other group members. S/he was bound by the language in the outside or peer-produced texts / materials and could not see ways in which to improve them.</li> </ul>	<ul style="list-style-type: none"> <li>The student-teacher let him/herself be guided by a peer. The peer provided strategic assistance, or scaffolding, for the student-teacher to advance towards completion of the task at hand.</li> </ul>	<ul style="list-style-type: none"> <li>The student-teacher was capable of independent problem-solving. S/he could identify content and/or technological difficulties and provide corrective / alternate options.</li> </ul>
<b>In terms of understanding the motive of the activity, the conscious goals of the actions, or the conditions required to achieve the goals...</b>	<ul style="list-style-type: none"> <li>The student-teacher had an inadequate or incomplete grasp of the motive, goals, and/or conditions of the task at hand. S/he relied on the instructor-generated instructions and/or directives.</li> </ul>	<ul style="list-style-type: none"> <li>The student-teacher did not yet fully comprehend the motive, goals, and/or conditions of the task at hand. S/he was unable to revise or contribute fully on his/her own initiative, but could achieve a certain degree of control over the task at hand thanks to peer assistance and extensive use of other tools/signs.</li> </ul>	<ul style="list-style-type: none"> <li>The student-teacher internalized the motive, goals, and/or conditions of the task at hand. S/he had clear ideas of how to achieve the group's objectives, and had full control over their execution.</li> </ul>
<b>As far as understanding the content of the topics accepted by the group...</b>	<ul style="list-style-type: none"> <li>The student-teacher did not understand the fundamentals of the</li> </ul>	<ul style="list-style-type: none"> <li>The student-teacher was able to recall fundamental features of</li> </ul>	<ul style="list-style-type: none"> <li>The student-teacher understood the topic, knew what it should</li> </ul>

	topic, did not know how to design the content in terms of practice, and could not translate the content into actual practice.	the topic, and had some idea of how to design the content and translate it into practice. S/he might have confirmed or expanded his/her knowledge through help from a peer, but mostly allowed him/herself to be led through the task at hand by the other group members.	look like in practice, and was able to actually translate the content into practice.
<b>In terms of technology skills and/or understanding how to best use the technology to present the content of the topics accepted by the group...</b>	<ul style="list-style-type: none"> <li>The student-teacher had no or very rudimentary technology skills, and/or had trouble connecting the potential uses of the technology to the task at hand.</li> </ul>	<ul style="list-style-type: none"> <li>The student-teacher was able to use the technology with peer and/or instructor assistance. S/he could connect the technology to the task at hand in a basic manner.</li> </ul>	<ul style="list-style-type: none"> <li>The student-teacher was comfortable and skilled with the technology. S/he could employ the technology in unique and creative ways to deal with the task at hand.</li> </ul>
<b>In terms of completion of an operation or action...</b>	<ul style="list-style-type: none"> <li>The student-teacher was satisfied with his/her contribution, while having little idea as to its appropriateness or accuracy in the overall activity.</li> </ul>	<ul style="list-style-type: none"> <li>The student-teacher could accept suggestions for revision from peers or tutor but sometimes problems arose due to the student-teacher's limited understanding of the content, the technology, or the task.</li> </ul>	<ul style="list-style-type: none"> <li>The student-teacher was capable of guiding other members of his/her group, and of providing scaffolding to less regulated group members.</li> </ul>

**Linguistic regulation.** “Vygotsky believed that both consciousness and self regulation are dependent on ‘psychological tools,’ such as language” (Holzman, 1996, p. 79). It is for this reason that this researcher believed that a study of language use might also reveal individual movement toward self-regulation. Table 6, adapted from Erben (2001), offers a guide to the types of collaborative language use indicative of participant regulative movement, or in the words of Erben (2001) “instantiations of student-teachers’ socially-derived mental functioning”. Private speech was added to the model, since it was an indicator of the student-teacher attempting, at an early stage, to gain control over external tool use. “Instantiations of student-teachers’ socially-derived mental

functioning” included, but were not limited to, examples of language used to support and/or

Table 6:

*Instantiations of productive, constructive, destructive, & private speech*

<b>Other-Mediation</b>			<b>Self-Mediation</b>
<b>Productive Speech</b>	<b>Constructive Speech</b>	<b>Destructive Speech</b>	<b>Private Speech</b>
1. Provision of support, e.g.: <ul style="list-style-type: none"> <li>• prompting</li> <li>• assisting</li> <li>• coaching</li> <li>• confirming</li> <li>• encouraging</li> <li>• suggesting</li> <li>• guiding</li> <li>• interpreting</li> </ul> 2. Requesting support/feedback           3. Construction of a shared referential perspective, e.g.: <ul style="list-style-type: none"> <li>• use of deixis</li> <li>• use of common referring expressions</li> <li>• use of context informative referring expressions</li> <li>• negotiating meaning</li> </ul> 4. Facilitation of strategic interactions, e.g.: <ul style="list-style-type: none"> <li>• scaffolding</li> <li>• modeling</li> <li>• drafting</li> <li>• editing</li> <li>• recapping</li> </ul> 4. Management of strategic behavior, e.g.: <ul style="list-style-type: none"> <li>• negotiating rules</li> </ul>	1. Affirmation 2. Agreement 3. Approval 4. Inclusion 5. Courtesy 6. Humor 7. Pragmatic Appropriateness 8. Small Talk 9. Conceding 10. Offering 11. Sharing a discovery 12. Apology/Repair 13. Compliment	1. Discourtesy 2. Resistance 3. Apathy 4. Incoherence 5. In-cohesiveness 6. Rapid pace 7. Topic shifts 8. Non-sequiturs 9. Inappropriate pragmatics 10. Inattention 11. Imperatives 12. Interruption	1. Audible self-talk 2. Mouthing words – inaudible self-talk



<ul style="list-style-type: none"> <li>• managing operations</li> <li>• moderating pace</li> <li>• refocusing</li> </ul>			
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undermine the construction of collective and/or individual knowledge. Examples of this dialogic construction are characterized by three types of collaboration: productive, constructive, and destructive (see also Smagorinsky & O'Donnell-Allen, 2000).

Productive collaboration is defined as any interaction or utterance that contributes to the facilitation of shared knowledge and establishment of intersubjectivity.

Instantiations of productive strategic behaviors represented movement toward self-regulation. Constructive collaboration promotes social cohesion with the group and destructive collaboration undermines the group's social cohesion. Examples of productive, constructive, and destructive collaboration can be seen in Table 6.

### **Organization of the Research Findings**

Explained above was the theoretical framework of the study, and how that organized the research process and guided the data collection, management, and analysis procedures. The following chapter presents the findings from the analyzed data.

## **Chapter IV**

This chapter provides details of the study findings. Included herein is background information on the participants, followed by the findings from each of the analyses conducted, including the thematic and activity theory analyses, followed by those done on behavioral and linguistic regulation. The chapter concludes with an examination of the research questions in light of these findings.

### **Data Analysis and Findings**

As previously stated, the pool of participants was eventually narrowed to one group of two student-teachers due to the appropriateness of the data they provided in light of the study design. Henceforth, they shall be referred to by the pseudonyms “Vanessa Carrera” and “Paula Cordero”.

#### **Questionnaire – Findings**

**Questionnaire – Biographical Data.** One of the participants was Vanessa, a 26-year-old female seeking a Master’s degree in Foreign Language Education, specializing in Spanish. Her previous post-secondary educational experience had been at the university for her Bachelor’s degree in Spanish Language and Literature, her completed courses for the M.A., and one paid workshop on teaching foreign language with technology completed at a state foreign language teacher’s conference. Vanessa had more previous teaching experience by far than any of the other participants. Though she had never taught in a public K-12 setting, she had tutored (1.5 years – junior college level) and taught (2 years – private primary school; 1.5 years – beginning-level

university) Spanish prior to the study. Vanessa indicated that she held full native-language proficiency in English and Spanish in all skills.

Vanessa's partner was Paula, a 25-year-old female who, like Vanessa, was seeking a Master's degree in Foreign Language Education with a specialty in Spanish. Her previous post-secondary educational experience had been at the university for her Bachelor's degree in Spanish Language and Literature, and her completed courses for the M.A. Paula had no previous public or private school teaching experience, but had taught beginning-level university Spanish for one semester. Paula indicated that she held full-native proficiency in English, advanced proficiency in Spanish, and low proficiency in French across all skills.

**Questionnaire – Motivational Data.** The fact that Vanessa had voluntarily opted to complete a paid workshop on technology in FLE may have indicated a strong motivation to learn by advancing her professional knowledge and skills – as would her attendance at a state conference for teachers. When asked to state her overall expectations of the Practicum course, she wrote, “To prepare me better for the upcoming internship. To have a better understanding of what is expected of us as teachers”. Understanding her role as a language teacher, and perhaps many of the tasks associated therewith – what might be termed “readiness” – appeared to be a personal objective in taking the practicum course. Of the twelve course objectives stated in the syllabus (See Appendix D), only the last two were related in any way to Vanessa's response: “11.) To prepare the student-[teacher] for internship;” and “12.) To examine and develop effective procedures for record-keeping and improving classroom management.” In sum, expanding her pedagogical tool base, gaining practical knowledge on practice, and

professionalizing herself appeared to be of interest to Vanessa based on her previous experiences and educational choices. Her expectations of the course, however, indicated a possible narrowing of interest to practical knowledge on practice.

In terms of pedagogy, little in the questionnaire gave insight as to Paula's objective. Her expectations of the Practicum course were stated, "To receive more observation experience for my target language." Having more opportunities to watch experienced teachers in practice appeared to be a motivation for taking the practicum course. Her perspective appeared to be passive, mentioning only observation rather than hands-on, real-world practice and experience. Of the twelve course objectives, only the first related in any way to Paula's stated expectation for learning: "1) To provide structured observations of actual classroom teaching." In sum, observation of other, more experienced professionals appeared to be of interest to Paula.

**Questionnaire – Technology Data.** In terms of technology, Vanessa rated herself as highly skilled and very comfortable, including DV recording, playback, and editing. She indicated that she had very little overall curiosity about learning more about technology, and no interest in learning anything more about DV. There was a possible implication for motivation in Vanessa's responses concerning her lack of curiosity or interest in learning anything more about DV (or most other technologies presented in the questionnaire). This appeared to contradict somewhat with Vanessa's previously stated educational experience (which implied a natural curiosity and desire to learn in that she had actively sought out an opportunity to expand her knowledge beyond the basic requirements for the degree or for certification). The researcher made note of this and attempted to follow up with it in the pre-interview.

Paula, like Vanessa, generally rated herself as skilled and very comfortable with technology. For DV specifically, she indicated that she had advanced skills and considerable experience with recording and playback, but only intermediate skills and little experience with DV editing. She showed a mild curiosity in learning more about DV recording and playback, and more curiosity about DV editing. Unlike Vanessa, Paula reported considerable interest in learning more about most of the newer technologies presented in the questionnaire. Again, there was a possible implication for motivation in Paula's responses due to her reported interest in learning more about a variety of technologies. The researcher noted that this may have been an indicator of a personality with a natural curiosity and desire to learn more about new things, with implications for motivation to engage in the video project through the use of the primary mediational tool (DV).

**Questionnaire Findings – Summary.** In sum, the student-teachers of interest in this study were Vanessa and Paula, two women in their mid-twenties seeking an MA in Spanish Education. Both had previous Spanish-language teaching experience prior to the Practicum course, and both listed narrow expectations for the Practicum course. Vanessa felt a bit more comfortable with DV recording and editing than Paula did, but neither was anxious in any way about the technological tools they were to use. Both women expressed, in one way or another, a natural curiosity and interest in learning, though, in terms of technology, Vanessa contradicted this, while Paula indicated it exclusively.

## **Audio and Video Recordings – Findings**

**Thematic Analysis.** Once the researcher had broken the pre-interview, activity, and post-interview transcripts into dialogic episodes, a variety of themes began to emerge from the data. From these episodes came an inventory of recurrent themes, which was then converted into a list of codes. The researcher then coded the data accordingly. The following are the most prominent themes that arose in the pre-interview, activity, and post-interview. (Note that the themes gleaned from the interviews were heavily dependent on the interview questions).

**Topics.** Of all the themes that emerged from the activity, the topics that Vanessa and Paula were working on were understandably the most frequent to arise. They chose as their two topics 1) Comprehensible Input as a Teaching Tool; and 2) Listening Skills as a Critical Target Language Skill to be Taught. For both topics, the instructions required them to fully explain the terms in the contexts of second language acquisition and instruction. They were also directed to discuss the theoretical foundations, seminal supporting research, as well as points of divergence or disagreement among researchers and practitioners. They were asked to consider when, why, and with whom their topics might be more or less appropriate. Vanessa and Paula experienced considerable difficulty in defining and organizing the presentation of their topics, usually confounding the two. In the end, their lack of organization and planning coupled with their failure to use the tools and people that were readily at their disposal resulted in what were, for the most part, incompletely developed ideas and concepts, and a product that adhered very tenuously to the instructions and the grading rubric.

*Topics – Confounding the Topics.* A serious problem that plagued them throughout the activity was the trouble they encountered in differentiating between the two topics. Their struggle began immediately during their first meeting when Vanessa questioned whether the notion of “learner characteristics” would apply to the use of comprehensible input in the classroom or the teaching of listening skills to students (see References below). Vanessa noted that, in her opinion, “its kind of hard to separate them.” Paula then suggested that they not try to separate the topics, but rather, “do listening as part of comprehensible input.” Moments later, as they began discussing issues of presentation sequence for their video, Paula offered, “before we start showing clips of the video we can actually ...show an example of the listening portion of comprehensible input ... through a day in a university Spanish class, for Spanish One...” Vanessa then said that they should begin by talking about “Krashen” and “describe the theory.” Paula interrupted to say that she must mean the theory behind both comprehensible input and listening skills because, “Krashen covers both of them, cause that’s his thing...cause we have to do theory for both [topics]”. Vanessa hesitated, then fumbled over her words, finally saying that she thought they should “at least at the beginning” try to separate comprehensible input and listening, and then tie them together later. Paula agreed saying, “Okay...And then for the sixth part, maybe we can ... show ...comprehensible input, listening, for, uh, comprehensible input.”

As they continued to work, the notion that listening skills were just a part of the larger idea of comprehensible input began to strengthen. For instance, as they tried to approach the project plan a second time, Paula asked, “Are we just gonna talk about comprehensible input, and sub-areas, listening?” Here she appeared to view listening as

a sub-section of comprehensible input, rather than a skill to be taught and learned in its own right. Almost immediately, her confusion presented itself again when she tried to talk her way through the sequence in which they would present their topics, examples, and the like:

**Paula:** ...good listening, how do you say, like, good listening teaching skills, like  
You know, it's also good that a teacher uses a lot of gestures, speaks slowly,  
And outputting good...listening methods, that's not what I want to say

**Vanessa:** Outputting

**Paula:** I know, there is comprehensible output, so ...

Vanessa later decided to add to the video her version of a 'clear' connection between comprehensible input and listening skills as follows: “[Comprehensible input] is crucial for language students because without a clear understanding of what is being said, students will lose interest and stop listening to the teacher.”

Later as Vanessa began working on the listening portion she engaged in a bit of self-talk as a means of refocusing herself, and said, “What was I defining? I was defining, uhh, listening.” To which Paula responded, “Yes. Or really defining comprehensible input, actually.”

When it came time to create the “slide” to introduce the topic of second language listening skills, it was clear that they had completely entangled the two topics, essentially obliterating listening skills as an independent concept, while reducing comprehensible input down to a perfunctory, one-dimensional, decontextualized 'to-do' list. As Vanessa began the title of the slide, Paula suggested, “Oh, just write 'comprehensible input'. If



you wanna put a colon, ‘listening’ [...]. Comprehensible input in relation to listening.”

Vanessa agreed, and then used the following bullet points to explain listening skills:

- Gestures
- Situations
- Background Knowledge

In the end, they wound up presenting and exemplifying comprehensible input and listening skills in nearly the same way. In both cases, they interpreted both of the topics to be actions taken by a teacher to help students to understand what s/he might say in the classroom.

*Topics – Definitions.* One of the many reasons why Vanessa and Paula confounded comprehensible input with listening skills may have been their inability to accurately define either of their topics in the first place. For example, as they attempted to formulate a basic plan for their video, Vanessa stated that they should “define listening” before proceeding. At this moment in the planning phase, Paula suddenly decided to improvise a definition of listening:

Listening occurs to me, like, the best definition I would think of, unless you have something better, would be ‘the student intercepting (voice volume rose slightly, seemed struck with a good idea, smiled, dipped head to one side and continued waving) and putting into memory what you’re saying.’

Vanessa suggested changing “intercepting” to “interpreting”, and both appeared to be very satisfied with their creation. They made no attempt to verify or expand this definition. They continued through to the end of the project, seemingly unable to differentiate between the physical act of listening and the teaching of target language

listening skills to foreign/second language students. Over time as they worked, the locus of control shifted from the students “interpreting what [the teacher is] saying,” to what the teacher could do to be comprehensible to students when speaking.

After their attempt to define listening skills, they then continued by attempting to formulate a definition for comprehensible input. Paula, speaking rapidly and gesturing, said, “And then, like, we need a way that we can tie this into comprehensible input because basically the purpose of comprehensible input is teaching the language to where students can understand it...” This portion of the definition, while extremely narrow, did approach Krashen’s Input Hypothesis, which states that in order to acquire a language, one must have comprehensible input in that language (Krashen, 1985). They continued:

**Vanessa:** (Overlap) Yeah, well, comprehensible input helps...

Them...understand...

**Paula:** (Overlap) Understand what

**Vanessa:** ...and interpret what is being said...

**Paula:** said

**Vanessa:** ...and put it in, so...The comprehensible input is the aid [...]

And actually, it’s an aid for both ...It’s an aid to help the teacher stay in the target

language ...And it’s an aid for the student to understand what is being said.

Vanessa continued with a basic example of comprehensible input in a manner that appeared to be more thinking out loud than an actual explanation for Paula’s sake (possibly evidence of an attempt at self-regulation):

Because if, if...(lifted book, cover toward Paula) you have an actual book, and you can say “libro”, they know what the book is...and they, they know that it’s a book...and so you don’t need to say “libro” is “book”. You can just say “libro.”

Paula’s own interpretation of comprehensible input appeared to define it as language used by the teacher that might have real-life application and meaning for the learner:

(Rapid speech, waved pencil for emphasis) The way I always understand comprehensible input is something [the students] can use in real life, you know, if you talk about traveling, people are gonna travel... Like you were saying, even “book” because they go to school – book, and if we’re talking about scientific theory, and none of them are science majors, its gonna be like, “When am I gonna use this?”

As with listening skills, they made no attempt to check to see if their definition of comprehensible input was correct or complete. The source of their definitions for both their topics then, appeared to be a mixture of piecemeal recollections of the subject matter from previous coursework combined with what seemed to be an attempt to make up something that sounded commonsensical based on the names of the topics themselves.

*Topics – Foundations and Theories.* Vanessa and Paula offered evidence that they were able to summon up from memory a few isolated concepts related to the idea of comprehensible input, but they were not able to recall much about the fundamental tenets of the original theory. All in all, they made note of three to four general techniques of making input comprehensible--the use of pictures, gestures, writing, and speaking slowly--which they considered to be models of comprehensible input in practice. They were not able to recall anything about the skill of target language listening, nor were they

able to conjure up any listening strategies that might be taught and practiced with language learners. In the end, they reiterated Paula's earlier invented definition (students being able to interpret what a teacher says), followed by a recasting of their explanation of comprehensible input (important for teachers to try and make their speech comprehensible in order to ease the act of listening for the students). Omitted was the notion of listening as a fundamental skill to be taught and practiced in the second language classroom (just like speaking, reading, and writing in the target language). In both cases, they neither researched the topics, nor explored alternate or expanded points of view. They also appeared to give no consideration to variations in application according to context, such as modifications to the means of making auditory or text-based input comprehensible to students at different proficiency levels.

As far as any theoretical foundations on their topics went, Paula was able to recall that Stephen Krashen was linked to comprehensible input:

I'm, just briefly gonna talk about Krashen's theory, I'm, I'm pretty sure these are the four main things, and I'll just kinda like briefly say these are the main, kinda, listening, but then I'll just say, 'the importance of comprehensible input in the classroom is la, la, la', and that's it right?

And later she recalled Krashen again, and made an association between comprehensible input and his Acquisition vs. Learning Hypothesis:

I may do [...] why, comprehensible input's important to do, you know, from the beginning of, like, learning another language, so because, you know, I can talk about how, you know, the first thing, you know, the first point of Krashen's

theory is, like, you know, students can learn a language, but acquiring it is different, and you acquire it through blahblahblah, all that crap, you know.

Paula did eventually flip through the index of Vanessa's methods textbook in search of "Krashen," then turned to the segment of the book where he was mentioned. From this she gleaned that he had posited "three different hypothesis, hypothesises, hypotheses," which moments later she changed to "the four different parts of the acquisition theories, such as you know, the four, the five, hypotheses." Based on this cursory investigation into Krashen and his theories, Paula then directed Vanessa to build a slide for their video to "explain" comprehensible input by listing the Acquisition/Learning Hypothesis, The Monitor Hypothesis, The Natural Order Hypothesis, The Input Hypothesis, and The Affective Filter Hypothesis (Krashen, 1985). She directed Vanessa to highlight "The Input Hypothesis." They did not explain any of the hypotheses in terms of what they theorized, how they related to one another, or what they might mean in a practical setting.

One other isolated notion that they were able to recall from previous courses was that of background knowledge. Paula in particular gave considerable attention to the idea, and worked to incorporate it into their presentation. This began while they were reviewing classroom footage in search of example clips, when Paula eagerly remarked that the students in her class had made use of their background knowledge to respond to Vanessa's video comprehension questions. She explained to Vanessa that the verb, *hacer*, that she had just conjugated for them in the preterit, was the background knowledge they needed in order to be able to comprehend the video clip and the comprehension questions that followed. Later, Paula again connected the video of her

preterit conjugation on the board to background knowledge as an example of comprehensible input:

I could probably say that the preterit, the reason why it could be considered as comprehensible input, is for the fact that, you know...that's because we talk in the past, a bridge, if we're gonna talk in the past tense, that's important, that's something they're gonna use everyday, you know, they can't just continue to learn the present.

In another instance, they came to a section of video where Paula, using an overhead transparency with pictures and corresponding clothing vocabulary, mentioned buying clothes at a department store to the class. At this moment, Paula remarked with *élan* that she had again connected comprehensible input to the students' background knowledge at that point because the students already knew "what Macy's is." It should be noted here that Paula appeared to be either confounding background knowledge with the practical future usability of the vocabulary and grammar of the language, or making the assumption that, since the students understood and could use the notion of the past in their own languages, they would be able to apply that background knowledge to Spanish.

Later, Paula summarized how the verb conjugation and the clothing vocabulary had given the students the background knowledge they needed in order to comprehend Vanessa:

So then we can say if we're going to be discussing the preterit, that is like the background knowledge of everything we've taught so far. We're starting off with that [...] What you're doing is background knowledge as well as me teaching the clothing, cause they learned that the day before.

That's all background knowledge...Cause for you to ask them, 'oh ¿Qué hicieron?' they're gonna have to use background knowledge, that's something I just taught them...So that's what we can say, that's how we can kinda introduce that, cause I was, like, how are we gonna introduce the preterit?

In this manner, Paula found a means of explaining how her having conjugated the preterit of the verb *hacer* was not only comprehensible input, but also a foundation for listening skills as evidenced in the following audio segment she recorded on comprehensible input and/or listening:

As you just saw in the previous clip, and as you will see in the next one, for our project for comprehensible input, one of the components, as stated earlier, is background knowledge. For this we are teaching the students the preterit, or past tense, so we are, at this point, setting up background knowledge, which you will see in the future clips in our video presentation, how this will come in handy, because they will now need to know how to be able to listen in the past tense and answer in the past tense.

Paula reiterated this point later when Vanessa questioned how the clip of her asking display-style questions of the students related to background knowledge, by saying "Past tense, cause you talk to them in the past tense."

At one point, Vanessa attempted to connect the notion of background knowledge to listening skills. While the connection to prior knowledge was never developed, Vanessa did appear to have a momentary insight about what they were supposed to do with the listening skills topic:

[The students] need to have background knowledge, and then you need to, to teach them how to listen. And I think that something else that we need to put in here somewhere...is how do you teach them to listen, to be better listeners?

Here, for the first time, Vanessa seemed to understand that listening skills were something to be considered in their own right, and that how to teach students to be better listeners in the target language was the foundation and the purpose for the second half of their project. She seemed to grasp that while the use of comprehensible input with second language learners might support listening comprehension, it was just one thread tying together the two separate concepts. Unfortunately, at this moment, Paula was still confounding the two topics, and drew both of them away from Vanessa's moment of clarity:

[I]f we have to define listening and explain the theory behind it, through the theory we can say... it is important for students to be good listeners, and the way that we can help them be good listeners is through gestures, and ta-da-ta-da-ta-da, so I guess that would go, (looked to rubric, leaned in, tapped rubric with pencil point) like, right here, in the theory. ...[A]fter you explain the theory behind it you can talk about, making them good listeners.

Paula suggested that for their segment on listening skills, they first talk about how to help the students understand, and that then they might discuss how to help them to be



better listeners. Unfortunately the latter half of this idea was dropped, leaving only a restatement of the definition of listening-based comprehensible input.

As with idea of background knowledge and comprehensible input, Vanessa and Paula seized on the notion of repetition as a key factor in teaching listening skills because it was a means to support student comprehension. In one example, they were reviewing the segment of their teaching video wherein Vanessa was asking the class general comprehension questions about a video they had just viewed. Vanessa had asked a question, and received no response from the students, so she wrote the question on the board so they could see the verb form and recognize the verb *hacer* in the preterit form (which Paula had just conjugated for them prior to the showing of the video):

**Vanessa:** (Pointed to screen) See there, I had to write it on the board again because they, like ...

**Paula:** (Interrupted) Repetition, (nodded affirmatively) repetition's a part of listening.

**Vanessa:** (Proffered an acknowledging hand gesture – a *voilà* opening of the palm).

**Paula:** (Glanced at the computer, then back at partner, and gesticulated as she spoke - revelatory) But at least you tried, you listened, and once they saw '¿Qué hicieron?' written, they were, like, 'ohhhhhh', you know, they just got it, so without having to tell them it means what they do. You know?

**Vanessa:** Right.

Vanessa and Paula were able to remember that comprehensible input was linked to second language acquisition theorist Stephen Krashen, and that the ideas of

background knowledge and repetition were important to helping students understand. They were also able to list from memory a handful of strategies to support comprehensible input, such as gesturing while speaking. They did not, however, recall, seek out, or attempt to understand or report even the basic tenets of either topic, let alone identify and explain fundamental theories, provide alternate perspectives, or give examples of confirmative or contradictory research.

*Topics – Reflection on Best Applications.* A significant part of the video project assignment was to have the student-teachers reflect on their topics from a variety of second language teaching perspectives. For comprehensible input, they were to consider factors such as 1) What is the premise behind why its use is considered “best practice”?; 2) When, why, and with whom are different forms of it appropriate or inappropriate to use?; 3) When might its use be problematic?; etc. For listening skills, they were to consider factors such as 1) Why listening skills are important for language learners; 2) When during second language learning can these skills be developed?; 3) How would development need to change with proficiency?; 4) What are some of the most effective ways to teach these skills?; 5) When might it be inappropriate or problematic to teach listening skills; etc.

Vanessa and Paula appeared to have difficulty with these issues. For the most part, they appeared to ignore them completely. Other times, they oversimplified them, such as when Paula responded to the rubric point of “when, why, and with whom” comprehensible input should be used by saying, “With comprehensible input, I mean, it’s best at all times.” Finally, they occasionally removed the topics from the context of second language learning entirely, such as when Vanessa stated that, “listening skills can

be taught at a very early age, [and] should become better and more detailed” and “Listening is a skill that [...] the students [...] will use the rest of their lives.”

They appeared to believe, however, that they had covered these topics thoroughly in their presentation. The source of this disconnect was unclear, but a few possible explanations are explored in Chapter 5.

*Topics – Examples.* When it came time to choose examples from their teaching video that exemplified the topics they were trying to explain, Vanessa and Paula appeared to rationalize the use of what they had, rather than critique it and determine if it was, indeed, the best material.

One instance of forcing the material they already had to bend to their needs was Vanessa’s mention throughout the project of using still images as examples of comprehensible input. The source of these images was a “picture file” she’d been required to make for another class consisting of a variety of concrete vocabulary:

**Vanessa:** ...Books, Newspaper,

And other things [...] I got the maracas, like, the realia, [...] the globe for, like...another form of realia, like the map and stuff, or [...] the CDs if we mention music.

Having a teacher show realia when working with lower level concrete vocabulary does support comprehensible input in a sense. In their video, however, these images were just shown one after another as an example of “realia”, and in no way connected to how or why they would support comprehensible input. Not only did they not explain the presence of the visuals they showed on the screen as examples, Vanessa and Paula made no attempt to think beyond this to consider how to make non-teacher-centered linguistic

input comprehensible, such as an actual book, newspaper, or song, nor how or why the input would change in accordance with student proficiency levels, skills, etc.

The clearest example, however, of their determination to use material they already had was how they chose the video segment of Paula conjugating the verb *hacer* on the board in the preterit to demonstrate comprehensible input. At first, they wanted to use the clip because they felt that Paula writing the verb conjugations on the board as she said them helped to make her speech more comprehensible to the learners. Paula rightfully had doubts at the outset about using it as an example of comprehensible input:

Maybe...honestly, I would probably say, looking at this video, maybe a non-example of comprehensible input would have been just flat out teaching the preterit. I was just writing on the board. Which, of course, was my purpose. I wanted to give them the rules first, but that wouldn't be comprehensible input.

[...] 'this is the preterit, tadatadatada', you know, that's not really comprehensible input, it's just telling flat out what this is. So, that could be a non-example we could use later on.

This insight that Paula had on her own teaching was important. She had simply conjugated the verb *hacer* in the preterit on the board in front of the class. There was no evidence of her being aware of the notions of  $i+1$ , connecting new information to previously learned vocabulary, providing contextual information to indicate that she was showing them the verb endings for a past tense, etc. The issue of using this clip arose again in their second meeting:

**Vanessa:** Okay, so for your, for you, the comprehensible input in this was you writing on the board.

**Paula:** (Stared at screen)

**Vanessa:** Okay?

**Paula:** *Unintelligible* language, right (raised brows questioningly)?

**Vanessa:** Right

**Paula:** (Leaned back, hesitated, with confused, doubtful expression)

(Rapidly spoken) I don't know if I would really say that's comprehensible input, like...(questioning, doubtful scowl) I mean, would you? Writing? I guess.

(Looked back at screen, with pained expression) We were covering, auh, (rocked head, expression fell to serious) I guess so.

**Vanessa:** Well, isn't that (gestured back at partner's notes) what you put, too? Listening, reading, and writing, and speaking?

**Paula:** (Leaned back, put crook of arm on top of head, looked at screen, and sighed as she spoke) I mean, those aren't really comprehensible input.

In this case, the iterative review of the video clips was having the effect for which it was designed: to offer the participants an opportunity to reflect on their initial choices, and question, verify, and make changes when necessary. In this instance, however, the participants were able to perceive a potential problem with the example, but instead of examining, reflecting, verifying, or even deleting it, they worked to rationalize its use unchanged. When the time came for them to begin integrating clips of their teaching to use as examples in the video, Vanessa began with the segment where Paula was conjugating on the board. At this point, Paula ceased to protest at its inclusion. She appeared to find a new rationalization for its use as they played it back another time, perking up, smiling, and saying in a self-satisfactory manner, "That can cover speaking."

The clip was ultimately chosen as an example, though Paula still voiced a few reservations about its use even as they edited it. Later, even as Vanessa had moved ahead to other work, Paula was still concerned that the use of the conjugation video would be misinterpreted. She changed her mind from her previous rationalization for its use to it being an example of her establishing background knowledge for the sake of comprehensible input.

Like I was saying, maybe for introducing the next video you can just [...] tie it to background knowledge, so that way, [our professor's] gonna be, (inhaled, expression of realization) "Ohh, okay, now I see why they were showing this clip of her just writing on the board." That's not listening skills or comprehensible input. But the purpose that we're trying to make is that, (chopped right hand into left palm) I was establishing background knowledge, cause we keep saying, background knowledge is key, background knowledge is key. Cause when you (meaning Vanessa) start talking, you're (snapped fingers) automatically doing the preterit tense, and [...] the book] says one of the factors involved in the comprehension process is short tem memory."

Vanessa disagreed here, saying, "No, let's not, cause we're not doing memory [...] I wanna just keep focusing on what we talked about before, like, background knowledge and teacher clarity." Paula agreed. Later, Vanessa stepped out momentarily, and Paula sat at the computer and tried to compose a segment on listening for Vanessa to record. Still unable to let the conjugation clip go, she worked in, "In the previous clips that you saw, Paula began to establish background knowledge for the past and the preterit."

As stated above, Vanessa and Paula seemed to be determined to use pictures and teaching video they had already collected before beginning the project. Rather than composing a sturdy, well-researched and considered foundation on their topics, and then examining the video for any possible examples, they ordered the explanations around the examples they had.

*Topics – Summary.* In both instances, Vanessa and Paula offered incomplete or incorrect explanations of their topics. For comprehensible input, they demonstrated only a superficial “technical rationality”, omitting many of the key points of the theory and its recommended classroom applications. Never once in any of their discussions did they note the origins or essential tenets (e.g.  $i + 1$ , Krashen, 1985) of either topic, or how they came to have relevance to the fields of second language acquisition and instruction. Neither did they examine or explain related principles (e.g. natural acquisition order, Krashen, 1985), or describe what were the generally accepted views and findings of seminal research in the field either supporting or critiquing the theories. Finally, they disregarded the requirement that they discuss the monitoring and adjustments necessary for the efficacious application of their topics in practice so as to appropriately meet student needs.

*Project Instructions.* Overall, Vanessa and Paula had trouble following the instructions for the project, as well as interpreting the rubric. They followed very few of the recommended procedures for completing the project, and they frequently forged ahead without first thinking through what they were supposed to be doing (i.e. recording teaching sample video before making a plan; making the project plan before reading the project instructions, etc.). The instructions and the grading rubric for the project were

distributed to the students and discussed with the professor on the first night of class, and also made available online through the Practicum website. One week later, the researcher visited the class to go over the instructions with the students, explaining them in detail and offering examples of what was going to be required. During the activity, however, the instructions were rarely consulted by any of the participants, Vanessa and Paula included. Instead, they opted to glance at the rubric, but then only sporadically and in an unsystematic manner. They seemed reluctant to reflect on the meaning of the rubric topics, or to take note of the varying point levels for the depth of coverage for each item therein. At no point was it observed that any of the participants referred to the instructions while examining the rubric in order to clarify the items.

When asked in the pre-interview, Vanessa stated that the project instructions were clear, and that she liked that they gave direction, while allowing room for creativity:

It kind of gives everyone a guideline, but then the rest of it, it gives you a lot of wiggle room, and a lot of...creative freedom and so it's just, giving us the topics, it's not telling us *how* specifically to do it ... we have freedom in that.

The researcher felt that perhaps Vanessa's apparent interest in the creative aspect of the project might also have been a motivation for her to engage in the activity (see Creativity below). Paula had little to say on the instructions other than that they didn't seem too hard, but that if she had any questions she would ask the professor. In the same interview, she indicated that she had not really read them through.

Two causes came to light for not thoroughly reading the instructions or rubric: 1) overconfidence that they already understood what was required; and 2) veering off-topic whenever the subject of the instructions arose.



In the earliest example of trouble with the instructions, the problem was simply that they only gave them a very superficial glance, and then only after having already begun to work. It was well into their first meeting, after they had made their outline for the sequence of the video presentation, that Vanessa decided to look at the project instructions. She cursorily read them aloud, skipping over segments of text:

...’purpose: To create, demonstrate, document & present focused samples of appropriate second/foreign language teaching practices, the process & product...will exemplify’ nananananaaa... ‘To enhance your technology skills,’ blah blah blah... [...] Practical Application: demonstration’ nanananana ‘lesson segment delivered through the specific’ okay. [...] ‘Each of the above skill-based’ nanananana okay.

With the word, “okay,” Vanessa appeared satisfied that she knew what to do.

Getting sidetracked was another common cause for not examining the instructions. In one instance, Vanessa and Paula had chosen, extracted, and edited the segments of their teaching video that they wanted to use to exemplify their topics. Vanessa suggested that the next thing to do was to go back and “in between we’ll add explanations,” followed by “so how are we gonna do this?” Paula responded, “Can we start with the instructions I forgot, ummm, maybe look in there?” Before they could do so, however, Paula reminded Vanessa, “So did you wanna do your little talking thing about comprehensible input? Like, you had the little intro you were gonna do, talking about what we were gonna do.” Vanessa was distracted off onto this, and then decided that they should record all their audio clips and move them into the editing software before proceeding any further. The opportunity to review the instructions before

proceeding with the activity was again derailed.

Many misunderstandings arose from not completely reading and attempting to understand the instructions. One confusion that emerged was between what was expected of Vanessa and Paula as student-teachers working on the video, and what was expected of them as teachers in the instructional examples. For example, when Vanessa read aloud that one of the purposes for the video project was “to enhance your technology skills”, Paula interpreted it as though she was being asked to demonstrate in the video that she was able to use technology in her teaching. The enhancement of their technology skills through the project was to come from their having to use digital video cameras and editing software as tools with which to create their product. Whether or not their example video clips in the classroom showed them using technology in their teaching was not the focus of interest. Paula mentioned several times throughout the activity, however, that they might meet the technology requirement of the project because they had used an overhead projector and transparency, as well as a commercial DVD video in their teaching examples. For instance, as they were reviewing the video they recorded of themselves in the classroom, Paula said “that’s showing proof right there that we’re using a DVD...so [our professor] can see that we’re using technology, we’re using TV as technology, so we’re using a variety of modes of technology.” She then insisted on them placing still pictures of the transparency and of the cover of the DVD video in their presentation as examples of comprehensible input.

In another example, even after the researcher intervened with an explanation and examples, Vanessa continued to struggle with the segment on teaching TL (Target Language) listening skills. She and Paula both appeared to be particularly stuck on the

“when, why, and with whom” notion on the rubric. Had they referred back to the project instructions, they might have been able to clarify this as it was stated quite explicitly, “provide background information and explanations of why [listening] is an important skill for language learners, when during the process of language acquisition can this skill be developed, what are the most effective ways to teach/learn this skill, etc.” As it was, however, their apparent lack of understanding caused them to gloss over this important item:

**Paula:** But you’re talking about with whom, you don’t really need to describe...

And this, (pointed to what Vanessa had typed on the screen) I don’t understand all this right here, seems more like a ‘why’. [...] with whom, you can say, like, pretty much, I would say, like, with whom, should start, like, at the beginning level of any, you know...

**Vanessa:** (Interrupted, pointed to screen) Well that’s what I say here... ‘listening can be taught at a very early age, as students grow, their listening skills should become better and more detailed.’...

**Paula:** (Inhaled, sighed as she said) With whom should listening be taught?  
(Looked fixedly at partner) It should be taught to *all* language students.

**Vanessa:** Mm.

**Paula:** (Glanced between screen and partner, gave a disgusted expression with an eye-roll and a lip curl) I mean, it’s kind of a short answer...

**Vanessa:** (Interrupted) That’s why I said, ‘all students need to develop’ soooo...

Immediately thereafter, Paula interjected, with a whine in her voice and pleading look on her face, “I think it sounds really hard for me to talk about comprehensible input and when, why, and with whom.”

Additional problems developed when their misinterpretations were coupled with the difficulties they had in understanding one another (see Rapport below). For example, Paula correctly seized on the notion that they were to do the video in two parts, focusing first on the teaching strategy and second on the language skill. Vanessa at first agreed that they had two topics to cover, but then said that she didn’t think the video had to be in two parts. There appeared here to be a miscommunication between them as Paula had so confounded the notions of comprehensible input and listening that she was concerned that the instructions were indicating that they were not actually one and the same. Vanessa, on the other hand, appeared to know that they were two separate topics, but believed Paula was asking whether they must make two separate videos.

Yet another problem came out of what appeared to be a general reluctance on their part to ask for or accept clarification or help, relying instead on their own interpretations of the instructions or the rubric. For instance, after a discussion in which the researcher had voluntarily attempted to help them understand what was meant by the portion of the rubric that dealt with considered contextual application, Paula suggested they not bother covering it at all. She recommended that they just respond verbally during the showing of the video if the topic arose. Her rationale was, “[The professor] didn’t really say, you know, it wasn’t like our, our mini-lesson we had where we need[ed] to talk about how does this affect ESOL students, how does this affect this, so I think maybe we could just cover, you know, if some people ask, what listening is, what are

ways to do that, and use the ESOL example, or whatever.” This led to a narrowing of the project scope by choosing to interpret the professor’s meaning on their own, ignoring the instructions and the rubric, and failing to verify if their suppositions were correct.

Another serious misinterpretation of the instructions by Vanessa was her pressure throughout the project to say little in the explanatory pieces and “let the video do the talking.” In one instance, Paula expressed her worry with this saying:

...the only thing is... [the professor] could potentially ask us questions, you know, it would be good to go ahead and get them out, you know? Cause ...she might not, she might see it, or she might be, like, ‘well, how are you really showing this and that’, *unintelligible* I would say, well, see I was pulling my clothes, I mean (wrinkled nose) I don’t know.

Yet another example of how their decision to interpret the instructions on their own caused a serious omission in their final product occurred near the end of their second meeting. After having recorded their audio segments “explaining” their topics and introducing their example videos, they assessed what they had completed and what remained to be done. They recalled from memory that the rubric had asked for examples and non-examples, and began to discuss how they would add them into what they already had:

**Paula:** We kind of use examples, but we didn’t do non-examples, you can just...

**Vanessa:** But the non-examples would just be the opposite

**Paula:** Actually, you kind of did.                      **Vanessa:** Speaking too fast.

**Paula:** I mean, in a sense, when you’re saying ‘notice how I’m speaking slowly’, but if you wanna really get into it, just to kinda cover the rubric, [...] at the very

end of all these just say, [...] ‘you notice how Paula and I have given you examples of [...] comprehensible input and listening, now some non- examples [...] would, of course, be speaking too fast, not really giving them the chance to really input what we we’re saying, you know...

Something like that. Um, not using visuals could be, you know... That, and not establishing background knowledge, for example, just maybe be, like, asking them ‘oh, ¿Qué, qué hicieron?’, and they’re, like, (looked lost) ‘¿Qué hicieron?’, like, if they don’t know the preterit, you know.

Paula’s comment above, “...just to kinda cover the rubric,” may reveal an additional aspect of their perception of the project. The rubric did contain gradations, indicating that one could cover an item at different depths, and receive corresponding points for it. For Vanessa and Paula, however, the gradations seemed unimportant, focusing instead on just getting something related to the rubric point into their project. They seemed to feel that even the most cursory coverage of an item would be enough to merit them full points. For instance, their final ‘coverage’ of non-examples in the video was:

Throughout the video, you have seen examples of things that a teacher should do in order for their students to be able to understand them. Non-examples would be to speak too fast, or to speak in a way that the students could not understand.

Also, this could include slang that has not been previously explained to the students. Another non-example would be not using visuals, such as transparencies, PowerPoints, pictures, or flashcards. Those, of course, help the students to be able to visualize the vocabulary that is being used. [...] It is also

important for the teacher to build on background knowledge. Students use that background knowledge in order to piece together new material that is being presented. Without that background knowledge, a student could lose the meaning of what is being said, and therefore lose interest in the topic that is being discussed.

On a related note, as previously mentioned, Vanessa had set a creative goal for herself that she would present the required information in a ‘fluid’ manner. Her desire to avoid addressing the rubric points one by one in order to produce a more polished-looking delivery may have led to the glossing over or omission of important points, and the inclusion of irrelevant information. For instance, as Vanessa was creating an explanation of listening skills she composed aloud:

‘Listening is a skill that’, um, I’ll put ‘the students’ instead of ‘they’... ‘That students will use the rest of their lives. In the foreign language classroom students need to listen to the teacher speak in the target language in order to acquire the language and be able to speak near to that of a native speaker.’ [...]

‘Listening is a skill that all students need to develop. Special cases with hearing impaired students accommodations will need to be made, for example, the teacher could tape-record themselves during class and allow the student to listen to it later’. ‘At a volume that is appropriate for them?’

This passage lightly grazed the idea of comprehensible input (“listen [...] in the target language in order to acquire the language”), missing or misinterpreting, however, the majority of that concept, and skimmed the surface of listening by saying that it was a skill that students need to develop. The example of adjusting the teaching of listening skills to

the needs of learners was narrowed to a single example of a modification that might be made for a hearing impaired student. In a sense, Vanessa appeared to believe that she was “fluidly” covering several of the items in the rubric, when in fact she was barely scratching the surface of what was expected.

In their final work session, Vanessa said that she had, on her own time, gone over the rubric, and determined that they had covered everything. Paula cautioned that they should take care to not say too much or use too many examples because, “I think we have enough.” Near the end of this session, as the researcher asked them two separate times if they felt they had checked everything thoroughly against the instructions and the rubric and were confident in the content. Paula responded affirmatively, saying that she felt sure of the content, and that her only concern was ultimately how it flowed together as a single video.

In the post-interview, when asked specifically if the project instructions and rubric had been clear about what was expected, Vanessa said that she thought they were “fairly clear,” and that the researcher coming into the class and going over everything also “really helped to clarify.” When the same question was posed to Paula, she asked if the researcher was talking about the rubric. The researcher clarified that she was asking about the instructions *and* the rubric, and Paula answered that the wording of the rubric was hard to understand. The researcher then asked when during the process they had read or double-checked the instructions or rubric. Paula noted that, “we looked at them at the very beginning, but of course we have a lot of projects that we have to do so we can only remember so much.” She then added that they had double-checked the rubric while they worked just to be certain that they had covered everything.



When asked pointedly if she had connected the item on the rubric that dealt with adjusting comprehensible input or listening skills instruction according to learner needs to special needs or English language learners, Vanessa said:

Yeah. ... Umm (cleared throat). I was trying to focus more how, on how we could make it work in the foreign language classroom umm, where most of the students, their first language is English and they're learning Spanish. Um...but, I think, but then at the same time, a lot of the information that I was pulling that from came from my ESOL classes. So, its sort of...I guess it can go in between. I guess if, if you really use the comprehensible input correctly, um, then it can go from either an ESOL class with them, you know, learning English to another to the foreign language class where they're just learning Spanish.

Paula stated simply that they had not made the connection.

In sum, Vanessa and Paula made only a few sporadic efforts to read and follow the project instructions or to refer to the rubric as they worked. Where they had questions, they failed to cross-reference the course materials or to seek assistance. As a result, they struggled to cover their topics as comprehensively as was expected.

***Technology.*** Due to the nature of the activity, technology was a frequent theme throughout the project. During the interviews, the discussion centered on their technological knowledge and interests. In the activity, however, the focus was on the functionality of the hardware and software.

Vanessa and Paula's interview responses on technology generally corresponded to their questionnaire data in that, overall, they were very comfortable in using it, felt they knew most of the more recent technologies quite well, and believed that learning a new

technology, or more about one with which they were already familiar, would be quite easy. Vanessa, specifically, had no interest in learning to use older technologies saying, "... I mean, if I'm going to learn anything, I'd rather learn...something looking more to the future". This matched her interest in learning more about the editing software. She was also uninterested in learning a new technology, such as a software program, when she already knew how to use one that paralleled it in functionality. This corresponded to her insistence on using her own DVC, laptop, and editing software.

Paula, on the other hand, said, "I would just be interested in knowing more about it because it doesn't hurt to know more ... I'd probably be ... fascinated to find out how it works." Paula also expressed a small amount of anxiety around video editing and making a DVD due to the fact that they were relatively new to her, but that she did want to know how to use these technologies. During the activity, however, Paula learned very little about any of the technologies, perhaps partially due to her anxieties, but more likely due to Vanessa' monopoly on all of the equipment. Since the laptop belonged to Vanessa, and since she knew how to use the editing software, the editing process defaulted completely to her. This caused a) her fear of an imbalance in labor to come true (see Rapport below); b) Paula to learn little about the technology because she never used it herself.

Though Vanessa had said that she was familiar with the video editing software that she already had installed on her computer, she still struggled from time to time to make it do what she wanted it to do, or to understand why it did something that she had not foreseen. The frequency of incidents of this type occurred from the very beginning as they designed their introductory screens and the like, but increased markedly once

Vanessa began to crop and edit the video they had recorded of their teaching and of the audio they recorded to correspond to text on the screen. In her struggles were opportunities to learn, and she did employ strategies to help herself do so. One strategy that Vanessa frequently used to help herself through her difficulties with the software was self-talk or private speech. (For background on private speech, see Vygotsky's seminal work, *Thought and language* 1986) (For information on the use of private speech by adults, see John-Steiner, 1992)) Private speech use is important because it is often an indicator of an effort toward self-regulation. For example:

(To Paula) Editing is what takes so long.(Self-talk, sighed) Why is it not working?...

Aw, come on. (Facial expression of annoyance and frustration)...

(Voice sing song and frustrated, brow knit) Why isn't it working? That's weird.

And later

(Self-talk) Okay, so to one-oh-nine

All right...so let's...

Oy, *unintelligible*... [...]

Okay...Undo what I just did (chuckled)...

Then I'll move that out of the way...

Pull this...this way...

(Softly to self) Oh s\*\*\*.

Why is it not working...any more?...

Okay, there, that's a better way of doing it...Okay...

It's easier to add them in that way than...this way...Okay...

Vanessa was not able to self-regulate in all instances, however, complaining from time to time that, though she had gotten the software to do what she wanted it at some previous time, she had difficulty recalling how she did it when she needed it again. In one instance, while working, she said:

What is it doing?! Whenever I get it to work, I never know how I did it. So then I, I get to that point again, you know what I'm saying? It's, like, one of those things, like, I didn't, I did nothing really that special to get it to work, you know? [...] And you know it's nothing they would have in the help menu either.

Paula's interest in the editing software was displayed only very sporadically in the project as they were making decisions concerning the aesthetic features of their video. She asked about and directed Vanessa to try various buttons and features, and at times even appeared to have more intuition about how to make the software function than did Vanessa. For example:

**Vanessa:** (Having difficulty with a transition) Why does it keep doing that?

**Paula:** Why don't you stretch it out first and then move it over?

**Vanessa:** I did.

**Paula:** No, no, no, not the, not the comprehensible input part, the, umm, the, the slide effect.

Like, see if you can move it out, move it out the other way, like, stretch it out (sweeps extended arm in front of her to right) this way first

**Vanessa:** Okay. Wait. What? Try this one? That, and we'll stretch that out to where we want.

**Paula:** Okay, then, add that in there.

**Vanessa:** And this one.

**Paula:** No, I'm saying, stretch that out, but...

**Vanessa:** But takes...

**Paula:** (Pointing)...like, on this side.

And later:

**Paula:** There's a way to slow that down, isn't it?

**Vanessa:** Yeah, I think so, there has to be a way

**Paula:** Maybe...Duration? Oh, that's not, it's something else...

Oh, that's six seconds. Oh! Hit up on duration and see if that makes it last longer.

[...] Yeah, that, see if it makes it slower...It did! Ah!

And later:

**Paula:** Oh! What is the T down there, let's see what happens.

Absolutely nothing

Oh! It's a new text box

**Vanessa:** A, a new text box

Let's see

**Paula:** Just hit CTRL Delete and that'll get rid of it

In her post-interview, the researcher asked Vanessa, "Did you have to learn more about how to use [the technology] than you thought you would?" Vanessa responded that she'd had some trouble here and there, but it was more an issue of remembering how it worked than of learning something new. She said, "I mean, with technology, even if you're familiar with it, there's always some frustrations, I mean even if you've had many, many years of experience." When asked if she would be taking any new technology

skills away from doing the project, Vanessa said “not really.” She stated that there were things that she had hoped to learn, and that she did take the time to try and figure them out, only to discover that the software she had was a pared down version of a more premium program, and it simply was not able to do those things.

Paula understandably responded that she had not learned any new technology skills, since Vanessa used her own camera and editing software and Paula did not work directly with either of these.

***Project Plan.*** A plan for the project was an important tool that Vanessa and Paula were unsuccessful at building and using. All of the participants had been given a calendar and verbal instructions at the beginning of the semester encouraging them to follow certain steps and complete them by certain dates. This guideline was offered to help them to avoid procrastination and to make the project easier through organization and planning. Included in the steps was a four-week window near the beginning of the semester when they were encouraged to meet with the researcher for help with preparing a plan and storyboard. Out of all of the participants, Vanessa and Paula included, no one chose to make use of this resource, and no one made a storyboard.

During the pre-interviews, the researcher asked Vanessa and Paula where they felt they were in the process of beginning the activity. At this point, the researcher was aware that Vanessa and Paula had not thus far opted for time in the technology lab, and they had not chosen to meet with either the professor or the researcher to help them create a plan or a storyboard for their video (recommended procedure).

Paula’s interview was first, and she indicated that she had not yet read the instructions. Vanessa stated that the two of them were going to have their first meeting

after that interview. The researcher remarked offhand, “you don't have any video yet”, thinking that this first meeting would be one in which Vanessa and Paula would create a plan. Surprisingly, Vanessa responded that they did, indeed, already have video that they would edit into the project. She continued that she knew that they were doing things out of order, and went on to describe the video they took. Her explanation indicated that she felt they would have adequate footage to use. The researcher, concerned, made a point to remark that their footage might be adequate for the portion of the project that asked for demonstration of their topics in practice, but that they would still need to do quite a bit of additional work on the foundational information. Vanessa acknowledged this, then repeated again that she was aware they were “working somewhat in reverse”.

At the beginning of their first meeting, Vanessa and Paula had considerable trouble getting organized and focused. Occasionally and unsystematically referring to the project instructions and the rubric, they were finally able to haphazardly sketch out a very ill-defined outline for their presentation. In this outline, they essentially listed, in a very unspecific way, the order in which they thought the topics ought to be presented. Before they could flesh out any of the critical details of their plan, however, they launched immediately into the design of their opening page, and discussed creative options for the overall presentation delivery.

After a great deal of time and effort perfecting the design of the introductory screen, they realized that they had no plan for what should come next. They discussed several ideas, and made a few ill-conceived and disparate attempts to move ahead, but ultimately got nowhere. For example, at one point, after abandoning the idea of videotaping themselves that day because of how they thought they looked, Vanessa

decided to record just her voice for an introduction. Paula suddenly asked, “So do you know what you’re going to say pretty much?” to which Vanessa replied, “No...Hey, I’m being honest.” At this point, they abandoned the recording altogether and decided to view the video they had previously obtained of themselves teaching. From this video, they chose and groomed a collection of clips that they felt would exemplify their topics (“about four and a half minutes” worth), and Paula noted a short time later, “we have the edited video, that’s the big part” (See Expectations – Effort and Time below). Vanessa stated that the next step would be to go back and add explanations in between the examples. This struck the researcher as forcing the explanations to correspond to the examples they happened to have, rather than constructing a substantive foundation on the topics, and then reviewing their video to see if they could extract any valid examples (and re-taping if they should find them to be insufficient).

This haphazard approach to creating their video continued right up until the end of the project. This caused some additional friction between them as they discussed what should go where, tried to determine where they were in the process of completing the video, as well as contributed to the difficulties they had with confounding the meanings of the two topics. For example, as Vanessa was writing an explanation of comprehensible input, she asked Paula’s opinion of what she had done. Paula responded, sighing deeply and showing her irritation, “I thought we were gonna uh, shouldn’t we just go ahead and do the video first, and *then* talk about why?” She and Vanessa went back and forth, Vanessa trying to understand what Paula was getting at, and Paula trying to explain that by showing the video before the explanation, that they would be establishing background knowledge for their viewers. Vanessa finally agreed to this presentation



order. In another example, near the end of their second editing session, they were still frequently reassessing what they had finished and what still needed to be done (in addition to still confounding the two topics):

**Vanessa:** Okay, so, should we, after you do your clip, should, we should do one introducing mine? Since it's me doing the video doing a different skill, doing listening?

**Paula:** Yeah, if, like, you're going to define listening according to the storyboard then you're gonna go more in depth with listening. (By "storyboard" she meant the written outline of the topic presentation sequence they made during their first meeting.)

**Vanessa:** I thought I already defined listening.

**Paula:** Nope, you just did a brief thing on comprehensible input.

I mean, I define what comprehensible input is, but you talk more ab...

**Vanessa:** (Interrupted) Oh! That's right, cause what I did before, right.

By the time they had reached their fourth and last editing session, they were still not clear on everything they needed to do. It occurred to them that they had not planned for a conclusion to their video, and decided to make one up by reiterating what they had said in the previous clips. This seemed to strike them as being a bit thin, so then they decided to add several images, such as still images from a picture file Vanessa had created for another course, as well as a photo of the cover of the DVD and one of the textbook used in Paula's class. The picture file images were supposed to be examples of comprehensible input, the DVD cover was supposed to exemplify listening skills (in that the students had been asked to watch the DVD and answer comprehension questions

using the preterit of *hacer*), and the book cover was supposed to be “interesting” to their viewers.

Paula seemed to realize, on some level, that what they were producing was not what they had originally said they would do. She reacted at one point to what they were making, pursing her lips and saying, “Mmm. (Rapid-fire delivery, unenunciated) It just really seems a little uhhm it looks like something different that we were talking about when we wrote it down.” This apparently was not enough of an impetus, however, to re-consult their plan, the project instructions, or the rubric.

In the end, the lack of a realistic plan caused them to reverse the appropriate emphasis in the project. They chose to put together a collection of teaching segments and examples, interspersed with an occasional text-based slide highlighting what they perceived to be the basics of the topics covered in the clips. The project instructions, however, encouraged just the opposite, asking for in-depth explanations and critical analyses of theories, concepts, and applications, with a few interspersed teaching examples to reinforce the concepts.

***Reference Materials.*** Vanessa and Paula struggled with all aspects of their topics throughout the activity, including everything from basic definitions to appropriate applications. Clearly, Vanessa and Paula were aware on some level that they were having some trouble with their topics, yet they persisted in the notion that in-depth research, or even verification of their assumptions, was unnecessary, preferring instead to rely on their interpretations of their prior knowledge. This was in spite of having had immediate access (either in physical or electronic form) to reference materials through textbooks, the Internet, and full library access.

The first instance in which it became clear that they were aware that they were struggling occurred almost immediately during their first meeting. Vanessa was stumped by whether a book topic she had marked (learner characteristics) applied to the use of comprehensible input or the teaching of listening skills:

**Vanessa:** Would that be for comprehensible input, or would that be for? ...  
Listening?

**Paula:** Let's try comprehensible input. Cause we're talking about different people that we're supposed to teach... No, I guess listening, actually. You know...we probably could ask people to do an activity such as comprehensible input and listening. ...(Leaned back in chair, put hands in lap, screwed up face) Maybe both together?... (Relaxed face, gestured lightly with hand in lap) Cause listening is a sub-field of comprehensible input, so, I mean, I guess we can just cover it under comprehensible, you know, I guess we can cover it under listening...

**Vanessa:** See, since they're going hand-in-hand it's kind of hard to separate them.

**Paula:** Yeah.

Paula in particular then continued to struggle with how listening skills could be part of comprehensible input. Vanessa was attempting to plan, when Paula was suddenly seized by a related memory, and said questioningly, "Glisan's studies on foreign language...education?" Vanessa, distracted, replied, "in foreign language acquisition." Paula then refined her idea once again, "acquisition...second language acquisition," then followed it with, "And that's Krashen's theory right there." Vanessa distractedly agreed by saying, "Basically." Unfortunately, neither of them appeared to consider this in any

more detail, make any coherent connections to comprehensible input, or access any of the reference materials at their fingertips to confirm or expand this memory into something appropriate for their project content.

The one reference material they did attempt to use was a foreign language methods textbook from a previous course. Their success, however, with even this resource was limited due to tensions in their relationship, difficulty in maintaining focus, and what was apparently some trouble with discerning relevant information.

Their difficulties began to become apparent even before they met for the first time to work on the project. Vanessa had marked a few pages of a textbook that she thought might contain information relevant to the topics, but she had not done anything specific with the material. They began by glancing at this textbook, but less than three minutes into their first meeting they had already twice been distracted from the book. The first time was in trying to clarify their topics from memory. The second time, Paula focused on a point in the rubric and began talking about where in the video sequence she would deal with particular issues. Vanessa quietly attempted to keep looking through the textbook, but Paula continued to talk about the rubric and presentation order. Vanessa finally abandoned her efforts and joined her partner in the discussion of the presentation sequence. The book was closed and remained so for the remainder of that meeting. Vanessa merely mentioned the book one additional time in that meeting when she recalled a connection mentioned therein between comprehensible input and background knowledge.

In their second meeting, Paula picked up Vanessa's textbook and flipped to the index. After a quick glance, she veered off onto a bit of gossip she had heard about

another student, to which Vanessa gave no response. Shortly thereafter, Paula discovered a passage from the book she thought was meaningful,” Oh! I like that! The theory behind this, which comes from Krashen, is it really would focus on how learners actually ... ‘connect grammatical form with their meanings’ ...that’s a good quote right there.” Her understanding of this passage eventually revealed itself in her example of writing a conjugation of the preterit form of *hacer* on the board while saying the pronoun and verb (writing was interpreted as comprehensible input in that it supported her oral conjugation of the verb in front of the students). Soon after Paula found another passage that grabbed her attention:

‘Intake is language that comprehended and used by learners to develop a linguistic system that they can use to produce output in the language’...Ahhhhh (smiled, satisfied) [...] Nice. So the purpose of comprehensible input is to output knowledge.

Well into their second meeting, then, Paula had finally done enough “research” to find passages that expressed a limited technical knowledge of one of their topics.

Very shortly thereafter Vanessa asked, “What did it say about listening in there?”

Paula, in between a myriad of distractions, had a look at the index:

**Paula:** (Read aloud) ‘...assessment of, listening, technologies for, bottom-up models of, developing’ ... ‘Factors involved’ ...

‘Listener-based variables, social process’ ...

“Strategies for”, that’s what you need, right?

Vanessa: Yeah

Paula: Pages 163-165

The researcher found it interesting (albeit perplexing) that they passed over several leads that might have proved fruitful, and may have even led to more in-depth reflection and examination on the topic, opting instead for, “Oh, ‘Strategies for comprehending, comprehending and interpreting.’ Even “strategies”, however, might have led them to think about how a teacher might help learners to develop and practice those strategies, but they were still confounding comprehensible input and second language listening skills.

Paula: That’s, really it’s comprehensible input.

Vanessa: Strategies for... Oh, yeah.

Paula, therefore, began to interpret strategies required by learners as strategies teachers might use when speaking to them:

**Paula:** Ooo, it says this van der Geest, which I know is not Krashen, van der Geest studied, ‘van der Geest’s studies reveal that novice conversation partners demonstrate higher use of kinetic, kines, kinesthetics, body language, goal *Unintelligible*, request or petition for rephrasing, simplification, *Unintelligible* hypothesis *Unintelligible* or ask for additional input *Unintelligible*’

[...] Mmm, anyway, let’s just, for listening we maybe wanna talk about, you know, how like... Or comprehensible, I guess probably, we really should talk about how gestures, repetition, you know?

**Vanessa:** Yeah that’s comprehensib, isn’t it?

**Paula:** For yeah, for listening ...I guess the biggest thing you maybe wanna do is maybe say, like, you know, for listening it's important , but, like, as you know...

Vanessa interrupted here and exhorted Paula to be sure she also look for information corresponding to the rubric items on considering context and varying learner needs and abilities. The researcher found it interesting that Vanessa cited these items, nearly verbatim, without looking at the rubric, but also that she added a term not present in the text: "level" (referring to learner proficiency level). It appeared then, that Vanessa did understand this rubric item to be asking them to reflect on carefully considered application in varied contexts. Paula appeared to not really hear her say this, and continued reading from the index:

(Concentrated on text) Cause it has, like, a thing about, like, (read from index)  
'instructional strategies and interaction of listening, examples, non-examples.'  
...*'Unintelligible* reprise, continua, continuation of signal.'

At one point the researcher pointedly asked if they had done any research on the topic of second language listening. She mentioned that there was considerable scholarly work in the areas of how to teach learners to read, write, and speak in the target language, but that there was also a body of work on teaching them how to listen. She offered some examples, and Vanessa replied that she had found more material on what the teacher might do to be clearer to students as they listened, rather than on what the students might do (or learn to do) to be better listeners. Vanessa went on with several examples of what teachers might do, such as slowing the pace of their speech and avoiding slang, essentially describing the features of foreigner talk (Ferguson, 1971). Vanessa then took

the conversation down a lengthy sidetrack, and the subject of researching more about teaching and practicing TL listening skills was lost.

As mentioned above, another problem they appeared to have was in being able to look at the limited “research” (i.e. related passages from a single textbook), and extract what was relevant to them at that time. For example, Vanessa looked over one of the textbook segments on listening, and chose the following to work into their presentation: “Listening skills can be taught at a very early age, as soon as growing, or listening skills should become better and more detailed.” While it is true that listening skills can be taught at an early age and developed over time, the typical second language teacher (which included Paula and Vanessa) is more interested in developing second language listening skills and strategies in older children and adults.

As Vanessa was trying to compose her segment on listening skills, Paula again picked up the textbook and began to search. She came across a passage that explained that TL listeners and readers use their knowledge of the TL and their background knowledge to interpret a text. She then cursorily noted the words “short-term memory” further on in the book. This appeared to lead Paula to conclude with confidence that they had done everything recommended by the book for listening skills, that is: 1) Vanessa required the students to use their knowledge of the target language to listen and comprehend her questions; 2) Paula’s lesson on the conjugation of *hacer* in the preterit was the background knowledge her students needed to be able to listen to Vanessa’s questions; 3) their background knowledge was located in the students’ short-term memory because Paula had only just presented the preterit. Paula added that the fact that Vanessa had to write the questions on the board before the students were able to respond



proved that they were accessing short-term memory, “it’s like they forgot, when you wrote it on the board, they got it. Like, it’s short-term memory, that’s how it...goes into that.”

In their post-interviews, both Vanessa and Paula confirmed that they had built the project out of their prior knowledge of the topics, and that the only reference they had consulted had been a methods textbook (though Paula could not correctly recall which book they had used). Vanessa gave more details on the use of the textbook than Paula, saying, “I wanted to make sure that I was *very* specific, and really go back and check my...my answers and things like that so, [...] I started it off with [my prior knowledge], but then to give it some good meat and potatoes I decided to go to the book to get specific things and to quote specific things from the book.” Vanessa claimed that they’d used some online resources “for ideas of things we could do in the class, or ways to expand it.” When asked when she had gone online, she said, “once we had already had everything and we were actually looking for more examples or non-examples, I went online just to see what else I could find, but it was towards the middle of the project.” Again this was not observed. They did take some *images* from the Internet, but only after stating that non-examples would just be the opposite of the examples they had already given. Paula’s response was that the only real use they’d had for references of any sort was as a resource for “how to properly word” what they already knew they wanted to say.

Also in the post-interview, the researcher directly asked them both if they thought that having found some academic articles on their topics might have been able to deepen their understanding of the concepts or expand on what they already knew. Vanessa answered:

I think it might have helped a little bit, but I think it would have given just more, like, research and more statistical information. Most of the information, especially the part where we're defining comprehensible input and listening skills, that, that we got from the book and I think that, that was fine. It probably would have helped, it probably would have been nice to have had more, you know, 'According to so-and-so', you know, in this article, umm, blah, blah, blah, but, I dunno. Actually I did my annotated bibliography for [the Methods professor] with listening and things like that, and so I *did* find articles, but it was after the video project was done. But reading those articles it, it really didn't say too much different than what we found in the book, so...

Paula's response was that she supposed it would have helped:

but I mean, honestly, I kind of feel like what we went over wasn't that hard. Comprehensible input is not that hard to comprehend what it is and how to do it. [As for the listening], its pretty much you read it, and find out what it is, its not one of those definitions or practices that you have to do a lot of research on or get a deep explanation of it to understand it. You know what it is [...] I mean, it could have enhanced it with some different ways as to how to present it, methods to do it, but at the same time, it wasn't, you know...I can't really say it would have deepened my knowledge, I pretty much got it, I mean to say, you pretty much understood it once you knew what it was."

The researcher then probed further asking if there had been any content or concepts that they had felt the need to check against a reference source. Vanessa responded, "Not really. Actually, if there was anything, either Paula *or* I could pretty much clarify it for

the other one.” When asked what specifically they had clarified for one another, she said, “She clarified the part that she talked about [which] was Krashen’s theories of second language acquisition, she was more up-to-date on that. I think she had a class recently that talked more recently than when I took it, and so she’s like, ‘Yeah, remember we learned this in this class’, and I was like, ‘Oh, okay that’s right.’ When asked if she had clarified anything for Paula she hesitated, and then said, “No, not really. She was really knowledgeable of it as well, and I think its because now she’s also taking [an ESOL class], and so, again a lot of this is things that we’ve learned recent[ly].” When Paula was asked if she had learned anything from Vanessa or vice versa, she responded, “I can’t really say this was the kind of project where we could learn anything from each other, really. I mean it was more so like you know everything about the subject I don’t think there’s necessarily anything where we can learn something from one another, I don’t think it was that type of project, quite personally.” The researcher felt that these post-interview comments were very revealing as to their perceptions of the topics, the depth of their own knowledge, and the real purpose of the project.

Their unsystematic, cursory attempts to examine a single reference material coupled with their struggle to accurately choose and interpret even this limited information, resulted in serious misunderstandings and representations of their topics.

***Researcher Presence.*** In the pre-interview, when asked if there was anything about the researcher’s presence, the study, or being observed that made her uncomfortable, Vanessa responded that, on the contrary, she was happy to have someone to ask for help. The researcher felt it was interesting, however, that Vanessa specifically said:

**Vanessa:** You're kind of an extra help, an extra person...to ask, you know, instead of it all falling on me,... I can ask you about the technology, and things like that. The specific mention of help with the technology, rather than that of a more general nature, or help with the content was more salient once the study was complete, since this was the primary type of help requested of the researcher.

As for Paula, she indicated no interest whatsoever in the researcher's presence, and specifically stated that her thoughts were likely elsewhere when the researcher first visited the class to explain the project and the research study.

Their feelings were borne out in their behaviors during the activity. During the project, Vanessa and Paula often appeared to forget that the researcher was present or that the cameras were on. This may be one reason why they rarely made a bid to the researcher for help or support. This was evidenced in their occasional comment that they had forgotten about the cameras, usually after saying or doing something embarrassing on tape. It was also confirmed by the infrequency with which they asked for help, and the inattention given to unsolicited support offered by the researcher.

*Researcher – Solicited Support.* When they did ask for assistance from the researcher, it was most often for assistance with the technology tools, or to borrow items, such as pieces of blank paper or a microphone, to support them in their work. There were only two occasions when they asked the researcher about anything directly related to their video. In the first instance, they asked how long the example video clips should be. The second time was when Vanessa was working alone, and she asked the researcher's opinion on the use of a specific graphic.

*Researcher – Unsolicited Support.* There were times during the activity when the researcher intervened in an effort to clarify something for the participants. The first clear instance of this was in the second meeting when Vanessa told Paula to find information that would help them with the portion of the rubric dealing with application in varied contexts. The researcher asked them if they really understood what the item on the rubric meant. Vanessa answered that she thought it referred to “different type[s] of learners.” The researcher agreed, adding that it could refer to learner differences, or learning styles, such as those proposed by Gardner (1983). She added that it could also refer to special needs students, such as those with learning disabilities, or a physical impairment, particularly a hearing impairment in the case of listening skills. She also mentioned that they might consider ESOL students from non-TL backgrounds, and offered the example of a local high school where she had encountered an ESOL student of Vietnamese origin in a mainstream high school French class. She was going to add that they should consider heritage language learners and native speakers, but was sidetracked when Vanessa digressed onto the topic of former French colonies in Asia and Africa. The researcher again told them that she would be happy to help with anything at all, and both Vanessa and Paula responded positively. They then turned to one another, and referring to the previous discussion about the rubric said:

**Vanessa:** (Laughed and looked back to partner) I didn’t even *think* about that.

**Paula:** Me neither, cause you know what?

**Vanessa:** Hearing impaired students.

**Paula:** [The professor] wants us to do that for our observations of a high school.

*Unintelligible*, like, ESOL, or a special needs student.

As previously mentioned, the notion of accommodating varied learners and making lesson modifications where necessary was not new to the participants, having encountered and practiced doing so in previous coursework. Vanessa then turned to Paula and the researcher and asked, "How *do* you help a...hearing impaired student learn a language?" The researcher then offered an example of a hearing impaired student she once had in a language class, and how, in that instance, the solution involved planned physical placement of the student in the classroom for different types of activities in order to maximize the student's limited hearing. Vanessa then said in a slightly frustrated tone, "See, comprehensible input is easier, because if you have a visual...and audio, and, you know, like that." The researcher offered another example for accommodating a hearing impaired learner, to which Vanessa responded, "I didn't even *think* about that." Paula intervened at this point to ask Vanessa, "I mean, do you wanna cover all of the bases? I mean, cause, like, for example, like, the video that we have is of my college class, and, like, everyone there is just, you know, there's no problem." Whether Paula was suggesting here that they not follow the instructions for the project because they did not have any example video of accommodation-making was unclear to the researcher. Paula then went on to recount that she had encountered some physically impaired students in a high school Spanish class that she had observed, and then recalled that she had a Japanese learner of English in her university Spanish class who did quite well. Both Vanessa and the researcher asked what sort of modifications she made to her lessons or materials for this student, such as whether she used spoken English in class or written English in assignment or assessment instructions. Paula acknowledged that she did use English for these things. The researcher then offered some examples of how Paula might help that

student to better understand the English used in the course, noting that consistently using the target language instead would put all the students on an equal footing. Paula remarked that she did try to use Spanish in class, and noted, “Like, that’s what you’ll see, you’ll see our video, like, when we do clothing, I try to do a lot of gestures.” They continued to struggle with the notions of how to most efficiently and appropriately apply the concepts in practice with varied learners. At one point, they concluded that listening skills were something that all students needed to develop. The researcher noted here that they might consider what accommodations and modifications might need to be made to the execution of a lesson designed to teach and enhance target language listening skills if a deaf student were present. They acknowledged her, but did nothing with the information. In another instance, the researcher asked them directly if they had done any research on the topic of listening, but Vanessa steered the conversation away from the topic.

At one point, Vanessa became very frustrated when she found that her clips were starting too late and cutting off too soon once she had inserted transitions between them. Paula’s suggestion was to go back and remove the transitions and see if the problem still occurred. The researcher intervened at this point to explain that transitions would overlap the video on each end of the clips they were connecting. She suggested that instead of cropping each video segment to the precise point where they wanted it to begin and end, they leave the equivalent of a tab for the transition to latch on to. Ultimately, this was the only suggestion made by the researcher that they chose to use, and it was related to the technology, not the content.

In the end, Vanessa and Paula appeared to be quite comfortable with the

researcher, but they did not particularly take advantage of her presence. When they asked for help on the project, it was usually related to a technology problem that Vanessa was struggling to solve. When the researcher offered support, direction, or advice, they largely ignored it, except when it related to technology.

***Community Support.*** In addition to making very little use of the many reference materials at their disposal, Vanessa and Paula also made very little use of the many people available to them, such as the researcher, the professor, and their peers. Before their fourth meeting, Vanessa had sent out an email to some of the other student-teachers in their class letting them know when she and Paula would be working on their video. She did this, she said, to let them know that they could chat online about the project if they wanted to. In the end, one person in particular contacted them, both by cell text and by online chat, but they did not discuss the project.

***Motivation.*** Motivation was a recurrent theme throughout the study, though the large majority of data came from the pre-interviews. While a few mitigating factors were identified, overall, neither Vanessa nor Paula was exceptionally motivated to do the video project and said so clearly in their pre- and post-interviews.

***Motivation – Grades.*** When asked directly in the pre-interview to describe what their motivations were in doing this project, Vanessa and Paula’s responses were akin to those of the other participants in the study. Vanessa found the question somewhat amusing, and then asked if it meant anything other than a good grade. Paula’s response was more succinct: “I want a decent grade, so that's the reason.”

Other discussions with the participants revealed additional information about grade-based motivation. In her pre- and post-interviews, Vanessa projected an image of



herself as a very conscientious student. She described some negative group work experiences in which she had been forced to do most or all of the work in order to get a project done to a standard with which she could be satisfied (even describing the act of writing what to say in a presentation for an unmotivated group member). She indicated that she was willing to do whatever it took to achieve high grades on her work, but she could also enjoy the creative process when paired with the right partner. According to her responses then, a high grade was of key importance to Vanessa's sense of success. Paula mentioned grades less than Vanessa, but still indicated that a high grade was important to her. For example, she stated that she knew that Vanessa was just as serious about her grade as she was. She clarified in her post-interview, however, that her interest in getting a good grade was not tied to her desire to learn, rather, "It was more so like okay, let me just look at the rubric, see what I have to do, and get a good grade." Ultimately, however, their actions did not bear this out as a primary motivation in the video project assignment.

*Motivation – Tasks, Tools, and Work Partners.* In their interviews, the participants revealed other potential sources of motivation. Vanessa appeared to often seek out the positives in a situation or person, or at least to soften the negatives. Whether this was due to a generally optimistic personality, or a deep dislike of conflict (see Rapport below) was unclear. She described herself in several instances as someone who could be energized by a stimulating task, an interesting tool, or when working with an industrious, like-minded partner. Paula, on the other hand, held what seemed to be a more dichotomous outlook in that she was either interested in doing an activity, or she

was not. If she was not, then she was also relatively uninterested in any potential positive outcomes associated with the task.

Motivation – Tasks. In the present case, the project did not appeal to Vanessa. At the beginning of the pre-interview, she indicated that she was not keen on doing the project because she felt that she had done something similar in another course. She even stated that she had considered dropping the course and re-enrolling as an undergraduate (graduate students were permitted to apply one undergraduate level course toward their degree, and the undergraduate version of the Practicum did not require the video project.) just to avoid the activity, “But then, that kinda would've been a cop out, so I decided I'd just stay with it and do the video project.” Toward the end of the pre-interview, when specifically asked about her motivation to do the activity, she commented that she was “go[ing] into it a little disgruntled”, and that she’d “rather be able to do other things.” Like Vanessa, Paula also found the task unappealing. In her case, however, rather than lack of novelty, Paula simply found it tedious and of little practical value. In her pre-interview she stated, “I guess I'm the kind of person where, if it's something that just really interests me, then I have a lot of passion for it and everything, and I'm not going to say I'm *not* interested in [the video project], but... its not really grabbing me.”

It was interesting, however, that while both of them declared their disinterest in the content of the task, the product did make it more palatable. Vanessa noted in the pre-interview:

I think it's sort of a fun ending to the semester, too, where we can see other people's videos and laugh with them, and laugh at them in the video, and that sort of thing, so I think ...it's more fun than just listening to someone rattle off the

information and then watching the tape. Again, it's not just someone rattling off the information [...] or reading out of the book.

Paula echoed this view in her pre-interview as well when she said, “[I]t looks like it's at least a more a fun kind of project that I would rather do.”

This view held up for Vanessa, but not for Paula in the post-interview. When asked if she would have preferred another delivery format, such as a research paper, Vanessa's answer was clearly no:

I enjoy the technology too much, and you know, and, and its sort of, even though it was more time consuming. The research paper, you know, I could have cranked that out a lot quicker than, than this video project, but it was sort of, it was more up my alley, it was more fun more of a fun project to do than just researching and writing another research paper.

She added that with a research paper, “You can't really own it as much as a video, because with a video you're like, I made that video.” When the same question was posed to Paula, her response revealed one possible explanation for why they had failed to research their topics, as well as why they had not used the video medium to its potential. Paula stated that, while it was better than a research paper because, “I don't like to write, personally,” she did not feel that the video had been a good method for presenting considering how “narrow” the topic had been:

Just for the topic itself and how brief it was I felt like to go through all this video and editing it was too much for this one little subject. If it was something that was a bit more broad I could understand. Like I said, my personal opinion is we could have done the same thing with a PowerPoint presentation, and it would

have still conveyed the same message in you know less time and less of work, you know.

Motivation –Tools. Vanessa was, however, somewhat motivated by the use of the tools\_(i.e. the digital video camera and editing software). While she stated that she already knew how to record and edit digital video, she felt that there was at least some potential to learn more. She stated in the pre-interview, “I like the technology aspect of it anyway, it would be more practice for me for doing videos, just getting better at it, so I'm just trying to get the positives out of it, you know. That was the way I kind of...[tried to] make it better in my mind.” While the object of the activity as envisioned by the designers of the curriculum did not particularly interest her, she decided on a goal for herself that did. “I want to find a way to challenge myself, and to learn something new about the [software] program that I'm using, maybe some feature that I didn't know existed, and to try to apply it to this, so that's a personal goal.” Another aspect of the technological tools that appeared to motivate Vanessa was the potential for creativity in the digital video editing software. She stated that editing the video would be the easiest part of the project because “it's the most fun part of it.” She said that the technology was conducive to “let[ting] the creative juices flow,” while exploring “all the little gadgets, and the little cool things with video.” She felt that she had an advantage over some of her classmates in that she was already familiar with the software so she would not have to grapple with learning the basics of how to use it. She could use her time in learning more about the software gadgetry by playing with the more advanced features. Near the end of the pre-interview, Vanessa compared the completed video to “artwork” in which one would feel pride and a sense of accomplishment. Paula had less to say about any

motivation to the tool set, saying simply, “I would just be interested...in knowing more about it because ... it doesn't hurt to know more.”

*Motivation – Work Partners.* Vanessa described in both her pre- and post-interviews the type of motivation she had received from project partners in previous activities as having come from a like-minded, shared understanding and trust that gradually built up a level of “mutual excitement.” She stated in her pre-interview, however, that she anticipated that this would not be the kind of relationship that she and Paula would share. In her interviews, Paula described no such motivation from other people.

Though they did appear to lack the type of shared vision that Vanessa described, there were instances in the early phases of the video project when Vanessa and Paula momentarily enlivened one another. They were, however, unable to sustain these moments of “mutual excitement.” Paula was the one to initially dampen their temporary burst of fun and creativity by checking the rubric to make certain that there would be points for engaging in it. Once it was noted, however, that there were points for maximizing the potential of the video format, Paula renewed her interest in some of the creative aspects of the project. She then joined Vanessa in offering aesthetic advice and humorous, often creative suggestions for directions they might take with the video. Their creativeness waned as the project got underway, in spite of the potential for “points.” Both of them continued to make small suggestions for the design of various segments of the video, but creativity on a larger scale faded and disappeared. Their interest in “completion” increasingly superseded all other considerations, and the spark of “mutual excitement” was extinguished.

In her post-interview Vanessa again described in some detail an example from previous situations in which working with a highly compatible partner ultimately created a level of excitement between them: “neither of us wanted to do the project, but once we were working on it, it sort of got fun,” and “With Maria (a previous work partner) it was really fun because she and I just really understood each other.” She then added that this had not been the situation with Paula. “With Paula, she was, like, ‘okay lets get this done’, and I think I was more in that mindset, too. [...] ‘I wanna have a really good end product, but lets just finish this.’” In the end, Paula and Vanessa were unable to create much zeal for the project between them, and both ultimately settled for “completion” as their primary goal.

*Motivation – Completion.* “Getting it over and done with” was a motivation from the start of the project. At the end of the pre-interview, Vanessa expressed her hopes that the project would not take too long to complete because she did not want it to “linger on.”

During the activity the interest in “completion” appeared to overshadow reading the instructions, attempting to interpret the rubric, researching, confirming, or expanding information on their topics, or asking for help. In the last work session, Paula was clearly the most anxious to be done, telling Vanessa to skip certain tasks or to ignore some of the refinements of the design elements. For example, her response to Vanessa asking for input on things was often, “whatever.”

In Paula’s post-interview, the researcher began by asking her to summarize the experience doing the project. Her response was, “I’m glad its done [because] it was a pain.” Later in the interview she said that her biggest frustration was with the editing process “when it took forever for something to get done, cause this wasn’t my most fun

project, so I wanted [it] to be done and over with.”

In an answer to another question, Paula again touched on the notion that her primary goal was simply to get the project done. The researcher followed up asking how Paula might rank her priorities for the project when it came to rapid completion, grade, and learning something new. Her very candid response was:

I know for me, personally (paused briefly, inhaled deeply) I didn't really care to learn anything new, I mean it was interesting, you know, and it was something I can take with me when I'm teaching, I'm not gonna say I haven't learned anything at all, but I didn't really see it as, you know, oh okay let me learn as much as I really can plus get a good grade. It was more like okay, let me just look at the rubric, see what I have to do, and get a good grade. Like I said, this wasn't like my most fun project to do. And if a project for me is not very fun, I don't really try to get the most I can out of it, I just do what I have to do. My main concern was just to do what I have to do and get the best grade that I can.

The researcher recalled that Paula had said in her pre-interview that group work typically went well when everyone involved was interested. She asked if that had been the case in this activity. Paula's answer was:

I'm gonna change 'interested' to more, not necessarily 'interested' as in 'motivated,' [but] more so 'interested in getting it done.' “We wanted to get it done and do the best we can, so I think that we were both interested on doing the best we can on that, and we were both trying to go by the guidelines of the rubric and do it done in a time manner because we both also have other classes and other deadlines.

Paula, then, was clearly motivated by what it would take to get the project done within the minimum specified requirements. Vanessa, on the other hand, appeared, at least at first, to be motivated from the very start by the creative and learning possibilities offered by the technology, but this waned considerably over time, and was eventually crowded out by the simple desire to be done.

*Motivation – Overall Program.* Some of their responses and behaviors during the study may have revealed something about their overall attitudes and aptitudes in the foreign language education program as a whole. As a part of their general demeanor, these would certainly be difficult to divorce from their drive to do the video project specifically.

In a potentially revealing discussion during the post-interview with Vanessa, the topic of her prior teaching experience arose. The researcher noted, “You taught before you had professional training, [...] and that gives you practical experience. Now you’ve come [to the university] and done stuff with theory and then you’re gonna launch back out into practical experience, but this time *with* theory.” Vanessa added, “And experience.” Vanessa then went on to say:

There are a lot of things that I learned on my own, I figured out on my own in my two years of teaching that I also learned here. I’m like, ‘oh yeah, right, I didn’t know that there was a name for it.’ I thought I was original, you know, but then there were also things that we learned that everyone was like, ‘oh wow,’ and I’m like, ‘Yeah, right! That would never work,’ you know, or ‘that’s not true’, or ‘that’s in this fantasy teacher world,’ because, in the real world, this is what I experienced. You only *wish* you could have a lesson plan that you’re gonna do



exactly how you imagined it in your little head, and you're gonna get all the material you wanted to get done, done because your students are going to sit there perfectly soaking in (lilting speech) *all* the information you have to give them.

The researcher felt this was interesting in several ways. First, Vanessa appeared to take her prior experience and compare it to the content of her teacher education curriculum. Where the curriculum content matched her experience, she felt validated, and where it did not, she discounted the content completely and retained her belief in her prior experience. To her detriment, this appeared to come through in her execution of the video project as well. She relied on her prior knowledge and perceptions of the topics, rather than verifying her assumptions, or seeking out additional information and examining it from alternate perspectives.

During the activity itself, Paula mentioned on a couple of occasions her progress in other classes or other assignments. While they may have been a form of ritual complaining (Tannen, 1986) or posturing, they may also have been indicators of her general motivation as a student-teacher. For example, in the second meeting, she mentioned that in another class she would be turning in her work late, adding, "Please let me pass this class, even with a C. I'm happy with that at this point." Shortly thereafter, in reference to the video project, she mentioned that she could do a section on Krashen's theory saying, "I can BS that." Perhaps it was posturing, but it may also have signaled that she was not a conscientious student. Later, Paula was thumbing through a textbook when she discovered a quote that she wanted to use in the video and said, "[The professor] doesn't read the whole book, she doesn't know the whole thing, she doesn't know where I got it." Again, the notion of "getting away with" something was present.

This same attitude emerged again partway through their fourth work session when Paula interrupted Vanessa as she was working to broach the topic of a unit plan assignment that was required for another course. Once again, Paula presented herself as someone who preferred ruse to real work, saying that she could “BS” her way through the task, and that she would just resurrect an old unit plan that she’d used previously (“*Tomar un Viaje*”). She then went on to describe another lesson plan she had done, complaining that the professor had not given her much feedback in spite of a low score.

Both Vanessa and Paula conveyed a sense of themselves as student-teachers whose primary interest was to reach the end of the foreign language education program in order to be credentialed teachers. Vanessa did express a desire to expand her knowledge of topics that interested her (i.e. voluntarily taking a technology in foreign language teaching workshop and attending the state foreign language teacher conference), while at the same time ignoring information that did not match her personal interest or experience. Paula, however, expressed little interest in learning of any kind, and projected the image of an indolent and unprofessional student-teacher coasting through the program.

***Rapport.*** The rapport between Vanessa and Paula was an important factor in the activity. Preconceived notions about one another affected their ability to communicate well, which impacted their ability to successfully accomplish the task.

***Rapport – Perceptions.*** The young women went into the project each with certain assumptions about the other, and about their relationship. These impressions were significant because they would affect how they engaged with and reacted to one another.

In the pre-interview with Vanessa, when asked by the researcher to discuss her thoughts on working with Paula, she hesitated and was visibly uncomfortable. She

continued to hesitate for another few moments, then offered a positive statement, “Umm, you know, I like Paula a lot, and we worked all semester, also.” This was immediately followed by:

Ummm, but sometimes I feel like she's not... I don't know, she doesn't really have her heart into things...and she just puts things off, and puts things off...and I kinda felt like I was going to be the one pulling the load for this project...ummm, in this project, this video project.

Vanessa voluntarily went on to describe other past group work experiences, spending the majority of her time discussing two situations that had been positive. What was positive about these experiences for Vanessa was primarily that she felt that she and her partner were alike in a variety of ways. For example, “When I have to work with a group, like if I'm working with Sara, we, we're like an extension of the other, we think the same, we know how to work with technology the same.” She added, “Sara, it's, I mean, it's like working with a clone of myself. Really! And, and, you know, we work excellent together.” She continued, “Other situations, like, with the group with Maria umm, Maria and I are the same.” When there was a difference in skill set, Vanessa indicated that she could overlook it if the other person was able to take on another aspect of a project, thus equalizing the workload. For instance, “...even though [Maria] was less technology savvy, she was willing to pull the load in other things so, we, we balanced each other out.” The second most salient feature of positive group work experiences for Vanessa appeared to be the ability to trust her partners. She spoke of Sara, “We work together, but if she says she's gonna do it, I know its gonna be done.” In sum, her description of a good group dynamic was one in which the members held a fairly equal balance of

knowledge and skill, as well as a high level of trust

Vanessa's unsolicited explanation of group work that had gone well in the past appeared to be an indirect way of stating that her expectations of Paula were quite the contrary. She seemed to be saying that she did not share a sense of sameness with Paula (of purpose, skill, or otherwise), and that she did not trust that her partner would do her share (at least not to a level of quality that Vanessa would like). Vanessa's next words seemed to confirm these ideas as she again noted past experiences before mentioning her current situation, seemingly in order to provide a precedent for her concerns about Paula. "I've been in some groups where... it's... you know, I feel like if, if I don't do it, it's not going to get done." She continued, "I feel like I'll just, I'll do everything, and I end up taking the initiative and wanting to do everything, cause I know that if I do it, it's going to be done the way it should be, or the way *I* think it should be." She was then able to return to the topic of Paula when she added:

I kinda feel like she's just... not..... into it as much...but she kind of has, ummm, at the beginning of the semester, it was just like, "oh, I don't care. Oh, whatever. Oh, take whatever topic is left for me to talk about", or this and that, and just kind of that, "I don't care" mentality, and that kind of worried me at first, ummm..... but, you know... I don't, I hope... it's *not* going to be that way, uh, and I hope today when we're doing the editing that she *will* have input, and she will give her opinions, and pull some of the load, so...I hope she proves me wrong.

She concluded, "[The] only thing I can base it on is, just like that, where she was "oh, I don't care, angh." That kinda made me a little nervous cause if she doesn't care then she's not going to put effort into it, and, and I don't want that to also to affect my grade either."

Vanessa's concern that she might have to shoulder the majority of the responsibility in the project was later reiterated indirectly. The researcher was asking about Vanessa's feelings concerning the researcher's presence or the existence of the study. Vanessa replied that she was pleased by the researcher's presence "you're kind of an extra help, an extra person...to ask, you know, instead of it all falling on me, I can ask you." Her reply seemed to indicate that she expected "all" the work to "fall" on her, and that she felt more reliance on the researcher than on her partner.

On the whole, prior to beginning the project, Vanessa's expectations of and trust in her project partner were low. As it turned out, her suspicions were largely well-placed, and Paula was not a particularly hard-working, reliable partner. In some ways, however, Paula contributed on a greater scale than Vanessa had initially expected. For example, from the beginning of their second meeting until the end of the project, Vanessa and Paula often appeared to be on different wavelengths, each concentrating on separate work for the project (or in Paula's case, often not attending to anything project-related). While seeming to be generally unfocused, however, Paula was actually relatively aware of what Vanessa was doing. For example, at one point in their second meeting, Vanessa made what appeared to be an indirect bid for Paula's input. She said aloud that she was struggling with the fluidity of her phrasing because she did not want it to appear as though she was addressing the rubric points one by one. Paula was quiet for a moment, and then began to compose aloud an alternative to what Vanessa had, "Mmph. It is important for the student and the teacher, it is important for a teacher to develop good listening skills to be able to teach it to their children because...auh, I know *unintelligible* what you're trying *unintelligible* as well to say it." Vanessa appeared surprised and said,

“Oh, you’re, uh, uh (looked back at screen and pointed to self) helping me?” Paula replied, “Yeah,” to which Vanessa quickly said, “I thought you were doing your thing. Oh, okay. No, okay, well then, let’s go through this...” Vanessa seemed genuinely surprised that Paula was paying attention to her. In her post-interview, the researcher referred back to Vanessa’s early concerns about working with Paula, and asked if her worries had been justified. Overall, Vanessa said that she thought it had gone better than she had expected. On one hand, she felt as though Paula had really come through much more than she had supposed she would when it came to the editing process.

While we were editing I thought back to the first interview and I thought, gee, I feel bad because I really didn’t expect much from her and then she’s actually doing things that I didn’t expect.” “I’d be doing things and she would actually suggest, ‘Oh well how about we do this?,’ or ‘Why don’t you do that?,’ and there were a lot of times I was really surprised because I really didn’t think that she would really care enough.

In large measure, however, Vanessa was ultimately correct about Paula’s desultory approach to the project as well as her indifference to the content. For example, moments after arriving unapologetically late for their second meeting, Paula as a complete non-sequitur, suddenly said, “When are we supposed to define comprehensible input?... You wanna talk about the strategy for comprehensible input, like, listening, writing. I’ll talk about Krashen’s theory, okay, no problem, I can BS that.” In her post-interview, after mentioning that Paula had done a bit more than she had expected (see above), Vanessa went on to say that she did have to push Paula to get her to meet or to participate at times. She also noted that, particularly toward the end of their project, Paula

was apathetic and inattentive. Vanessa recalled Paula's very long disappearances to chat on her cell phone, while she continued to work: "Her phone rang and she went outside and she was talking on the phone a long time. I wanna say about a half and hour or so, and I was like, ummm, well, let me keep working because this is a half an hour that, I don't have time to lose you know, and so I kept doing as much as I could without her there." As often happened when Vanessa spoke of something that bothered her, she then tried to be fair to Paula by saying that she supposed that she too had taken time away to feed and change her baby. She then remarked on Paula's late arrivals to their meetings, "One time I think was half an hour, and the other time it was forty-five minutes, which, I can't really talk much because (laughed) I've been late, too, but, its just...especially when we said the time, two o'clock. I understand two-fifteen, two-twenty, that's, you know, but I mean, for two-forty-five and then there are times that I didn't hear from her and it was two-thirty and I'm like...ummm?" Vanessa concluded, "So, in that way, it sort of happened the way I expected it to and then, in other ways she sorta surprised me.

It should also be mentioned that Vanessa's expectations may have led her to behave in a way that somewhat discouraged Paula's full participation. The primary example of this was Vanessa's insistence on using her personal digital video camera, laptop, and editing software for the project. Since she knew how to use them all, and Paula did not, recording, uploading, and editing the video fell exclusively to Vanessa. In her post-interview, Vanessa clearly stated that Paula may not have supported her much in the realm of technology issues, but to hold it against her would be "unfair in the sense that she really didn't know the technology that I was using."

Vanessa's expectations of Paula may have had yet another detrimental effect on the overall project. She had said in her pre-interview that when previous project partners did not do their share she simply did it for them to ensure a high overall project grade. In this case, however, Vanessa appeared to want to guard against being exploited by her partner, and took steps to try and let Paula know that she would have to do her share. For example, prior to their first meeting, they had discussed that they would both do some background research on their topics and bring what they found to form a foundation for the project. Vanessa stated in her pre-interview that for her own "research" she had simply gone to an old textbook and "dog-eared" pages that contained what might be relevant information. She had not yet read or extracted anything prior to their meeting because she did not believe that Paula would do so. She stated that she assumed that Paula would arrive to the meeting having done nothing at all, and this would force them to extract the information together. In the post-interview, the researcher asked Vanessa about her concern that Paula would not do her share of the research, and her having marked pages, but written nothing prior to their first meeting. Vanessa thought a moment, then replied:

There was really nothing that I can remember that she had prepared before she came in. A lot of what we ended up saying we wrote together. I'm not gonna say I did it on purpose, but when I was finding the information, I would mark in the book [...] so then when she got there I would say, "Okay this is what *I* found." "What are *we* gonna say about it", because really, I wasn't gonna sit there and write out the whole script for her to say. [...] I really wanted it to be more of a group effort. [...] In a way I probably did less than I normally would have if I



were doing the project with someone else. It probably would have been, like, okay, look, I'm gonna look this up and write this script and you look this up and you write this script and I *know* that that other person's gonna have it when I get there. I sort of didn't expect her to have it, and then, I was right, and so then, I was glad, but at the same time I wasn't. [...] It was sort of my way of not...how can I say... making me carry the load. And this way it took longer. I think we would have been done in a lot shorter amount of time if it had been done in advance. If I had done it and said, "Okay, look here I found this, I wrote this, you say this, I say this.

Vanessa, therefore, did the minimum in order to even the playing field with Paula, thinking that it would make clear that she would not be manipulated into taking on more than her share of the workload. As it turned out, Vanessa had been absolutely correct about Paula showing up with nothing but excuses. Unfortunately, she was also correct to say that she "probably did less than she normally would have." In the end, the outcome was that neither of them wound up doing any research of consequence, which resulted in a partially inaccurate and profoundly incomplete video presentation.

The difference was quite poignant in Paula and Vanessa's expectations of one another as working partners. Initially, Paula, like Vanessa, noted that the majority of her previous experience working in groups had been positive, and that she actually preferred collective to individual work, particularly when "the people that I'm working with are...people I know or people that are hard-working like me who have the same visions, because it's good to get different opinions ...and ideas, maybe, you know, I understand the, the assignment one way, someone else understands it another way." She had little to

say concerning negative group work experiences except that, like Vanessa, on occasion she had encountered “other people that just, whatever, don't care. It's frustrating, because you may find out you're doing more work or putting a little bit more effort into it.” Both of them, then, had described themselves as hard-working learners that enjoyed group activities with like-minded, industrious partners, and disliked situations in which they had been forced to shoulder an unequal amount of the workload. The similarities in their responses ended there, however, with Paula’s opinion of Vanessa as a partner. She stated simply, “I know that she's just as serious about her grade as I am, about working.”

In her post-interview, when asked if working with Vanessa had gone as she had expected, Paula replied that it had. She added that they worked well together and balanced one another out, “You know she handled certain things, I handled certain things.” She noted that Vanessa had done most of the editing of the video because she was more familiar with the software, but “would try to help her out the best I could.” Paula noted pointedly, “and *she offered* that, too.” She described her own contribution as “editing, and [the] creative side,” as well as having been the one to offer her classroom and lesson plan for the class they videotaped. Paula’s description of events was one of fair distribution of labor and resources, contrasting with Vanessa’s view of what had happened. In the end, Paula stated that she and Vanessa had experienced very little conflict over the design and execution of the activity because, “we wanted to get the project done and you know cover as much of the rubric as you can.” Paula stated this as a positive, while Vanessa had described this “just-get-it-done” mindset as having detracted from her normal attention to detail.

All told, it was clear that Vanessa and Paula's perceptions of their relationship and of the activity were very different from one another. Where one was guarded and apprehensive, the other was unconcerned and trusting. Where one felt that she had not been able to live up to her usual potential for fear of being taken advantage of, the other felt they had divided the tasks fairly and been able to do what they'd been asked to do. Their disparate perceptions and expectations of one another resulted in a kind of tension that made it difficult for them to resolve the conflicts and contradictions encountered in the activity.

*Rapport – Conflict.* Vanessa and Paula's perceived levels of rapport had a significant impact on their ability to notice and resolve conflict. This affected the process to such a degree that they were not only unable to expand and deepen their knowledge of their topics, but in some aspects, unable to reach even a basic level of "technical rationality."

*Rapport – Conflict – Vanessa.* An important theme that emerged from Vanessa's pre-interview was the notion of how an individual might react and cope in a situation involving conflict with another group member. The researcher asked Vanessa if she would speak to another group member who was not doing his/her part. Her response was that she would not because a) she would "feel bad" doing so; and b) she feared the person would be angry with her. Vanessa explained that in situations like that, she would not say anything to the person she felt was slacking – rather, she would just take over and do whatever needed to be done in order to get the grade that she wanted. She stated that she would also not say anything to the professor.

I would probably just do [the work myself]...[laughed] cause you're working in a

group, and then it's, you know, go to the professor, [...] and then it's their word against mine so I just kind of zip the lips, and just kinda just do it... and then, if it's a speaking part, I'd rather give it to them, "here's your part" [laughed], "read over it, and make sure it's OK".

Vanessa then qualified her response by saying that she *would* say something to someone she knew well and felt close to because of the difference in the length and depth of the relationship. For her, speaking out when the relationship was likely to be temporary wasn't worth it, but for a close, long-term friendship, she said that she would not have to worry about the person "turning on" or "bailing on" her. Interestingly, she did go on to say that, even in the case of someone close to her, she would approach the conflict somewhat indirectly by making a joke or by asking if there was something wrong, and could she help. When asked directly about how she thought she might respond to any conflict with Paula, she stated, "I know Paula, but I don't know her that well where I would seriously go to her and say, 'Hey, why haven't you done this?'"

Generally speaking then, Vanessa stated that when faced with a conflict with a work partner with whom she was not very close (in this case, Paula), she would opt to stay silent and take on whatever share of work that she felt that individual was not doing. Her view appeared to be that the extra workload was preferable to possible retaliation on the part of another group member in the form of animosity or abandonment.

During the activity, it was true that Vanessa very rarely questioned, contradicted or confronted Paula, since, as she stated, she did not feel she knew her well enough.

The first example of a failure to challenge Paula came almost immediately during their first meeting when they were having trouble differentiating between using

comprehensible input as a teaching strategy and teaching TL listening skills to students.

Paula suddenly said, speaking rapidly and not enunciating clearly:

Well, why don't we just not bring it in at all? Why don't we just say, oh, you know, the best, you know, kinds of, you know, method to do listening as part of comprehensible input. You know, tie it together, you know, is when this, when that, when this, when that... How about that?

Vanessa looked over at Paula and hesitated as if she were trying to make sense of this. Finally, rather than ask for clarification, she just said, "Okay." Paula continued:

**Paula:** You know, that way we're not really separating it.

**Vanessa:** Not separate.

**Paula:** Yeah.

Vanessa again hesitated, then said, "okay", followed immediately by changing the subject, rather than questioning or contradicting Paula. By just agreeing to something she did not understand, the opportunity was lost to seek out additional clarification from reference materials, their peers, the researcher, or the professor. From that point forward, they confounded the use of comprehensible input, as a strategy for use by teachers, with the teaching of listening skills to students, as a learning/communication strategy for use by language learners.

Even when it came to issues other than those related to content, Vanessa still had difficulty voicing her own views. In one instance, Paula very much wanted to use a particular font, so she asked if Vanessa had it on her computer. They found it, to Paula's delight, but Vanessa immediately saw that its thin-lined curly-cued style was not a good design for the video presentation. She started to say, "But that's kind of..." then briefly

bared her teeth in slight disgust. She then said, more to herself than to Paula, “Oh, okay, we can, we can change it.” Vanessa obviously disliked the font, but rather than stating this openly, or explaining why it might not work for a presentation format, she caught herself and made a qualified agreement. The issue arose again later, and Vanessa was slightly more direct when she said “I think that text is kind of hard to read,” and then added “even though it’s pretty” as a means of softening her critique. Paula did not agree to do away with the use of the font altogether, but responded that they didn’t have to use it throughout the video, and the issue was dropped.

At times, the concerns Vanessa had voiced in the pre-interview about not wanting a work partner to be angry with her or to “bail” on her appeared to come into play. At one point, Vanessa tried to tell Paula that an audio segment that she’d recorded was a bit wordy by saying, “Okay, no offense, but that was ten seconds to get into (chortled lightly) what you wanted to say about background knowledge.” Paula asked her what she meant, and Vanessa replayed the recording for her.

**Vanessa:** Do you see what I’m saying?

**Paula:** Mm, what, you wanna cut it out?

**Vanessa:** No...

**Paula:** Well, then why would I be offended?

**Vanessa:** No! Uhgh.

**Paula:** (Leaned back, smiled, wagged finger in the air) Hey! Ya’ll say I talk fast.

Now I talk too slow? Ya’ll better make up your minds.

Paula’s response seemed to imply that if Vanessa were to edit what she had recorded, then she would take offense. Vanessa then made a second attempt:

**Vanessa:** No, no, no, no, but, I'm saying, just like, a lot of fill there, like,  
(changed briefly to narrative voice) 'for our project on comprehensible input', you  
see what I'm saying, like, you're kinda, like, adding, like...

**Paula:** I mean, if you wanna cut no, cut some of it out.

**Vanessa:** No.

**Paula:** We can.

**Vanessa:** No.

**Paula:** It's not a big issue to me.

**Vanessa:** Nah. Don't worry about it.

Vanessa raised the issue twice, but then abandoned the subject. Had Paula been more conciliatory, agreed that the passage needed to be changed, and/or offered suggestions for improvement, it is possible that Vanessa may have felt comfortable enough to pursue the issue.

In one other instance, the very retaliation and abandonment that Vanessa had feared briefly materialized. As Vanessa was trying to compose a passage explaining listening skills, she asked for input, and was surprised when she got it, from Paula. Paula offered a couple of comments, but was very soon distracted by unrelated things as Vanessa was speaking. Vanessa continued to compose aloud, but hearing nothing more from Paula, looked back to find her apparently deeply engrossed in a minute examination of her lower leg. Vanessa laughed very lightly, then softly said, "Okay," and turned back to her computer as if she understood that Paula wasn't going to help much after all. Paula, after a moment's hesitation, leaned back, sighed heavily, and said curtly and in a rapid-fire manner, "This is *your* task okay," and looked at Vanessa's screen with a brief,

sneerish smile. Vanessa responded, “I know, I’m...”, but was interrupted by Paula who appeared to be trying to make a repair by repeating back what Vanessa had read out earlier, “listening is a skill that all students need to develop.” They then shifted the subject to the rubric, avoiding both the topic and the conflict.

In yet other instances, Vanessa experienced conflict, not over project decisions, but from direct irritation at Paula. Oftentimes, Vanessa’s aggravation was well-founded, but she rarely said anything bluntly to Paula, and at times said nothing at all.

For instance, near the end of their third work session, Vanessa and Paula were seated together and had just discussed an audio recording that Vanessa was preparing to make. She set up the camera, microphone, and laptop. Vanessa only wanted the audio track, so she aimed the video camera at something unimportant, in this case Paula’s keys. As soon as she pressed “record”, but before she could speak, Paula picked up her keys and rattled them, saying in Spanish, “*Llaves.*” Vanessa just shot her an annoyed look and tried again to begin recording herself. Just then, Paula turned to her own laptop and began noisily clattering away at the keyboard. Vanessa waved at her to stop, but she did not. Finally, Vanessa paused the recording, and looked at Paula quizzically, with mild irritation. Paula finally looked over at her, at which point Vanessa began to tap her fingers on the table as if she were at a keyboard. Paula responded, “I keep forgetting. It’s the nails, girl, it ain’t even me, it’s the nails,” and tapped her own nails on the tabletop. Vanessa just smiled and said, “The nails are part of it.” Paula, seeming to realize that she’d crossed some boundary with Vanessa, rapidly changed the subject to what they might write for the conclusion, and it was some time before Vanessa could return to her recording.



Another example took place at the start of their second meeting, which was in Vanessa's home. Vanessa had gone to the trouble to make snacks and lemonade, and had asked her mother over to care for her infant son. She readied the workspace (the kitchen table), setting up her laptop and laying out their planning notes, equipment, and the like. Paula was very, very late, and had not telephoned to explain or ask for directions. Vanessa was annoyed and clearly expressed her irritation to the researcher. When Paula eventually arrived over thirty minutes late, Vanessa, completely masking her annoyance, got up and served Paula some food and a drink. Paula then mentioned that she had just eaten at a meeting for the teaching assistants at the university. Vanessa replied in a slightly aggravated tone, "Okay. That's why you got here late". Immediately, she laughed as if to diffuse any anger that might have come through in her comment. Paula answered, "That, and me getting lost." Vanessa was silent for a moment, and then said in a serious tone, looking away from Paula, " All right....No, that's fine. We're cool.

At the start of their fourth meeting, again at Vanessa's home, Paula's lateness was even more egregious. This time, Vanessa had not put out any snacks or drinks, but she had set up their workspace at her kitchen table as before. Paula was even later than before, and again had not phoned. Vanessa was understandably perturbed, and had gone ahead and begun to work alone. When she did finally arrive, Paula came in with no apologies or explanations and settled herself at the table with a large clamshell of take-out food and began to eat. Vanessa said nothing to reproach her directly, but began explaining in detail what she had done during Paula's absence (which was to formulate a conclusion). During this entire time, Paula continued to eat, saying nothing, save to ask if Vanessa had photographed her transparency. When Vanessa paused a moment to close

a computer file, Paula asked, “[Can you get] something to drink for me?” Vanessa got up to get it for her, then returned to the table and continued to explain what she’d done during Paula’s absence. This time, though Vanessa had openly expressed her annoyance before Paula arrived, she said nothing directly to her, and in no way indicated her irritation.

Vanessa did appear to relax somewhat toward Paula near the middle of the project, and she was then able to speak out more on design issues. At first, she almost always chose an indirect approach, such as offering to help, but she eventually managed to take a more direct, but joking and friendly tone indicating that her trust and confidence in Paula had increased. For example, Paula attempted to write a piece on listening for Vanessa to read as she recorded herself. When Vanessa read what Paula had written, her comment was, “Okay, that’s like, run-on sentence. . . .city (smiled). Paula responded, “Didn’t I tell you I’m not good at writing papers?!” (laughed, waved off with right hand).” This exchange appeared to remain friendly, no offense was meant or taken, and they went on to rework the passage together, though Paula was self-deprecatory throughout (e.g. “I don’t know why I wrote it like that;” “I didn’t read what I wrote. It was in my head”;, etc.).

By the middle of the third session, Paula began exhibiting an increasing number of behaviors that appeared rude and inconsiderate, as well as increasingly disinterested in the project. Now that Vanessa felt closer to her, she was able, to some extent, to voice her irritation with Paula on two occasions.

In the first instance, they were reviewing their teaching video in search of segments to use as examples:

**Paula:** I was getting sarcastic with this class.

**Vanessa:** (Glanced back at Paula, smiled) That's not really PC, I don't really wanna put that in [our video].

**Paula:** (Flippantly) I don't know. (Played with earring). Why? What did I say?

**Vanessa:** Huh?

**Paula:** What did I say?

**Vanessa:** (Exasperated) Are you blind!?

**Paula:** Oh.

Vanessa appeared to be annoyed that Paula had remarked on her own sarcasm, and then seemed to pretend that she had no idea what she'd said that was offensive. There was no effort at any kind of repair after this exchange, an unprecedented behavior on Vanessa's part.

The second instance occurred after Paula had become increasingly absorbed with her cell phone, mostly sending and receiving text messages from someone. At one point, she left Vanessa to work by herself and went outside to talk on her cell phone. She was gone for approximately forty-five minutes, during which time Vanessa became increasingly annoyed. When Paula finally returned to the worktable, she apologized for being gone so long. Vanessa did not look at her and answered in a low murmur, "That's okay." The conversation continued as follows:

**Paula:** I didn't mean to take that long.

My foot is killing me.

All right, whatcha got?

**Vanessa:** (Seriously) All right. Sit.

I uhhh...

**Paula:** Did you just tell me to sit?

**Vanessa:** Yeah, sit. Okay.

**Paula:** You not my mama (chortled, then sat, refocused on cell phone screen).

Both of them laughed briefly, but perhaps less than sincerely, at Paula's comment, and that was the end of it.

Vanessa's description in the pre-interview of her dislike of confrontation in general, and her inclination to avoid it completely with people with whom she did not share a close relationship, was an accurate prediction of her behavior with Paula. By the time Vanessa began to feel enough of a rapport with Paula to speak up, the serious decisions as to the project's direction and depth had been made. What's more, unlike Vanessa's description of her behavior in past unsuccessful group projects, she did not take up the slack in the project work. She seemed determined from the start to protect herself from overload (see above). The repercussions of Vanessa's dislike of confrontation, coupled with her determination to not take on work that she felt that Paula should do, were serious in terms of the project's success.

Rapport – Conflict – Paula. When Paula was asked in the pre-interview how she would respond, generally, if a partner failed to share the workload, she answered much as Vanessa did that she would speak up only if she knew the other person well. When asked directly about Vanessa, Paula said, "it would be easy to talk to her because I've known her since last semester and we're pretty cool with each other, and also I know that she's just as serious about her grade as I am."

Vanessa was unable to speak up when faced with tension or conflict with Paula because she felt that she did not know her well-enough to be able to trust that she would not take offense, or worse, become hostile or vindictive. Conversely, Paula's perceptions of their familiarity and like-mindedness appeared to facilitate her ability to offer her opinions and suggestions. It may also, however, have contributed to her digressions off-topic into gossip, food, dating, and the like, as well as her distracting behaviors such as dancing around, emailing and texting friends, and doing work for other courses.

While Paula may have stated her opinions in a more direct manner than Vanessa, she still frequently used language and paralinguistics to soften any aggressive overtones. For example, when commenting on the length of a text segment written by Vanessa, she said:

The only thing I know, that [the professor], umm, may have to criticize us on, is, I've seen it done, is you don't want to write everything that's going to be shown, you wanna just, like, write, like, brief points, we can say this stuff, but I know, like, in a presentation, you don't wanna, like...

**Vanessa:** We shouldn't have it written out.

**Paula:** Yeah (briefly looked down).

In another instance, Vanessa was composing her audio piece on listening when Paula became very animated and participatory. She tried to think of connections between their video clips and what they wanted to say about comprehensible input and listening. She began throwing out ideas, prefacing them with conflict-avoiding qualifiers such as, "Well, maybe you disagree with this, but...", and "I think, in my opinion, personally, you can disagree with what I say...".

On other occasions, Paula spoke harshly, but seemed to catch herself and immediately offer some kind of repair, such as the incident mentioned above when Vanessa had asked for help. Paula's response was a sharp, "This is *your* task okay," but it was immediately followed by an attempt to help.

There were even moments when Paula offered Vanessa encouragement, concern, or comfort. For example, as Vanessa worked on her audio piece on listening skills, she was struggling to record herself evenly and smoothly without making mistakes. She was frustrated, but Paula offered her reassurance, "I think you said it really well, actually, what you said." And later:

**Vanessa:** I am acting so retarded when I'm talking.

**Paula:** (Laughed).

**Vanessa:** I'm so stupid.

**Paula:** No you're not. You can just say you use methods...

**Vanessa:** (Overlap) I just I think too much.

Throughout their third meeting, Vanessa had a terrible headache. Paula offered support and comfort:

**Vanessa:** Oh God (placed hand over eyes) I'm like (rested forehead on open palm while looking at screen).

**Paula:** (Reached over and briefly rubbed Vanessa's back) Are you sure you don't need some [aspirin]?

**Vanessa:** Mm mm, I can't. I can't take anything.

What's more, Paula also seemed to feel comfortable enough to occasionally make friendly jibes at Vanessa, as well as share personal stories and gossip. The problem with

this was in the difference in their perceptions of their relationship. Where Paula may have simply been giving Vanessa a friendly ribbing, Vanessa appeared completely nonplussed, or to take offense.

The very first instance of this occurred at the start of their second meeting. Vanessa was looking on her computer for a file she wanted to open, and was having trouble finding it, when Paula slipped in a jibe:

**Vanessa:** What happened to all the video that I had captured?

**Paula:** You replaced it with your baby, that's what you did.

**Vanessa:** (Tone moderately irritated) No I didn't!

**Paula:** (Tone slightly mocking) All your baby pictures (Smiled).

**Vanessa:** Ungh (Surprised/annoyed facial expression, did not turn away from computer).

Vanessa did not reply, and continued to look for her file, focusing on the computer. Paula appeared to realize that Vanessa had not taken her comment as a joke. She then apologized after a moment with, "I'm sorry (very light laugh) that was rude". Vanessa looked confused, but said nothing in response.

A similar incident occurred near the beginning of their third meeting. The following exchange took place, again seeming to catch Vanessa off guard:

**Paula:** (Stared at her own computer screen, looked sad, said softly) I hate you so much right now.

**Vanessa:** (Looked over at Paula)...Hm?

**Paula:** I hate you so much.

**Vanessa:** (Startled) Me?

**Paula:** (Seriously) Yes.

**Vanessa:** Why?

**Paula:** (Smirked, then grinned) Cause you *unintelligible* (turned to Vanessa and laughed) thought to run to Burger King before class.

**Vanessa:** What?!

**Paula:** You went over to Burger King before class.

**Vanessa:** (Miffed tone, said vehemently) You had time to go!

**Paula:** No, I shouldn't spend any money at all, like, I'm like, on a budget so bad.

**Vanessa:** Ungh (Lifted fingertips to forehead, and pulled palms down over face).

Paula appeared to be trying to make a joke. Vanessa was surprised and irritated, and was unable to relax even when it became clear that Paula had only been kidding. As mentioned above, there was a small window between the midpoint and the completion of the activity when Vanessa appeared to relax a bit with Paula. It was during this time that Paula was able to tease her a bit without provoking her. For example, Vanessa had made several attempts to record herself, but had repeatedly fumbled over her words causing her to want to stop and start again. She was ready to make another attempt at recording, this time with a written script, when Paula said, "Don't flub it up this time." Vanessa seemed to take this fine, and responded, "I know, I won't. Hopefully he won't talk either (referring to her baby nearby)."

To a lesser degree than Vanessa, Paula also appeared to have her moments of irritation with her partner. One source of apparent annoyance was a subtle note of competitiveness that arose between them at times. The source of the tension often appeared to be in comments on Vanessa's part related to her own assiduousness as a



student. For instance, on one occasion, in reference to the video they had made of her teaching, Paula began to talk about the differences between the students in her two classes. She noted that the early morning students were lively and engaged, while the two p.m. students were dull and reluctant to participate. The researcher mentioned that the time of day may have something to do with it, noting factors such as mealtimes and self-selection of course times by students. Vanessa looked back at the researcher and intervened at this point saying, “I was such a dork, cause I always took the early morning classes.” At this point, Paula made a face with her lips pressed tight, chin down, and eyebrows raised. A sort of competitiveness seemed to arise between them as Paula said, looking out into the room, “Well, I think I may have, too, cause that’s all there is (looked back at partner, serious, with eyebrows raised) available.” Vanessa interrupted Paula and countered with a comment that appeared to be stressing that she’d attended the early classes by *choice*, “But I lived, but I lived closer, I lived in [the same city as the university] at the time.” Paula looked down, and then back up at Vanessa with the same serious expression and said “Well, okay” as if surrendering. Vanessa added, interrupting Paula again, “But living here I’d get a later class because, to give me a commute time, but...” In what appeared to the researcher to be a defensive kind of attempt at impression management (Goffman, 1959) Paula interrupted her in turn, “Even when I first got in college, I was, like, okay, eight a.m., cause you know, I’m still in that high school, like, you know, by seven a.m. [mode].” She then added, “And I *worked* in the afternoon, but, like...” During this moment of hesitation, Vanessa rocked her head to the side and arched one eyebrow, which appeared to the researcher to convey a level of skeptical superiority. Paula concluded, “I would say, it’s the, I would rather deal with the morning

classes, I would rather get my classes done in the morning... like, cause I hate taking evening classes.” In another instance, Vanessa was starting to describe to the researcher a classroom observation she had recently made. Paula suddenly interrupted saying, “You observed already?!” Vanessa replied that she had, and Paula responded petulantly, “I hate you. You were supposed to email me two things and you didn’t.” Vanessa responded in a parallel manner, “Oh there you go, well you didn’t remind me either, so mmmm,” and then she smiled. There was an adolescent playfulness in the exchange, but the researcher also felt there was, again, a note of competition. In the ensuing minutes Vanessa went on at some length to animatedly describe how wonderful her observations had been, while Paula increasingly showed signs of boredom and distraction, and finally irritation, sharply raising her eyebrows, muttering under her breath, and finally rolling her eyes and lolling her head to one side.

The only other apparent source of direct irritation seemed to be frustration with Vanessa toward the end of the project when she spent time tweaking the video presentation, while Paula just wanted to be done.

In their relationship, Vanessa stated from the beginning that she did not feel close enough to Paula to speak up should conflict or tension arise between them, while Paula said the opposite. Had they been close friends in Vanessa’s eyes, Paula’s casual behaviors, comments, and jokes might have been interpreted as camaraderie, sociability, and friendly jibes. As it was, however, her remarks appeared to do little to bolster their mutual rapport. Vanessa, on the other hand, appeared to provoke Paula from a more competitive, slightly supercilious angle rather than any direct aggression or destructive behavior. These unequal levels of mutual trust and confidence may have ultimately

contributed to misunderstandings and tensions that damaged their ability to perceive and resolve conflicts and contradictions in their project content, their design, and with one another.

*Expectations.* Vanessa and Paula not only began with certain expectations of one another, but also of the amount of effort and time that would be required to complete the project, the potential outcomes of their efforts, as well as their beliefs about the purpose of the activity. The participants' expectations and beliefs were borne out in some cases, but not so in others. More importantly, however, these prior notions colored the activity through their choices, behaviors, attitudes, and concerns.

*Expectations – Effort and Time.* Neither Vanessa nor Paula appeared to ever have any real idea of how much effort or time would be needed to complete the project. They continued to underestimate what would be required from the moment they started until they ran out of time at the end of their last work session.

In terms of effort, Vanessa stated in her pre-interview that, in general, the project would not be hard to complete. When pressed as to what she thought would be the most difficult element of the project, she said that it would be in recording enough video with which to work. As for the simplest aspect, she stated that the editing would be the easiest because it would be fun to do (see Motivation above). Paula, however, was far more prescient and stated right from the beginning of her pre-interview that she felt that the project was going to involve a great deal of work. She did remark, however, that perhaps she had an advantage in that she was comfortable with the technology, and that she had the convenience of currently teaching on campus. When asked specifically about it, Paula responded that the most difficult part would be editing the video clips into a single

video. For her, the easiest part was what Vanessa had said would be most difficult: getting the video with which to work. Echoing her earlier statement about advantages, Paula felt that the easiest part of the project would be “just teaching and ... recording, I mean...I gotta teach every day.” In her post-interview, Paula confirmed that the editing had been the most difficult aspect of the project. She mentioned how difficult and time consuming it was to tweak even one small aspect of the video.

Their assessments of the workload may have guided their early behaviors in the activity, which had repercussions for the overall outcome. First, Vanessa’s worry that it would be difficult to gather enough video may have influenced their decision to record their teaching examples before they ever met to work or make a project plan. Without the plan, however, there was no guarantee that what they recorded would appropriately exemplify what they were going to discuss. Vanessa confirmed this in her post-interview saying that they expressly wanted to record first so they would have a lot of footage from which to choose examples. She confirmed that once they had the video, they then sat down and listed what would go where and who would explain or introduce the topics and their corresponding examples. In the end, their efforts to match the video that they already had to the explanations of their topics may have contributed to a narrowing of their focus to such an extent that they failed to verify their assumptions or expand their understandings.

Their underestimations of the amount of time that would be required matched those of the estimated workload. When Vanessa said in the pre-interview that they had their example video but had not yet met or done any work, the researcher remarked that, even if the video might provide the teaching examples, there would still be a great deal of

explanatory and foundational work that would be required for the project. Vanessa replied, “We’ll see if, if we can get that done today” (Note that the pre-interview with Vanessa was scheduled just prior to her first formal meeting with Paula to work on the project. This meeting was to last approximately two hours).

That Vanessa felt that she and Paula would be able to plan, research, compose, record, and edit together the remaining pieces of the project in one afternoon was indicative of either a critical misunderstanding or a significant underestimation of what was required. At the end of the interview, Vanessa reiterated her hope that the project would not require too much time, as well as her expectations that they should be able to complete it in one, or possibly two meetings. Paula was less clear in her pre-interview about her expectations of the time required. In accordance with her anticipation that the project was going to involve a lot of work, she did state that she felt it was important that they get an early start.

Even once they began work on the activity, neither Vanessa nor Paula appeared to develop a sense of the amount of time that the project would require to complete. Even nearing the end of their first meeting, when all they had actually completed to that point was a title page, Paula suggested, “maybe next Friday, if we can get everything else set up, then, [...] tape ourselves, and then just add it in that day... and then we’re done.” She seemed to be, like Vanessa, condensing the required research, organization, and editing that would need to be done into a vague notion of “everything else.” Their perceptions appeared unchanged well into their second meeting. They were thinking of a way to avoid being on video that day, so Paula suggested:

**Paula:** If you wanna, like, record all this stuff, like, on another day, I mean, you know, it's up to you.

**Vanessa:** Aye yay yay, I wanna get this done.

**Paula:** No, what I mean, if we can get *everything else* done and we're pretty sure what we're gonna do, I mean... [*italics mine*]

**Vanessa:** Oh yeah.

**Paula:** That way we can have it written out, and, like, the recording won't take long once we have things written out.

Near the end of that same session, little had changed as the topic of continuing on for more time arose. Paula's response was, "I don't want to be here too much longer." She decided, however, to stay long enough to record her audio piece on comprehensible input, "cause then pretty much all you have to do is work on [doing] the same thing [for listening] and just type in the little stuff." Moments later she reiterated, "I think after you do your part about the listening it's not gonna take that much time (waved off with hand, dismissive head shake and facial expression) to introduce the videos." Vanessa agreed with her. When they reached the end of their time for the third session, they realized they still were not done and that they would have to meet again. Paula said:

The only thing we need to do is the conclusion, so I'm thinking, if you want to, why don't we go ahead and, like, record the conclusion today, so next time we meet, all it really is gonna be a matter of, like, the slides, and where to put them.

That way we can have at least all the recordings it's done.

A few minutes later she added:

We're probably gonna plan right now, tentatively, for two more hours next Wednesday cause we're almost done all we have to do is, like, write up the conclusion and then we just have to record it. And then it's just, like, a matter of adding the transitions of the slides and so we're hoping we can get done next week.

Once again, they did not seem to appreciate the amount of time it would take to complete the remaining work. Hours into their fourth work session, the mismatch between their expectations and reality in terms of time seemed to become apparent, at least to Paula. She indicated her impatience with the project by becoming agitated and telling Vanessa to just abandon or narrow the scope of what they were attempting to do. For example, when Vanessa was having trouble opening a file, Paula sharply said, "Aw who cares?" Minutes later as Vanessa was tweaking a photo:

**Vanessa:** It'll just take one second.

(Several seconds passed)

**Paula:** (Sighed loudly through nose, irritated)...

**Vanessa:** It doesn't seem to want to do...

**Paula:** You know, just forget it, I mean, just, whatever.

[...] I mean, seriously... That's good, then you have the pictures there and all that stuff.

Summing up their experience in her post-interview, Vanessa stated:

The hardest thing for me was the time, was making sure that we would have enough time, especially toward the end when I was like, okay we have three hours, we have to get it done in these three hours, and then those three hours come

and go and we got half of what we thought we'd get done. It was like, 'Ohh, man!' So then it was like, 'okay so when can we meet again?' and look at the calendars, 'well its due here and I really wanna get it done by this time. So that ended up being the hardest part.

One of the apparent causes of their inability to estimate the amount of effort and time that would need to be invested was their inadequate plan. Their plan (see Planning below) had been so sketchy that they not only seemed to take for granted the small jobs in between the larger tasks, but they continued to uncover and add on new tasks. Their failure to ever establish a substantive plan (let alone a storyboard, as was recommended) seemed to play a significant role in their inability to comprehend how much time they would need, because they not only never fully understood what they had completed, they were not able to gauge what remained to be done.

It should also be noted that their inability to estimate effort and time also caused them to have to narrow the object of the activity. According to Vanessa in her post-interview, time was the reason they chose not to go ahead with their original news anchor idea (see Creativity below). "We just ended up using the audio and then showing things on the screen and that made it easy because we could just do that where we were at and didn't matter if we had make up on or not or if our hair was in a mess or not."

*Expectations – Project Purpose.* One of the topics broached by the researcher in the pre-interview was the purpose of the assignment. When directly asked to give her opinion as to why this project had been included as part of the course and what she believed the designers of the curriculum had hoped she might learn from it, Vanessa stated, "... if you spend a lot of time on a particular topic, you'll learn that topic inside



and out, and so, I think it gives you an opportunity to really research it, and to really develop information for that specific topic.” Paula’s response was less reflective: “I have no idea to be honest. I mean, I’m sure there’s a reason behind it, I don’t know what, time maybe will clarify some things but, at this time, I’m not that sure.”

Their responses could not have been more different. On one hand, Vanessa appeared to fully grasp that she was to look beyond her current levels of understanding of the topics, and delve into an in-depth, critical inquiry in order to “develop” her knowledge. On the other hand, Paula stated that she did not know the purpose at all.

*Expectations – Professionalization.* The researcher asked the participants both before and after the activity if they thought they might take anything away with them from the project into their teaching. She then followed up with a question about whether completing the project would affect their sense of themselves as knowledgeable professionals poised to enter the teaching profession.

In the pre-interview, Vanessa was unspecific, first bringing up her prior teaching experience, then referring to the foreign language education program in general saying that she’d learned “a lot from my classes in different strategies, and different things to do.” In the post-interview, when asked specifically if she thought she would employ the concept of comprehensible input or work to enhance her students’ listening skills in her future teaching, Vanessa replied that doing the project had made her more aware of comprehensible input (she did not mention listening skills). She said that doing the project took the notion from just a recommended practice to “more of a clear view of how and why exactly it should be used, and good ways to use it.” When asked if the project had professionalized her in any way, she replied that it had not, then added, “Well, it

doesn't help, that mostly, at least towards the beginning it was (dejected voice, slumped body) another project we have to do, and thank God this is going to be my last semester that I'm taking classes." She added:

I think I'm going to feel more teacher-ized once I finish the internship, and actually have had another cl-, well, I've taught before, but to have another class...that's... sort of... 'mine' quote, unquote, and it'll be in a different setting, too. I taught elementary before so teaching in high school is going to be a different experience altogether. I think then I'll feel more professional because I would have taught K through eight, and then high school, and then I've taught here in college so, it's like I've been all, the whole spectrum.

In Paula's pre-interview, the only thing she stated that she might take away with her from doing the project was perhaps more skill with technology. When asked pointedly if she would take anything from the content of the project into her teaching she very succinctly said, "no." In the post-interview, Paula also only responded on the topic of comprehensible input, saying that the project, particularly in the making of the example instructional video in her class, had led her to "try and use it as much as I can now." Later in the same interview she said that she'd learned a lot this semester, "and not because of this project, but because of the class overall." She then added, "I mean, it definitely helped me be able to teach a little bit better to my class, so I did learn a little bit from it, yeah." As for the question on professionalization, Paula's response was a straightforward, "No.... I just saw it as a project that I had to do for class, I can't say it made me a better professional."

*Creativity.* Due to the visual nature of the project, the participants were frequently involved in dialogue concerning its design and presentation. Indeed, these topics were already under discussion before Vanessa and Paula had even established a rudimentary presentation plan.

*Creativity and Design.* Throughout the project, Paula offered considerable input on design features, such as transition types and speeds, background screens, text fonts, sizes, and colors, and the like. Paula was willing to pay attention to the basic design features above because she seemed to view them as a normal part of putting together a video. Paula often wanted to add variety by changing the elements from screen to screen, and choosing features such as pretty, but difficult to read fonts, and attractive, but busy backgrounds. As the project drew to a close, however, and her impatience with being done increased, she not only lowered her design input to a minimum, she began to discourage Vanessa from spending time on anything but the most basic features.

Vanessa, on the other hand, appeared to have a better sense of design elements for the purposes of consistency and clarity, such as maintaining a uniform background color, font type, and transition format throughout the presentation. To Paula's occasional mild disappointment, Vanessa chose a bold, easy-to-read font, a basic background to contrast well with the text, and a single, simple transition type. An example of their differences can be seen in the following exchange as Vanessa was connecting their "slides" to the video examples:

**Paula:** Let's see some cool [transitions].

**Vanessa:** I'm just gonna use the same one, just to make it consistent.

[...] Otherwise you get all kinds of different transitions, (looked up at researcher), it looks kind of funky.

**Paula:** See, yeah, I'm all about consistency but, I just think it's boring after awhile (laughed) I guess, I don't know why.

To Paula's greater annoyance, however, this attention to detail and consistency required time to go through the video and match features in order to get it right. This was time that Paula saw as wasted, but Vanessa was insistent on taking.

*Creativity and Presentation Format.* The majority of their early activity in the project was oriented toward aesthetic decisions and creative wording, rather than content. For example, Vanessa's first priority when they began editing the video was to choose a background for their title screen. Eleven backgrounds later they agreed, temporarily, on an ocean-like screen. Paula joined in for this part, animatedly offering her opinions and suggestions on colors, fonts, and playback lengths and speeds. To conclude their opening screen, Vanessa wanted to avoid writing "By Vanessa and Paula" as she saw it as too "elementary school." It was Paula, however, who came up with a humorous and creative means of adding their names with, "How about 'Carrera-Cordero Productions'?"

A critical drawback in their attention to creative detail was that they gave it priority over the far more significant work they needed to do with the content. Had they used the time instead to look into their topics, and verify, correct, and deepen their understandings they would have likely enjoyed a great deal more success with the final product.

Aesthetic choices and creative wording not only outweighed content, they also overshadowed the planning process. For example, during their first meeting, they had

settled down to discuss an outline of the presentation and to make a plan to follow as they worked. Paula frequently interrupted with disjointed ideas on specific content and design issues. Vanessa attempted to return them to the process of planning the sequence of the video project, but Paula steered them back into a discussion of design by suggesting they videotape themselves speaking, but insert text over their heads so their input would be “comprehensible” to their viewers. Vanessa countered that they could instead just have text on the screen, with audio recordings of their voices playing in the background. Vanessa immediately contradicted her own idea and suggested, laughing, that perhaps they do the whole video presentation in the role of news anchors. She added that she thought that doing so would “keep people’s attention better, too.” Paula appeared to like the idea, but stopped first to look at the rubric to see if there were any points for creativity. She discovered that there was a section on using the video format to its potential, and then agreed to the idea, adding, “I think [the professor] would get a kick out of that.” Vanessa agreed saying that if she were the professor she would enjoy it.

This was an important moment because it was then that both Vanessa and Paula became (temporarily) motivated by the potential for creative enjoyment in doing the project as exemplified in the following clip of dialogue:

**Paula:** You can play music while that’s going on...you know...a little...theme. [...]. (Inhaled sharply, opened mouth and briefly lifted fingertips to lips) Oh my God! I just had this good idea, *unintelligible*, we could put it right on the thing (pointed to screen) umm, what is it called, an editorial, what is it called when it’s a special edition, kind of news?

**Vanessa:** Newsflash?

**Paula:** Or a newsflash, or something like that, or, like, a special report...comprehensible input and listening skills, a special report by...(smiled)

Minutes later, Paula added:

**Paula:** You know what if you can find a news, kind of

**Vanessa:** Music in the background?

**Paula:** Yeah, like, dodooodoodoodoodoo, (laughed aloud while speaking) a little typing in the background.

Paula continued to interject creative ideas, such as putting still photos of themselves on the screen while playing audio in the background, in the style of a remote news correspondent calling in with a report. Paula stayed focused even as Vanessa exuberantly digressed, suggesting things like using scrolling text “like, Star Wars, where it’s going up the screen” to explain their topics instead of audio. Paula agreed that this would be humorous to do, but that it would distract from their news anchor theme, which she reiterated she would very much like to do.

The significant downside to this creative excitement was that both young women were completely distracted from their original, critically important task of making a plan for the project. Unfortunately for them, they were never able to create more than an abstract, fragmentary plan, which was a problem that plagued them until the final moments of the activity.

Another adverse development was that, in addition to losing their focus on the content and the planning aspects of the project, the time they had spent on creative notions for presentation was almost entirely wasted. Vanessa and Paula’s plan of pretending to present the topics in the role of news anchors wordlessly seemed to fall by

the wayside, giving way to a more lackluster delivery. The creative use of the video medium to deliver their information quietly reverted to Vanessa's first suggestion of showing a text-based screen supplemented with recorded audio. The creative aspects of the project were then reduced to basic design choices, such as selecting screen backgrounds and font sizes, and the level of excitement dropped precipitously. There was a corresponding fall in their level of creativity-inspired motivation, which was gradually subsumed by the goal of finishing as quickly as possible. For example, in the third meeting, Vanessa proposed that she might have some "classical baby music" on her computer that they might use in the background, to which Paula responded with relative indifference. Later, as Vanessa was trying to figure out a way to have text appear on the screen to match the audio, Paula said, "You don't have to do this whole [line by line thing], you can just...girl, save the work on yourself, just have it all come up at once."

While there was no guarantee that it would have made any difference whatsoever to their content, had they gone with the news anchor plan, they would have at least met the rubric requirements that a) "Graphics, realia, visuals explain and reinforce the presentation;" and b) "Uses video enhancement features to reinforce presentation (uses video to potential)." As it was, they went with a PowerPoint format, showing text-based slides and still images, interspersed with an occasional "example video."

*Creativity and Content.* Paula, however, appeared to have a better sense of where to be brief and where to be wordy, whereas Vanessa erred in both by trying to place too much text on a page, or not saying enough and trying to let the "video speak for itself".

Once they completed their introduction screen, they were then forced to consider what would come next. They reviewed their plan, which contained some information

about sequence, but none about design.

**Vanessa:** Should we define [comprehensible input] with the text on the screen?

[...] Or should it be one of us defining it?

**Paula:** I think [the professor] would want us to be more creative, she doesn't want just someone talking instead of just text all the time, you know?

**Vanessa:** Right

During their second meeting, Vanessa mentioned that she was having trouble phrasing things the way she wanted to because she didn't want to sound as though she was addressing the rubric point by point, rather she wanted to try "to incorporate it all in without making it so...obvious." It should be noted that while this may have been a worthy goal in terms of harmonious and fluid design, it perhaps did not serve them well in the end when they were assessing how well they had met the requirements in the rubric.

In Paula's interview, the researcher recalled her earlier comment that the project was constraining because the content limited the possibilities for creativity, and asked if there had been more freedom in some way would she have enjoyed the activity more.

Paula replied:

I think just cause of what we had to be able to achieve, this wasn't fun. I mean, better if it could be about a lesson, that's always so fun, you know, I mean that's always so interesting. I mean, in terms of being creative, I don't know, I mean, it'd be different if you telling people, okay, make up a TV show and videotape it. But asking if we covered, this, this, this, that I would see as more constraining. I



mean, you really only allow so much freedom when pretty much you're being told, okay, talk about this subject.

The researcher found this interesting because Vanessa and Paula had originally planned to do their video as news anchors on a TV show, but abandoned the idea. The other issue was that she appeared to want to make a video on something of her own choosing, such as a lesson plan (though the project did involve the delivery of a lesson).

In the end, their interest in creative design and delivery at the outset of the activity usurped the need to construct a project plan, as well as to override the necessity of researching their topics. It also consumed valuable time, which was ultimately wasted anyway as their creative ideas were abandoned in favor of a text-based format.

***Distractions.*** Distractions appeared to play a role in Vanessa and Paula's difficulties in staying focused on the project as a whole, as well as in staying with an idea long enough at a stretch to analyze, investigate, reflect on, and revise or enhance it into a more fully developed concept. Some of the sources of distraction came from outside sources, and were usually out of their control. Other sources came from within themselves, and were related to things such as bodily needs, personality (particularly sociability), and attitude toward the activity.

***Distractions - External.*** Throughout the project, there were many distractions from exterior sources. Sources of distraction ranged from room temperature, to other people, to the video itself as they were editing. Unfortunately, these distractions occasionally came along during moments of serious discussion, and resulted in a complete derailment of the conversation and train of thought. Vanessa and Paula were rarely able to recover from distractions and return to their original points of discussion.

For example, in their first meeting, they were discussing the sequence of their presentation and the content of their conclusion. While speaking, Paula caught sight of herself on camera as the video was being played back on Vanessa's computer. She switched instantly from her ideas for the conclusion to "This is me in the second class here." They began to discuss the person doing the videotaping, and then an example they might use for comprehensible input, thus completely altering the thread of their conversation.

In the second meeting, they met at Vanessa's home. Vanessa's mother was there for the day taking care of Vanessa's infant. The child offered minimal distractions apart from an occasional cry or gurgle audible through the baby monitor Vanessa had nearby and the times she was required to break to feed him. Toward the end of their meeting, Vanessa's mother had to leave, so the baby was moved to a swing next to the worktable. He then became a much larger distraction, cooing and crying as they tried to record, and a source of interest for Paula. In their fourth meeting, the baby was present the entire time, though he slept for part of it. When he awoke, Vanessa was frequently distracted by the sounds he made, and launched into several stories about the baby and his various activities and behaviors.

Starting with their third meeting, Paula was increasingly distracted by communication with outside people and by other, non-related work. She brought along her own laptop computer and set it up beside Vanessa's. She was already typing away at her computer before they even began their meeting, and continued as Vanessa played back and tweaked segments of their video. She offered occasional interest and feedback, but her attention was clearly divided. Paula's cell phone was a distraction as well, with

the occasional buzzing, and Paula slipping out for significant stretches (fifteen minutes or more) to answer her phone. In their fourth meeting, Paula avoided looking at her cell phone for the first hour, but then began sending and receiving text messages. At one point, she left the room and went outside to talk on her phone for approximately forty-five minutes. Vanessa had told some of their classmates that they would be working on the video so they could chat online together if they wanted to discuss the project. Vanessa soon realized that all of the chatting was off-topic anyway, and that it was more of a distraction than a real help.

*Distractions – Internal.* Other types of distractions came from within the participants themselves. Paula was most prone to them, and they increased in frequency as the activity progressed.

Hunger and food were recurrent sources of distraction throughout the project. When food was available, such as happened with the snacks Vanessa provided in their second meeting, both of them were prone to losing their train of thought as they reached for a bite of something. When food was not available, Paula often talked about food, either in terms of hunger, particular favorites, nutritional information, or diets.

Exhaustion and physical pain were also frequent themes during the project. Again, Paula seemed to experience more trouble in these areas. Throughout the second and fourth meetings, Paula looked tired, and often stated how sleepy she was. She often had trouble staying focused on the project, her gaze very frequently wandering off and her attention with it.

In one example:

**Vanessa:** Okay so that could...introduce one of mine, right?

(Glanced between Paula and screen)

**Paula:** (Still resting head on fist, looked bored or tired, stared into space, unresponsive)

**Vanessa:** The background knowledge, *unintelligible* to use background knowledge...Or I could put that after one of my...

**Paula:** (Lifted head slightly) Let me hear it again...

In terms of pain, Paula seemed to be having considerable discomfort with her hair, even commenting how much her scalp hurt. She could often be seen massaging her head, completely distracted from the work Vanessa was doing. Vanessa began their third meeting with what appeared to be a very bad headache, causing her to frequently rub her forehead and eyes. Throughout the meeting, she was irritable, often sighed sharply and used an occasional expletive.

To Vanessa's detriment, Paula's personality could be somewhat distracting at times. She occasionally hummed, or sang, played a little clapping slapping game on her hands and knees, or danced around. More significantly, Paula would frequently interrupt Vanessa's focus with an incongruent comment or question. For instance, Vanessa was working at the computer, getting the equipment set up for them to begin uploading and editing video:

**Vanessa:** Okay...Now, the only thing I, I didn't do was, ummm I, I didn't

**Paula:** (Interrupted, asked loudly) Listening, reading, writing, speaking?

**Vanessa:** (Turns to look at partner questioningly, then makes a lost, then slightly irritated expression).

**Paula:** Sorry, talking out loud, please go ahead.

Paula was also prone to spontaneously offer up commentary on other assignments, classes, classmates, or other unrelated gossip. When this happened, Vanessa largely ignored her or offered distracted backchanneling as acknowledgement.

This began to happen so frequently that Vanessa began to use low or inaudible self-talk as a means of maintaining some focus on her work, while continuing, but reducing, the distracted backchanneling to Paula in acknowledgement. For example, Vanessa was working on writing more for their introduction, while Paula was intermittently looking over the textbook for information on comprehensible input:

**Paula:** So.

**Vanessa:** (Began inaudible self-talk while typing).

**Paula:** So it is believed (Vanessa stopped typing and cocked head toward partner), I'm going to say 'it is believed...'

Paula said nothing after this for several moments, so Vanessa finally tried to return her focus to her writing, using inaudible self-talk to re-read what she wrote.

Vanessa's most troublesome internal distraction was an occasional tendency to begin talking about one thing, but get sidetracked onto other topics, sometimes at such length that the original topic was forgotten in the process. A prime example of this was when the researcher asked the girls pointedly if they had done any actual research on developing target language listening skills in students. Vanessa responded that what she had discovered thus far was related more to what a teacher might do to be comprehensible when speaking to students. This was an important distinction to make, and revealed a gross misunderstanding of the concept of target language listening skills. The opportunity to become aware that they were not on the right track and to clarify their

understanding was immediately lost, however, when Vanessa suddenly and excitedly launched into a lengthy description of an observation of a French class she had made at a local high school. The connection was that she was pleasantly surprised at how well she was able to understand the teacher (to add to the distraction, this was interrupted by a small side conflict with Paula, as well as multiple deviations from the main topic to add many descriptive details to her account of the classroom setting, the students, the teacher, etc.). She continued on animatedly describing in detail what she had observed, and then segued into a lengthy description of another class, this time Spanish, that she'd visited, including the details of a successful classroom reading activity. Paula, meanwhile, had begun to exhibit tired, bored, and somewhat annoyed body language, bringing Vanessa to eventually refocus and say suddenly, "All right. We need to get working here," to which Paula replied, "Yes, cause I'm asleep, [and] I don't want to go to sleep, cause then I won't sleep at home." By this time, the original topic of listening skills was long forgotten.

**Themes – Summary.** By extracting and examining the themes that emerged from the data the researcher was able to gain some important insights into the process. This helped to reveal how numerous, diverse factors came together to impact Vanessa and Paula's learning and professionalization.

**Activity Theory Analysis. Conflicts, Contradictions, and Tensions.** As stated in Chapter Two, an activity is an individualized, contextual, and flexible system. Activity Theory models are a means of graphically representing the interacting factors in an activity, as well as a means of reflecting some of the conflicts, contradictions and tensions that arise therein. These conflicts, contradictions, and tensions are important

because they are the turning points at which development is poised to take place. It is the act of resolving these problems that may bring about change in people (i.e. regulation).

Vanessa and Paula experienced many conflicts, contradictions, and tensions throughout the activity, offering many opportunities for learning as they might work to resolve them. Figure 10 illustrates an idealized model of Vanessa and Paula's activity as envisioned by the designers of the curriculum. This model can then be used to contrast against models of their actual activity, which illustrate the conflicts they experienced while working.

Several conflicts arose between the participants and the tools they needed to use to complete the project. In the case of technological tools, the problem arose less with the tool itself than with the division of labor related to it. As previously stated, Vanessa insisted on using her own camera, laptop, and editing software to create the video. As such, this barred Paula access to the technology. All of the technology-related tasks then fell to Vanessa, who alone had the opportunity to deepen her knowledge in this domain, by resolving small moment-to-moment conflicts in her understanding of the workings of the software. (see Figure 11).

In the case of reference tools, Vanessa and Paula had nearly everything they could need, literally at the tips of their fingers through their laptops. They had instant access to materials on the Internet, as well as to thousands of electronic publications available through the university library. Instead, Vanessa produced a lone methods textbook for them to use together to extract data. Due to a series of distractions, coupled with a lack

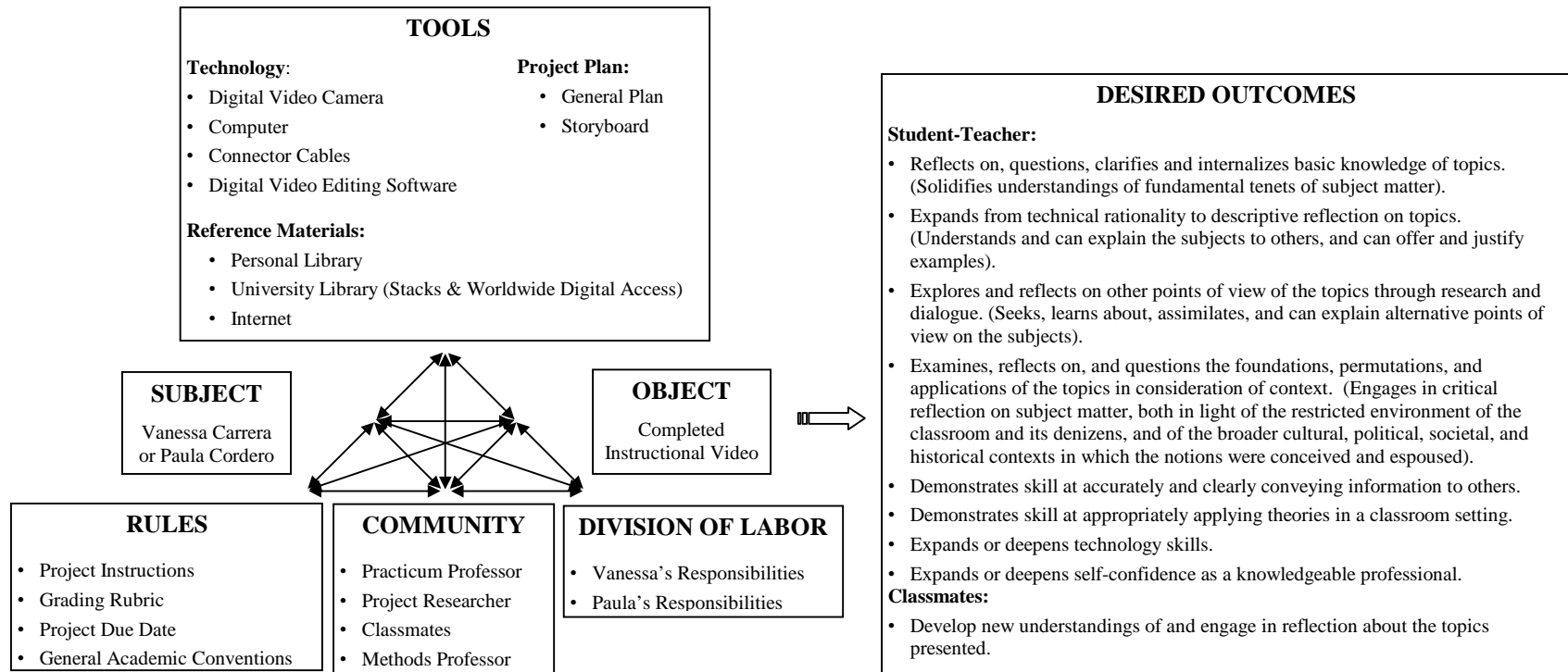


Figure 10: Model of the video project assignment as envisioned by the designers of the curriculum prior to activity.



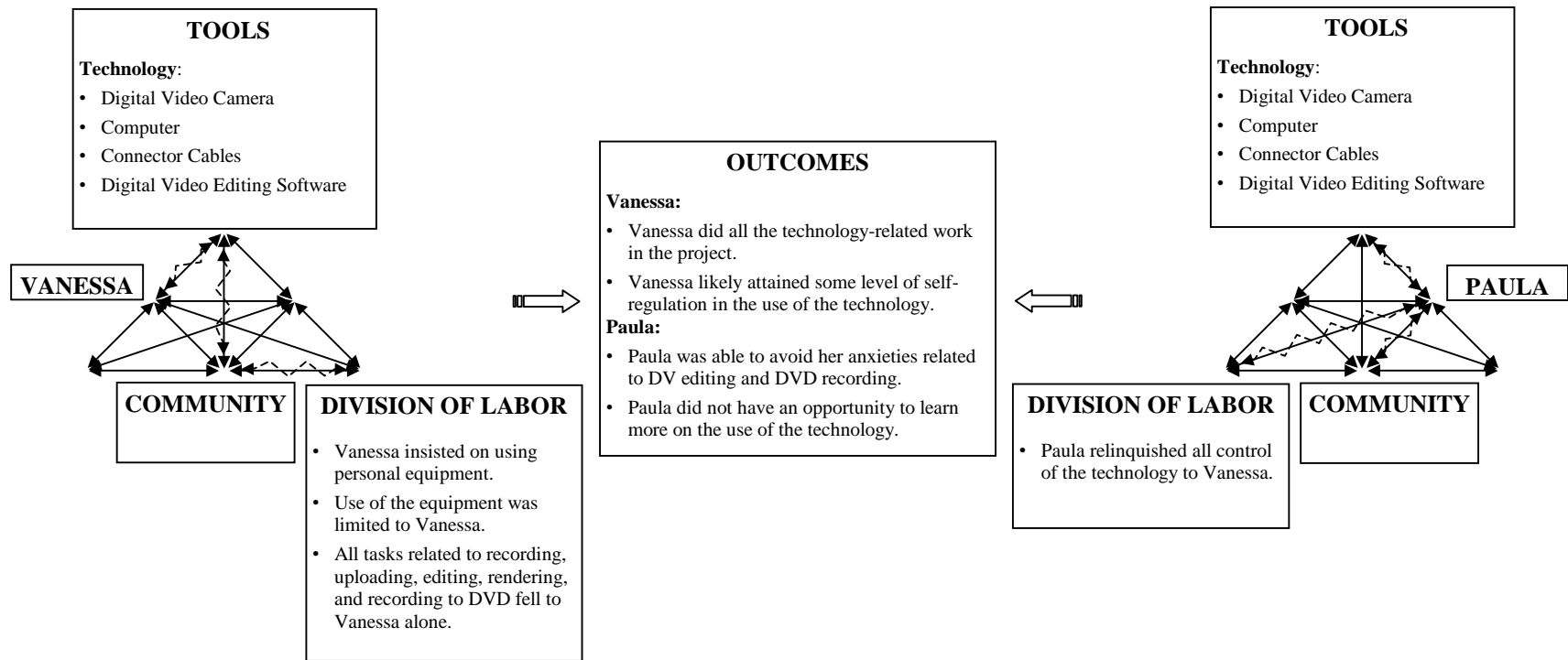


Figure 11: Model of division of labor issues related to technology use.

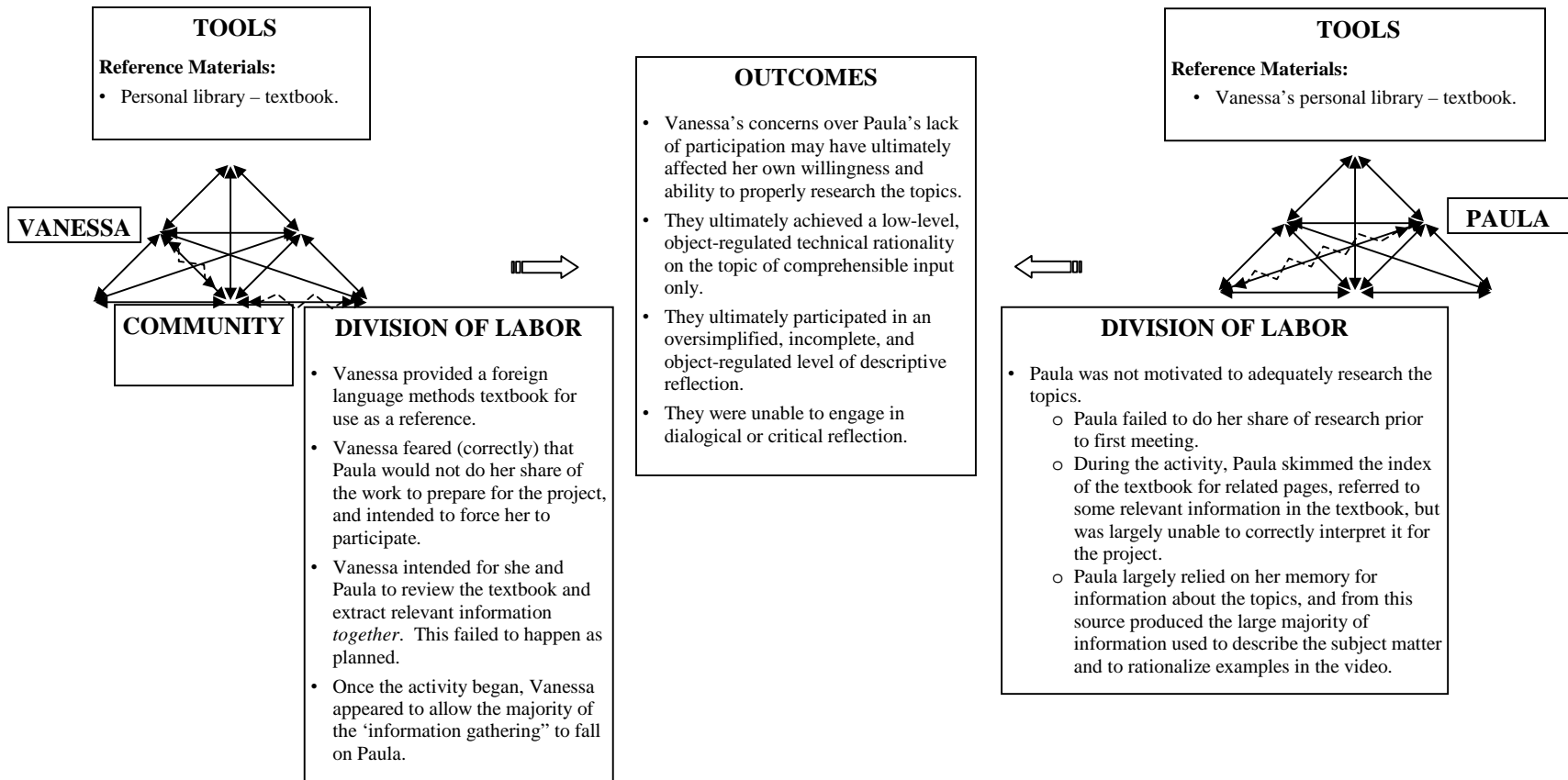
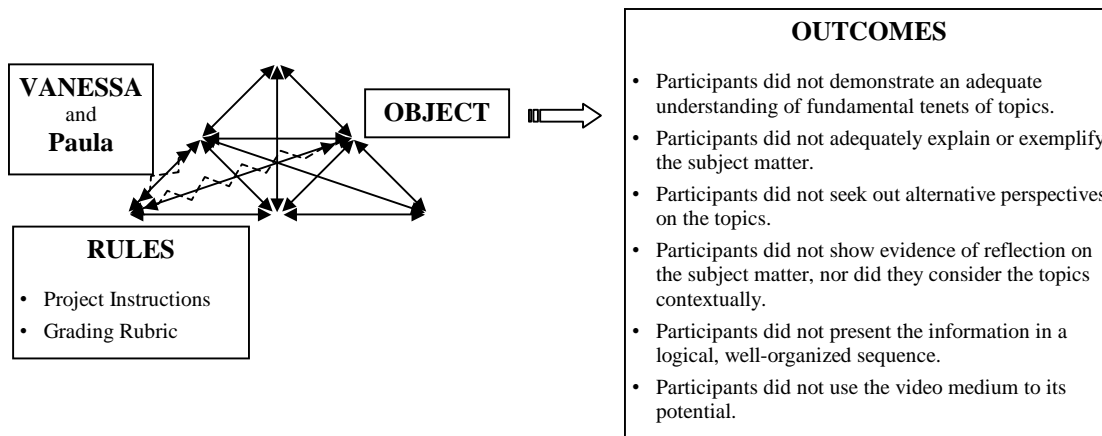


Figure 12: Model of division of labor issues related to reference materials.

of organization, they were unable to glean much from the text together. In later meetings, it was primarily Paula who skimmed this book not so much for information as for “ideas for wording.” Their choice to avoid doing even basic research appeared to be founded in their belief that they already knew the topics thoroughly, and that all they needed to do was to present this knowledge in video format accompanied by a few teaching examples (see Figure 12).

This belief may have presented another conflict, this time between the participants and the rules of the activity, in that they failed to thoroughly read the instructions or to confirm their understandings of the rubric, preferring instead to be guided by their impressions (see Figure 13).



*Figure 13:* Model of difficulties in reading and interpreting the instructions and rubric.

Their belief that they already knew the topics thoroughly also contradicted Vanessa’s statement in her pre-interview on the purpose of the project: “If you spend a lot of time on a particular topic, you’ll learn that topic inside and out, and so, I think it gives you an opportunity to really research it, and to really develop information for that specific topic.” In reality, they spent little time on the actual topics, did next to no research, and were unable to develop their understandings. In the end, there were many

conflicts and contradictions in their knowledge of the topics, but they were unable or unwilling to take the necessary steps to resolve them (see Figure 14).

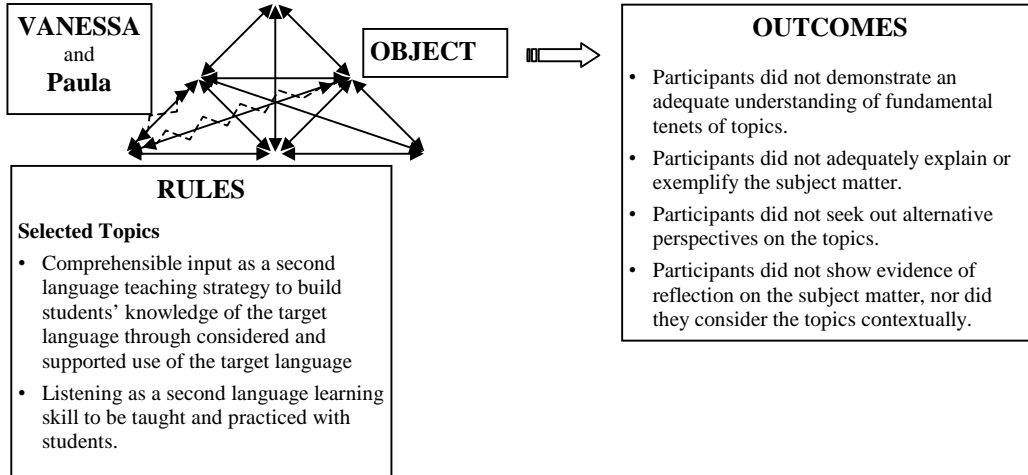


Figure 14: Model of difficulties in defining, describing, exploring, and reflecting on the topics.

The third major conflict of this type was tied to two tools that they first needed to construct and then make use of – a project storyboard and a project plan. They did not make a storyboard, and the plan they attempted to make was little more than a superficial outline of the order in which they would present their topics. This lack of direction as

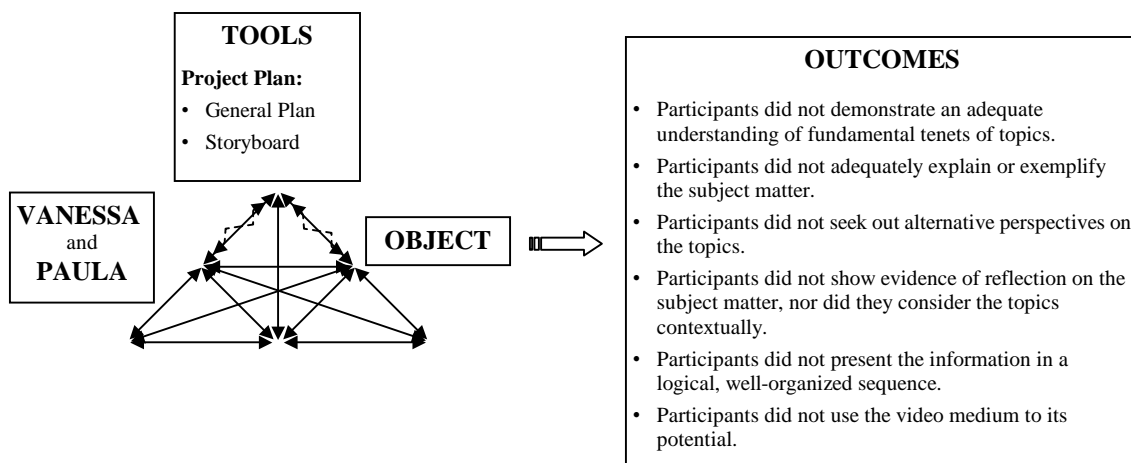


Figure 15: Model of difficulties in making and following a project plan.

they moved through the activity contributed to their difficulties in covering the topics adequately (see Figure 15).

In terms of conflict with community, the primary tension was between Vanessa and Paula. As stated above under Thematic Analysis, Vanessa's distrust of Paula made it difficult for her to question or challenge Paula's contributions to the project. As such, the necessary debate over content and examples was not able to take place, and they were unable to engage in the type of reflection that might have led to deeper understandings (see Figure 16).

Conflicts between the subject and the object of the activity were due primarily to lack of motivation and expectations that they would learn little from doing the task. One contradiction within this conflict was the fact that Vanessa stated in her pre-interview she understood the purpose of the project was to do in-depth research on the topics in order to develop her understanding of it.

In Vanessa and Paula's case, there were many instances of conflict, contradiction, and tension. Vanessa likely was able to resolve most or all of the conflicts she experienced with the use of the video editing software, allowing her to experience a positive change in her abilities. Apart from this, however, no other conflicts were ever completely resolved, which was indicative of very little change or development on their parts.

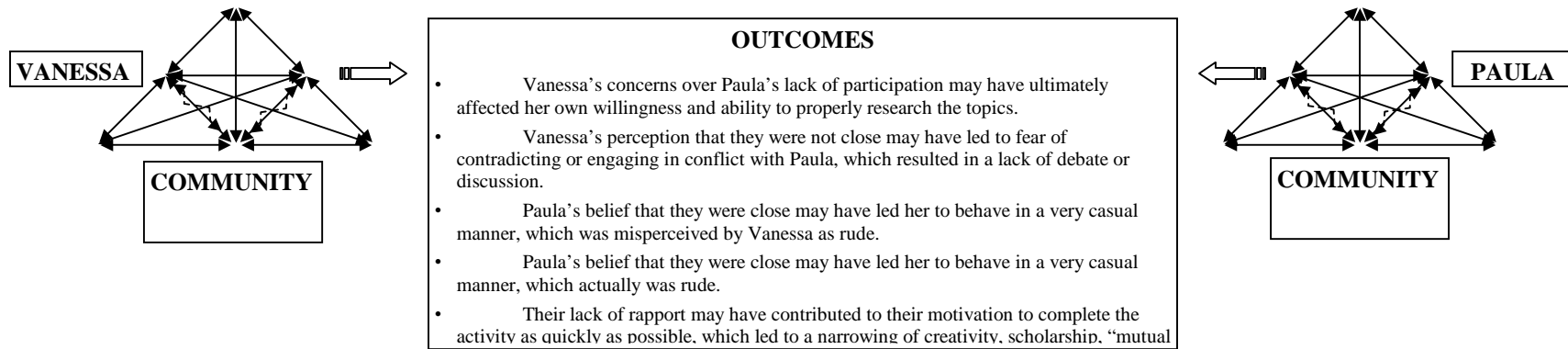


Figure 16: Model of personal conflict between Vanessa and Paula.

*Object Change.* Vanessa and Paula's inability to resolve satisfactorily the large majority of their conflicts led to a change in the object over time. In the majority of cases, the object narrowed, with some shifting and disintegration as well (see Figure 17).

*Object Change – Tool-Based Conflicts.* The conflicts Vanessa and Paula experienced with the tools in the activity certainly impacted the object. As for the technology tools, Vanessa took complete control of them, with Paula's permission, causing all of the video editing tasks to default to her alone. The editing was a very time-intensive task, and occupied the large majority of Vanessa's work time in the activity. This appeared to be one of many contributors to the narrowing of the object due to time constraints. Vanessa and Paula's inability or unwillingness to consult reference materials was another source of object narrowing, and in some aspects object disintegration. Their inability or unwillingness to construct a detailed project plan led to their omitting critical details, as well as their wasting time as they struggled to determine what they had completed and what remained to be done. This contributed to both a shift in the object due to lack of clear direction, as well as a narrowing of the object due to time constraints.

*Object Change – Rule-Based Conflicts.* As with the tools, the conflicts Vanessa and Paula experienced with the rules were also unresolved and contributed to object change. In the first place, neither of them appeared to give much attention to the project instructions, which were abandoned in short order anyway in favor of using the grading rubric as a guide. As for the rubric, they also gave it scant attention, and when they had questions about it, they sought no help or clarification from any source. When it came to their selected topics, they relied primarily on incomplete memories or improvised information that appeared to them to be logical. By largely ignoring the instructions and

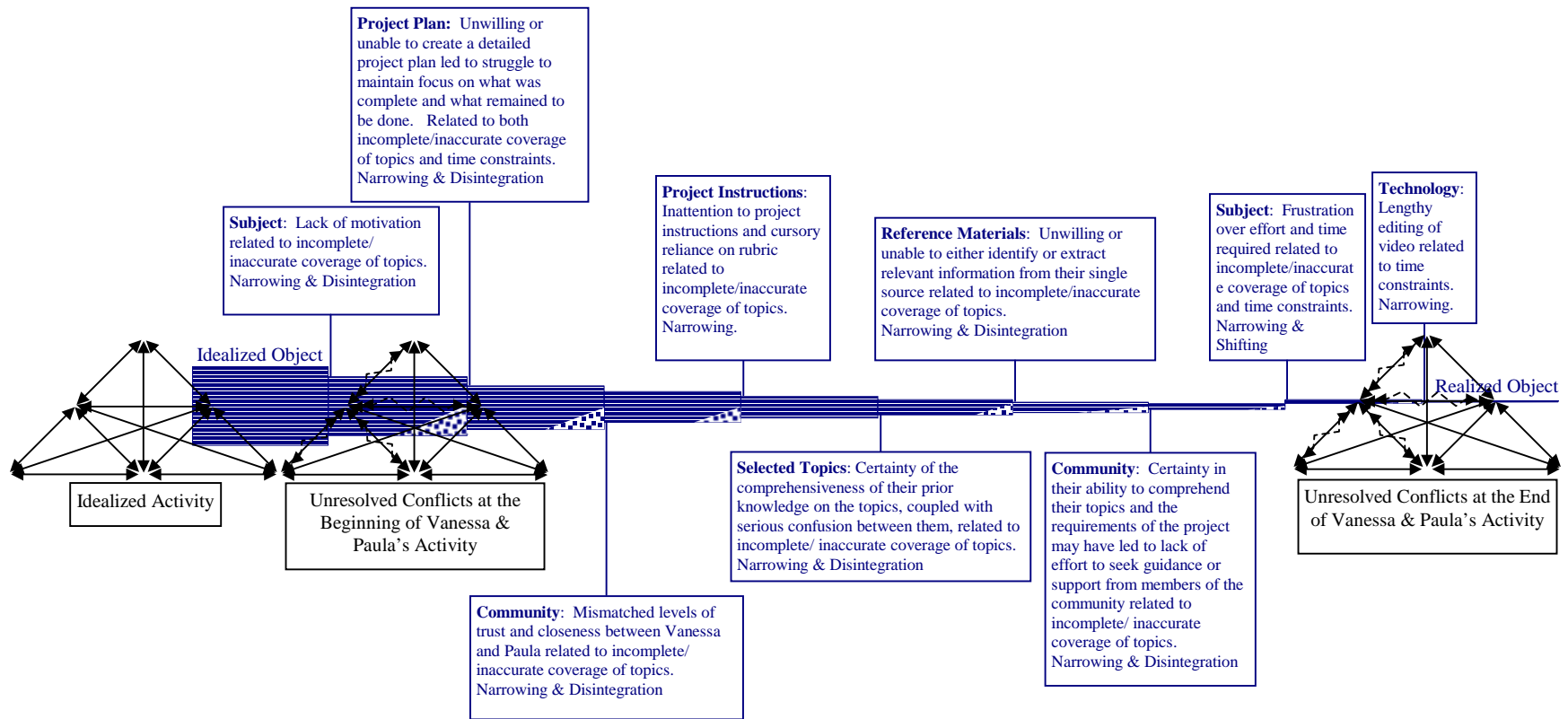


Figure 17: Transformation of the object over time in Vanessa and Paula's video project activity due to non-resolution of conflicts, contradictions, and tensions.



composing the subject matter explanations out of their “prior knowledge”, the object narrowed considerably, and partially disintegrated (particularly in the area of listening skills).

*Object Change – Community-Based Conflicts.* The most salient conflict related to community was certainly the difficult rapport between Vanessa and Paula. Vanessa’s distrust of Paula led her to avoid researching the topics. Her lack of closeness to Paula contributed to her reticence to confront her, leading to a lack of crucial discussion and debate. Their lack of communication with the surrounding community was less a conflict than perhaps a contradiction, but it was yet another readily available and critical source of help and information of which they did not take advantage. The shortage of trust on Vanessa’s part, coupled with the lack of dialogue between them and the larger community was yet another contributing factor to the narrowing and partial disintegration of the object.

*Object Change – Subject-Based Conflicts.* Finally, conflicts between the participants and the object itself also affected the object. While briefly motivated by a kind of “mutual excitement” kindled through the creative idea of designing the video around a news anchor theme (which was abandoned), neither Vanessa nor Paula was able to maintain any real enthusiasm for the project. While not particularly motivated, they both expected the project to be relatively easy to do, and to not require all that much time to complete. When this did not turn out to be true, they experienced frustration, and became wholly focused on just getting it done. The lack of motivation along with their frustration was another reason for the narrowing and shifting of the object.

For the most part, neither Vanessa nor Paula appeared to be aware of the changes in the object, apart from the disintegration of their original plan to construct the presentation around a news anchor theme. Had they been able to construct an actual storyboard, or at least a clear plan of action, there is a possibility that they might have been able to work more efficiently, and ultimately have prevented some of the object changes.

**Regulation.** The search for evidence of positive changes in the regulation levels of the participants was another important aspect of the data analysis. As previously stated, it was Vygotsky's view that a learner would engage in strategic behaviors to gain control of a difficult situation when the problems encountered therein were just beyond his/her ability to solve alone. He believed that these strategic behaviors involved making use of mediators in order to "regulate," or overcome, the problem. For example, if the learner should turn to an artifact (e.g. a book, a computer, a set of printed instructions, etc.) for answers, then in that instance, s/he would be considered to be "object-regulated." Similarly, should the learner look to other people for help, then s/he would be "other-regulated." In either of these situations, the learner would need to rely on something or someone else in order to achieve what s/he could not do alone. By using external sources for support, the learner is able to do, and by doing the learner is able to, hopefully, increase his/her competence over time. As competence increases, the learner can rely less and less on external crutches, and more and more on internal, or cognitive, resources. As the learner does so, his/her behaviors and language begin to emulate those of people more competent than themselves. This movement from the external to the internal, from other to self, is theoretically indicative of cognitive change (i.e. learning).

In the present study, the researcher conducted both a behavioral and a linguistic analysis in an effort to pinpoint how the participants were regulated throughout the activity. It was hoped that noting the levels of regulation and any changes thereto over time would offer insight into the student-teachers' learning process as they moved through the video project activity.

**Regulation – Behavioral Analysis.** Based on the situations presented in Table 6, Regulation Category Definitions, the researcher examined and coded both Vanessa and Paula's behaviors for evidence of the types of regulation in which they engaged throughout the activity. By and large, both Vanessa and Paula were object-regulated or other-regulated throughout the activity. Vanessa alone was able to achieve some self-regulation, but only in the area of technology use. The regulation category situations are briefly described and exemplified in Table 7 below.

Table 7:

*Behavioral regulation*

<b>Situation: When faced with conflict, contradiction, or tension within the activity:</b>	
<b>Object-Regulated</b>	
Vanessa and Paula:	
<ul style="list-style-type: none"> <li>• were largely satisfied with what was produced and decided by one another.</li> </ul>	<p><b>Example:</b>  <b>Paula:</b> Maybe one of the things you say about listening is that it's okay to teach [the students] by writing [...] like, basically, using what you just taught them. For example, they just learned how to say, "¿Que hicieron?" and then you're just doing the same thing, "Oh, ¿Que hicieron?" then you just <i>unintelligible</i> oh <i>unintelligible</i>  <b>Vanessa:</b> Right  <b>Paula:</b> So, something like that.  <b>Vanessa:</b> (Pointed to screen) See, the, there I had to write it on the board again because they, like...  <b>Paula:</b> (Interrupted) Repetition, repetition's a part of listening.  <b>Vanessa:</b> (turned back to screen with an acknowledging hand gesture – a <i>voilà</i> opening of the palm)  <b>Paula:</b> (Gesticulated as she spoke - revelatory) But at least you tried, you listened, and once they saw '¿Que hicieron?' written, they were, like, ohhhhhh, you know, they just got it, so without having to tell them it means what they do. You know?  <b>Vanessa:</b> Right.</p>
<ul style="list-style-type: none"> <li>• were bound by the</li> </ul>	<p><b>Example:</b></p>

language produced by one another.	<p><b>Vanessa:</b> Okay, so, what's our introduction gonna be?</p> <p><b>Paula:</b> Should we just do comprehensible ...colon...listening?</p> <p><b>Vanessa:</b> (Sounds out while typing) Comprehensible input: listening. Listening skills?</p> <p><b>Paula:</b> Mhmm</p> <p><b>Vanessa:</b> Okay.</p>
<ul style="list-style-type: none"> <li>were bound by the language of the textbook they used as a resource.</li> </ul>	<p><b>Example:</b></p> <p><b>Paula:</b> (Glancing through textbook) Oh! I like that! The theory behind this, which comes from Krashen, is umm, it really would focus on how learners actually process input into quote unquote 'connect grammatical form with their meanings' ...that's a good quote right there.</p>
<ul style="list-style-type: none"> <li>were unable to see significant ways of expanding or improving upon any of the above.</li> </ul>	<p><b>Example:</b></p> <p><b>Vanessa:</b> Does this make sense? (Reading what she just wrote) 'In the foreign language classroom students need to listen to the teacher speak in the target language in order to acquire the language and its accents'.</p> <p><b>Paula:</b> (Nodded slowly).</p> <p><b>Vanessa:</b> Does that make sense, or ...</p> <p><b>Paula:</b> Mhmm</p> <p><b>Vanessa:</b> You know what I mean? Acquire a language and its accents, like, how can I say that better? Acquire the language and...</p> <p><b>Paula:</b> Aaaand... developmlalah, uh, develop, no...and be able to speak in the target language with...an accent similar to that of a native speaker</p> <p><b>Vanessa:</b> Okay. Thanks.</p>
<b>Other-Regulated</b>	
<ul style="list-style-type: none"> <li>each allowed themselves to be guided by the other.</li> </ul>	<p><b>Example 1:</b></p> <p><b>Vanessa:</b> Okay, so for your, for you, the comprehensible input in this was you writing on the board.</p> <p><b>Paula:</b> (Stared at screen)</p> <p><b>Vanessa:</b> Okay?</p> <p><b>Paula:</b> <i>Unintelligible</i> language, right (raised brows questioningly)?</p> <p><b>Vanessa:</b> Right.</p> <p><b>Paula:</b> (Leaned back, confused, doubtful expression) I don't know if I would really say that's comprehensible input, like...(questioning, doubtful scowl) I mean, would you? Writing? I guess. (Vanessa gestured with brief wrist movement possibly acknowledging statement).</p> <p><b>Paula:</b> (Looked back at screen, with pained expression still) We were covering, auh, (head rocked, expression fell to serious) I guess so.</p> <p><b>Example 2:</b></p> <p><b>Paula:</b> Maybe if you do, like, a little transition right there in that <i>unintelligible</i> part, it would kinda, like, look cool.</p> <p><b>Vanessa:</b> (Overlap) <i>Unintelligible</i> transition here?</p> <p><b>Paula:</b> Yeah, in that open space.</p> <p><b>Vanessa:</b> Just, like, a zoom back out type of thing?</p> <p><b>Paula:</b> Yeah, or, like a, no, like we could do a little slide over (passed vertical arm in front of body).</p> <p><b>Vanessa:</b> Oh, okay</p>
<b>Self-Regulated</b>	
Vanessa:	
<ul style="list-style-type: none"> <li>was capable of independent problem-solving. Was able to identify difficulties and provide corrective</li> </ul>	<p><b>Example:</b></p> <p><b>Vanessa:</b> Why is it not working...any more?</p> <p>Okay, there, that's a better way of doing it</p> <p>Okay</p>

options.	It's easier to add them in that way than...this way.
<p><b>Summary:</b> When it came to conflict, contradiction, or tension, Vanessa and Paula were primarily object-regulated throughout the activity. When they were other-regulated, they usually led one another astray, rather than closer to self-regulation (with the exception of technology decisions). Vanessa was the only one to show much evidence of self-regulation, but this was only in relation to the functionality of the editing software.</p>	
<p><b>Situation: In terms of understanding the motive of the activity, the conscious goals of the actions, or the conditions required to achieve the goals:</b></p>	
<p><b>Object-Regulated</b></p>	
<p>Vanessa and Paula:</p>	
<ul style="list-style-type: none"> <li>• had an incomplete grasp of the motive, goals, of the actions, or the conditions required to achieve the goals.</li> </ul>	<p><b>Example from pre-interview - Paula</b>  <b>Researcher:</b> Why do you think somebody made this project part of the course?  <b>Paula:</b> I have no idea to be honest. I mean, I'm sure there's a reason behind it, I don't know what, time maybe will clarify some things, but, at this time, I'm not that sure.</p> <p><b>Example from post-interview - Paula</b>  <b>Researcher:</b> You said at the beginning that you couldn't see why this project was in the curriculum. [...] Do you still think that way?  <b>Paula:</b> Yeah. And the reason why is because, [...and] maybe there's more deeper meaning to behind it, my understanding of the purpose was to teach this to the undergrads, and the way I see it is, if we're sharing a class with the undergrads, they could have easily learned the same type of thing as we would do, without us having to do a video project <i>for</i> them. I guess personally, I don't really see necessarily, I mean... You know yeah, it's a good way to use technology, it's a good way to be creative and to work with others, and you know even with the topics that we had, we definitely could learn something from it that we can take with our teaching lives, teaching professions, excuse me. But I guess I...definitely don't understand why the graduates have to do something to entertain the undergraduates when they could easily do the same thing. I guess that's why I really didn't see much point to it cause I don't see it as something that its so difficult that only we would understand it to where they wouldn't. I think that they could learn the exact same things, they could even do the same things with technology you know I don't think its something that only graduate students can do. So I guess its probably why I didn't really see a point of the video, and I still don't understand to this day. I mean, if it's a part of the project, I mean, certain things like observing, I know why we observe teachers. It helps us understand what we're learning the books in the classroom and see it in practice. You know I've learned a lot from that. Doing the video project to show to people, if it was just a technology class, and we were using, like, more technology, you know, as you use I could understand it I would say okay then its purpose is this. Its not a technology class.</p> <p><b>Example from pre-interview – Vanessa</b>  <b>Vanessa:</b> If you spend a lot of time on a particular topic, you'll learn that topic inside and out, and so, I think it gives you an opportunity to really research it, and to really, develop information for that specific topic.</p> <p><b>Example from post-interview – Vanessa</b>  <b>Vanessa:</b> I think maybe having [the project] as part of a technology course would have been more, I don't wanna say appropriate...but I know that there are people that aren't as familiar with the technology, and for them it was sort of a double project because, “Oh my God, I have to learn this technology” and then, by the way, we have to do the project as far as the content. [...] But I think also that sort of technology you're not really gonna use in your classroom</p>

	as far as, I mean unless you do have your kids do a video project, but mostly you're not really gonna tape yourself teaching something, and then have to edit it and use it like that.
<b>Summary:</b> Paula appeared to be completely unaware of the goals of the activity and how to achieve them, Vanessa was able to state in the pre-interview that she understood the purpose of the activity to be to research the topics and learn them in depth. She also knew they needed some kind of plan. She was not able, however, to effectively set up the conditions necessary to achieve this.	
<b>Situation: As far as understanding the content of their selected topics:</b>	
<b>Object-Regulated</b>	
Vanessa and Paula:	
<ul style="list-style-type: none"> <li>• did not understand the fundamentals of comprehensible input</li> </ul>	<p><b>Example:</b>  <b>Paula:</b> See, pretty much, like, the way I always understand comprehensible input is something they can pretty much use for them in real life, you know, if you talk about traveling, people are gonna travel...  <b>Vanessa:</b> Right  <b>Paula:</b> ...so they can think, oh, this is just, like you were saying, even book because, you know, they go to school – book, and if we're talking about, you know, scientific theory, and none of them are science majors, its gonna be like, "When am I gonna use this?"  <b>Vanessa:</b> Right  <b>Paula:</b> So.  <b>Vanessa:</b> Well, and that was part of what was said in the book here.  <b>Paula:</b> Use gestures, too, yeah.  <b>Vanessa:</b> Well, gestures, but also the background knowledge.  <b>Paula:</b> Yeah.  <b>Vanessa:</b> They need to have background knowledge, so, like you said, if they're not science majors, how are you gonna...  <b>Paula:</b> Exactly.  <b>Vanessa:</b> ...explain that to them if they don't have background knowledge?</p>
<ul style="list-style-type: none"> <li>• did not understand the fundamentals of listening skills</li> </ul>	<p><b>Example:</b>  <b>Vanessa:</b> (Reading what she wrote) When teaching listening skills, teacher clarity is crucial for foreign language students, because without a clear understanding of what is being said, students will lose interest and stop listening to the teacher. This is where comprehensible input is an important part of listening skills. Listening skills can be taught at a very early age. As the students grow, their listening skills should become better and more detailed. It is a skill that all students need to develop, and will use the rest of their lives.  [...]  <b>Paula:</b> That was good.</p>
<ul style="list-style-type: none"> <li>• did not know how to explain comprehensible input in terms of practice</li> </ul>	<p><b>Example:</b>  <b>Paula:</b> I'm gonna talk about comprehensible input blah blah blah, then we're gonna talk about what we view, you know, what could be used as comprehensible input, such as transparency, PowerPoint, pictures, flashcards...</p>
<ul style="list-style-type: none"> <li>• did not know how to explain listening skills in terms of practice</li> </ul>	<p><b>Example:</b>  <b>Vanessa:</b> (Reading what she wrote) 'In the previous clips that we saw, Paula began to establish the background knowledge for the past tense of the target language. Now, they will have an understanding of how to speak and listen in the present and past tense. In the upcoming clips, I ask students questions relating to a video that they watched. I use the past tense as well as the present, since they now have been introduced to it.'</p>
<ul style="list-style-type: none"> <li>• could not translate use of comprehensible input into actual</li> </ul>	<p><b>Example:</b>  <b>Paula:</b> ...then we can show an example [of comprehensible input]...like, you know, with me doing the whole writing in the preterit tense or whatever like that, you know.</p>

practice	
<ul style="list-style-type: none"> <li>could not translate instruction and practice of listening skills into actual practice</li> </ul>	<p><b>Example:</b>  <b>Paula:</b> To target the listening part of comprehensible input, I am speaking to them only in the target language [...] not only am I speaking in the target language, but I'm slowing down and using repetition as Vanessa stated which is important to do, but as you see I am using gestures.</p>
<b>Other-Regulated</b>	
Vanessa and Paula:	
<ul style="list-style-type: none"> <li>were able to recall fundamental features of comprehensible input</li> </ul>	<p><b>Example:</b>  <b>Paula:</b> I'm just briefly gonna talk about Krashen's theory.</p>
<ul style="list-style-type: none"> <li>were able to translate some aspects of comprehensible input into practice</li> </ul>	<p><b>Example:</b>  <b>Vanessa:</b> Because if you have an actual book, and you can say "libro", they know what the book is...  <b>Paula:</b> Mmm  <b>Vanessa:</b> ...and they, they know that it's a book...  <b>Paula:</b> Right.  <b>Vanessa:</b> ...and so you don't need to say "libro" is "book" You can just say "libro."  <b>Paula:</b> Yeah, exactly.</p>
<ul style="list-style-type: none"> <li>allowed themselves to be led by each other without expanding their knowledge</li> </ul>	<p><b>Example:</b>  <b>Vanessa:</b> Well, first cover the method behind using comprehensible input in the classroom.  <b>Paula:</b> Mhmm...the importance of it.  <b>Vanessa:</b> And then, the importance of ...  <b>Paula:</b> Glisan's studies on foreign language...education?  <b>Vanessa:</b> g- in foreign language <i>acquisition</i>.  <b>Paula:</b> <i>acquisition</i>...<i>second</i> language acquisition.  <b>Vanessa:</b> Yeah.  <b>Paula:</b> Okay, cool. And that's Krashen's theory right there.  <b>Vanessa:</b> Basically.</p>
<p><b>Summary:</b> When it came to understanding comprehensible input as a teaching strategy and listening as a skill to be taught and practiced with second language learners, Vanessa and Paula were primarily object-regulated. To a small extent, they did recall a few fundamental, though highly disconnected and grossly incomplete, notions about comprehensible input. As they remembered these disparate bits of information, however, they offered them up to one another and were received without doubt or question as facts which need not be verified.</p>	
<b>Situation: In terms of technology skills and/or understanding how to best use the technology to present the content:</b>	
<b>Object-Regulated</b>	
Vanessa and Paula:	
<ul style="list-style-type: none"> <li>had trouble connecting the potential uses of the technology to the task at hand.</li> </ul>	<p><b>Example 1:</b>  <b>Vanessa:</b> I'm doing a slide one at a time.  The same slide, I'm repeating it, and I'm trying to ...fix it to where it's in the same spot so it looks like it's (rotated finger) a PowerPoint.  <b>Example 2:</b>  <b>Paula:</b> Like I said, my personal opinion is we could have done the same thing with a PowerPoint presentation, and it would have still conveyed the same message in you know less time and less of work, you know.</p>
<b>Other-Regulated</b>	
Vanessa:	

<ul style="list-style-type: none"> <li>was able to use the technology with assistance.</li> </ul>	<p><b>Example:</b>  <b>Paula:</b> There's a way to slow that down, isn't it?  <b>Vanessa:</b> Yeah, I think so, there has to be a way.  <b>Paula:</b> Ummm...Maybe...Duration? Oh, that's not, it's something else. Oh, that's six seconds. Oh! Hit up on duration and see if that makes it last longer. Cause it's only for six seconds, so maybe...Yeah, that, see if it makes it slower. It did! Ah!</p>
<ul style="list-style-type: none"> <li>was able to connect the technology at hand to the task in a basic manner.</li> </ul>	<p><b>Example:</b>  <b>Vanessa:</b> But, in part of defining comprehensible input, I think we should show, either pictures, or, like, clips of ummm... of comprehensible input...like, for example...(briefly placed hand on transparency).</p>
<b>Self-Regulated</b>	
Vanessa:	
<ul style="list-style-type: none"> <li>was comfortable and skilled with the technology.</li> </ul>	<p><b>Example:</b>  <b>Vanessa:</b> (Softly) I think I did something that's gonna work, hang on...  (Self-talk) Ahh! Yes...  (Self-talk) Okay what is it - the video  (Self-talk) Save...  (Self-talk) So then, this...I can take out, actually...  (Self-talk) And then...hang on...  I think I've got it  (Played video)  (Smiled and briefly put her arms up) Ah, Yes!  Okay!</p>
<p><b>Summary:</b> When it came to using the technology, Paula played only as small role as other-regulator, since Vanessa controlled all of the equipment and software. Vanessa self-regulated quite well when it came to the operation of the technology. When it came to using the technology to its potential as a tool, Vanessa and Paula experienced a brief moment of other-regulation that was moving toward self-regulation (plan for the news anchor theme), but then both returned to object-regulation in their decision to construct the video like a PowerPoint presentation.</p>	
<b>Situation: In terms of completion of an operation or action:</b>	
<b>Object-Regulated</b>	
Vanessa and Paula:	
<ul style="list-style-type: none"> <li>were largely satisfied with their contributions, while having little idea as to their appropriateness or accuracy in the overall activity.</li> </ul>	<p><b>Vanessa:</b> And then we need to define listening.  <b>Paula:</b> Listening's the student.....it's the student, you know, (waved hand toward self, over shoulder) intercepting what you're saying pretty much, I mean, I'm sure it's probably talking about a definition, but [...]  <b>Vanessa:</b> (Overlap) I mean, we don't have to take something from here (rested hand on methods textbook), like, if we can come up with, like, a good definition of it I think that would be...just as good.  <b>Paula:</b> I think, what might work, because I know right now that we're trying to separate it, but, like, maybe, you know, after you briefly define the thing you could say how this ties in with comprehensible input.  <b>Vanessa:</b> Oh, of course.  <b>Paula:</b> Yeah. So, like, listening occurs to me, like, the best definition I would think of, unless you have something better, would be the student intercepting (voice volume rose slightly, seemed struck with a good idea, smiled, dipped head to one side) and putting into memory what you're saying.  <b>Vanessa:</b> Okay, so let's write that down before we forget it.  <b>Paula:</b> Okay. So, listening: definition: So, your students intercepting – a very good word, or interpreting.  <b>Vanessa:</b> Interpreting  <b>Paula:</b> In-ter-pret-ing what is being told to them, or said to them. Why did I</p>



	say “told to them?” That was bad grammar, and putting it into working memory (Said sharply, with relish and a smile) Ah! I’m so good. We’re so awesome (raised left palm to Vanessa for a high five). <b>Vanessa:</b> (returned the palm slap, laughed) Okay.
<b>Other-Regulated</b>	
<ul style="list-style-type: none"> <li>were able to accept suggestions from each other, but still experienced problems due to their limited understanding of the content, the technology, or the task.</li> </ul>	<p><b>Example:</b>  <b>Vanessa:</b> The previous clip, where Paula was teaching background knowledge, is the basis for my lesson (looked over to Paula for confirmation)...  <b>Paula:</b> (Shook head) That wasn’t teaching background knowledge. That was establishing it.  <b>Vanessa:</b> Yeah, okay.  <b>Paula:</b> How about, “In the previous clips...  <b>Vanessa:</b> previous clips...Paula began teaching...  <b>Paula:</b> (Overlap) to establish a background knowledge for the preterit tense...  <b>Vanessa:</b> There you go (smiled and nodded head once, satisfied).</p>
<p><b>Summary:</b> When executing an operation or action, Vanessa and Paula were largely object-regulated, choosing to rely on their own perceptions rather than investigating or verifying their choices. They did regulate one another on occasion, accepting each other’s ideas, yet the ideas were often object-regulated to begin with.</p>	

**Regulation – Linguistic Analysis.** In addition to looking at their behaviors for evidence of regulation, the researcher examined and coded the language used by Vanessa and Paula as they worked through the project (see Appendix H for coding example). Examples of language that either supported or undermined the construction of their collective/individual knowledge offered insight into their strategic efforts to gain control within the activity.

**Productive Speech.** As stated above in Chapter Three, productive collaboration is an interaction or utterance that contributes to the facilitation of shared knowledge and establishment of intersubjectivity, and which may indicate movement toward self-regulation. As stated in Chapter 3, productive speech behaviors drive an activity forward, supporting the co-creation of an object through actions, such as providing or requesting support, constructing shared references, engaging in strategic interactions, and managing strategic behaviors. In Vanessa and Paula’s case, they engaged in a considerable amount of productive speech. Both employed supportive language, such as prompting,

confirming, suggesting, and guiding. Both made use of shared references and worked to negotiate meanings. As for strategic interactions and behaviors, they worked to draft sections of the video, they edited each other's work, and stopped periodically to recap. Of the two, Vanessa was more likely to request feedback from Paula, and she was also generally the one to pull them back on track after a digression. In spite of this, however, their productivity was extremely limited, resulting ultimately in a greatly diminished object (see more below).

*Constructive Speech.* One of the factors that appeared to contribute to the amount of productive speech in which they were able to engage was the use of constructive speech. Particularly toward the beginning of the project, they were generally courteous to one another, offering help, agreeing with one another, conceding to one another's ideas and suggestions, etc. Toward the end, there was a diminishment of constructive speech, which went hand-in-hand with a decrease in the need for productive speech as the project was underway, as well as an increase in destructive speech. Relating back to the section on Conflict above in the Thematic Analysis, it should be noted here that occasionally what was likely an attempt at Constructive Speech turned into Destructive Speech because of how it was interpreted (See Destructive Speech below).

*Destructive Speech.* In the beginning of their activity, the majority of what could be categorized as destructive speech was related to issues of focus. Both engaged in detractive behavior, such as sudden topic-shifting and occasional resistance to the suggestions of the other. Paula, however, was particularly responsible for frequently interrupting the course of events with non-sequiturs and topic shifts, occasionally accompanied by rapid-fire, incoherent conversation on items ranging from off-topic

suggestions for the video to office gossip. As the project continued, Paula in particular, engaged in increasing amounts of apathy, inattention, and occasional discourteousness. Added to this were, as mentioned above, Paula's occasional attempts at constructive dialogue in the form of friendly jibes, which Vanessa often appeared to interpret as discourteousness.

*Private Speech.* In light of Paula's distracting speech, Vanessa often engaged in self-talk, audible and inaudible as a means of maintaining focus on something on which she needed to concentrate. At these times, she would either not respond at all to Paula, or she would offer distracted and inattentive backchanneling. At other times, Vanessa appeared to engage in private speech as a means of self-regulating her activity, but only in the domain of the use of the software.

In sum, Vanessa and Paula's Destructive Speech outweighed their Constructive Speech, but not seemingly enough to cancel out all of their Productive Speech. In the end, however, their product was still inadequate. A closer examination of their Productive Speech may offer insight as to why this was. The linguistic markers of Productive Speech were, indeed, present. The substance of that speech was, however, relatively devoid of the content required to successfully meet the requirements of the assignment. It would seem that they knew something of the linguistic structures involved in carrying out such as task, but were unwilling or unable to endow those structures with the substance that would make them successful in their endeavor.

### **Study Findings**

In light of the present study then, it is to be noted that the "short-term, preservice intervention" (Wideen et al., 1998) that was the focus of interest, required that student-

teachers 1) recall language teaching approaches encountered prior to the practicum; 2) expand and deepen their knowledge concerning the theoretical foundations of these topics; 3) explore and explain the interpretations of these theories, including their endorsements and criticisms; 4) actively and collaboratively construct and reconstruct video-recorded microteachings to explain and exemplify these approaches, 5) reflect on this experience throughout and after completion of the activity. The focus of interest was the *process* engaged in by the student-teachers as they collaboratively recalled, reinforced, designed, planned, constructed and reconstructed the video, as well as the development of their understandings and professional knowledge.

### **Study Findings – Research Question 1**

**What cognitive transformations took place, if any, when student-teachers in a foreign language education program used video editing technology to learn about teaching?**

Ultimately, there was little evidence that the two chosen participants in this case study, Vanessa and Paula, were able to expand or deepen their content knowledge. Observations indicated either insufficient or ineffective use of mediating artifacts and productive strategic behaviors. Multiple factors appeared to come into to play in explaining why this occurred. One contributing factor was their cursory attention to and lack of understanding of the project's instructions, objectives, and purpose. Another element was the shallow understanding of the topics that they brought with them to the project, which was exacerbated by their apparent perceptions that their prior knowledge was actually quite sufficient. This seemed to connect to their disinterest in researching or reflecting on their topics in any meaningful way, since they were quite satisfied that the

knowledge they already had was adequate for the task. This may also explain why they failed to ask questions or seek help from anyone in their learning community. What's more, Vanessa and Paula brought with them to the project very low motivation to engage in the task, and inaccurate expectations of the amount of effort and time required to complete the activity. Aggravating to the situation were the frequent distractions with which they met, both from internal and external sources. Finally, their unequal perceptions of rapport made communication and cooperation still more difficult. The only clear indication of cognitive transformation was in Vanessa, and then only in relation to the digital video editing software she used to construct the video. Paula was not able to enjoy this same technology-related cognitive transformation, since she was not given the opportunity to engage with the technology.

### **Study Findings – Research Question 2**

**What was the nature of the pedagogic transformations, if any, that took place when student-teachers in a foreign language education program used video editing technology to learn about teaching?**

In terms of pedagogic transformations, or professionalization, on the part of the participants, there appeared to be no change to their sense of themselves as professionals during the process of completing the video activity. Without meaningful reflection or discussion, Vanessa and Paula were unable to demonstrate movement from external to internal knowledge of the concepts involved. In the end, they were neither able to deepen their understandings of the topics or the technology, nor were they able to fully appreciate the potential for the practical application thereof to actual classroom practice.

## **Outcomes**

The following chapter will discuss additional explanations for the activity outcomes. This will include discussions of theory and the application thereof, as well as possible implications for teacher educators, curriculum designers, and teacher education program components.

## **Chapter V**

Using theoretical constructs previously shown to be effective in the pedagogy of teacher preparation, the creators of the core task involved in this study endeavored to design a socially- and artifact-mediated activity with the potential to broaden and deepen student-teachers' pedagogical and professional knowledge. In order to explore what might be learned from observations of how the enterprise unfolded in actual practice, the present study attempted to closely examine the process engaged in by student-teachers as they worked through this activity. What ultimately was revealed in the case of participants Vanessa and Paula was a disconnect between the intentions of the core-task designers and the outcomes effected by the student-teachers.

### **Sources of the Problem**

In the end, Vanessa and Paula did not fully meet the requirements of the project object (product), and they did not visibly benefit from the intended outcomes of engaging in the activity. They appeared, however, to be fully satisfied with their work, and were confident in their success at having done what was required.

Close examination of this disparity between the student-teachers' perceptions and actions and the intentions of the core-task designers may offer critical insight for those engaged in teacher development. Chapter Four presented some of the student-teacher-generated factors that appeared to contribute to this discrepancy, but it is also important to explore issues sourced in the design and execution of the project itself.

### **Individual obstacles**

Several disadvantageous factors converged in the pairing of Vanessa and Paula. These exacerbated the difficulties they encountered in engaging with the artifacts at their disposal in order to carry out the project, and made it difficult for them to resolve the associated problems. Inability to resolve their conflicts, contradictions, and tensions appeared to contribute to their remaining primarily object-regulated throughout the activity.

**Division of Labor.** One issue was the unequal division of labor between the participants, due primarily to Vanessa's insistence on using her personal equipment to construct the project. All of the recording, uploading, editing, and rendering of the video became Vanessa's sole responsibility, which seemed to distract her from other aspects of the project (listening), and which did nothing to foster Paula's skills in technology. Paula appeared to be content to let these tasks be fully usurped by Vanessa, which may have been partially due to a) the anxieties associated with learning more about video editing and DVD creation that she expressed before the project began; and/or b) her complete lack of interest in the project, possibly coupled with her apparent general indolence in relation to the foreign language education program overall. Once the technological tasks were firmly placed in Vanessa's court, the next division was of the topics. Paula was primarily responsible for choosing comprehensible input for herself, and for assigning listening skills to Vanessa, seeming to disregard the quantity of labor her partner was already contributing to the editing process. Vanessa in no way protested this division, and actually seemed content to have full control over the technology, in spite of her concerns that the labor would be unfairly divided in Paula's favor. The relevant outcomes of their arrangement were that a) Paula learned nothing new in the realm of



technology; b) Vanessa felt the need to scale back their original creative plans for the project because of time constraints, possibly related to the quantity of work involved as sole editor; c) Vanessa spent her time on the technological aspects of the project, and gave little attention to the topic of listening skills; and d) Vanessa may have relied on Paula too much to provide the content of the video. There was a positive outcome for Vanessa in that the time and effort spent editing gave her greater self-regulation over that process.

**Rules.** Another issue was Vanessa and Paula's disregard for the majority of the rules of the project (aside from the basic structure of the video and the assignment due date). Once they began the activity, they did not give due attention to the project instructions, relying instead on their own interpretations of the grading rubric for what was required in the project. (This was in spite of specific direction and intervention by the researcher as to what was being asked of them both before the inception of the project, as well as during the work activity). As such, it appeared that they did not grasp that the assignment's purpose was to broaden and deepen their knowledge of the topics, to consider them from a variety of perspectives in terms of validity and applicability, and to reflect on how they came to be recognized as valued and accepted practice within the field of second language acquisition and teaching.

**Tools.** As per Vanessa and Paula's post-interviews, it would seem that they misconstrued the task as simply an exercise in the use of technology as a means to reiterate what they and their perceived audience already knew on the subjects. As such, their attention may have been overly directed toward demonstrating their prowess with the technological tools. In addition to the post-interview data, Paula's frequent concern

during the activity that they show their use of technology (e.g. the overhead projector) in their example video clips would seem to confirm this supposition. This would also explain to some degree why so little effort was made on their part to make use of reference tools to explore, research, or verify their assumptions about their topics.

The focus on technology does not, however, seem to account for Vanessa and Paula's choice to not make a storyboard, or their lack of success at making a practicable project plan. Personality factors (see Participants below) may have had more to do with why they were unable to make use of these two tools, which likely would have helped them to better focus, stay on task, and perhaps even see problematic issues with their content.

**Community.** Again, if Vanessa and Paula viewed the purpose of the activity to be a demonstration of their technological skills, rather than an opportunity to consolidate and expand their understandings, then it may also offer a reason why they appeared to have no interest in making use of their community as a resource. Indeed, the only significant project-related help they solicited of their most easily accessible community member, the researcher, was in the realm of technology. This may also explain why unsolicited help and advice on other aspects of the activity were not accepted or acted upon.

**Participants.** Finally, what the participants themselves brought to the activity appeared to contribute significantly to their lack of success. Both were unmotivated to engage in the activity from the start, and neither was able to spark in the other any sustainable level of "mutual excitement" as they progressed, even when spurred on by their desire to be creative. Issues of rapport between them also seemed to create

problems in their ability to resolve difficulties. Paula trusted in Vanessa's dedication and skill from both an academic and technological point-of-view, felt that they were close enough to be considered as friends, and behaved accordingly. Vanessa, however, distrusted Paula's sense of commitment to the project, and perhaps to some extent her academic drive. Ultimately, her distrust of Paula's work ethic led Vanessa to hold back some of her own effort as a device to put them on a more equal footing. The result, however, was not increased effort on Paula's part, but rather insufficient action and reflection on both their parts.

### **Organizational obstacles**

Another aspect of teacher preparation illuminated by the outcomes of the video project is what is within the control of teacher educators and designers of teacher education curricula. As mentioned above, the idea was to have student-teachers take information that they had been presented in previous courses and organize and elaborate on it in order to make it their own. The ultimate goal was to help them to become self-regulatory and thoughtful in their applications of these approaches once in actual practice. In addition to explanations derived from the observations of the student-teachers engaging in the process, it is important to examine the project itself for possible weaknesses, and to explore some potential avenues of improvement.

**Prior knowledge.** One flaw in the core task design was the assumption that the student-teachers would bring with them a conceptual framework of the topics – knowledge at least to the level of basic “technical rationality” (Schön, 1983). In Vanessa and Paula's case, they, too, assumed that they knew the fundamentals of the topics. In Paula's post-interview she stated that she and Vanessa were quite comfortable with their

topics because they had studied about them in recent courses and, “because [...] comprehensible input is *not that* hard to comprehend what it is, and how to do it. [and the listening skills] you read it, and find out what it is, its not one of those definitions or practices that you have to do a lot of research on or get a deep explanation of it to understand it.”

**Project instructions and purpose.** Another flaw in the design was the assumption that the student-teachers would be able to fully comprehend the instructions for and the purpose of the project. In spite of the professor and the researcher explaining the instructions and going over the project expectations in detail, the student-teachers did not have an opportunity to deconstruct them and fully assimilate their meaning. Instead, they garnered an overview, made an interpretation thereof, and then used the grading rubric as a checklist rather than as a barometer by which to gauge the breadth and depth of differing aspects of their treatment of the topics.

The student-teachers were told at the outset that the goal of the activity was to make an explanatory video geared toward teaching the undergraduates in the course. The reason for this was to give them an audience (different from the expert audience of the professor) to whom they were to direct the content. The primary purpose of the project, as stated in the instructions, was to explore and exemplify second language teaching methods from theory to practice. The secondary purpose was to enhance the student-teachers’ technology skills and confidence therein, and to hopefully encourage them to consider the creative use of technology in their own future classrooms. As Ainley and Pratt (2005) state,

“[t]he purpose of a task is not the ‘target knowledge’ within a didactical situation [...] Indeed it may be completely unconnected with the target knowledge.

However, the purpose creates the necessity for the learner to use the target knowledge in order to complete the task, whether this involves using existing knowledge in a particular way, or constructing new meanings through working on the task.

The notions of audience, of learning more about their topics, or of improving their technology skills, at least in this case, were not sufficient to motivate the student-teachers. As stated previously, Paula said clearly in her post-interview that she’d learned nothing from the project in terms of content or technology, and that

my understanding of the purpose was to teach this to the undergrads, and the way I see it is, if we’re sharing a class with the undergrads, they could have easily learned the same type of thing as we would do, without us having to do a video project *for* them. [...] I definitely don’t understand why the graduates have to do something to entertain the undergraduates when they could easily do the same thing. I really didn’t see much point to it cause I don’t see it as something that its so difficult that only we would understand it to where they wouldn’t.

**Learning community.** Another erroneous assumption was that the student-teachers would seek help and advice from the professor, the researcher, their peers, or others when faced with difficulties. This was particularly in light of the fact that help was clearly offered and readily accessible. This, however, implied first and foremost that the student-teachers would be able to perceive a need for assistance. As stated above, Vanessa and Paula did not feel a need for support with the content because they felt quite

well-versed in its foundations and practice. Also, if indeed they believed the primary focus of the project to be a demonstration of their technological skills, then this would also account for the fact that the few requests for help that they did exhibit were oriented toward technology. It also helps to explain why they did not heed the unsolicited support offered by the researcher in terms of their content.

On an additional note, the task designers had incorporated a peer-review task for the projects. During the class session in which the videos were shown to everyone, all of the student-teachers in the course were given copies of the grading rubric and asked to complete them anonymously concerning their peers' videos. The rubrics were then collected by the course professor for comparative review. In short, their student-teachers in the course were unable to perceive serious omissions, incomplete or inaccurate coverage of the topics, design problems, etc. in their peers' work, even when guided by a rubric.

**Peer-to-peer scaffolding.** Also in this vein was the assumption, based in social constructivist principles (Vygotsky, 1978), that Vanessa and Paula would be, at least some of the time, able to scaffold one another as they worked in order to iron out conflicts, contradictions, and tensions. Again, this was assuming that, in the first place, the student-teachers would be able to perceive these problems. With the complications they were able to notice, they did exhibit some of the forms of productive collaboration, but the substance of their dialogue did not contain substantive solutions, resulting in little, if any, regulative movement. This supports similar findings by Erben (2001) and Siekmann (2004), which found that “scaffolding is less important than the quality of the dialogic engagement.”

**Technology.** There was also a fault in the premise that the video editing technology would provide multiple opportunities to review, reflect on, discuss, and modify their content and examples as the student-teachers deepened their understandings thereof over the course of the project. After all, “[a] basic premise in constructivism is that meaningful learning occurs when the learner strives to make sense of the presented material by selecting relevant incoming information, organizing it into a coherent structure, and integrating it with other organized knowledge (Mayer, 2003). In Vanessa and Paula’s case, the only teaching example video that provoked any second thoughts was the one of Paula conjugating in the preterit. Paula’s initial (correct) instinct was to leave it out of their project video because it was not appropriate as an example. The discussions that arose from the use of this clip evolved throughout the project, but failed to contribute to any development in their thinking. On the contrary, Vanessa and Paula went through several iterations of rationalizations for how the clip was appropriate (incorrect), until it was finally included as an example. The iterative viewing, therefore, had no positive impact on them because it did not promote any deeper understandings.

A second apparent problem with the technology used in the project was that instead of it serving as a mediating artifact, a tool to help the student-teachers regulate their understandings and internalize the concepts, it was perceived as an object itself. The strongest evidence of this was in the post-interviews where both Vanessa and Paula stated that they felt that this activity belonged in a technology course rather than the Practicum or even a Methods course.

This raises an important issue about the choice to have the student-teachers employ digital video as a means to organize and present their topics. “Like with any

assignment, questions [...] surface about whether students will get caught up in the process and miss the learning outcomes" (Guthrie, 2009). In Vanessa and Paula's case, however, the trouble may have related more to their inability to perceive the primary goal of the project. They may have given the technology some level of emphasis because they could see little importance in the topics themselves. It may have just been an assumption on their part that the technology use was the whole point of the activity, since, in their view, the topics were not. Interestingly, however, they were not motivated to maximize the potential of the video as a medium of expression either, based on their final product. As such, it would seem that, in their case, they did not particularly "get caught up in the process" at the expense of the content.

Generally speaking, however, any kind of mediational tool (technological or otherwise) must be carefully considered before inserting it into the instructional process. After all, a well-designed learning task only uses technology if it is "driven by specific objectives related to instruction and learning with direct linkages to the curriculum" (Duhaney, 2000). When considering mediational tools, educators must carefully choose "[t]echnologies as tools that amplify and extend fundamental human capacities to observe, understand, and communicate about the world – tools that give us rich data, help us manipulate and think about it, and connect us with others around it in new and powerful ways" (Tally, 2007). In the case of the core task in the present study, the technology was carefully chosen for its potential to help the student-teachers do just this with both the course objectives and the preservice teacher standards related to the content and their technology proficiency. Tally (2007) fairly and cogently argues for the judicious application of technology, particularly in socio-constructivist-based learning



tasks since “the work of cognitive and brain scientists in the past two decades has greatly strengthened the evidence that this is indeed how people learn: by building and testing models of the way things work, in social settings, and gradually substituting ‘better’ models for ‘worse’ ones (see also Bransford, Brown, & Cocking, 2000).

Guidance and scaffolding by the course professor, however, may have made a considerable difference (see Organizational mediation below) in encouraging the student-teachers to maximize their use of the technology as a mediational tool, while giving appropriate attention to the subject matter. What’s more, since technology proficiency is part of the preservice teacher standards, the student-teachers may also have benefited from help in seeing that the technology they used as a project tool might one day be useful in their own classrooms.

**Project Design and Execution.** Problems with the activity design included critical mismatches between the type of object the student-teachers were to construct, and the nature of both the intended and actual process and environment in which they were to create it. To clarify, while the student-teachers were to be engaged in an artifact-mediated, social-constructivist-oriented activity to make an instructional video, the pedagogical nature of the video they were asked to make was conversely, permitted to be top-down and didactic.

What’s more, the environment in which the student-teachers were to execute the project did not wind up being the artifact-mediated social-constructivist activity it was intended to be. This was likely due to a combination of missing structural elements commingled with the participants’ unwillingness or inability to perceive the need to make appropriate use of the artifacts/resources at their disposal.

## **Organizational mediation**

While nearly impossible to account for elements such as personality and motivation, the teacher educator does still retain some elements of such an activity under his/her control. The difficulty is in how to create an activity that is flexible enough to accommodate individual learner idiosyncrasies, while at the same time standardized enough to be realistically applied by teacher educators.

**Formative assessment and corrective feedback.** Critical elements missing from the activity as it was executed in this study were the use of required formative assessments and the provision of corrective feedback. In the present study, offers of and opportunities for support were woven into the recommended timeline and procedures of the activity. It was, however, not mandatory that the groups avail themselves of this guidance. Only one group chose to meet with the researcher prior to beginning the activity, and then only once. In this meeting, they requested help with the concepts of storyboarding, and explored a few creative ideas for a theme into which they might weave the delivery of their content. Since they requested no follow-up, there was no opportunity to determine if the participants had indeed correctly made use of the planning tools, and more significantly, to determine if the content they were preparing to present was accurate or complete. As previously mentioned, support solicited during the activity was rare and most often related to technology, and unsolicited support was not heeded. The mere availability of guidance, therefore, was not adequate.

Formative interim assessments would be a means of compelling the student-teachers to interact with the community (the professor or other more knowledgeable individuals with the skills and knowledge to scaffold), even if they should feel it

unnecessary. By offering them opportunities to perceive erroneous or incomplete ideas, and giving them a chance to iteratively research, discuss, and reflect, they would be more likely to internalize the information as they engage in the production of a better product.

Since, in the pre-interviews, all of the participants initially included in the study reported that their primary (and often only) motivation to engage in the project was in order to get a passing grade, it follows that a likely means of getting them to seek and accept help, at least initially, would be to attach a grade to doing so. Breaking down the project into a series of required segments with attached due dates and grading rubrics would a) force the student-teachers to engage with the material over time, allowing greater opportunities for reflection and revision; and b) allow the course professor the opportunity to flag potential problems, and guide (scaffold) the student-teachers from where they stand to where they need to go. By attaching an interim evaluative component to the project, the professor can, not only act in the role of the “more-knowledgeable other,” but influence whether or not the student-teachers take heed of the guidance being offered. There is also the possibility that, once the student-teachers realize that there is valuable information to be learned, new kinds of motivation might emerge to propel them along.

Formative assessment also returns to and reinforces the importance of the notion of process versus product. Additional benefits might be derived from the opportunity to revise and re-submit the segments after obtaining corrective feedback.

In Vanessa and Paula’s case, had the professor or the researcher been able to help them perceive the gaps in their knowledge at the outset of the project, they might have been more inclined to at least do the research necessary to consolidate a basic technical

rationality on the topics. Further assessment could have helped them to perceive the disparity between what was being asked of them in the instructions and what they actually made clear in the video.

**Modeling, co-constructing, and scaffolding.** Several improvements might be made to the outcomes of the video project by modifying both the process and the object according to socio-cultural/constructivist theories of learning. It is important to synchronize the student-teachers' learning environment with the process in which they are to engage, as well as with the product they are to produce. In this manner, the teacher educator may model, involve, and mentor the student-teachers in the pedagogical approaches envisioned for their prospective classrooms.

It is the opinion of this researcher that one critical modification would be to find ways to involve the student-teachers in co-constructing elements of the activity, helping them to better assimilate its pieces and parts by giving them ownership of the project's intent. Another would be to insist on their engaging on a deeper level with the artifacts at their disposal, particularly their circle of collaboration. Both of these modifications must, however, take place within preconceived and monitored structures. Again, the notion of expert guidance is critical to the process, since

[p]ure discovery—even when it involves lots of hands-on activity and large amounts of group discussion—may fail to promote [an important] cognitive process, namely, selecting relevant incoming information. In short, when students have too much freedom, they may fail to come into contact with the to-be-learned material. There is nothing magical to insure that simply working on a problem or simply discussing a problem will lead to discovering its solution. If the learner

fails to come into contact with the to-be-learned material, no amount of activity or discussion will be able to help the learner make sense of it (Mayer, 2004 p.17).

**Structured co-construction of project requirements.** One recommendation in this vein would be to require the student-teachers to be more participatory in the activity organization. By offering them some degree of control, within a structured environment, they might increase their sense of ownership, and improve their assimilation of the activity purpose. Stipek states:

Students are intrinsically motivated to work when the threat of negative external evaluation is not salient and when their attention is not focused on extrinsic reasons for completing tasks. They will also feel more competent and proud, and thus more intrinsically interested in tasks, when they can take responsibility for their success (1988, p.73) .

To this end, the researcher, having previously taught the course in question, had some degree of success in previous semesters with involving the student-teachers in a rubric-creation activity before beginning the project. The procedure was to:

- Distribute the video project instructions, and explain and exemplify the purpose and directions.
- Distribute a grading rubric for the video project that had been created in a previous semester by former student-teachers in the course.
- Have the current student-teachers work in small groups to review the activity purpose and instructions, and then collaboratively, as a class, discuss how and why they would improve the old rubric.

- Use the revised rubric ideas, and have the student-teachers create the grading rubric that would be used to evaluate them in the current semester.

This procedure was meant to accomplish several instructional goals, the most important of which was to require the student-teachers to engage with the project purpose and instructions in a way that took the content thereof beyond the realm of received knowledge. By evaluating a rubric created by other student-teachers, rather than one created by the course professor, they appeared to gain a sense of freedom to deconstruct and critique it with confidence in their own skills as evaluators. Perhaps this was due to a sense of safety in critiquing a product made by an anonymous group of student-teachers, or they may have felt that a product created by novices would be inherently flawed. Whatever the reason, they would inevitably closely scrutinize and critique a variety of aspects of the rubric, from its point distribution system to its quantity and clarity of verbiage. In so doing, they appeared to better assimilate the purpose and instructions of the project, which may have led to better outcomes when they engaged in the actual activity process. This fits with Mayer's (2004, p.15) notion that it is important for learners to engage in "(a) activating or constructing appropriate knowledge to be used for making sense of new incoming information and (b) integrating new incoming information with an appropriate knowledge base." By constructing the rubric with which they would be graded, they better assimilated the project purpose and instructions, which helped them to know what to look for and how to better integrate it with what they already knew. From a teacher development perspective, it also gave the student-teachers practice with evaluating and constructing appropriate assessment instruments, an important skill in their overall professional development.

**Structured use of the collaborative circle.** The value of feedback in student-teacher development is well-documented in the literature (Bell & Gilbert, 1994; Joyce & Showers, 1980), and is therefore an essential component to be incorporated into learning activities. Feedback may come from all members of a student-teacher's learning community, including peers.

The conceptual rationale for [...] peer feedback is that it enables students to take an active role in the management of their own learning. It is an element of self-regulated learning (Butler & Winne, 1995) by which students monitor their work using internal and external feedback as catalysts. 'Self-regulated learners seek feedback from external sources such as peers' contributions in collaborative groups' (Butler & Winne, 1995, p.246). In their model of formative assessment and self-regulated learning, Nicol and MacFarlane-Dick (2006) also contend that by commenting on the work of peers, students develop objectivity in relation to standards which can then be transferred to their own work (as cited in Liu & Carless, 2006).

An important consideration in the use of feedback is to create a structure in which it can occur. First, the structure can function to keep everyone focused, and second, it can help to create an environment in which feedback is both honest and constructive.

There were moments during the activity at which Vanessa and Paula did reach the precipice of their ZPDs. For example, when Vanessa realized the need "to put in [the project] somewhere...[...] how do you teach them to listen, to be better listeners?", she was poised to move in the right direction. Instead of helping one another to move forward, however, their lack of expertise actually caused them to reverse direction and

revert to a less regulated understanding. This is where intervention by a more-knowledgeable other could have made a significant impact on their learning.

Opportunities to be scaffolded by more-skilled and symmetrically-skilled others were available in the present project, but went unused, perhaps because of the student-teachers' perceptions that they did not require any help.

*Working with the course professor.* Requiring, as mentioned above, some kind of formative assessment procedure would help the professor to recognize individual difficulties and gaps in understanding, and then to scaffold the student-teachers at that level so they might be able to perceive their problems and deficits, and seek to remedy them before continuing on.

Another, less formal, approach might be the use of questioning techniques on the part of the professor in order to engage the student-teachers in guided dialogical reflection throughout the activity process. The intent would be to ask the student-teachers complex, thought-provoking, contextually-rich questions in order to pique their curiosity and motivation, and/or encourage them to seek more information as they perceive gaps in their knowledge and understanding (see Beatty, Leonard, Gerace, & Dufresne, 2006). If the learners are unable to respond accurately or completely, then the professor might even guide them to specific resources, and schedule a follow-up opportunity to discuss the answers. For example, the professor might meet with an individual group and ask them to explain what they understand about their topics. In Vanessa and Paula's situation, a pointed question about theory and application, such as "Explain what you understand about how to teach top-down versus bottom-up processing skills for listening to your future foreign language students" might have revealed to the



professor and the student-teachers alike that they would need to look further into the topic of listening skills.

A more formal, and less hands-on, means of employing questions to stimulate greater reflection and to help keep the student-teachers on track might be to delay working on and distributing the rubric until later in the semester, and instead to offer a set of guiding questions to which the student-teachers might refer as they construct their project. Examples of such questions might be, “Does your video clearly define the theories that undergird your topic? Have you explained these theories? Have you explained how these theories came to be viewed as accepted practice in second language instruction? Have you presented opposing viewpoints to these theories?” and the like.

*Working with classroom peers.* There may also be valuable opportunities for the student-teachers to benefit from peer-to-peer interaction and collaboration. Again, however, the design of such activities must be very carefully considered, both in terms of affect and cognitive processing, since the ultimate goal, as Mayer states, “is to discover instructional methods that promote appropriate processing in learners rather than methods that promote hands-on activity or group discussion as ends in themselves” (2004, p.15). As stated in Chapter Two, peer-to-peer collaboration can be effective in the ZPD when there is motivation to actively construct solutions to problems (Slavin, 1987; Tudge, 1990). In Vanessa and Paula’s situation, they cooperated to accomplish the task, but they did not collaborate to problem-solve because they were not motivated to construct any solutions. They constructed a product, but it was not, in their eyes, a problem to solve, it was a hurdle to jump en route to a credential.

It is the opinion of the researcher that simple discussion groups in which the student-teachers might share problems and seek feedback would be far less effective than structured sessions. Vanessa and Paula, for example, were unable to challenge one another, and though they had access to outside help and support, they did not make use of it. Guidance and structure would allow the course professor to provide an environment in which feedback could be sought without fear of negative repercussions, and which would facilitate the types of interaction and questioning that may lead learners to become aware of “the to-be-learned material”.

In the present study, the student-teachers were unwilling or unable to point out serious problems in the work of their peers. One possible means of improving peer feedback might be to make the completed videos available online for the student-teachers to watch as often as need be, then ask the groups to evaluate one another carefully. Working in groups to evaluate other groups, and providing written, versus oral, feedback, would help to lower the affect and provide space for genuine critique, and mitigating fears of criticism and retaliation. What’s more, the opportunity for multiple viewings of the video might elicit more thorough and thoughtful feedback. Allowing time for the participants to make revisions based on the feedback would likely also be helpful and lead to improved outcomes, since suggestions could be attended to before a final evaluation.

This process might be further improved by the professor providing the student-teachers with a list of guiding questions to go through as they watch their peers’ explanations and examples. The questions might be general in nature, such as, “Did the authors of the video offer alternative viewpoints on the topic in question?”, or quite

specific, such as “What are the arguments against the validity of Stephen Krashen’s Input Hypothesis?” The added advantage to guided questions would be that, in seeking the answers, the peer reviewers may assimilate more of the topic presented.

**Learning to teach by teaching to learn.** As stated above, the project goal of making an instructional video in order to provide more comprehensive information on the topics for their undergraduate peers in the course was not accepted by the participants as a valid need. This appeared to be, at least partially, due to their perception that there was no information that might be conveyed with which their peers were not already familiar. Requiring the graduate students to teach, however, may still be a valid approach to enhancing their learning, as teaching can lead to clearer and deeper understandings of a topic as one strives to consolidate, supplement, and complete one’s own knowledge in order to be able make the information comprehensible to someone else. “The education literature, as well as conventional wisdom dating back at least to the time of Seneca in the first century A.D., recognizes teaching to be a powerful learning modality” (Caprio & Borgesen, 2003). This is in addition to the fact that they are training to be teachers, and such a project also provides them with experience in selecting and preparing information to be learned.

In addition to providing structure and guidance to the student-teachers in order to help them to perceive, locate, and assimilate “to-be-learned” material, the professor must help them to connect their roles as learners to those as teachers. After all, if the approach of the teacher educator compliments the structure of the activity in attempting to promote in the student-teachers increasingly complex forms of reflection and self-regulative movement, then shouldn’t the product of the activity also align with this philosophy? In

this vein, the professor may wish to incorporate an added element to the requirements of the project in that the student-teachers might be encouraged to seek ways to effectively incorporate social-constructivist-based practices into the video. In this manner, the more-knowledgeable graduate students might then scaffold the learning of the undergraduates. By raising the student-teachers' awareness of the multiple dimensions and complexities in their topics that merit consideration and perspectival adjustment according to contextual factors, as well as that of their role as educators of more-novice educators, purpose-driven motivational factors may be affected in a positive manner. After all, Paula did say in her post-interview that "I think, you know, just cause of the fact of what we had to be able to achieve, this wasn't fun, I mean, better if it could be about a lesson, that's always so fun, you know, I mean that's always so interesting." Perhaps if she had understood that this project actually *was* about a lesson, she might have been more motivated.

**Meta-cognitive awareness.** A final recommendation would be to debrief with the student-teachers the elements of the activity as structurally beneficial to the learning process. Also helpful would be to collectively brainstorm ways to incorporate similar elements into their own second language teaching practice. This may be particularly true in light of Vanessa's post-interview comments that "I think that sort of technology you're not really gonna use in your classroom as far as, I mean unless you do have your kids do a video project but mostly you're not really gonna tape yourself teaching something, and then have to edit it and use it," and Paula's comments that this was not "the kind of project where we could learn anything from each other, really."

## **Implications for Program Design**

### **Programmatic evaluation and change**

As previously stated, teacher preparation programs are challenged to help student-teachers cultivate their knowledge from comprehension of concept into concept application, and eventually to creative, original, and masterful levels of expanded concept development and use. Just as this study attempted to examine the process engaged in by student-teachers in a single activity, teacher education programs would do well to scrutinize their processes for developing teachers. To do this, programs must view the student-teacher as a whole person engaging in a formative journey of education, training, and development, progressively moving from object- and other-regulation to self-regulation. It is critical that we consider this individualized process of growth from novice to professional as taking place within the larger process of a teacher preparation program. As exemplified by the results of this study, student-teachers may not be learning what we think we have taught. The implications are serious and the stakes are high in light of the impact on their knowledge and professional growth from the start of their teacher preparation programs on into a lifetime of practice, including the consequences for their future students. We must, then, examine ways in which to better adjust our curricula and our instruction in order to better foster their cognitive and professional growth.

### **Design for development**

The core-task in this study was created to promote cognitive and professional development, but it may also be valuable to consider how a program functions to develop student-teachers. In this project, the student-teachers had been exposed to the material in

three to five previous courses, yet they could not provide basic definitions of their topics, let alone engage in critical reflection about the subject matter. It was assumed by the designers of the core-task that the student-teachers would be embarking on the project with a certain amount of basic information on which to base additional concepts. (Clearly, the participants assumed this to be true as well). Many questions arise as to how and why the student-teachers were unable to extract and/or retain at least fundamental concepts after multiple exposures to the content. One possibility is to explore aspects of what we know about learning in terms of how much and what kind of exposure leads to regulative movement at a given level of processing. Perhaps three to five courses is just not enough, or was there something fundamentally important in the way they had been previously exposed to the material? Had their previous coursework been organized according to the principles of “effective” reflection as described in Chapter 2 and on the idea of “appropriate processing”(Mayer, 2003) through scaffolded social interaction? Had consideration been given to the notion of development over time by setting developmentally-oriented goals for the student-teachers to attain as they moved through the program?

### **Programmatic-level interim assessments**

Assessment of student-teacher knowledge is certainly built into each individual course of a program. One consideration, however, is whether these assessments are of a formative or summative nature. From yet a wider perspective, attention might be given to how well these assessments articulate together in the larger program design to reflect individual student-teacher development over time.

### **Programmatic-level articulation**

As with assessment, articulation of content between courses has the potential to be far more effective at enhancing programmatic fluidity than changes to a single task within a single course. By reducing the fragmentation of concepts taught and assignments required, development in the learners may be improved. By designing activities that can grow and change with the student-teachers as they progress through their program of study, teacher educators would better accommodate elements of learning theory (that one must learn something over and over before really assimilating it), plus better assess individual student progress from object- to other- to self-regulation. Every iteration could provide new opportunities to consider the same material in new lights. This might also help mitigate another problem with overall curricula, in that teacher educators can often see things that need to be added to the curriculum, but it is more difficult to see ways to simplify and streamline. The result is courses that contain massive amounts of information and multiple assignments, which can overwhelm students into focusing more on getting through it all, than on learning. As both Vanessa and Paula stated on several occasions, time was an issue, and completion of the project became a primary goal. As Paula said, “I think for both of us we wanted to get [the project] done *ahead of time*, you know, we wanted to get it done and do the best we can, so I think that you know we were both interested on doing the best we can on that, and yeah, definitely you know we were both trying to ...you know, go by the guidelines of the rubric and you know do it done in a time manner because we were both also have other classes and other deadlines.”

### **Co-construction and collaboration among faculty**

As indicated above for the individual core-task, programmatic improvements may also be made by encouraging the co-construction of the curricula by faculty members, and by encouraging faculty collaboration at a variety of levels. In terms of research, it may be very valuable to examine the progress of multiple student-teachers as they move through the program as a means to identify points of conflict, contradiction, and tension, and then look for solutions within the overall program design and curricula.

### **Accountability – The Meaning of Standards**

An important question emerging from this study relates to program and individual accountability. If the intent and the reality of curricular design and implementation do not match, then what is the meaning of standards for teacher preparation programs and the individuals who successfully graduate from them? In Vanessa and Paula's case, the process in which they engaged clearly revealed the depth and breadth of the gaps in even their basic understandings of their selected topics. The product, however, was far less revelatory in this regard. While it was clear, according to the grading rubric, that they had either skimmed over or omitted significant elements of the requirements, the degree to which they really lacked understanding was less clear. In the end, the lowest possible passing grade for the assignment would still have merited them full credit for meeting all of the preservice teacher standards associated with that core task. The process, however, revealed that they had little understanding relating to core standards. For example, they appeared to engage in little to no critical thinking as they pursued their task, let alone to consider engaging their own students in critical thought in their teaching examples. Every explanation and example was from a teacher-centered perspective, with little



regard for active involvement of the students in the learning process or of their diverse needs and abilities with regard to the course content. While it was certainly the intent of the designers of the curriculum and core task that the student-teachers indeed meet the standards at a minimum level of intent, this was clearly not what occurred. Research into the process was able to reveal more about what was really going on than the product, which speaks to a need for more research of this nature. By discovering more about process, we can better align intentions with outcomes and give the assignation of standards meaning.

On a related note, standards for preservice teachers do not reflect development over time. They are more in the form of summaries of what student-teachers should achieve by the end of their education programs. In spite of this, curriculum designers weave these standards into the core tasks located throughout the program as a means of satisfying program accountability. The very nature of the standards, as they are written and incorporated into tasks, may contribute to a lack of attention to the need for development of understandings and skills over time.

### **Directions for Future Research**

More studies of process are critical because products do not reveal the microgenetic changes, nor the contradictions, conflicts, and tensions that can lead students to the precipice of the ZPDs, and the ideal moments for intervention by a more-knowledgeable other. The designers of the curriculum and core task in this study attempted to meet a set of learning goals by designing a task that they believed would oblige the student-teachers to engage in complex, higher-order cognitive functions. From a cognitive-Constructivist perspective, the student-teachers were supposed to hold

prior knowledge of the topics, which they would build upon through iterative exposure to and reflection on the explanations and examples they created for the video. From a socio-Constructivist point of view, the student-teachers were expected to work collaboratively to produce the final product, thus creating space for discussion, conflict, contradiction, and ultimately resolution. It was hoped that the co-created external knowledge could be gradually assimilated and internalized resulting in greater self-regulation.

The disparity between these intentions and the actual outcomes raises many questions about the processes of student-teacher development, and which elements detract from or contribute to their successful learning and professionalization. One of the primary outcomes of this study is that a microgenetic case study of learner processes can reveal important data about some of the many factors that contribute to or limit student-teacher success during their preparation. By examining teacher development as it occurs (or fails to occur) in individual tasks and courses, as well as throughout a comprehensive teacher preparation program, teacher educators gain critical insight in how to design tasks that promote the quantity and type of learning they were intended to do. Lee Shulman reports on and calls for additional similar research in his (2002) article *Truth and consequences?* “Our current conclusion is that the field is in serious need of low-stakes, high-yield instrumentation to monitor the vital signs of teacher development in ways that can guide teacher educators, professional developers, and ultimately teachers themselves” (p. 252).

The video project was designed to encourage student-teachers, in an innovative way, to employ reflective and collaborative learning approaches, as well as engage with

mediational items with the potential to promote critical thought, such as digital video editing software, which would allow them to iteratively review their content and their examples, offering multiple opportunities to notice conflicts and make revisions. In the present study, the student-teachers made little to no use of these mediating artifacts in the manner intended, however, and were not particularly successful in their endeavor.

Additional research is needed to explore ways in which to encourage engagement with surrounding artifacts, and then again to explore the outcomes of an activity to see if this has any effect.

In this vein, there is a need to examine ways to provide enough structure, or scaffolding, to keep the participants on track without limiting their regulative development. It also remains to be seen whether this is truer among novices than among more developed participants.

A related idea is the notion of collaborative work, and the factors that contribute or detract from its success. In the present case, Vanessa and Paula brought with them to the project a mismatched level of rapport and confidence in one another's abilities. They also, however, brought to the activity the perception that they understood their topics quite thoroughly, but what they did not know was how incorrect they were in this regard. As a result, while they were able to engage in dialogue that was productive in form, it was not so in substance. Learning more about how to help learners work more collaboratively, and trust in the value of critique without criticism, would be an important line of research. Also, examining ways to raise learner awareness of where they are in a larger developmental process may help them to see that there is more to be learned, as well as perhaps motivate them to learn more completely.

In sum, it is intriguing to explore, within the domain of the pedagogy of education, the developmental processes engaged in by student-teachers throughout the implementation of specific instructional approaches. By doing so, we can understand more about how these approaches function to impact student-teachers' understandings during the learning process, and adjust our instruction and curricula to better meet their needs.

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## Appendices

## Appendix A

### VIDEO PROJECT INSTRUCTIONS

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**Purpose:** This project serves a dual purpose: A) To create, demonstrate, document & present focused samples of appropriate second/foreign language teaching practices, the process & product of which will exemplify your understanding of how to move from theory to practice in the classroom; B) To enhance your technology skills in the hopes of building your technological knowledge & confidence, & to encourage you to look for & implement creative technology use in your own classrooms.

**Procedure:** First, you will work together in small groups to compile a two-part video piece using digital video cameras & editing equipment. As a group you will decide on the contents & script of the video. Each time, a different person will serve in the teaching role, allowing each person to be on camera at least once.

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**Part One** of your group's video will explain and demonstrate a very specific strategy of foreign language instruction. Your group will be responsible for one of the following:

- Activating Schema - Scaffolding
- Employing Comprehensible Input
- Modeling Procedures for Students
- Using Authentic Materials
- Scaffolding Students for Higher Order Thinking
- Alternative Assessment in Practice

For the language instruction strategy assigned to your group:

- A. Introduce & present the concept by providing background information & explanations (Theoretical Background: what is the premise, what do theoreticians say for and against the practice, why is it considered "good practice", when can it best be used in the classroom, etc.).
- B. Include one or more very short video segments demonstrating this concept as it would appear in actual practice in front of students. (Practical Application: demonstration of the concept in actual practice - lesson segment delivered through the specific pedagogical approach).

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**Part Two** of your group's video will explain and demonstrate the instruction and practice of a given second language skill. Your group will be responsible for one of the following:

- Instructing students in and practicing Listening Skills
- Instructing students in and practicing Speaking Skills
- Instructing students in and practicing Reading Skills
- Instructing students in and practicing Writing Skills
- Instructing students in and practicing Cultural Knowledge/Pragmatic Skills

For each of the above skill-based concept assigned to your group:

- A. Introduce & present the skill by providing background information & explanations (Theoretical Background: why is this an important skill set for language learners, what do theoreticians say about learning this skill set, when during the process of language acquisition can this skill set be developed, what are the most effective ways to teach/learn this skill set, etc.).
- B. Include one or more very short video segments of this concept as it would appear in actual practice in front of students. (Practical Application: demonstration of the concept in actual practice - skill-oriented lesson segment).

---

Next, you will join with the other groups to create a single, full-length video by compiling what each group has done.

All students are responsible for creation of activities & lessons, for recording & editing the video footage & for creating a final CD-ROM/DVD/medium for accessing the video clips.

**Presentation:**

- The final video will be recorded on CD-ROM/DVD/other medium.
- On the last night of class, the graduate students will present their video segments to the rest of the class with explanations of both the process & the content of the individual video clips.

**Materials Needed:**

- Digital Video Camcorder
- Digital Video Tapes
- Fire wire
- iMovie or other software for editing digital video
- Quicktime or other software for storing digital video
- Computer Memory
- Recordable CD/DVD/other recordable medium

**Suggested Semester Sequence:**

- Meet with your group & create a storyboard of your full video (create the blueprint). Compose scripts for introductions, & decide on appropriate content for teaching sequences. Decide who will be responsible for what parts of the video.
- With your group, set a date to record your digital video.
- With your group, set dates and times to meet to edit your digital video.
- Set meeting dates with all groups involved to compile & complete the final video & save it to CD/DVD/other medium.

---

**Help and Support on the Video Project**

In Spring 2007, in addition to support from the course professor, you will have unique access to personal, hands-on assistance with the video project, including access to and help using the equipment and software, from a researcher fully familiar with the requirements of this course. The researcher will be conducting a simple study, in which you are asked, but not required, to participate. The researcher is happy to provide you help and support whether or not you choose to participate in the study. If you should choose to be part of the study, all that is required of you is that you agree to be videotaped as you edit your video clips (the entire editing process should be recorded), and that you agree to be interviewed by the researcher at the beginning and at the end of the video project work. The researcher will be happy to meet with you and your group at any time during the semester at your convenience.



## Appendix B

### Video Project Grading Rubric

Students' Names: \_\_\_\_\_

Group Topics: \_\_\_\_\_

- **Excellent/Superior:** (100%) parameters for assignment descript & rubric met at/above level described.
- **Good/Adequate:** (84-100%) parameters for assignment descript & rubric met at/just below level described.
- **Minimal:** (68% +) parameters for assignment descript & rubric met below level described.
- **Inadequate** = (68% -) parameters for assignment descript & rubric inadequately met at level described or missing.

CRITERIA	Excellent/ Superior	Good/ Adequate	Minimal	Inadequate/ Missing	TOTAL POINTS
<b>Video Introduction</b> Introduces video, clarifying its content & sequence of presentation.	4	3-4	2-3	0-2	
<b>Method Topic 1</b>  Provides an introduction & overview of the topic.  Explains theoretical constructs behind the practice.  Provides explanations of when, why, & with whom this practice is best used in the classroom.  Provides explanations of when, why, & with whom practice is inappropriate/less appropriate, or in what form/level it may be problematic.  Demonstrates the practice in actual practice – lesson segment delivered through the specific approach.	6	5-6	4-5	0-4	
	8	7-8	6-7	0-6	
	6	5-6	4-5	0-4	
	6	5-6	4-5	0-4	
	6	5-6	4-5	0-4	
<b>Skill Topic 2</b>  Provides an introduction & overview of the language skill.  Explains theoretical constructs behind teaching the skill.  Provides explanations of when, why, & with whom this skill is best taught/learned in the classroom.  Provides explanations of when, why, & with whom skill is inappropriate/less appropriate, or in what form/level it may be problematic.  Demonstrates the skill in actual practice – lesson segment delivered through the specific approach.	6	5-6	4-5	0-4	
	8	7-8	6-7	0-6	
	6	5-6	4-5	0-4	
	6	5-6	4-5	0-4	
	6	5-6	4-5	0-4	
<b>Organization</b>  Presents information in a logical, interesting sequence.  Presentation of material is well-organized.	4	3-4	2-3	0-2	
	4	3-4	2-3	0-2	
<b>Subject Knowledge</b> Demonstrates thorough content knowledge through information presentation & examples.	12-14	13-14	12-13	0-12	
<b>Strategies</b>  Graphics, realia, visuals explain & reinforce presentation (not just a “talking head”).  Uses video enhancement features to reinforce presentation (uses video to potential).	6	5-6	4-5	0-4	
	4	3-4	2-3	0-2	



Comments:

<b>Project Total:</b>
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## Appendix C

### Recommended Completion Schedule – Video Project

January 2007	Sun	Mon	Tues	Wed	Thu	Fri	Sat
		1	2	3	4	5	6
	7 WEEK 1	8 First Day of Class	9	10	11	12	13
	14 WEEK 2	15 No Class – MLK Day	16	17	18	19	20
	21 WEEK 3	22 First meeting – planning phase. Explanation, technology introduction, beginning storyboarding. Planning/storyboarding help and technology tutorials available – schedule with researcher over next four weeks.	23	24	25	26	27
	28 WEEK 4 Planning/storyboarding help and technology tutorials available – schedule with researcher.	29	30	31			

February 2007	Sun	Mon	Tues	Wed	Thu	Fri	Sat
					1	2	3
	4 WEEK 5 Planning/storyboarding help and technology tutorials available – schedule with researcher.	5	6	7	8	9	10
	11 WEEK 6 Planning/storyboarding help and technology tutorials available – schedule with researcher. Pre-interviews.	12	13	14	15	16	17
	18 WEEK 7 Pre-interviews. 	19	20	21	22	23	24
	25 WEEK 8 Pre-interviews. 	26 Video editing should begin	27	28			

March 2007	Sun	Mon	Tues	Wed	Thurs	Fri	Sat	
					1	2	3	→
	4 WEEK 9	5 Video editing continued	6	7	8	9	10	
	11 WEEK 10	12 Video editing continued	13	14	15	16	17	
	18 WEEK 11	19 Video editing continued	20	21	22	23	24	
	25 WEEK 12	26 Video editing continued	27	28	29	30	31	

April 2007	Sun	Mon	Tues	Wed	Thurs	Fri	Sat	
	1 WEEK 13	2 Video editing continued	3	4	5	6	7	
	8 WEEK 14	9 Video editing continued	10	11	12	13	14	
	15 WEEK 15	16 Compilation of final video	17	18	19	20	21	
	22 WEEK 16	23 Last Day of Class  Video Presentation	24	25	26	27	28	
	29 WEEK 17	30 Post-activity Interviews						→

## Appendix C (Continued)

### Equipment

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#### Digital Video Camera (DVC)



#### At least two DVC Tapes



#### Firewire for DVC



#### Computer with video editing software



## Appendix C (Continued)

### iMovie Basics

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#### **IMPORT movie to computer**

- Connect camera to computer
- Capture Clips from DV camera (importing clips)
- Preview clips
- Rename clips

#### **EDIT movie**

- Drag clips to timeline (also known as clip viewer)
- Arrange clips on timeline
- Discard (“trash”) unwanted clips
- Rearrange clips in timeline
- Play movie to see results

#### **EFFECTS**

- Add transitions (Effects Palette)
- Preview movie
- Adjust speed of transitions
- Add Title (Effects Palette)
- Customize Title effects
- Preview Title clip
- Add additional sounds to iMovie
- Preview

#### **VIEW movie**

- Full screen mode on iMac DV
- Save iMovie as a Quicktime movie, back to DV camcorder cassette and/or copy to DVD

---

## **IMPORT**

1. Connect your DV camera to your iMac computer.
2. Your iMac comes with a fire-wire cable that you need.
3. Plug one end into the digital camcorder's Fire-wire output.
4. Plug the other end into your iMac's Fire-wire input.
5. Turn on digital camcorder in VCR mode.
6. Start iMovie program.
7. Click the camera button.
8. It immediately detects your camera and displays message Camera Connected.
9. If you receive a message that there is no camera connected, unplug the cable and try again. It doesn't matter if computer is on or off when you connect the camera. Make sure tape is in camera.
10. Capture Clips from DV camera (importing clips).
11. Run camera until place where desired footage starts.
12. Click Import.
13. Clips move to shelf automatically.
14. At end of clip iMovie moves to next vacant space on the shelf.
15. iMovie automatically imports next clip.
16. When shelf is full, iMovie stops importing.
17. Begin editing to clear space on shelf and import more clips.
18. Preview clips.
19. Click on clip.
20. Click play button.
21. Rename clips.
22. Click on the default name of clip.
23. Type in meaningful name.

---

## **EDIT**

1. Drag clips to timeline (also known as clip viewer).
2. Arrange clips on timeline.
3. Crop and split clips as desired.
4. Discard ("trash") unwanted clips. (To free up hard drive space, click and drag unwanted thumbnails into the trash can, then empty trash from edit menu.)
5. Play movie to see results.
6. Click on clip.
7. Click play button.
8. Rearrange clips again, if necessary.

---

## **EFFECTS**

### **Transitions**

Transitions are the effects that happen between clips.

1. Choose transitions (Effects Palette).

Click transitions button.

Choices appear in window.

Click on a transition.

Its simulation appears in preview screen.

2. Render Transition.

Click and drag choice to timeline and place between two video clips.

Progress bar appears as transition is rendering.

Icon will appear between the clips.

Note: transition times cut into video clips on both ends – don't clip too precisely before transitions.

3. Preview movie in monitor screen.

Click Preview button.

4. Adjust speed of transitions.

Never make a transition longer than the clip.

### **Titles**

Titles refers to all text that is added to an iMovie, including credits.

1. Select Title (Effects Palette).

Click Titles button.

Click desired Title from window in palette.

A simulation will appear in the preview screen.

2. Preview Title in monitor window.

Click Preview button.

3. Customize Title effects.

Type words.

Change font.

Change color.

Animation.

Title over black box.

4. Render Title clip.

Every title has to be rendered.

Click and drag title from preview screen to the timeline and place it in the desired location.

Progress bar appears.

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### **EXPORT**

Save back to Digital Video camcorder cassette.

Save iMovie as a QuickTime movie to view on computer.

Copy to DVD.

## Appendix C (Continued)

### Storyboarding

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By Jane Stevens

#### Why Do a Storyboard?

A storyboard is a sketch of how to organize a story and a list of its contents.

A storyboard helps you:

- Define the parameters of a story within available resources and time
- Organize and focus a story
- Figure out what medium to use for each part of the story



story

#### How to Do a Rough Storyboard

A multimedia story is some combination of video, text, still photos, audio, graphics and interactivity presented in a nonlinear format in which the information in each medium is complementary, not redundant. So your storyboard should be put together with all those elements in mind.

The first thing to tackle is the part about the story being nonlinear.

1. *Divide the story into its logical, nonlinear parts*, such as:

- a lead, essentially addressing why this story is important
- profiles of the main topic in the story
- the event or situation
- any process or how something works
- pros and cons
- the history of the event or situation
- other related issues raised by the story

Next, divide the contents of the story among the media -- video, still photos, audio, graphics and text.

2. *Decide what pieces of the story work best in video*. Video is the best medium to depict action, to take a reader to a place central to the story, or to hear and see a person central to the story.

3. *Decide what pieces of the story work best in still photos*. Still photos are the best medium for emphasizing a strong emotion, for staying with an important point in a story, or to create a particular mood. They're often more dramatic and don't go by as quickly as video. Still photos used in combination with audio also highlight emotions.



Panorama or 360-degree photos, especially combined with audio, also immerse a reader in the location of the story.

4. *Does the audio work best with video, or will it be combined with still photos?* Good audio with video is critical. Bad audio makes video seem worse than it is and detracts from the drama of still photos. Good audio makes still photos and video seem more intense and real. Avoid using audio alone.

5. *What part of the story works best in graphics?* Animated graphics show how things work. Graphics go where cameras can't go, into human cells or millions of miles into space. Sometimes graphics can be a story's primary medium, with print, still photos and video in supporting roles.

6. *Does the story need a map?* Is the map a location map, or layered with other information? GIS (geographic information systems) and satellite imaging are important tools for reporters. Interactive GIS can personalize a story in a way impossible with text by letting readers pinpoint things in their own cities or neighborhoods - such as crime or meth labs or liquor stores or licensed gun dealers.

7. *What part of the story belongs in text?* Text can be used to describe the history of a story (sometimes in combination with photos); to describe a process (sometimes in combination with graphics), or to provide first-person accounts of an event. Often, text is what's left over when you can't convey the information with photos, video, audio or graphics.

8. *Make sure the information in each medium is complementary, not redundant.* A little overlap among the different media is okay. But try to match up each element of a story with the medium that best conveys it.

When you're done breaking a story down into its elements - both in terms of its content and the different media you could use - you need to reassemble all that into a rough storyboard.

On a sheet of paper, sketch out what the main story page will look like and the elements it will include.

A rough storyboard doesn't have to be high art - it's just a sketch. And it isn't written in stone - it's just a guide.

What storyboarding does is help point out the holes in your story. It helps you identify the resources (time, equipment, assistance) you'll need to complete the story, or how you have to modify the story to adjust to your resources.

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From: (Stevens, 2011) <http://multimedia.journalism.berkeley.edu/tutorials/starttofinish/storyboarding>

## Appendix C (Continued)

### Blank Storyboards

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Screen No. \_\_\_\_  
Content:

Sounds:  
Actions:

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Screen No. \_\_\_\_  
Content:

Sounds:  
Actions:

--

Screen No. \_\_\_\_  
Content:

Sounds:  
Actions:

--

Screen No. \_\_\_\_  
Content:

Sounds:  
Actions:

## Appendix D

### Foreign Language Practicum

#### Student Information

LAST NAME	FIRST NAME	STUDENT U-NUMBER	MONTH / DAY / YEAR DATE OF BIRTH
HOME ADDRESS			
CAMPUS ADDRESS			
TELEPHONE (OFFICE)	(HOME)	(CELL)	
EMAIL ADDRESS(ES)			

#### Language Information

<p>1. What is your first language? _____</p> <p>Rate your skills in this language from low to high:</p> <p>Listening Comprehension:   <input type="checkbox"/> Very Low   <input type="checkbox"/> Some Comprehension   <input type="checkbox"/> Intermediate   <input type="checkbox"/> Emerging   <input type="checkbox"/> Advanced   <input type="checkbox"/> Native/Native-like</p> <p>Speaking Skills:   <input type="checkbox"/> Very Low   <input type="checkbox"/> Some Comprehension   <input type="checkbox"/> Intermediate   <input type="checkbox"/> Emerging   <input type="checkbox"/> Advanced   <input type="checkbox"/> Native/Native-like</p> <p>Reading Comprehension:   <input type="checkbox"/> Very Low   <input type="checkbox"/> Some Comprehension   <input type="checkbox"/> Intermediate   <input type="checkbox"/> Emerging   <input type="checkbox"/> Advanced   <input type="checkbox"/> Native/Native-like</p> <p>Writing Skills:   <input type="checkbox"/> Very Low   <input type="checkbox"/> Some Comprehension   <input type="checkbox"/> Intermediate   <input type="checkbox"/> Emerging   <input type="checkbox"/> Advanced   <input type="checkbox"/> Native/Native-like</p>
<p>2. What is your second language? _____</p> <p>Rate your skills in this language from low to high:</p> <p>Listening Comprehension:   <input type="checkbox"/> Very Low   <input type="checkbox"/> Some Comprehension   <input type="checkbox"/> Intermediate   <input type="checkbox"/> Emerging   <input type="checkbox"/> Advanced   <input type="checkbox"/> Native/Native-like</p> <p>Speaking Skills:   <input type="checkbox"/> Very Low   <input type="checkbox"/> Some Comprehension   <input type="checkbox"/> Intermediate   <input type="checkbox"/> Emerging   <input type="checkbox"/> Advanced   <input type="checkbox"/> Native/Native-like</p> <p>Reading Comprehension:   <input type="checkbox"/> Very Low   <input type="checkbox"/> Some Comprehension   <input type="checkbox"/> Intermediate   <input type="checkbox"/> Emerging   <input type="checkbox"/> Advanced   <input type="checkbox"/> Native/Native-like</p> <p>Writing Skills:   <input type="checkbox"/> Very Low   <input type="checkbox"/> Some Comprehension   <input type="checkbox"/> Intermediate   <input type="checkbox"/> Emerging   <input type="checkbox"/> Advanced   <input type="checkbox"/> Native/Native-like</p>
<p>3. What additional languages do you know? _____</p> <p>Rate your skills in these languages from low to high (please indicate which is which):</p> <p>Listening Comprehension:   <input type="checkbox"/> Very Low   <input type="checkbox"/> Some Comprehension   <input type="checkbox"/> Intermediate   <input type="checkbox"/> Emerging   <input type="checkbox"/> Advanced   <input type="checkbox"/> Native/Native-like</p> <p>Speaking Skills:   <input type="checkbox"/> Very Low   <input type="checkbox"/> Some Comprehension   <input type="checkbox"/> Intermediate   <input type="checkbox"/> Emerging   <input type="checkbox"/> Advanced   <input type="checkbox"/> Native/Native-like</p> <p>Reading Comprehension:   <input type="checkbox"/> Very Low   <input type="checkbox"/> Some Comprehension   <input type="checkbox"/> Intermediate   <input type="checkbox"/> Emerging   <input type="checkbox"/> Advanced   <input type="checkbox"/> Native/Native-like</p> <p>Writing Skills:   <input type="checkbox"/> Very Low   <input type="checkbox"/> Some Comprehension   <input type="checkbox"/> Intermediate   <input type="checkbox"/> Emerging   <input type="checkbox"/> Advanced   <input type="checkbox"/> Native/Native-like</p>
<p>4. What language(s) do you plan to teach? _____</p>

## Teaching Information

### 5. What is your prior teaching experience?

Choose from the selections below – **check all that apply**

(You may add explanation or additional information in the space provided:

a.  I have never taught before.

b.  Tutoring - I have tutored students or done private instruction outside a regular classroom.

For how long? \_\_\_\_\_ What topic(s)? \_\_\_\_\_

Additional explanation or information on tutoring/private instructional experience:

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c.  Classroom - I have previously taught in a regular classroom setting.

In the role of:  Main instructor  Co-instructor  Assistant instructor  Intern/Student Learner  Teacher's Aide

For how long? \_\_\_\_\_ What topic(s)? \_\_\_\_\_

In what setting(s) (e.g. public or private elementary, middle or high school; university, etc.)? \_\_\_\_\_

Additional explanation or information on classroom instructional experience:

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## Education Information

### 6. What is your prior teacher education experience?

Choose from the selections below – **check all that apply** (you may add explanation or additional information in the space provided):

- a.  I have previously attended 1-2 brief non-degree seeking teacher education courses and/or workshops.

How many? \_\_\_\_\_ How long did they last? \_\_\_\_\_

What topic(s) were covered? \_\_\_\_\_

\_\_\_\_\_

Additional explanation or information on training experience: \_\_\_\_\_

\_\_\_\_\_

- b.  I have previously attended some/several non-degree seeking teacher education courses and/or workshops.

How many? \_\_\_\_\_ How long did they last? \_\_\_\_\_

What topic(s) were covered? \_\_\_\_\_

\_\_\_\_\_

Additional explanation or information on training experience: \_\_\_\_\_

\_\_\_\_\_

- c.  I am currently enrolled in a teacher education program (seeking a degree in education from the College of Education).

What is your specialization? \_\_\_\_\_ How long have you been enrolled in this program? \_\_\_\_\_

What level of degree are you seeking? \_\_\_\_\_

What pedagogical topic(s) have you covered so far? \_\_\_\_\_

\_\_\_\_\_

Additional explanation or information on training experience: \_\_\_\_\_

\_\_\_\_\_

- d.  I already hold a university degree & am a graduate student in a teacher education program (seeking a degree in education from the College of Education).

In what area is/are your already-obtained degree(s)? \_\_\_\_\_ I

What level of degree(s) did you obtain? \_\_\_\_\_

What pedagogical topic(s) do you recall having covered? \_\_\_\_\_

\_\_\_\_\_

Additional explanation or information on training experience: \_\_\_\_\_

\_\_\_\_\_

### 7. What are your expectations for this course?

## Appendix E

### Technology Information

<b>a. Digital video camera recording/playback</b>
i. My skill level with digital video recording: <input type="checkbox"/> Few or no skills <input type="checkbox"/> Basic skills <input type="checkbox"/> Intermediate skills <input type="checkbox"/> Advanced skills
ii. My current anxiety level about using a digital video camera: <input type="checkbox"/> Anxious/nervous <input type="checkbox"/> Somewhat comfortable <input type="checkbox"/> Comfortable <input type="checkbox"/> Very comfortable <input type="checkbox"/> Don't know yet
iii. I would like to learn more about using a digital video camera: <input type="checkbox"/> Very much <input type="checkbox"/> Sure <input type="checkbox"/> Somewhat <input type="checkbox"/> No
iv. I have used this technology as a student: <input type="checkbox"/> Often <input type="checkbox"/> Sometimes <input type="checkbox"/> Rarely <input type="checkbox"/> Never
v. I have used this technology outside my college classes: <input type="checkbox"/> Often <input type="checkbox"/> Sometimes <input type="checkbox"/> Rarely <input type="checkbox"/> Never
vi. I would like to use this technology with my future students: <input type="checkbox"/> Often <input type="checkbox"/> Sometimes <input type="checkbox"/> Rarely <input type="checkbox"/> Never
<b>b. Digital video editing</b>
i. My skill level at editing video on the computer: <input type="checkbox"/> Few or no skills <input type="checkbox"/> Basic skills <input type="checkbox"/> Intermediate skills <input type="checkbox"/> Advanced skills
ii. My current anxiety level about editing video on the computer: <input type="checkbox"/> Anxious/nervous <input type="checkbox"/> Somewhat comfortable <input type="checkbox"/> Comfortable <input type="checkbox"/> Very comfortable <input type="checkbox"/> Don't know yet
iii. I would like to learn more about editing video on the computer: <input type="checkbox"/> Very much <input type="checkbox"/> Sure <input type="checkbox"/> Somewhat <input type="checkbox"/> No
iv. I have used this technology as a student: <input type="checkbox"/> Often <input type="checkbox"/> Sometimes <input type="checkbox"/> Rarely <input type="checkbox"/> Never
v. I have used this technology outside my college classes: <input type="checkbox"/> Often <input type="checkbox"/> Sometimes <input type="checkbox"/> Rarely <input type="checkbox"/> Never
vi. I would like to use this technology with my future students: <input type="checkbox"/> Often <input type="checkbox"/> Sometimes <input type="checkbox"/> Rarely <input type="checkbox"/> Never
<b>c. Digital camera photography</b>
i. My skill level with digital photography: <input type="checkbox"/> Few or no skills <input type="checkbox"/> Basic skills <input type="checkbox"/> Intermediate skills <input type="checkbox"/> Advanced skills
ii. My current anxiety level about using a digital camera: <input type="checkbox"/> Anxious/nervous <input type="checkbox"/> Somewhat comfortable <input type="checkbox"/> Comfortable <input type="checkbox"/> Very comfortable <input type="checkbox"/> Don't know yet
iii. I would like to learn more about using a digital camera: <input type="checkbox"/> Very much <input type="checkbox"/> Sure <input type="checkbox"/> Somewhat <input type="checkbox"/> No
iv. I have used this technology as a student: <input type="checkbox"/> Often <input type="checkbox"/> Sometimes <input type="checkbox"/> Rarely <input type="checkbox"/> Never
v. I have used this technology outside my college classes: <input type="checkbox"/> Often <input type="checkbox"/> Sometimes <input type="checkbox"/> Rarely <input type="checkbox"/> Never
vi. I would like to use this technology with my future students: <input type="checkbox"/> Often <input type="checkbox"/> Sometimes <input type="checkbox"/> Rarely <input type="checkbox"/> Never
<b>d. Digital picture editing</b>
i. My skill level at editing photos on the computer: <input type="checkbox"/> Few or no skills <input type="checkbox"/> Basic skills <input type="checkbox"/> Intermediate skills <input type="checkbox"/> Advanced skills
ii. My current anxiety level about editing photos on the computer: <input type="checkbox"/> Anxious/nervous <input type="checkbox"/> Somewhat comfortable <input type="checkbox"/> Comfortable <input type="checkbox"/> Very comfortable <input type="checkbox"/> Don't know yet
iii. I would like to learn more about editing photos on the computer: <input type="checkbox"/> Very much <input type="checkbox"/> Sure <input type="checkbox"/> Somewhat <input type="checkbox"/> No
iv. I have used this technology as a student: <input type="checkbox"/> Often <input type="checkbox"/> Sometimes <input type="checkbox"/> Rarely <input type="checkbox"/> Never
v. I have used this technology outside my college classes: <input type="checkbox"/> Often <input type="checkbox"/> Sometimes <input type="checkbox"/> Rarely <input type="checkbox"/> Never
vi. I would like to use this technology with my future students: <input type="checkbox"/> Often <input type="checkbox"/> Sometimes <input type="checkbox"/> Rarely <input type="checkbox"/> Never
<b>e. VHS video camera recording/playback</b>
i. My skill level with VHS video recording: <input type="checkbox"/> Few or no skills <input type="checkbox"/> Basic skills <input type="checkbox"/> Intermediate skills <input type="checkbox"/> Advanced skills
ii. My current anxiety level about using a VHS video camera: <input type="checkbox"/> Anxious/nervous <input type="checkbox"/> Somewhat comfortable <input type="checkbox"/> Comfortable <input type="checkbox"/> Very comfortable <input type="checkbox"/> Don't know yet
iii. I would like to learn more about using a VHS video camera: <input type="checkbox"/> Very much <input type="checkbox"/> Sure <input type="checkbox"/> Somewhat <input type="checkbox"/> No
iv. I have used this technology as a student: <input type="checkbox"/> Often <input type="checkbox"/> Sometimes <input type="checkbox"/> Rarely <input type="checkbox"/> Never
v. I have used this technology outside my college classes: <input type="checkbox"/> Often <input type="checkbox"/> Sometimes <input type="checkbox"/> Rarely <input type="checkbox"/> Never
vi. I would like to use this technology with my future students: <input type="checkbox"/> Often <input type="checkbox"/> Sometimes <input type="checkbox"/> Rarely <input type="checkbox"/> Never
<b>f. VHS video editing</b>
i. My skill level at editing VHS tapes: <input type="checkbox"/> Few or no skills <input type="checkbox"/> Basic skills <input type="checkbox"/> Intermediate skills <input type="checkbox"/> Advanced skills
ii. My current anxiety level about editing VHS tapes: <input type="checkbox"/> Anxious/nervous <input type="checkbox"/> Somewhat comfortable <input type="checkbox"/> Comfortable <input type="checkbox"/> Very comfortable <input type="checkbox"/> Don't know yet
iii. I would like to learn more about editing VHS tapes: <input type="checkbox"/> Very much <input type="checkbox"/> Sure <input type="checkbox"/> Somewhat <input type="checkbox"/> No
iv. I have used this technology as a student: <input type="checkbox"/> Often <input type="checkbox"/> Sometimes <input type="checkbox"/> Rarely <input type="checkbox"/> Never
v. I have used this technology outside my college classes: <input type="checkbox"/> Often <input type="checkbox"/> Sometimes <input type="checkbox"/> Rarely <input type="checkbox"/> Never
vi. I would like to use this technology with my future students: <input type="checkbox"/> Often <input type="checkbox"/> Sometimes <input type="checkbox"/> Rarely <input type="checkbox"/> Never
<b>g. DVD player</b>
i. My skill level at playing DVDs: <input type="checkbox"/> Few or no skills <input type="checkbox"/> Basic skills <input type="checkbox"/> Intermediate skills <input type="checkbox"/> Advanced skills
ii. My current anxiety level about playing DVDs: <input type="checkbox"/> Anxious/nervous <input type="checkbox"/> Somewhat comfortable <input type="checkbox"/> Comfortable <input type="checkbox"/> Very comfortable <input type="checkbox"/> Don't know yet
iii. I would like to learn more about playing DVDs: <input type="checkbox"/> Very much <input type="checkbox"/> Sure <input type="checkbox"/> Somewhat <input type="checkbox"/> No
iv. I have used this technology as a student: <input type="checkbox"/> Often <input type="checkbox"/> Sometimes <input type="checkbox"/> Rarely <input type="checkbox"/> Never
v. I have used this technology outside my college classes: <input type="checkbox"/> Often <input type="checkbox"/> Sometimes <input type="checkbox"/> Rarely <input type="checkbox"/> Never
vi. I would like to use this technology with my future students: <input type="checkbox"/> Often <input type="checkbox"/> Sometimes <input type="checkbox"/> Rarely <input type="checkbox"/> Never
<b>h. DVD recorder/writer</b>
i. My skill level at making my own DVDs: <input type="checkbox"/> Few or no skills <input type="checkbox"/> Basic skills <input type="checkbox"/> Intermediate skills <input type="checkbox"/> Advanced skills
ii. My current anxiety level about burning DVDs: <input type="checkbox"/> Anxious/nervous <input type="checkbox"/> Somewhat comfortable <input type="checkbox"/> Comfortable <input type="checkbox"/> Very comfortable <input type="checkbox"/> Don't know yet
iii. I would like to learn more about burning DVDs: <input type="checkbox"/> Very much <input type="checkbox"/> Sure <input type="checkbox"/> Somewhat <input type="checkbox"/> No
iv. I have used this technology as a student: <input type="checkbox"/> Often <input type="checkbox"/> Sometimes <input type="checkbox"/> Rarely <input type="checkbox"/> Never
v. I have used this technology outside my college classes: <input type="checkbox"/> Often <input type="checkbox"/> Sometimes <input type="checkbox"/> Rarely <input type="checkbox"/> Never
vi. I would like to use this technology with my future students: <input type="checkbox"/> Often <input type="checkbox"/> Sometimes <input type="checkbox"/> Rarely <input type="checkbox"/> Never
<b>i. CD Player</b>
i. My skill level at playing CDs: <input type="checkbox"/> Few or no skills <input type="checkbox"/> Basic skills <input type="checkbox"/> Intermediate skills <input type="checkbox"/> Advanced skills
ii. My current anxiety level about playing CDs: <input type="checkbox"/> Anxious/nervous <input type="checkbox"/> Somewhat comfortable <input type="checkbox"/> Comfortable <input type="checkbox"/> Very comfortable <input type="checkbox"/> Don't know yet
iii. I would like to learn more about playing CDs: <input type="checkbox"/> Very much <input type="checkbox"/> Sure <input type="checkbox"/> Somewhat <input type="checkbox"/> No
iv. I have used this technology as a student: <input type="checkbox"/> Often <input type="checkbox"/> Sometimes <input type="checkbox"/> Rarely <input type="checkbox"/> Never
v. I have used this technology outside my college classes: <input type="checkbox"/> Often <input type="checkbox"/> Sometimes <input type="checkbox"/> Rarely <input type="checkbox"/> Never
vi. I would like to use this technology with my future students: <input type="checkbox"/> Often <input type="checkbox"/> Sometimes <input type="checkbox"/> Rarely <input type="checkbox"/> Never

<b>j. CD recorder/writer</b>	
i.	My skill level at making my own CDs: <input type="checkbox"/> Few or no skills <input type="checkbox"/> Basic skills <input type="checkbox"/> Intermediate skills <input type="checkbox"/> Advanced skills
ii.	My current anxiety level about burning CDs: <input type="checkbox"/> Anxious/nervous <input type="checkbox"/> Somewhat comfortable <input type="checkbox"/> Comfortable <input type="checkbox"/> Very comfortable <input type="checkbox"/> Don't know yet
iii.	I would like to learn more about burning CDs: <input type="checkbox"/> Very much <input type="checkbox"/> Sure <input type="checkbox"/> Somewhat <input type="checkbox"/> No
iv.	I have used this technology as a student: <input type="checkbox"/> Often <input type="checkbox"/> Sometimes <input type="checkbox"/> Rarely <input type="checkbox"/> Never
v.	I have used this technology outside my college classes: <input type="checkbox"/> Often <input type="checkbox"/> Sometimes <input type="checkbox"/> Rarely <input type="checkbox"/> Never
vi.	I would like to use this technology with my future students: <input type="checkbox"/> Often <input type="checkbox"/> Sometimes <input type="checkbox"/> Rarely <input type="checkbox"/> Never
<b>k. VCR</b>	
i.	My skill level at using a VCR: <input type="checkbox"/> Few or no skills <input type="checkbox"/> Basic skills <input type="checkbox"/> Intermediate skills <input type="checkbox"/> Advanced skills
ii.	My current anxiety level about using a VCR: <input type="checkbox"/> Anxious/nervous <input type="checkbox"/> Somewhat comfortable <input type="checkbox"/> Comfortable <input type="checkbox"/> Very comfortable <input type="checkbox"/> Don't know yet
iii.	I would like to learn more about using a VCR: <input type="checkbox"/> Very much <input type="checkbox"/> Sure <input type="checkbox"/> Somewhat <input type="checkbox"/> No
iv.	I have used this technology as a student: <input type="checkbox"/> Often <input type="checkbox"/> Sometimes <input type="checkbox"/> Rarely <input type="checkbox"/> Never
v.	I have used this technology outside my college classes: <input type="checkbox"/> Often <input type="checkbox"/> Sometimes <input type="checkbox"/> Rarely <input type="checkbox"/> Never
vi.	I would like to use this technology with my future students: <input type="checkbox"/> Often <input type="checkbox"/> Sometimes <input type="checkbox"/> Rarely <input type="checkbox"/> Never
<b>l. Presentation software</b>	
i.	My skill level at making computer presentations: <input type="checkbox"/> Few or no skills <input type="checkbox"/> Basic skills <input type="checkbox"/> Intermediate skills <input type="checkbox"/> Advanced skills
ii.	My current anxiety level about making a computer presentation: <input type="checkbox"/> Anxious/nervous <input type="checkbox"/> Somewhat comfortable <input type="checkbox"/> Comfortable <input type="checkbox"/> Very comfortable <input type="checkbox"/> Don't know yet
iii.	I would like to learn more about making a computer presentation: <input type="checkbox"/> Very much <input type="checkbox"/> Sure <input type="checkbox"/> Somewhat <input type="checkbox"/> No
iv.	I have used this technology as a student: <input type="checkbox"/> Often <input type="checkbox"/> Sometimes <input type="checkbox"/> Rarely <input type="checkbox"/> Never
v.	I have used this technology outside my college classes: <input type="checkbox"/> Often <input type="checkbox"/> Sometimes <input type="checkbox"/> Rarely <input type="checkbox"/> Never
vi.	I would like to use this technology with my future students: <input type="checkbox"/> Often <input type="checkbox"/> Sometimes <input type="checkbox"/> Rarely <input type="checkbox"/> Never
<b>m. Overhead transparencies</b>	
i.	My skill level at making overhead transparencies for overhead projectors: <input type="checkbox"/> Few or no skills <input type="checkbox"/> Basic skills <input type="checkbox"/> Intermediate skills <input type="checkbox"/> Advanced skills
ii.	My current anxiety level about using OHPs: <input type="checkbox"/> Anxious/nervous <input type="checkbox"/> Somewhat comfortable <input type="checkbox"/> Comfortable <input type="checkbox"/> Very comfortable <input type="checkbox"/> Don't know yet
iii.	I would like to learn more about using OHPs: <input type="checkbox"/> Very much <input type="checkbox"/> Sure <input type="checkbox"/> Somewhat <input type="checkbox"/> No
iv.	I have used this technology as a student: <input type="checkbox"/> Often <input type="checkbox"/> Sometimes <input type="checkbox"/> Rarely <input type="checkbox"/> Never
v.	I have used this technology outside my college classes: <input type="checkbox"/> Often <input type="checkbox"/> Sometimes <input type="checkbox"/> Rarely <input type="checkbox"/> Never
vi.	I would like to use this technology with my future students: <input type="checkbox"/> Often <input type="checkbox"/> Sometimes <input type="checkbox"/> Rarely <input type="checkbox"/> Never
<b>n. Webpage design/editing</b>	
i.	My skill level at building webpages: <input type="checkbox"/> Few or no skills <input type="checkbox"/> Basic skills <input type="checkbox"/> Intermediate skills <input type="checkbox"/> Advanced skills
ii.	My current anxiety level about building webpages: <input type="checkbox"/> Anxious/nervous <input type="checkbox"/> Somewhat comfortable <input type="checkbox"/> Comfortable <input type="checkbox"/> Very comfortable <input type="checkbox"/> Don't know yet
iii.	I would like to learn more about building webpages: <input type="checkbox"/> Very much <input type="checkbox"/> Sure <input type="checkbox"/> Somewhat <input type="checkbox"/> No
iv.	I have used this technology as a student: <input type="checkbox"/> Often <input type="checkbox"/> Sometimes <input type="checkbox"/> Rarely <input type="checkbox"/> Never
v.	I have used this technology outside my college classes: <input type="checkbox"/> Often <input type="checkbox"/> Sometimes <input type="checkbox"/> Rarely <input type="checkbox"/> Never
vi.	I would like to use this technology with my future students: <input type="checkbox"/> Often <input type="checkbox"/> Sometimes <input type="checkbox"/> Rarely <input type="checkbox"/> Never
<b>o. Internet</b>	
i.	My skill level at surfing the net: <input type="checkbox"/> Few or no skills <input type="checkbox"/> Basic skills <input type="checkbox"/> Intermediate skills <input type="checkbox"/> Advanced skills
ii.	My current anxiety level about using the internet: <input type="checkbox"/> Anxious/nervous <input type="checkbox"/> Somewhat comfortable <input type="checkbox"/> Comfortable <input type="checkbox"/> Very comfortable <input type="checkbox"/> Don't know yet
iii.	I would like to learn more about using the internet: <input type="checkbox"/> Very much <input type="checkbox"/> Sure <input type="checkbox"/> Somewhat <input type="checkbox"/> No
iv.	I have used this technology as a student: <input type="checkbox"/> Often <input type="checkbox"/> Sometimes <input type="checkbox"/> Rarely <input type="checkbox"/> Never
v.	I have used this technology outside my college classes: <input type="checkbox"/> Often <input type="checkbox"/> Sometimes <input type="checkbox"/> Rarely <input type="checkbox"/> Never
vi.	I would like to use this technology with my future students: <input type="checkbox"/> Often <input type="checkbox"/> Sometimes <input type="checkbox"/> Rarely <input type="checkbox"/> Never
<b>p. Courseware (e.g. Blackboard, WebCT)</b>	
i.	My skill level using courseware: <input type="checkbox"/> Few or no skills <input type="checkbox"/> Basic skills <input type="checkbox"/> Intermediate skills <input type="checkbox"/> Advanced skills
ii.	My current anxiety level about using courseware: <input type="checkbox"/> Anxious/nervous <input type="checkbox"/> Somewhat comfortable <input type="checkbox"/> Comfortable <input type="checkbox"/> Very comfortable <input type="checkbox"/> Don't know yet
iii.	I would like to learn more about using courseware: <input type="checkbox"/> Very much <input type="checkbox"/> Sure <input type="checkbox"/> Somewhat <input type="checkbox"/> No
iv.	I have used this technology as a student: <input type="checkbox"/> Often <input type="checkbox"/> Sometimes <input type="checkbox"/> Rarely <input type="checkbox"/> Never
v.	I have used this technology outside my college classes: <input type="checkbox"/> Often <input type="checkbox"/> Sometimes <input type="checkbox"/> Rarely <input type="checkbox"/> Never
vi.	I would like to use this technology with my future students: <input type="checkbox"/> Often <input type="checkbox"/> Sometimes <input type="checkbox"/> Rarely <input type="checkbox"/> Never
<b>q. Online chat</b>	
i.	My skill level at chatting online: <input type="checkbox"/> Few or no skills <input type="checkbox"/> Basic skills <input type="checkbox"/> Intermediate skills <input type="checkbox"/> Advanced skills
ii.	My current anxiety level about using online chat: <input type="checkbox"/> Anxious/nervous <input type="checkbox"/> Somewhat comfortable <input type="checkbox"/> Comfortable <input type="checkbox"/> Very comfortable <input type="checkbox"/> Don't know yet
iii.	I would like to learn more about using online chat: <input type="checkbox"/> Very much <input type="checkbox"/> Sure <input type="checkbox"/> Somewhat <input type="checkbox"/> No
iv.	I have used this technology as a student: <input type="checkbox"/> Often <input type="checkbox"/> Sometimes <input type="checkbox"/> Rarely <input type="checkbox"/> Never
v.	I have used this technology outside my college classes: <input type="checkbox"/> Often <input type="checkbox"/> Sometimes <input type="checkbox"/> Rarely <input type="checkbox"/> Never
vi.	I would like to use this technology with my future students: <input type="checkbox"/> Often <input type="checkbox"/> Sometimes <input type="checkbox"/> Rarely <input type="checkbox"/> Never
<b>r. Online discussion boards</b>	
i.	My skill level at joining online discussions: <input type="checkbox"/> Few or no skills <input type="checkbox"/> Basic skills <input type="checkbox"/> Intermediate skills <input type="checkbox"/> Advanced skills
ii.	My current anxiety level about using discussion boards: <input type="checkbox"/> Anxious/nervous <input type="checkbox"/> Somewhat comfortable <input type="checkbox"/> Comfortable <input type="checkbox"/> Very comfortable <input type="checkbox"/> Don't know yet
iii.	I would like to learn more about using discussion boards: <input type="checkbox"/> Very much <input type="checkbox"/> Sure <input type="checkbox"/> Somewhat <input type="checkbox"/> No
iv.	I have used this technology as a student: <input type="checkbox"/> Often <input type="checkbox"/> Sometimes <input type="checkbox"/> Rarely <input type="checkbox"/> Never
v.	I have used this technology outside my college classes: <input type="checkbox"/> Often <input type="checkbox"/> Sometimes <input type="checkbox"/> Rarely <input type="checkbox"/> Never
vi.	I would like to use this technology with my future students: <input type="checkbox"/> Often <input type="checkbox"/> Sometimes <input type="checkbox"/> Rarely <input type="checkbox"/> Never

<b>s. Email</b>	
i. My skill level at sending and receiving email:	<input type="checkbox"/> Few or no skills <input type="checkbox"/> Basic skills <input type="checkbox"/> Intermediate skills <input type="checkbox"/> Advanced skills
ii. My current anxiety level about using email:	<input type="checkbox"/> Anxious/nervous <input type="checkbox"/> Somewhat comfortable <input type="checkbox"/> Comfortable <input type="checkbox"/> Very comfortable <input type="checkbox"/> Don't know yet
iii. I would like to learn more about using email:	<input type="checkbox"/> Very much <input type="checkbox"/> Sure <input type="checkbox"/> Somewhat <input type="checkbox"/> No
iv. I have used this technology as a student:	<input type="checkbox"/> Often <input type="checkbox"/> Sometimes <input type="checkbox"/> Rarely <input type="checkbox"/> Never
v. I have used this technology outside my college classes:	<input type="checkbox"/> Often <input type="checkbox"/> Sometimes <input type="checkbox"/> Rarely <input type="checkbox"/> Never
vi. I would like to use this technology with my future students:	<input type="checkbox"/> Often <input type="checkbox"/> Sometimes <input type="checkbox"/> Rarely <input type="checkbox"/> Never
<b>t. Word processing</b>	
i. My skill level at writing a word document:	<input type="checkbox"/> Few or no skills <input type="checkbox"/> Basic skills <input type="checkbox"/> Intermediate skills <input type="checkbox"/> Advanced skills
ii. My current anxiety level about using a word processor:	<input type="checkbox"/> Anxious/nervous <input type="checkbox"/> Somewhat comfortable <input type="checkbox"/> Comfortable <input type="checkbox"/> Very comfortable <input type="checkbox"/> Don't know yet
iii. I would like to learn more about using a word processor:	<input type="checkbox"/> Very much <input type="checkbox"/> Sure <input type="checkbox"/> Somewhat <input type="checkbox"/> No
iv. I have used this technology as a student:	<input type="checkbox"/> Often <input type="checkbox"/> Sometimes <input type="checkbox"/> Rarely <input type="checkbox"/> Never
v. I have used this technology outside my college classes:	<input type="checkbox"/> Often <input type="checkbox"/> Sometimes <input type="checkbox"/> Rarely <input type="checkbox"/> Never
vi. I would like to use this technology with my future students:	<input type="checkbox"/> Often <input type="checkbox"/> Sometimes <input type="checkbox"/> Rarely <input type="checkbox"/> Never
<b>u. Spreadsheets</b>	
i. My skill level at making a spreadsheet:	<input type="checkbox"/> Few or no skills <input type="checkbox"/> Basic skills <input type="checkbox"/> Intermediate skills <input type="checkbox"/> Advanced skills
ii. My current anxiety level about using spreadsheets:	<input type="checkbox"/> Anxious/nervous <input type="checkbox"/> Somewhat comfortable <input type="checkbox"/> Comfortable <input type="checkbox"/> Very comfortable <input type="checkbox"/> Don't know yet
iii. I would like to learn more about using spreadsheets:	<input type="checkbox"/> Very much <input type="checkbox"/> Sure <input type="checkbox"/> Somewhat <input type="checkbox"/> No
iv. I have used this technology as a student:	<input type="checkbox"/> Often <input type="checkbox"/> Sometimes <input type="checkbox"/> Rarely <input type="checkbox"/> Never
v. I have used this technology outside my college classes:	<input type="checkbox"/> Often <input type="checkbox"/> Sometimes <input type="checkbox"/> Rarely <input type="checkbox"/> Never
vi. I would like to use this technology with my future students:	<input type="checkbox"/> Often <input type="checkbox"/> Sometimes <input type="checkbox"/> Rarely <input type="checkbox"/> Never



## Appendix F

### Questionnaire Data Summary Form - “Vanessa”

- Female
- 26 years old

- Degree Completed: B.A. Spanish language
- Degree Program: M.A. Foreign Language Education – Spanish
- One workshop on teaching foreign language with technology completed at a state foreign language teacher’s conference

- No public school teaching experience
- Tutor (1.5 years) at Junior college level. Library/learning lab tutor in Spanish, English, Math.
- Teacher (2 years) at private elementary school. K-8 Spanish language courses.
- University-level teaching assistant (1.5 years). World Language Education Department teaching levels 1 & 2 undergraduate Spanish language courses.

#### Self-described

- L1 English – Native proficiency in all skills
- L2 Spanish – Native proficiency in all skills

#### Self-described

- |  |   |
|--|---|
| <ul style="list-style-type: none"> <li>• Overall technology skill:</li> </ul>                            | <p>Higher than average; Median: intermediate<br/>Lower than partner</p>                         |
| <ul style="list-style-type: none"> <li>• Overall anxiety about technology use:</li> </ul>                | <p>Very low; Median: Very comfortable<br/>Less anxious than partner</p>                         |
| <ul style="list-style-type: none"> <li>• Overall curiosity on learning more about technology:</li> </ul> | <p>Extremely low; Median: Not curious<br/>Less curious than partner</p>                         |
| <ul style="list-style-type: none"> <li>• Overall use of technology as a student:</li> </ul>              | <p>Sometimes; Median: Sometimes<br/>Less often than partner</p>                                 |
| <ul style="list-style-type: none"> <li>• Overall use of technology for personal use:</li> </ul>          | <p>Sometimes; Median: Sometimes<br/>Less often than partner</p>                                 |
| <ul style="list-style-type: none"> <li>• Overall plans to use technology in teaching career:</li> </ul>  | <p>Sometimes; Median: Sometimes for newer technologies (no plans to use older technologies)</p> |
- 
- |  |   |
|--|---|
| <ul style="list-style-type: none"> <li>• Specific: Digital video camera recording &amp; playback:</li> </ul> | <p>Highly skilled – Advanced<br/>Low anxiety – Very comfortable<br/>Low curiosity – Not curious<br/>Fairly high use as a student – Often<br/>Moderate personal use – Sometimes<br/>Moderate plans to use – Sometimes</p>  |
| <ul style="list-style-type: none"> <li>• Specific: Digital video editing:</li> </ul>                         | <p>Highly skilled – Advanced<br/>Low anxiety – Very comfortable<br/>Low curiosity – Not curious<br/>Moderate use as a student – Sometimes<br/>Moderate personal use – Sometimes<br/>Moderate plans to use – Sometimes</p> |

Self-described expectations of the Foreign Language Practicum course: Experiential knowledge of internship.

“To prepare me better for the upcoming internship.” “To have a better understanding what is expected of us as teachers.”

## Appendix F (Continued)

### Questionnaire Data Summary Form - “Paula”

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- Female
  - 25 years old
- 

- Degree Completed: B.A. (No response as to major)
  - Degree Program: M.A. Foreign Language Education – Spanish
- 

- No public or private school teaching experience
  - University-level teaching assistant (1 semester). World Language Education Department teaching levels 1 & 2 undergraduate Spanish language courses.
- 

Self-described

- L1 English – Native proficiency in all skills
  - L2 Spanish – Advanced proficiency in all skills
  - L3 French – Low proficiency in all skills
- 

Self-described

- |  |  |
|--|--|
| • Overall technology skill:                            | High; Median: intermediate<br>Higher than partner  |
| • Overall anxiety about technology use:                | Very low; Median: Very comfortable<br>More anxious than partner  |
| • Overall curiosity on learning more about technology: | Very low; Median: Not curious<br>More curious than partner   |
| • Overall use of technology as a student:              | Often; Median: Often<br>More often than partner  |
| • Overall use of technology for personal use:          | Sometimes; Median: Often<br>More often than partner  |
| • Overall plans to use technology in teaching career:  | Rarely; Median: Sometimes for<br>newer technologies (plans to use older<br>technologies)   |
| • Specific: Digital video camera recording & playback: | Highly skilled – Advanced<br>Low anxiety – Very comfortable<br>Mild curiosity – Somewhat curious<br>Fairly high use as a student – Often<br>Fairly high personal use – Often<br>Fairly high plans to use – Often |
| • Specific: Digital video editing:                     | Skilled – Intermediate<br>Mild anxiety – Comfortable<br>Curious – Curious<br>Moderate use as a student – Sometimes<br>Low personal use – Rarely<br>Few plans to use – Rarely                                     |
- 

Self-described expectations of the Foreign Language Practicum course: Observation  
 “To receive more observation experience for my target language”.

## Appendix G

### Thematic Coding Schema

ROOT THEME	THEME	SUB-THEME	THEME CODE	DEFINITION OF THEME CODE
<b>Assigned Topics</b>				Dialogue in which the participants discuss their assigned topics.
	<b>Comprehensible Input</b>	One of the topics is CI	CI	Dialogue in which the participants confirm that one of their topics is CI.
		The meaning of CI. (Determination of definition of CI)	CI-Def CI-Def-Det	Dialogue in which the participants work to define and express the meaning of CI.
		Research and theory (foundations) behind CI as a teaching strategy	CI-Base	Dialogue in which the participants discuss the pedagogical bases behind the use of CI.
		CI as a teaching strategy	CI-Strat CI-Strat-When± CI-Strat-Why± CI-Strat-With±	Dialogue in which the participants discuss when, why, and with whom CI as a teaching strategy is/is not appropriate in the classroom.
		CI exemplified. (Identification of examples of CI; general and in teaching context)	CI-ID CI-ID-Gen CI-ID-Contxt	Dialogue in which the participants offer up and question their own suggestions, their previously recorded teaching videos, and reference materials as to whether or not they contain examples of CI.
		<b>Listening Skills</b>	One of the topics is LS	LS
		The meaning of LS. (Determination of definition of LS)	LS-Def LS-Def-Det	Dialogue in which the participants work to define and express the meaning of LS.
		Research and theories (foundations) of explicit instruction of LS to students.	LS-Base	Dialogue in which the participants discuss the pedagogical bases behind teaching L2 learners LS in the TL.
		Listening as a skill to be acquired and practiced by L2 learners.	LS-Skill LS-Skill-When± LS-Skill-Why± LS-Skill-With±	Dialogue in which the participants discuss when, why, and with whom L2 LS can be taught and practiced (or not) in the classroom.
		LS instruction and practice exemplified. (Identification of examples of L2 LS instruction and practice; general and in teaching context)	LS-ID-Instr LS-ID-Instr-Gen LS-ID-Instr-Contxt LS-ID-Prac LS-ID-Prac-Gen LS-ID-Prac-Contxt	Dialogue in which the participants offer up and question their own suggestions, their previously recorded teaching videos, and reference materials as to whether or not they contain examples of teaching and having students practice L2 LS.

<b>Division of Labor</b>				Dialogue in which the participants discuss or take actions that determine who will be responsible for which aspects of the video project.
	<b>Power/Leadership</b>	Seizure of, assignment of, or mutual agreement on who is in charge of the video project at a given time.	CTRL CTRL-DIR-P/V CTRL-DIR-SPK-SZ CTRL-DIR-SPK-AS CTRL-DIR-SPK-OK CTRL-DIR-ACT-SZ CTRL-DIR-ACT-AS CTRL-DIR-ACT-OK CTRL-INDIR-P/V CTRL-INDIR-SPK-SZ CTRL-INDIR-SPK-AS CTRL-INDIR-SPK-OK CTRL-INDIR-ACT-SZ CTRL-INDIR-ACT-AS CTRL-INDIR-ACT-OK	Dialogue in which the participants discuss or take actions that openly or subversively claim, assign, or designate <b>power or control</b> over a portion of the project.
	<b>Responsibilities</b>	Seizure of, assignment of, or mutual agreement on which project responsibilities belong to whom.	RESP RESP-DIR RESP-DIR-SPK-SZ-? RESP-DIR-SPK-AS-? RESP-DIR-SPK-OK-? RESP-DIR-ACT-SZ-? RESP-DIR-ACT-AS-? RESP-DIR-ACT-OK-? RESP-INDIR RESP-INDIR-SPK-SZ-? RESP-INDIR-SPK-AS-? RESP-INDIR-SPK-OK-? RESP-INDIR-ACT-SZ-? RESP-INDIR-ACT-AS-? RESP-INDIR-ACT-OK-?	Dialogue in which the participants discuss or take actions that openly or subversively claim, assign, or designate given <b>responsibilities</b> within the project.
<b>Project Design and Construction</b>				Dialogue in which the participants discuss the actions and operations they must do in order to complete the video project.
	<b>Project Direction</b>		PD	Dialogue in which the participants discuss what needs to be done to complete the project.

	<b>Actions/Operations</b>		
		Actions necessary to complete the project	PD-ACT PD-ACT-INST-ORIGIN PD-ACT-RUBR-ORIGIN PD-ACT-SELF-ORIGIN
		Operations necessary to complete the designated actions.	PD-OPR PD-OPR-INST-ORIGIN PD-OPR-RUBR-ORIGIN PD-OPR-SELF-ORIGIN
		Periodic assessment of task completion.	PD-TASK-ASSESS
	<b>Time</b>	Time to completion.	PD TIME PD TIME-PROJ PD TIME-ACT PD TIME-OPR
	<b>Presentation Sequence</b>		SEQU
		Topic Sequence	SEQU-TOP
		Explanation Sequence	SEQU-EXPLAN
		Example Sequence	SEQU-EXMPL SEQU-EXMPL-VID SEQU-EXMPL-OTHER
	<b>Presentation Format</b>	Format of presentation delivery – video, audio, textual, or static image.	DELIV-FORMT DELIV-FORMT-VIDEO DELIV-FORMT-AUDIO DELIV-FORMT-TEXT DELIV-FORMT-STAT-IMG
	<b>Presentation Pull</b>	Getting and holding the attention of the intended audience.	PULL
	<b>Presentation Creativity</b>	Use of creative/aesthetically pleasing design choices in the presentation delivery.	PD CREATV
	<b>Presentation Length</b>		LENGTH LENGTH-SEG LENGTH-TOT
	<b>Scheduling</b>	Setting work times and locations	SCHED SCHED-TM SCHED-LOC
	<b>Technology</b>		TECH
	<b>Hardware</b>		TECH-HW
			Dialogue in which the participants discuss what actions are needed to complete the project. The designated actions may be determined by the project instructions, the project rubric, or by the participants.
			Dialogue in which the participants discuss what operations are needed to complete the actions they wish to carry out. The designated operations may be determined by the project instructions, the project rubric, or by the participants.
			Dialogue in which the participants discuss what they've completed and what they still need to finish.
			Dialogue in which the participants discuss how long the project, or any of its segments, will take to complete.
			Dialogue in which the participants discuss the order in which to present concepts and examples in video.
			Dialogue in which the participants discuss the order in which to present the assigned topics.
			Dialogue in which the participants discuss the order in which to present explanations of the assigned topics.
			Dialogue in which the participants discuss the order in which to present examples (video- and other-based) of the assigned topics.
			Dialogue in which the participants discuss how concepts and examples should be delivered (presented/illustrated/clarified) within the overarching video format.
			Dialogue in which the participants discuss how to pique and maintain the interest of their target audience through the presentation design.
			Dialogue in which the participants discuss creative and aesthetic choices in their presentation design.
			Dialogue in which the participants discuss how long the segments/overall video should be.
			Dialogue in which the participants discuss when, where, and at what time they should meet to complete the project.
			Dialogue in which the participants discuss aspects of the technology they are using to complete the project.
			Dialogue in which the participants discuss the hardware they are using to complete the project.

		Use of the hardware required to complete the project.	TECH-HW-COMPTR TECH-HW-CAM TECH-HW-PERI	Dialogue in which the participants discuss the use of the computer, video camera, and additional peripherals during completion of the project.
	<b>Software</b>		TECH-SW	Dialogue in which the participants discuss the software they are using to complete the project.
		Use of the software required to complete the project.	TECH-SW-VIDED TECH-SW-OTHER	Dialogue in which the participants discuss the use of the video-editing and other software for the purpose of completing the project.
	<b>User data</b>		USER-ORIGIN	Dialogue in which the participants discuss data they have generated.
		Use of participant-generated data.	USER-ORIGIN-VID USER-ORIGIN-VID-MAKE USER-ORIGIN-VID-USE USER-ORIGIN-AUD USER-ORIGIN-AUD-MAKE USER-ORIGIN-AUD-USE USER-ORIGIN-IMG USER-ORIGIN-IMG-MAKE USER-ORIGIN-IMG-USE USER-ORIGIN-TXT USER-ORIGIN-TXT-MAKE USER-ORIGIN-TXT-USE	Dialogue in which the participants discuss the creation and use of video, audio, image, and textual data in the project.
<b>Researcher intervention/ participation</b>				
	<b>Solicited intervention</b>	Request by participants for researcher input.	RES-SOL	
			RES-SOL-HW RES-SOL-SW RES-SOL-CONT RES-SOL-PRES RES-SOL-OTHER	Dialogue in which the participants solicit input from the researcher on hardware, software, content, presentation, or other issues.
	<b>Unsolicited intervention</b>	Researcher-initiated input.	RES-UNSOL	
			RES-UNSOL-HW RES-UNSOL-SW RES-UNSOL-CONT RES-UNSOL-PRES RES-UNSOL-OTHER	Dialogue in which the researcher initiates input on hardware, software, content, presentation, or other issues.
<b>Motivation</b>		Motivations within the project work.	MOT MOT-GRADE MOT-TIME MOT-LEARN MOT-CREATV MOT-TECH MOT-OTHER	Dialogue in which the participants reveal their motivations for working and/or completing the project.
<b>Distraction</b>				
	<b>Physical distraction</b>	Sources of physical distraction.	DISTRRACT-PHYS	Dialogue in which the participants appear distracted by a source of physical (dis)comfort.

			DISTRRACT-PHYS-HUNGR DISTRRACT-PHYS-FOOD DISTRRACT-PHYS-TIRED DISTRRACT-PHYS-SLEEP DISTRRACT-PHYS-PAIN DISTRRACT-PHYS-PAINRLF	including hunger, food, tiredness, sleep, physical aches and pains, medicines, etc.
	<b>Mental distraction</b>	Sources of mental distraction.	DISTRRACT-MENT DISTRRACT-MENT-FATG DISTRRACT-MENT-AVOID DISTRRACT-MENT-ENGAG DISTRRACT-MENT-CONVERS DISTRRACT-MENT-BID-OUT DISTRRACT-MENT-BID-SELF	Dialogue in which the participants appear distracted by a source of mental (dis)comfort, including fatigue, avoidance/ (dis)engagement, off-topic conversation, attention bids from outsiders, attention bids made to outsiders, etc.
<b>Relationship</b>			REL REL-LANG REL-PARALANG REL-NVC	Dialogue or behaviors in which the participants reveal the nature of their relationship, such as their levels of trust, amicability, jealousy, etc.

## Appendix H

### Sample of Dialogic Episode Coding

<b>Dialogic Episode 61:</b>	<b>Themes:</b>		<b>REGULATION</b>
<p><b>Topic:</b> Vanessa works on project at the computer. Paula distracts while cursorily scanning textbook. They are working on different things.</p> <p><b>Essence:</b></p> <ul style="list-style-type: none"> <li>• Paula repeats request for text.</li> <li>• Vanessa jumps up, runs out &amp; back w/ the book.</li> <li>• Paula scans the index looking for Krashen &amp; CI.</li> <li>• Throughout this DE, Vanessa continues to try and stay focused and work on the computer.</li> <li>• Distractions by Paula               <ul style="list-style-type: none"> <li>• suddenly suggests Vanessa do a sultry voice-over – unspecific</li> <li>• side topic about a student of hers with a nice voice</li> <li>• comments on baby's sounds</li> <li>• commenting on Vanessa's mother's accent</li> <li>• discusses accent of family in NJ and how it rubs off on her when she visits</li> <li>• says she doesn't want to go home today</li> <li>• suggests that Vanessa' baby may be trouble when he's older</li> </ul> </li> <li>• Paula occasionally glances at book, finds 2 separate quotes, but cannot extract from them accurate meaning</li> </ul>	<ul style="list-style-type: none"> <li>• Ref</li> <li>• Distract-Phys-Tired</li> <li>• Distract-phys-food</li> <li>• Ref</li> <li>• Deliv-format-audio</li> <li>• Distract-food</li> <li>• Creatv-humor</li> <li>• Rel-para</li> <li>• Resp-Act-As</li> <li>• Ref</li> <li>• Distract – mental-convers</li> <li>• Ref</li> <li>• Mot-low</li> <li>• Distract-mental-bid-out</li> <li>• Distract-ment-convers</li> <li>• Rel-lang</li> <li>• Rel-NVC</li> <li>• Distract-ment-convers</li> <li>• Ref</li> <li>• CI-Base</li> <li>• Dist-mental-avoid</li> <li>• Distract-ment-bid-out</li> <li>• Res</li> <li>• Rel-partial listening</li> <li>• Distr-ment-convers</li> <li>• Distract-bid-out</li> <li>• Dist-ment-convers</li> </ul> <p><b>Conflicts:</b></p> <ul style="list-style-type: none"> <li>• Paula goes to the index in the book to look for Krashen/CI, but can't seem to extract valuable information from the text</li> <li>• Paula is making suggestions for creative humor</li> </ul>	<p><b>Paula:</b> (Looks off, around room, then back at screen).</p> <p><b>Vanessa:</b> Okay</p> <p><b>Paula:</b> Where's the book? (looks around room).</p> <p><b>Vanessa:</b> Oh, sorry (stands). I'll go get it (leaves room).</p> <p><b>Paula:</b> Aughk! (Looks at screen) All right. So how are we gonna transit (looks up at the ceiling, then back at screen)... that'd be cool.</p> <p>(Glances from storyboard to screen, then sees chips and reaches for them).</p> <p>Ohhh, dear, I'm sleepy.</p> <p>(Returns with books). (Looks at Vanessa).</p> <p><b>Vanessa:</b> This one <i>unintelligible</i> this...I think</p> <p><b>Paula:</b> (Looks at books Vanessa is presenting) I have that one.</p> <p><b>Vanessa:</b> Okay.</p> <p><b>Paula:</b> That's [the book for another professor's class].</p> <p><b>Vanessa:</b> This one?</p> <p>Oh, that's [the other professor's] class.</p> <p><b>Paula:</b> Mm, this is the one I need.</p> <p><b>Vanessa:</b> Mhmm. Okay.</p> <p><b>Paula:</b> That one doesn't say anything about comprehensible input, or even Krashen's theory in the index, <i>unintelligible</i>.</p> <p><b>Vanessa:</b> Okay.</p> <p><b>Paula:</b> <i>Unintelligible</i>.</p> <p>Krashen, fourteen through sixteen.</p> <p><b>Vanessa:</b> (Places her book on counter, and sits back facing computer).</p> <p><b>Paula:</b> All right, ummm, (points to screen with end of pen) I just had an idea.</p> <p><b>Vanessa:</b> What?</p> <p><b>Paula:</b> If you still (points to Vanessa with pen) wanna retape yourself like that, or just do your voice (glances over briefly at Paula), (points back at screen) you know how the screen goes up (points up) after the, umm, (looks at bite of food Vanessa is preparing to eat) credits are done?</p> <p><b>Vanessa:</b> Right (Eats, looking at screen).</p> <p><b>Paula:</b> Now, umm, you know what would be really, like, cool, like, maybe, like, <i>unintelligible</i>, like (looks at partner, eyebrows raised, head cocked to the side, soft smile), (exceedingly soft,</p>	<p><b>Linguistic:</b> <b>Destructive:</b> Interruption, assigning/ ordering, topic detour</p> <p><b>Linguistic:</b> <b>Destructive:</b> Topic shift, in-cohesive.</p> <p><b>Linguistic:</b> <b>Destructive:</b> Topic shift.</p> <p><b>Linguistic:</b> <b>Productive:</b> Managing operations.</p> <p><b>Linguistic:</b> <b>Productive:</b> Refocusing</p> <p><b>Linguistic:</b> <b>Destructive:</b> interruption and topic shift</p>



<ul style="list-style-type: none"> <li>Paula apologizes to Vanessa</li> </ul>	<p>in piece, Vanessa snaps back a bit with a comment that indirectly expresses irritation</p> <ul style="list-style-type: none"> <li>Paula starts to find a reference in the book, but Vanessa interrupts referring back to the audio suggestion, which sends Paula off-topic</li> <li>Paula's quote she finds seems to be chosen based on the way it sounds, rather than for its meaning or accuracy</li> <li>Paula again expresses her low motivation at scholarship when she comments that the professor is not likely to note the plagiarized passage from the text</li> <li>Paula comments on Vanessa's mother's accent to her English, and Vanessa retorts that her mother has been in the US and was thoroughly schooled here since pre-adolescence</li> <li>Paula returns to research, and writes very little before being distracted again</li> <li>Paula gets back to research, reads a passage on why CI is useful to the L2 learner as they can use it to produce L2 output, and misinterprets this as "the</li> </ul>	<p>pleasant) 'Hello. (Chortles) This is Vanessa Carrera' (said with precious hand and head gestures) (Looks back at book).</p> <p><b>Vanessa:</b> (Still chewing, looks at screen, then smiles slightly and glances briefly over at Paula).</p> <p><b>Paula:</b> (Returns glance). Yeah, it's just an idea I had.</p> <p><b>Vanessa:</b> You can be our, you can be our sound person.</p> <p><b>Paula:</b> Yeahyeahyeahyeahyeah I'm sorry, sorry.</p> <p>(Sill looking at book) Ooo! Nice! (Looks back at partner). (Reads from text) 'In the processing <i>unintelligible...</i>'</p> <p><b>Vanessa:</b> (Interrupting, turns back to computer screen) I don't have the video voice.</p> <p><b>Paula:</b> (Looks up at partner) Ohh my God, you should come to my second class there's, like this one student, he did a presentation, no joke, like, he's got, like, this deep voice all right, but it gets, like, deeper when he talks (chortles), (begins to smile as she tells the story) but it's like he had some past position where, like, you know, like, it's some kind of job where he has to do that kinda stuff, so everyone says he sounds like the guy that, like, tells you to put on your seatbelt on [an amusement park] ride, so he'd be, like, "<i>unintelligible...yo unintelligible mucho dinero</i>", and it's like this really deep voice, it's like he would be an excellent, like, movie man or something (looks down again to book) (chuckles with mouth full).</p> <p><b>Vanessa:</b> James Earl Jones. <b>Paula:</b> Exactly, for real.</p> <p>Oh!! (Startles slightly) I like that! (Alternately glances over at Paula and back to screen). The theory behind this, which comes from Krashen, is umm, it really would focus on how learners actually process input into quote unquote 'connect grammatical form (looks up at Vanessa) (takes a drink, and is focused on screen) with their meanings' ...that's a good quote right there.</p> <p><b>Vanessa:</b> Mark it Do you have a pen? <b>Paula:</b> Yeah, right here (turns and hands her a pen). She doesn't read the whole book, she doesn't know the whole thing. (slight laugh and turns</p>	<p><b>Linguistic:</b> <b>Constructive:</b> Apology/Repair</p> <p><b>Linguistic:</b> <b>Destructive:</b> interruption, topic shift</p> <p><b>Behavioral:</b> Paula finds passage in book, but just a quote. Interrupted before she can attach meaning to it.</p> <p><b>Linguistic:</b> <b>Destructive:</b> interruption, topic shift</p> <p><b>Linguistic:</b> <b>Constructive:</b> Small talk</p> <p><b>Linguistic:</b> <b>Destructive:</b> Interruption and topic shift</p> <p><b>Behavioral:</b> Again, referring to text, but cannot extract correct inference.</p> <p><b>Linguistic:</b> <b>Destructive:</b> Inattention to content.</p>
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	<p>purpose of CI is to output knowledge”</p> <ul style="list-style-type: none"> <li>• Vanessa isn't really listening, so she agrees</li> <li>• Vanessa is trying to focus on the editing, and Paula's chatter is distracting</li> <li>• Once again, Paula makes off-color remark about baby</li> </ul> <p><b>Resolutions:</b></p> <ul style="list-style-type: none"> <li>• Paula apologizes to Vanessa for the suggestion</li> <li>• Paula manages to get back to the reference, and extracts a small out-of-context quote</li> <li>• Vanessa employs audible self-talk to help her stay focused in the face of Paula's chatter</li> <li>• See DE 62 as Vanessa takes control and refocuses them on LS</li> </ul>	<p>know the whole thing, (slight laugh, and turns back to screen) she doesn't know where I got it</p> <p><b>Paula:</b> Ummm (Baby fussing over monitor).</p> <p><b>Paula:</b> Poor thing Is that your mom?</p> <p><b>Vanessa:</b> Yeah.</p> <p><b>Paula:</b> <i>Unintelligible</i> (chortles) I just <i>unintelligible</i> (glances up at partner) short, little Cuban woman, I was, like, “hellooo (spoken with non-native accent)” (Looks down at book).</p> <p><b>Vanessa:</b> (Wrinkled brow, slightly annoyed look) Oh, she's been here (eating).</p> <p><b>Paula:</b> <i>Unintelligible</i></p> <p><b>Vanessa:</b> She's been here since she was twelve.</p> <p><b>Paula:</b> <i>Unintelligible</i>.</p> <p><b>Vanessa:</b> She</p> <p>She went through high school ...college</p> <p><b>Paula:</b> <i>Unintelligible</i> accent.</p> <p><b>Vanessa:</b> Here so</p> <p><b>Paula:</b> My mom has like, no New York accent, (looks up at Vanessa) my family (looks back at Paula) a New York accent, that's still in New York, has a thick accent (chortles, turns back to screen), and (looks down at book) when I go to Jersey next month (looks back at Paula) I will come back talking like “oh my God, for real, like, yeah, okay” Mm (smiles) (chuckles, looks back at screen).</p> <p>(Writing) Theory behind...</p> <p><b>Vanessa:</b> (Begins typing).</p> <p><b>Paula:</b> Krashen's, oh the reasoning behind Krashen's theory</p> <p>(Shakes head) I don't feel like going home today, I really don't (Continues writing)</p> <p><b>Vanessa:</b> (Continues typing).</p> <p>Okay.</p> <p>(Sighs) mmmh</p> <p><b>Paula:</b> (Reading) Oh, this is also <i>unintelligible</i>.</p> <p>(Baby coos)</p>	<p><b>Linguistic:</b> <b>Destructive:</b> Topic shift</p> <p><b>Linguistic:</b> Intended as <b>Constructive:</b> humor, but actually <b>Destructive:</b> perceived as discourteous</p> <p><b>Linguistic:</b> <b>Constructive:</b> Repair</p> <p><b>Linguistic:</b> <b>Destructive:</b> Interruption, topic shift</p> <p><b>Linguistic:</b> <b>Destructive:</b> Topic shift</p> <p><b>Linguistic:</b> <b>Destructive:</b> Inattention</p> <p><b>Linguistic:</b> <b>Destructive:</b> Interruption, topic shift</p> <p><b>Linguistic:</b> <b>Destructive:</b> Inattention</p>
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		<p><b>Vanessa:</b> (Laughs, smiles, continues typing)  <b>Paula:</b> (looks up at partner laughing) Listen to what <i>unintelligible</i></p> <p>(Reading) (looks back at Paula) 'Intake is language that comprehended and used by learners to develop a linguistic system that they can use to produce output (looks up at partner) in the language' ... Ahhhhh (smiles, satisfied)  <b>Vanessa:</b> (Turns back to typing, smiles) Ahhhhh.  <b>Paula:</b> Nice  (Looks down) So the purpose of comprehensible input (looks at partner) is to output knowledge  <b>Vanessa:</b> (Distractedly) There you go.  <b>Paula:</b> (Looks down) <i>Unintelligible</i></p> <p>So  <b>Vanessa:</b> (Inaudible self-talk while typing – seems to have a focusing effect over Paula's interruptions).  <b>Paula:</b> So it is believed (stops typing and cocks head toward Paula), I'm going to say 'it is believed...'</p> <p><b>Vanessa:</b> (Trying to return focus to writing, inaudible self-talk, re-reading what she has written).</p> <p>(Baby coos)  <b>Vanessa:</b> (Laughs).  <b>Paula:</b> (Laughs).  It's just a bath, it's okay, no.</p> <p><b>Vanessa:</b> No, she's, uh, (looks at Vanessa) I bathed him this morning, she'd better not be bathing him (chuckles).  Though I guess she could if she wanted to.  <b>Paula:</b> Somehow I was just thinking she was giving him a bath, maybe I just misheard is all.  <b>Vanessa:</b> You'd hear him, you'd hear him scream a lot more (chuckles).  <b>Paula:</b> Oh really?  <b>Vanessa:</b> Lately. He hasn't liked taking one. (Glances back over at Paula, takes a bite).  Too bad. He gets one every day.  <b>Paula:</b> Oh so, he might be that little kid that just doesn't want to take a bath, you're gonna have a lot of trouble with him let's see when he gets older (looks back down).  (Chortles).</p>	<p><b>Linguistic:</b>  <b>Destructive.</b>  Interruption, topic shift</p> <p><b>Linguistic:</b>  <b>Destructive:</b>  Inattention</p> <p><b>Linguistic:</b>  <b>Private:</b>  Inaudible self talk – possibly a focusing function over Paula's interruptions, rather than self-regulation.</p> <p><b>Linguistic:</b>  <b>Constructive:</b> Small talk</p> <p><b>Linguistic:</b>  Intended as  <b>Constructive:</b> humor, but actually  <b>Destructive:</b> perceived as discourteous</p>
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## Appendix I

### SYLLABUS

#### Practicum in Foreign Language/ESOL Teaching

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The College of Education is dedicated to the ideas of Collaboration, Academic Excellence, and Ethics/Diversity. These are key tenets in the Conceptual Framework of the College of Education. Competence in these ideals will provide candidates in educator programs with skills, knowledge, and dispositions to be successful in the schools of today and tomorrow.

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#### **Course Description:**

This course is intended to prepare students for their internship by providing a structured pre-internship experience while meeting regularly in a university class. Participation in a school environment is one of the richest experiences prospective teachers can have in a methods course. Seniors will have the opportunity to see students and teachers in action and will be able to apply what they have learned in their foreign language/ESOL methods courses during this pre-internship experience.

#### **Course Goals and Objectives:**

1. To provide structured observations of actual classroom teaching (Foreign Language and ESOL).
2. To help students understand the implications of their actions and decisions in the foreign language and ESOL classrooms.
3. To provide additional experience in planning and developing course work (lessons, units) for teaching foreign languages and ESOL.
4. To enable students to apply their knowledge of foreign language and ESOL teaching methodology in tutorial instruction.
5. To enable students to apply their knowledge of foreign language and ESOL teaching methodology in small group instruction.
6. To enable students to apply their knowledge of foreign language and ESOL teaching methodology in total class instruction.
7. To enable students to perform a case study on two individual students (one Foreign Language, and one ELL).
8. To explore current problems and issues affecting teachers of foreign languages and ESOL.
9. To become proficient in the utilization of professional literature in Foreign Language and ESOL education in their teaching.
10. To discuss and develop their own unique style of teaching.
11. To prepare the student for internship.
12. To examine and develop effective procedures for record-keeping and improving classroom management.

### **Content Outline:**

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|--|--|
| a. The learner, the teacher, structure of the language lesson      | k. Learning stations   |
| b. Observation techniques  | l. Record keeping  |
| c. Reflective teaching   | m. Grading   |
| d. Metacognition   | n. Alternative assessment                                    |
| e. Exploring teachers' beliefs                                     | o. Multicultural classrooms and cross-cultural understanding |
| f. Classroom management  | p. Standards in Foreign Language Education                   |
| g. Characteristics of effective foreign language and ESOL teachers | q. ESOL Performance Standards                                |
| h. Language Learning Strategies                                    | r. Continuous Progress                                       |
| i. Group work- cooperative learning                                | s. Listening training  |
| j. Multilevel classes  | t. Learning beliefs  |

### **Evaluation of Student Outcomes:**

1. **Class Participation.** All students will be expected to have read the required readings and to participate in class discussions.
2. **School Participation Portfolio.** 36 hours (to include ESOL, regular education, special ed., and FLES. Schools identified with help of instructor) **CORE TASK**
  - Observation
  - Tutorial
  - Small Group Instruction
  - Total Group Instruction
  - Case Study of Two Individuals
  - Presentation and Professionalism
3. **Group presentations** on reflective teaching issues. Project will include research, oral report and a typed report to be turned in. **CORE TASK**
4. **Individual Presentation** of a mini-lesson. **CORE TASK**
5. **Video Project** filming, editing and presenting to undergraduate peers **CORE TASK**

### **Grading Criteria:**

1. **Class Participation:** 10 points
2. **School Participation Portfolio:** 40 points
3. **Pair/small group presentations** on assigned topic covered in class: 10 points
4. **Individual Presentation** of a mini-lesson: 10 points
5. **Video Project** filming, editing and presentation to undergraduate peers: 30 points

### **Textbook(s) and Readings:**

- i. Richards, J. and Lockhart, C. (1994). *Reflective Teaching in Second Language Classrooms*. New York, NY: Cambridge University Press.
- ii. Sprick, R. (1985). *Discipline in the Secondary Classroom*. West Nyack, NY: The Center for Applied Research in Education, Inc.
- iii. Reading packet.