UNIVERSITY OF CALIFORNIA

Santa Barbara

A Reflexive Approach in Coming to Know: Uncovering the Logic-of-Inquiry in Ethnographic Research

A dissertation submitted in partial satisfaction of the

requirements for the degree Doctor of Philosophy

in Education

by

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"Everything is possible for him who believes."- Mark 9:23

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DEDICATION

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Monaliza Maximo Chian

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Hueneme School District Port Hueneme, CA

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CBET (Community Based English Tutoring) Teacher –Parents and Adults

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2003–2010 Adjunct Faculty

Azusa Pacific University Ventura, CA

Assessment and Evaluation (EDUC 508)

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1995–1997 Teacher Assistant

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AERA Annual Meeting-Chicago, IL-April 2015

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Abstract

A Reflexive Approach In Coming to Know: Uncovering the Logic-of-Inquiry in Ethnographic Research

By

Monaliza Maximo Chian

For the past three decades there has been a growing call for researchers in the social sciences across disciplines and in educational research, to place a greater emphasis on being more reflexive in both the research process and the reporting not only what was found but also their methodological logic-of-inquiry they engaged to construct the "findings" or accounts from their studies (Marcus & Clifford, 1986; Atkinson, 1990; Ellen, 1994). In Education, the American Educational Research Association (AERA) addressed this argument by constructing a set of Standards for Reporting on Empirical Social Science Research (2006) and framed the argument the need for transparency in reporting on the conduct of both qualitative and quantitative research studies. Furthermore, as inscribed by many scholars and leaders in the field of educational as well as educational research (e.g., Arthur, Waring, Coe, Hedges, 2012; Green, Skukauskaite, & Baker, 2012; Anderson-Levitt, 2006; Green, Camilli & Elmore, 2006; American Educational Research Association, 2006; Kelly, 2006; Heath, 1982) the basic foundation of any educational research is an understanding of the researcher's ontological and epistemological assumptions on the nature of the phenomena under study. Therefore, this dissertation takes a reflexive approach in coming to understand how to think ethnographically by examining how and in what ways an intergenerational Interactional Ethnography (IE) research team jointly conceptualized a shared logic-of-inquiry that framed the (co) construction of a logic-in-use in order to address the challenges of conducting a multifaceted and technology-enabled ethnographic research study of a developing instructional program within a larger institutional project initiative in a public regional university. Guided by the Interactional Ethnography framework, the ethnographer conducted a reflexive analysis of two telling cases (Mitchell, 1984) of her reconstruction of key cycles of analysis that were undertaken by her with her IE research team in order to examine the series of actions and decisions required in order to uncover what she and her team needed to know, understand, and undertake in order to strive to develop emic perspectives on the development of the principles and processes of integrating long term and futures thinking concepts into established contents of undergraduate courses within the Organizational Communication department in higher education. The researcher drew on both archive records collected and constructed by her team (video records, transcripts of interviews, field notes, and final reports) and archive records of the external team (annual reports, 8 syllabi, lesson plans, course notes). Discussions of findings from this reflexive study presented a set of principles of operations (c.f, Heath; 1982; Green, Skukauskaite, & Baker, 2012) that were developed to reflect on and to interrogate the ontological as well as epistemological theories guiding the methodologies of data collection, construction, analysis, and interpretation at multiple points across the research process.

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Chapter I: Introduction

For the past three decades, there has been a growing call for researchers in the social sciences to take a more reflexive approach to reporting not only what was found through their research in education and other disciplines but also their methodological logic of inquiry they engaged in to construct the "findings" or accounts from their studies. These discussions across disciplines to place greater emphasis on being more reflexive in both the research process and the reporting of the cultural practices of a particular social group gave birth to the Reflexive Turn in the social science. This turn, with roots in anthropology in the early 70's, was developed in the United States by Clifford and Marcus (Writing Culture: The Poetics and Politics of Ethnography, 1986). Marcus and Clifford argued that anthropologists write culture, not find culture; that is, culture is an ongoing construction and not out there to be found. A similar argument was framed in the United Kingdom, by Ellen (1984), who claimed that anthropologists produce data. In writing for anthropologist in the UK, he argued that ethnographers face what he calls a series of philosophical dilemmas of understanding what it is that we really "observe" as well as how the categories we construct through our analysis of the records we collect in the field, and influence what we observe and how we make visible what is "fact" and what is "interpretation."

From Sociology, Atkinson (1990), in response to Clifford and Marcus's argument that researchers write culture, not find culture, argued that the researcher's epistemological and ontological perspectives are embedded throughout the reporting of the phenomena. In his book, the *Ethnographic Imagination: Textual Constructions of Reality, published in 1990,* he explored how sociologist use literary and rhetorical conventions to convey their findings and arguments, and to 'persuade' readers (e.g., colleagues and students) of the authenticity of their accounts. By examining selected texts, he analyzed the ways in which the author(s) constructed and illustrated their arguments. Through this process, he made visible how the author inscribed what counts as a factual account.

In Education, the American Educational Research Association (AERA) addressed this argument, not for ethnographic research alone but for all research on educational processes and issues by constructing a set of *Standards for Reporting on Empirical Social Science Research* (AERA, 2006). These guidelines framed the argument that given that educational research is read by a broad range of audiences (e.g., researchers, educators, policymakers), there is a need for transparency in reporting on the conduct of such research. However, they stated that standards are not intended to define the *conduct of empirical research,* even though the reporting and conduct of research are related. In the preamble to these standards, they stated that:

> The purpose in specifying these standards is to provide guidance about the kinds of information essential to understanding both the nature of the research and the importance of the results. While these standards are directed to authors, editors, reviewers, and readers of AERA journals, the substance of the standards and the breadth of methodological coverage are not particular to education research (ER, 1986, Volume 35, No. 6. Pg. 33).

These standards, they argued, were designed to guide researchers in reporting their work in AERA publications as well as to guide authors in making transparent the design and logic of inquiry guiding the research and the interpretive processes involved in reporting the processes of analyses.

In these standards, they also acknowledged the differences in the logic of inquiry guiding ways of designing, analyzing, interpreting and reporting different approaches to research to educational research, where relevant to the particular tradition, i.e., quantitative and qualitative research. For example, in Standard 5, Analysis and Interpretation, they distinguished the logic guiding quantitative and qualitative research.

Table 1.1

Distinguishing Among Qualitative and Quantitative Approaches to Analysis and Interpretation

With quantitative methods	**With qualitative methods**
With quantitative methods, statistical analyses are typically undertaken and reported and then discussions of the results developed. The results of statistical analysis typically involve both a quantitative index of a relation between variables or a magnitude and an index of its uncertainty.	With qualitative methods, analyses typically occur during as well as after data collection. Early analyses can help inform subsequent data collection by, for instance, identifying categories of events, actions, or people for further analysis within the ongoing study or for further study

This distinction, as represented in Table 1.1, is directly related to the problem studied in this dissertation, the problem of how and in what ways an external ethnographic research team developed understandings of the complex, overtime, and conceptual work necessary to construct an innovative instructional initiative in a higher education program. The conceptualization of an external ethnographic research team, in contrast to the more traditional view of ethnographer or ethnography team a social group, as initiating the study of a social group, resulted from the fact that two ethnographic research teams were engaged in a collaborative research initiative that was designed to support the development of a new curriculum development project at an institutional level in higher education. This project was an externally funded project initiative in a public regional university (PRU) in northern California. In particular, the project initiative, called Long Term and Futures Thinking, LTFT, was an institutionally created initiative that emerged from a common interest of independent funders, a professor of Organizational Communication, and a project consultant, in forecasting and designing solutions. The project initiative focused on designing curriculum that would enable students to think about potential problems in the future, as far out as 5,000 to 35,000 years from now. The objective of this collaborative project was to foster creative, collaborative, and critical thinking among the faculty and students. As the analysis will show in Chapter IV, the long term goal of the initiative was to develop curriculum modules that could be "transportable" for K-12 and through internet based-learning.

The external research team (referred to as the IE, Interactional Ethnography, research team), was invited to join the internal Long Term and Future Thinking (LTFT) research team to make visible, through an external analysis of archived records, what the developing processes and decisions were undertaken across the two-year period of the Pilot Instructional Project (PIP), that was embedded within the LTFT initiative. The purpose of having two inter-related research teams was to provide a systematic exploration of the principles and processes guiding the work of the curriculum designers' (i.e., Lead Professor and the Project Consultant) logic of design, (i.e., series of actions and decisions) that was developed in order to integrate long term and futures thinking concepts with established course contents within a series of undergraduate courses in Organizational Communication. The curriculum designers, the Lead Professor from Organizational Communication with a background in futures thinking and an external

Project Consultant, who has extensive background in forecasting projects and was hired by PRU to provide support and collaborate with the Lead Professor to (re)formulate the established Organizational Communication courses to integrate LTFT concepts were also part of the PRU internal ethnographers, the LTFT research team.

The PI of the LTFT research team, who also had extensive backgrounds in developing innovative and new program initiatives in higher education, as well as a research background in ethnography, was the leader of the LTFT project initiative and was responsible for supporting a team of insider researchers/ethnographers with an ethnographic research background. Members of her internal LTFT research team also shared an Interactional Ethnographic perspective with her and with the external IE research team that she invited to join the LTFT ethnographic research project after the first summer of the Pilot Instructional Project (PIP), when she decided that more detailed analysis of the developing instructional project needed to be undertaken. Based on this decision, she extended the invitation to the IE research team, who were contracted by her to analyze the developing Pilot Instructional Project.

The PI and the members of her LTFT research team had a history of collaborative ethnographic research with the IE research team, who were at a research Intensive university on the central coast of California, a fact that facilitated the IE research team's entry into the Pilot Instructional Project after the first year. This history of collaborative research, therefore, supported the development of the LTFT research team, in which insiders served as ethnographers to collect and archive the work of the PIP curriculum designers, (the Lead Professor and the Project Consultant), and the meetings at the PRU from the beginning of the LTFT initiative. The IE research team assumed the role of the external (outsider) ethnographic analysts of the developing program in higher education. The development of the LTFT research team, and the IE research team, along with their research agenda will be discussed further in Chapter IV.

The overarching project initiative, the LTFT initiative, therefore, constitutes the context of the reflexive (re)analysis of the work and decisions of the IE research team, who drew on both the archived records collected by the LTFT research team, and the records they (IE research team) collected throughout the analysis phases of this ethnographic research project. The overall goal of this internal-external ethnographic collection and analysis process, therefore, was to uncover the emic (insider) processes and decisions that constituted the work undertaken by the LTFT research team in integrating LTFT concepts with the ongoing contents of a series of established undergraduate courses in Communication that met the requirement for a Bachelor's of Arts in Communication, with an emphasis on Organizational Communication at the PRU.

Given this goal, both the internal (LTFT research team) and the external IE research team drew on Interactional Ethnographic logic-of-inquiry (Castanheira, Crawford, Green & Dixon, 2001; Green, Skukauskaite, & Baker, 2012) to guide the logic-in-use when collecting and archiving records of events leading to the developing courses and program (2012-2014). The IE research team, as will be described further in Chapter III, engaged in a multi-layered process of collecting and analyzing records constructed by the LTFT research team in the courses (2012-2014) and that also constructed data sets from the archived records made prior to their unofficial entry in Summer of 2013. The IE research team, as described further in Chapters III-V, through ongoing dialogues, interviews, and email exchanges, extended the archive in order to gain deeper understanding of the work of the LTFT research team as they undertook the integration of the LTFT concepts with course content of the Organizational Communication.

Given that the IE research team produced a comprehensive final report of what the LTFT research team accomplished over the two year period of the LTFT project, this report was accepted by the PI of the LTFT research team and the PRU, this dissertation uses this report to anchor the examination of the roles undertaken, the challenges faced, and the research process undertaken by the IE research team as it worked interactively with the insiders' research team, particularly with the Lead Professor and the Project Consultant (curriculum designers), as they created and documented an innovative educational program at the campus level. In this study, therefore, I examine how and in what ways the IE research team, for which I served as a Lead Researcher, with the guidance from the IE research team's PI, engaged in the process of analysis and interpretation of this developing curriculum initiative at a sister university more than 300 miles away. Through a process of (re)analysis of work of the IE research team that led to the production of the final report, I explore what was involved in the development of a reflexive stance by the IE research team, a team composed of members, who were first through fourth year doctoral students. Members of this external team were, therefore, in the process of developing their understandings of what constitutes an ethnographic logic of inquiry for both data collection processes, of analysis of archived records as well as when additional data collection would be needed in order to gain a grounded understanding of the LTFT team member's perspectives. This dissertation study, therefore, explores the ethnographic research process that the IE research team undertook as well as the challenges they faced in constructing the phases of the research undertaken and the actions taken to meet these challenges.

My goal in (re)analyzing the work of the IE research team and the decisions they made was to develop a language to describe and understand what a reflexive approach entails, and how this reflexive approach provides a basis for constructing a transparent reporting process that meets the following call for transparency framed by the AERA's Standards for Reporting Empirical Social Science Research in Education for both qualitative and quantitative research as represented in Table 1.2 (AERA, Educational Research, 2006, pp.37).

Table 1.2

AERA Standards for Reporting of Analysis and Interpretation In General

Analysis and Interpretation In general (for both Qualitative and Quantitative Methods)
5.1. The procedures used for analysis should be precisely and transparently described from the beginning of the study through presentation of the outcomes. Reporting should make clear how the analysis procedures address the research question or problem and lead to the outcomes reported. The relevance of the analysis procedures to the problem formulation should be made clear.
5.2. Analytic techniques should be described in sufficient detail to permit understanding of how the data were analyzed and the processes and assumptions underlying specific techniques (e.g., techniques used to undertake content analysis, discourse or text analysis, deliberation analysis, time use analysis, network analysis, or event history analysis).
5.3. The analysis and presentation of the outcomes of the analysis should make clear how they support claims or conclusions drawn in the research.
5.4. Analysis and interpretation should include information about any intended or unintended circumstances that may have significant implications for interpretation of the outcomes, limit their applicability, or compromise their validity. Such circumstances may include, but are not limited to, key actors leaving the site, changes in membership of the group, or withdrawal of access to any part of the study or to people in the study.
5.5. The presentation of conclusions should (a) provide a statement of how claims and interpretations address the research problem, question, or issue underlying the research; (b) show how the conclusions connect to support, elaborate, or challenge conclusions in earlier scholarship; and (c) emphasize the theoretical, practical, or methodological implications of the study.

Thus, this dissertation takes a reflexive approach that makes visible what is entailed in coming to understand how and in what ways an intergenerational IE research team jointly conceptualized and constructed a dynamic logic-in-use in order to address the often unanticipated challenges of conducting a multi-faceted and technology-enabled, *intersegmental* ethnographic research project in higher education. The term *intersegmental is* situationally defined as *"two different levels of institutions"* that are in partnership to collaboratively work on an ethnographic research project.

This study, therefore, constitutes what Mitchell (1984) argued as a *telling case* in anthropologically framed ethnographies. Grounded in anthropology, Mitchell (1984) argued that a telling case uncovers what has previously been unknown ethnographically and theoretically. He stated that telling cases are:

> …the detailed presentation of ethnographic data relating to some sequence of events from which the analyst seeks to make some theoretical inference. The events themselves may relate to any level of social organization: a whole society, some section of a community, a family or an individual (p. 238)

To construct this telling case of the ethnographic research process constructed by the IE research team, I traced the processes and practices that the IE research team developed to undertake chains of analyses to uncover the logic of design and implementation of a developing innovative educational initiative (LTFT) in which a Lead Professor in Communication worked with a LTFT research team to integrate long term and futures thinking with an ongoing series of courses in Organizational Communication. By identifying key cycles of analysis from archived records constructed by both the LTFT research team and IE research teams, I explored what the IE research team needed to know, understand, and undertake in order to develop understanding of emic (insider) perspectives on the processes and principles of integrating interdisciplinary content into ongoing courses within an Organizational Communication department in higher education.

Therefore, as framed above, the goal of this study was to uncover the processes and principles in how to conceptualize a logic-of-inquiry developed by the IE research team. Additionally, this study, therefore, was designed to contribute to the discussions on how to articulate, or make transparent, the ontological and epistemological assumptions that informed the constructions of the methods and methodologies for data collection and analysis (c.f., Arthur, Coe, Waring & Hedges, 2012).

Framing the Reflexivity Approach: Situating My Role in the History of the Research Project

In July 2013, I was invited to coordinate an IE research team that was recruited to conduct, as indicated previously, an ethnographic research study of an ongoing and developing work of the curriculum designers, of the Pilot Instruction Project (PIP), embedded within a larger institutional project initiative, LTFT. In particular, the IE research team was contracted to examine how and in what ways did the Lead Professor, the Project Consultant, with the university support team, led by a Principal Investigator, conceptualized the processes of integrating an external disciplinary framework, i.e., long term and futures thinking into established contents of undergraduate courses that met the requirement for a Bachelor of Arts in Communication, with an emphasis on Organizational Communication, as previously discussed. As a graduate student and a novice researcher, I considered my participation in this research endeavor as an opportunity to engage with peers as well as more-informed and more-experienced others to interactionally and dialogically (co)construct the logic-of-inquiry guiding the logic-in-use for data analysis in this particular project. Furthermore, as an experienced educator in the K-8 setting, who had been involved in designing curricular units for English Language Arts to meet the California Common Core State Standards, I was interested in uncovering the logic of reformulating established courses within a discipline by integrating novel concepts external to the disciplinary framework in higher education. Finally, as an aspiring professor in higher education, I wanted to uncover the layers of work involved in designing a course of study for a particular discipline in order to gain a deeper understanding of how to develop a course in the future. This rare opportunity to have a hands-on experience to collaboratively conduct an ethnographic research study with such an intergenerational team with different levels of expertise was motivated by my goal to learn how to think ethnographically and to experience and see what an ethnographic study-in-action looks and sounds like, particularly within an unfamiliar context of the phenomena under study.

Therefore, I joined the IE research team consisting of two other doctoral students guided by a director of a research center within Research I-intensive University, and agreed to coordinate the research project with these students. By engaging in this complex, over-time project with an internal and external ethnographic team, what became evident, to the members of the IE research team in the early phase of the research project, was that this was not like any traditional ethnographic research that we had read about. Although we had read numerous handbooks of qualitative research, and multiple articles surrounding ethnographic study as well as taken numerous graduate research courses individually and collectively to complete the requirements for residency in the university, we soon learned that we could not simply apply a set of techniques or theories in this project. We had to step back from our intellectual ethnocentrism gained from such readings and courses, to develop a particular logic of inquiry that we were able to use to accomplish this complex ethnographic process. Stepping back from our intellectual ethnocentrism required for us to suspend our individual and collective beliefs and expectations as well as to maintain an open acceptance of the actions and cultural practices of the LTFT research team as we analyzed the events that were visible in the archived sources of records across the two-year period of the Pilot Instructional Project (Green, Skukauskaite, Baker, 2012).

Factors contributing to the need to step back from what we had thought were ethnographic processes resulted from the fact that unlike a traditional ethnographic research, the IE research team did not negotiate entry to the site and its participants, as indicated previously. Rather, the IE research team was recruited by the Principal Investigator of an existing LTFT research team that was created within the institutional LTFT project Initiative. Given that this research enterprise was a negotiated contract between two different institutions with different system structures, the IE research team had two points of entry. One point of entry was an unfunded, pre-fieldwork phase from July 2013 through March 2014, given an ongoing history of collaborative work, while the other was a funded research/evaluation phase from April 2014-January 2015. Adding to the complexities of this ethnographic research project was the fact that the IE research team's unfunded, pre-fieldwork point of entry was at the end of the first year of implementation of the project. This led to the need for the IE research team to trace the events from the inception of LTFT project initiative to development of the Pilot Instructional Project that led to the IE research team's point of entry, which will be discussed further in Chapter IV. The official funding phase of the ethnographic research project was approved in the midst of the last quarter of the second year of implementation. Additionally, the physical site of the study, as indicated previously, was geographically located more than 300 miles away, making it difficult for the IE research team to travel to the physical site of the study.

Consequentially, the IE research team was never physically present in the site of study. Therefore, they were unable to directly observe what was happening in situ or to take their own field notes, participate with the everyday activities in situ (in planning meetings for the LTFT team or in the classroom), or to interact with the participants (students as well as the internal team members) in their natural setting. As stated previously, the LTFT research team had collected and archived multiple kinds of records (e.g., video records of courses in year 1 and year 2, the annual report for year 1, syllabi of 8 courses, and lesson plans for these courses), which were then made available to the IE research team. Thus, what was developed was a process of ongoing virtual and face-to-face dialogic interactions between the IE research team and LTFT research team members as well as other actors (e.g., advisory committee, program developers, and institutional participants, including a private funder for the integration project) involved in the program development work of the LTFT project initiative. Most of the collaborative interactions between the two teams were conducted virtually through computer mediated communication via Google Hangout or email conversations, with the exception of a three day-interview of the Lead Professor and project consultant and 1-2 additionally face-to-face meetings with other team members conducted at the external team's site. The written artifacts or documents were shared and exchanged through Google Docs or Dropbox. These collection conditions presented additional challenges central to the IE research team's ethnographic process that sought to come to know and understand the insider's knowledge, processes and practices within a particular group.

Despite these challenges, the external team was able to carry out the contractual ethnographic research project of the LTFT course development and curriculum integration, as evidenced by the submission and acceptance of the Final/Research Evaluation Report in March 2015. The IE research team received both informal and formal acceptance of the contents of the report from multiple actors of the project particularly the Lead Professor, the Project Consultant, and the Principal Investigator. Further acceptance was extended from the institutional level when the final report was made public in the program initiative's website. Additional acceptance of the research project from external actors of the project can be seen in the inclusion of the IE team's research in two collaborative presentations at two conferences on a long term and futures thinking conferences in July 2015.

The Roots of the Reflexive (Re)Analysis: The Rationale for A New Study

As stated in the AERA standards briefly described previously, qualitative research often raises new questions, grounded in earlier phases of the research. In this section, I frame the need for the present study, one that seeks to make visible, i.e., transparent, the conceptual, methodological and interpretive work of the IE research team in order to address calls for reflexive reporting of research across fields of research in and beyond education. The roots of the need for this dissertation study came six months after the Final Report of the LTFT project was accepted.

At this point in time what became visible to me, as the lead researcher of the IE research team, was that this project differed from those described in many of the research books, currently available to students and researchers alike. As someone about to enter the field of higher education and to potentially teach research methods, I became aware of the need to uncover the layers of work that had been undertaken by the IE research team to study the development process of the Pilot Instructional Project. Specifically, the question guiding this study explores what the IE research team, a team composed of intergenerational ethnographers, needed to conceptualize and undertake in carrying out a multifaceted and technology-enabled ethnographic research study from a distance. The term *intergenerational* is defined as a group of researchers with varying levels of experiences and expertise in academia and research backgrounds, which will be elaborated further in Chapter III. This reflexive study was designed to explore the IE research team's research process as it developed to make visible the logic-of-inquiry guiding systematic and conceptually work undertaken by the IE research team collectively as a group as well as the interactional work with the LTFT research team members in this collaborative ethnographic research in education.

Brief Review of Theoretical Considerations: Ethnography as Epistemology

In this section, I present two sets of theoretical arguments about ethnography as a logic-of-inquiry that guided the development of this study. The first focuses on issues in conceptualizing research methodologies as they relate to ethnographic research in education. The second focuses on making visible key theoretical constructs guiding an Interactional Ethnographic perspective.

Underlying the need for further exploration of the research process itself are arguments about the ways to conceptualize a research approach and the theoretical framework guiding the logic of inquiry, which in turn shape the construction of logic-in-use for data construction and analysis (Coe, 2012; Waring, 2012). In *Research Methods and Methodology (2012),* Waring (2012) defined the relationship of the four 'building blocks': *Ontology, epistemology, methodology, and methods*. He argued that these are a "series of related assumptions" that frame the research study (p.11). He further argued that the researcher must define his/her assumptions of the nature or form of social world (ontology) and the way of knowing (epistemology) throughout the research process. Additionally, Waring (2012), in the same volume, defined the term "methodology" as the "reflection of the ontological and epistemological assumptions", that constitute the "procedure or logic that should be followed" in order to conduct the research study (p.16). Furthermore, he claimed that the term "methods" is often confused with the term "methodology." From this perspective, the term "methods" is defined as the "techniques for data collection that should be used," which are guided by the methodological assumptions of the researcher (Waring, 2012, pg. 16). He argued that any researcher "should be able to understand and acknowledge the fundamental relationship between the ontological, epistemological and methodological assumptions that underpin their research and inform their choice of methods" (p.17), across the different stages of the research process.

The argument was further elaborated in a chapter by Green, Skukauskaite, and Baker (2012) on ethnography as epistemology. They argued the idea that e*thnography as epistemology,* which defines ethnography as *a way of knowing*

(Agar, 2006) or as Anderson-Levitt (2006) argues, as a philosophy of research (p.309). Drawing from Agar's (2006) conceptualization of ethnography as a non-linear system, guided by an iterative, recursive, and abductive logic, Green et al. (2012) argued that ethnography is not a method, but logic-in-use. They further offered *four principles of operation* building on the work of Agar (1994) and Heath (1982*),* that would guide ethnographers in constructing and undertaking their logic-in-use in particular studies. The four principles are: Ethnography as a non-linear system, leaving ethnocentrism aside, identifying boundaries of events, and building connections. A complete explanation of the four principles of operation is located in Appendix A, Principles of Operation Guiding the Actions of the Ethnographer. To understand what these 4 principles meant in practice, however, required my involvement over time in this complex, multi-faceted study, as well become visible in Chapters IV and V.

In an earlier text, Green and Bloome (1997) proposed a distinction between *adopting ethnographic perspective* from *doing ethnography.* They argued that an ethnographic perspective constitutes a logic-of-inquiry guiding the ethnographer and this perspective enables the researcher to take a more focused study of a particular dimensions of a social group- "it is more possible to take a more focused approach (i.e., less than a comprehensive ethnography) to study particular aspect of everyday life and cultural practices of a social group. (pp.183). This argument provided a conceptual rationale for the work that I undertook. In studying the work of the IE research team and what it needed to know, understand and do to develop emic understandings of the complex work undertaken by the LTFT research team.

I turn now to an overview of a set of key constructs that were central to an IE logic-of-inquiry. A more comprehensive discussion of this theory and method issues as well as the logic-of-inquiry is presented in Chapter II. The discussion that follows provides, therefore, a conceptual overview of the ontological framework guiding the IE as a logic-of-inquiry. This dissertation is guided by Interactional Ethnography as a philosophy of inquiry (e.g., Castanheira, Crawford, Green & Dixon, 2001; Santa Barbara Classroom Discourse group, 1991; Green, Skukauskaite, Dixon & Cordova, 2007; Baker, Green & Skukauskaite, 2009; and Green, Skukauskaite & Baker, 2012). This approach to ethnography involves an iterative, recursive, abductive, non-linear dynamic process in order to examine the chains of decisions and actions undertaken by the IE research team to construct an account that reflects the insiders' perspectives (not perception) and to address the challenges of a multifaceted and technology-enabled ethnographic research study. Building on Lakoff and Johnson (1980) argument that words inscribe a view of worlds; the word "chain" was used to purposely convey that these decisions and actions were linked. These chains of decisions, as the analyses in Chapter IV and Chapter V will make visible, were linked, not linearly, but as an interactive-responsive process among members of the LTFT research team. Thus, to uncover the dynamic processes that the LTFT actors engaged in, we constructed a common logic-of-analysis that was drawn on to construct a logic-in-use to explore the chains of decisions undertaken by the IE research team as they engaged in analysis with the LTFT research team, through their social and discursive interactions in different social spaces (e.g., virtual, face-to-face, written, among others) (Baker, Green, & Skukauskaite, 2008). This logic-of-analysis was also used by the IE research team in their study of the LTFT's process of course integration process development, which will be elaborated in Chapter II.

Building on Agar's (2004) argument that actors within a social group (Heap, 1980), as they interact across times and events, construct *a languaculture*, I argue that the IE research team developed an ethnographic research *languaculture* that framed the actions and interactions of members of the IE research team. In conceptualizing the IE research team as well as the LTFT research teams as languacultures created the need for transparency so that others beyond both the research teams could understand how and in what ways, they developed accounts the processes, practices and meanings of life within these teams. Agar (1994) argued that in studying La*nguaculture,* the ethnographer is able to construct conceptually grounded understandings of what is happening in particular events within a group, and to trace the roots and the routes (pathways) leading to particular actions, events, and meanings. He further argues that language and culture are inseparable, and that *langua in languaculture is about discourse and* goes beyond the words and sentences, and culture is about meanings that go well beyond what the dictionary and the grammar offer. The conceptual framework of languaculture, therefore, became an ontological framework within the logic-of-inquiry that I developed to examine the IE research team's process of analysis as well as the processes the IE research team used in studying the LTFT's process of course integration development, which is further elaborated in Chapter II.

To frame further the importance of creating a transparent logic-of-inquiry that can be understood by others (outsiders to the group), I drew on Bloome and Egan-

Robertson (1993), who argue that whenever people engage in a language event, whether it is a conversation, a reading of a book, or a diary writing, etc., they are engaging in intertextuality as social construction of knowledge. From this perspective, to make visible how, and in what ways, the IE research team made decisions about the actions needed to (re)construct and analyze the perspectives of the insiders in the LTFT research project, as they sought to integrate long-term and futures thinking with on-going courses in Organizational Communication, I undertook an iterative and recursive approach to tracing the discourse chains of interactions among the IE research team members and what was accomplished in and through those intertextually tied processes and events. As the report of the cycles of analyses will show, in the course of analyzing the IE research team's research process, I also had to make visible the conceptual work of formulating the particular logic-of-inquiry guiding their logic- in- use for data constructions, analyses, and interpretation processes through which they inscribed particular accounts of what members of the LTFT research team were constructing.

Participants and Sites of Study

In this section, I present a brief summary and (re)presentation of the two research teams that were considered participants for this dissertation study; the external research team from the R-1 institution (IE research team) and the internal research team from the public regional university (LTFT research team) as indicated in Figure 1.1

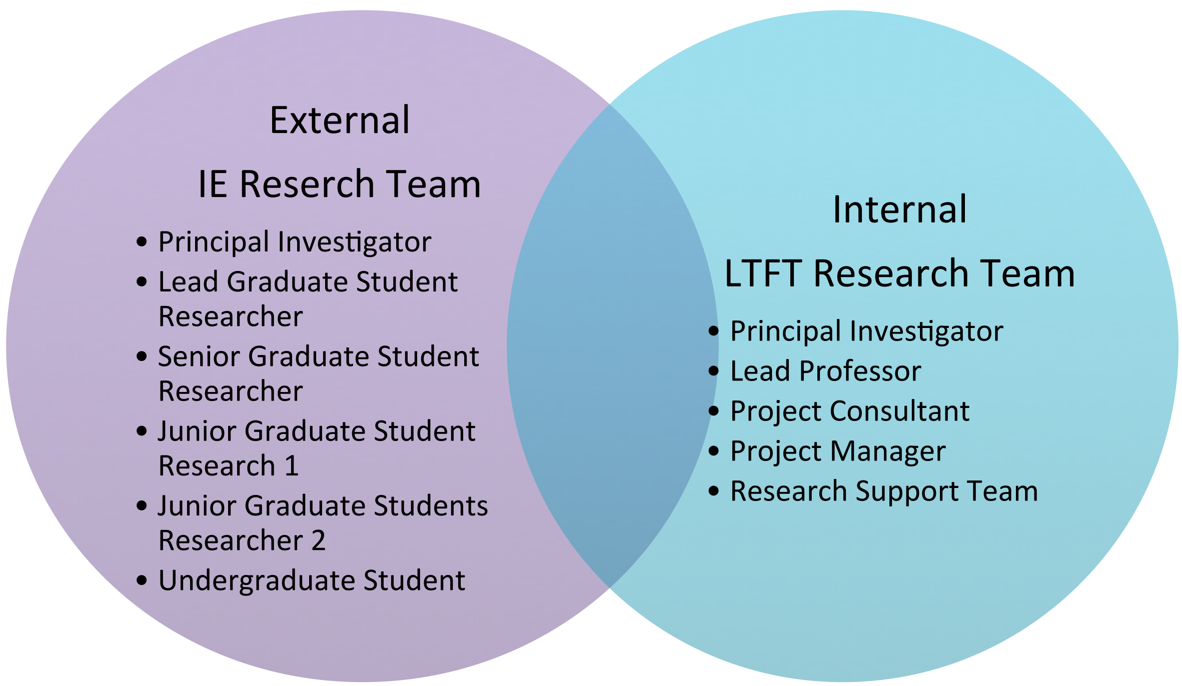

Figure 1.1. Members of the External Research Team and the Internal Research Team

As indicted in Figure 1.1, and described previously, the external, IE research team consisted of a group of three doctoral students with different levels of residency within the program, who were guided by a senior Professor, who was the PI for the IE research team, and the director of a research center, Center for Interactional Ethnographers In-Action (CIEIA). The senior Professor was also the advisor for the IE team members. A more comprehensive description of the rest of the external team members as well as their roles and responsibilities will be discussed further in Chapter III.   As indicated previously, the PI of the LTFT, who herself a former fellow of the CIEIA center, recruited the IE research team to form an intersegmental research partnership with the internal, LTFT research team. Also indicated in Figure 1.1, is the internal, LTFT research team, consisted of the Principal Investigator, Lead Professor, and a Project Consultant and the LTFT research support team. A description of these actors as well as their roles and relationship within the ethnographic research project and the larger LTFT/ Pilot Instructional Project will be presented in Chapter IV. By intersecting these two teams in this figure, I make visible an overlapping conceptual understanding of ethnographic research by the two teams as well as their common interest in uncovering the processes, and practices involved in developing an understanding of the work entailed in constructing the LTFT project initiative. This intersection also reflects, as previously indicated, the fact that both teams had common goals for the research as well as histories of collaborations. In Chapter IV, I will show how this history of professional collaboration was instrumental in the securing the negotiated research contract, multiple points of entry to the LTFT team's work, and the possibility of carrying out a multifaceted and technology-enabled ethnographic research study for two years.

Not visible in this Figure are the spaces in which the IE research team engaged in collaborative and individual work to uncover the decision-making processes and chains of activity within the LTFT project initiative. There were three major sites for the IE research team's work in this ethnographic study, i.e., spaces where face-to-face interactions and analytic work were undertaken, virtual spaces, and individual researcher spaces.

The IE research team conducted most of their collaborative work sessions in person and held such meetings in the CIEIA. However, there were rare occasions where the team met at the residence of the PI of the IE team, in restaurants, or in coffee shops. Each of these spaces afforded opportunities to explore differences in interpretation of empirical data, to identify similarities and differences in interpretation of analyses undertaken, and to decide on steps that needed to be undertaken to advance the IE research team's understandings of the work of the LTFT team as well as their own research processes.

The second site of the research project was conducted in virtual space through telecommunication technology or computer-mediated communication. The IE team's primarily communicated and shared information among team members as well as with different actors in the LTFT project, through email dialogues. Occasionally, we communicated about particular processes and analyses through phone conversations or text messages. If the team was not able to meet face-to-face, we conducted meetings and work sessions virtually through Google Hangouts. We shared our information through Dropbox, and conducted our collaborative written texts through Google Docs, a process where we jointly added, modified, and developed our collective knowledge surrounding any facets of the ethnographic research project.

The third site involved individual work spaces in homes of team members. These spaces were important given the amount of the analytic time needed for particular forms of analysis, i.e., video analysis, textual analysis, and interview analysis. However, although these individual spaces were created by each team member, these spaces often led to interactive spaces virtually supported as challenges arose or sharing of data was viewed as necessary. Thus, the latter two forms of spaces were often inter-related and dynamic, rather than planned.

Methodology and Methods

As discussed previously, methodology and methods are interdependent (Arthur, Waring, Coe, & Hedges, 2012; Green, Skukauskaite, Baker, 2012), I present the methodological processes and method of data collection and analysis that I constructed to conduct this reflexive study of the ethnographic research project, concurrently. Also indicated previously, was the selection of the Interactional Ethnographic perspective (IE), as a primary approach to studying the reflexive nature of the IE research teams' ethnographic research. This approach provided a guiding framework for analyzing the reconstructions of the methodology and methods undertaken by the IE research team as they engaged in the study of PIP's processes of course integration development. The logic of inquiry guiding this approach parallels the one used by the IE research team to construct the final report of the developing processes, practices and languaculture of the LTFT research team as they worked over two years to construct an integration of long term and futures thinking with the theories and content of the Organizational Communication programs and courses.

Central to this reflexive approach was the goal of coming to know what is happening from a perspective of those involved in interactions; that is, of gaining insights into the insider perspective of the IE research team as a group as well as my own reflexive work in (re)analyzing the work of the IE research team. Through this process, I focused on exploring ways of developing understandings of how and in what ways the IE research team engaged in chains of actions and decisions in order to conduct the ethnographic research project. Using the Final/Evaluation Research Report as an anchor of analysis, that is as the initial source of recorded actions, I developed two (re)constructed key cycles of analysis that the IE research team undertook for the final report in order to explore further the emic perspectives of the team in order to uncover the principles and processes the IE research team used to examine the reformulation of undergraduate courses, as the PIP team explored ways of integrating long term and futures thinking with organizational communication framework, within the Organizational Communication.

Additionally, I identified that the IE research team encountered challenges and explored how they addressed these challenges to construct an empirically-based final report. Given that the IE research team's point of entry was at the end of the first year of implementation, the first cycle of analysis presented in the final report was undertaken to identify what the IE research team, as an external ethnography team needed to know, understand, and undertake in order to situate the PIP ethnographic research project within the larger institutional project initiative contexts, the LTFT project initiative. The second (re)analysis focuses on cycles of analysis undertaken by the IE research team, in order to trace the developmental pathways constructed by the Pilot Instructional Project team. As in the first cycle of reflexive (re)analysis, this (re)analysis process was undertaken to establish what the external team (IE research team) needed to know, understand and undertake in order to systematically examine the nature of the pedagogical approaches used by the Lead Professor, and how, with the Project Consultant, he engaged in the process of integrating key constructs about long term and futures thinking with disciplinary content in the Organizational Communication courses that he taught.

In order to (re)construct these selected cycles the IE research team's analysis process undertaken, across the two-year period, I systematically retrieved and reflexively reviewed archived records constructed and collected by the IE research team members as well as some sources of records collected by the LTFT research team. To supplement these records, I sent formal email requests to the doctoral students, who contributed the research project and the final report. I asked them to complete a matrix of their intellectual biographies and a list of graduate courses that they had completed in order to construct an intellectual biography of the IE team. This matrix served as a basis for analysis of the history of the project and the roles and relationships among actors presented in Chapter IV. This information, therefore, I included as part of my sources of data analysis for this dissertation study. A complete list of the sources of records that were used for this study is represented in Table 1.3, List of Sources of Records for this Dissertation Study.

Table 1.3

List of Sources of Records for this Dissertation Study

Archived Sources of Records Collected and Constructed by the IE Research Team	**Archived Sources of Records Collected and Constructed by the LTFT Research Team/Additional Resources**	**New Sources of Records Collected by the Lead Researcher for this Dissertation Study**
Research/Evaluation Final Report	Annual Report for Year 1	Doctoral Student Members Intellectual Biography Matrix
Interim Report	Course syllabi (one for each 8 courses)	Doctoral Students List of Completed Graduate Research Courses
External team's threads of email exchanges surrounding the research project	Lesson Plans created by the Lead Professor and the Project Consultant	
External team's schedule calendar of collaborative work and meetings	Project Initiative Website	
External teams field notes of the meetings with LTFT team and the interviews		
External team collection of biographies of the actors involved in the project (Lead Professor, Project Consultant, Authors of the texts used in the courses)		
External team Interactional Ethnography Guide Book		
External team's thread of email exchanges between the internal and the external research team, particularly with the Lead Professor		
Transcript of the 90 minute video records of the first day		
Transcript of the series of interviews: • 2 2-hr interviews of the Lead Professor • 2 2-hr interviews of the		

	Project Consultant • 1 2-hr joint interview of the Lead Professor and the Project Consultant • 1 2-hr interview of the Primary Investigator of the external research team

In addition to the sources of records listed in Table 1.3 that I drew on to reconstruct the key cycles of analysis, I also had an ongoing consultation with the one of the members of the doctoral students of the IE research team, who assisted me with data analysis of the larger ethnographic research project. This consultation took place virtually, via Google Hangout and through ongoing e-mail exchanges in order to confirm the processes being (re)analyzed and to gain clarification of the meeting notes that the IE research team had written throughout the two-year period. Multiple discussions and interview-conversations with the PI for the IE research team were also undertaken to reflect on the teams' research process and to understand the larger institutional LTFT project initiative and the work undertaken by the key actors of the LTFT research team.

Questions Framing the Research Study

Adopting the telling case framework (Mitchell, 1984), I analyzed key cycles of analysis in order to develop an emic perspective of actors participating in, and contributing to the work of the PIP team. The process enabled me to explore perspectives from multiple points of viewing, a challenge that IE research team sought to address throughout the two-year internal-external ethnographic project. Therefore, this dissertation was guided by the overarching question:

- How and in what ways a team of Interactional Ethnographer conceptualized a common logic-of-inquiry guiding the logic-in-use to address the challenges in conducting a multifaceted and technology-enabled ethnographic research study of a developing program from a regional public university over a two-year period?

The first telling case constructed was an investigation of the cycles of analysis in order to uncover the multiple embedded histories of the larger institutional LTFT project initiative from multiple perspectives. The guiding question for this telling case was, "How and in what ways did the IE research team engage in cycles of analysis that uncovered the multiple embedded histories of the larger institutional LTFT project initiative?" The second telling case was an exploration of a cycle of analysis in order to trace the developmental pathways that led to multiple transformations of the pedagogical approaches and the processes of interdisciplinary course integration of the courses, which in turn, led to the course that the Lead Professor referred to as "our best course to date." This telling case was guided by the question, "How and in what ways did the IE research team engage in cycles of analysis tracing the developmental pathways of the multiple transformations of the pedagogical approaches and the processes of (re)formulation of interdisciplinary courses?" Both telling cases of the cycles of analysis involved the following sub-questions:

- What series of decisions and actions were undertaken for each level of analysis, by whom, with what purpose leading to what outcome?
- What questions guided every phase of the cycle of analysis?
- What sources of records did they draw on to construct data for what purpose?
- What additional information that was required and needed to collect across the cycles of analysis?

Organization of the Dissertation

This dissertation is divided into six chapters. The first chapter consists of the overview of this dissertation which includes the purpose, my role in the history of the research project, the background of the research project, the roots of the reflexive analysis, a brief review of the theoretical considerations, participants and sites of the study, an overview of the methodology and methods well as the questions framing the research. The second chapter is a conceptual review of the theoretical framework that were adopted in order to conduct both the reflexive study of the research process undertaken by the IE research team in order to jointly conceptualize a logic-of-inquiry guiding the construction of logic-in-use as well as the ethnographic research study of underlying work of the Pilot Instructional Project research team to systematically integrate interdisciplinary contents within series of undergraduate courses in Organizational Communication. The third chapter is the methodology and methods that were undertaken for this dissertation. Chapter four is a telling case of cycles of analysis the IE research team engaged in to uncover the histories of the different configurations of actors who contributed to the development of the larger institutional LTFT project Initiative. Chapter V is a telling case of cycles of analysis the IE research team engaged in, which traced the developmental pathways of the Pilot Instructional Project within and across the two-year period of the project. Chapter VI presents discussion of findings and implications for conducting such ethnographic research as well as directions for future research projects. This chapter concludes with a reflexive analysis of my goals, expectations of, and experiences in joining the IE team to conduct the research project.

Chapter II: Conceptual Literature Review

In this chapter, I present a conceptual review of literature which framed the approach that my team and I adopted in order to conduct the multifaceted and technology-enabled ethnographic research project in order to address the challenges we faced in data collection and analysis. As indicated in Chapter I, this conceptual literature is also guided the (re)analysis of this process, which formed the basis for this dissertation. Therefore, the literature review that follows constitutes the logic of inquiry guiding the study of this reflexive process. In particular, it provides a way to understand how my research team and I conceptualized a logic of inquiry in order to develop emic perspectives of the decision making processes and actions of those we were studying—The decisions and work of the LTFT research team as they developed principles of integrating external disciplinary framework into established courses of study in higher education while preserving the academic integrity of the discipline and the expectations of the project initiative as well as the demands of the institution, and the approach I developed to (re)analyzed the decisions and processes that the Interactional Ethnography (IE) research team constructed to study the LTFT development process as a developing languaculture (Agar, 1994; Agar, 2006).

In the first section of this chapter, I present series of concepts that guided the IE research teams' logic of inquiry, as well as the inquiry process in this dissertation, which shaped the present construction of logic-in-use as reflected in the chapters on methodology and methods (Chapter III) and data analyses (Chapter IV and V) in this study. The second section, I present my rationale for adopting Interactional Ethnography as the theoretical framework guiding the research process of the larger ethnographic research project as well as the (re) analysis processes of the present study. As part of the discussion, therefore, I frame how each concept presented was taken up and used as a basis for the present reflexive study of the research process undertaken by this external ethnography team.

Section I: Contextualizing the Literature Review Process

As previously presented (Chapter I), my team and I were contracted to conduct an analysis of an ongoing ethnographic research study that was embedded within a larger institutional project initiative from a regional public university (PRU) at the end of the first year of its inception. As a result, we were presented with a rich corpus of archived data they collected from the embedded five courses within their Pilot Instructional Project. Their goal in archiving these records was to provide a basis for examining the underlying work of the Lead Professor, and the Project Consultant with the support of the Principal Investigator and her LTFT research support team. My team and I did not collect these raw sources of records, and had a limited idea of how they came to being, who collected them, when, where and how, for what purpose, under what conditions, and for what outcome. Given this state-of-affairs, we encountered a series of challenges related to how to locate particular records to use as an anchor for our ethnographic (re)construction of the developing Pilot Instructional Project. Therefore, before we began our data construction and analyses, we held multiple discussions on our individual ontological and epistemological assumptions about the nature of human activities in a particular setting within a particular social group. The approach we took was an *if x then y, logic of inquiry.* Our discussions were initiated by the questions suggested by Waring (2012):

- What is the form and nature of the social world? (ontological question)

- How can what is assumed to exist be known? (epistemological question)

These questions laid the foundation for the construction of our logic of inquiry, which guided our dynamic, logic-in-use for data collection, data (re)construction, and analysis, and served as a resource for my logic of inquiry in the present study. Discussions of the underlying premises that were interdependent with the development of these perspectives are also presented in this section. I begin with the discussion of the socioconstructivist perspective on the social construction of realities. This is followed by the discussion on discourse, text, and intertextuality, all conceptual perspectives that frame how my research team and I conceptually approach the study of actors and their interactions within the social contexts. As part of the second part of this chapter, I provide the rationale for adopting Interactional Ethnography as a theoretical framework in order to conceptualize a logic of inquiry, which guided the logic-in-use adopted for data construction and analysis of the work undertaken by the LTFT research team as well as the logic of inquiry that I used to conduct a reflexive analysis of the research process undertaken by the IE research team.

Perspective on Social Constructivism: Social Construction Of Realities

Social constructivism was developed by post-revolutionary Soviet psychologist Lev, Vygotsky. In social constructivism, multiple realities are being constructed by individuals with their interactions with other individuals (Waring, 2012; Schub & Barab, 2007; Oulasvirta, Tamminen, Hook, 2005, Kim, 2001), and the (co)constructions of these realities are influenced, or shaped by, multiple elements including the individual's relationships of people to their environment(s) (Prawatt & Floden, 1994) as well as culture and context (Kim, 2001 citing Derry, 199; Mahon, 1997). Meaning-making, or knowledge, is (co) constructed as the individuals engage in social activities, and actively interact with each other and their environment. Such knowledge creation is shared (Prawatt & Floden, 1994) and evolves through social negotiations of meaning (Savery & Duff, 1995). The creation of these symbol systems, such as language, logic, and mathematical systems, are acquired over time through a membership in particular cultural group (Kim 2010). In addition, adopting Vygotsky's (1978) perspective, Von Glasser (1989) explains that learners construct their models of reality as part of a meaning-making process as they engage with culturally developed tools and negotiate meaning through cooperative social activity, discourse, and debate. According to Marshall (1996), sociocultural perspective focuses closely on cultural and linguistic factors as they interact with individuals and groups to support learning.

In a review of the socioconstructivist perspective, Galloway (2010) explains the two key concepts from Vygotsky's theories on cognitive development: The More Knowledgeable Other (MKO) and the Zone of Proximal Development (ZPD). The key concept of MKO is that there must be a person who is more knowledgeable than the learner. Applied to the LTFT project, in this case, the Lead Professor, the Project Consultant, and other external actors, served as the more knowledgeable others (MKO) to students as well as to each other and other members of the Pilot Instructional Project research team. In framing this group in this way, our research team also viewed these actors as more knowledgeable others for our analysis. In taking this conceptual stance, therefore, we viewed the work of the LTFT research team as creating a potential ZPD for our research, in order to examine more deeply their decision-making processes and actions at different phases of curriculum development in the two-year project. From this perspective, the archived records of our IE research process can also be viewed as a form of ZPD for this reflexive study, particularly given that I had ongoing access to my IE research team members as well as the LTFT research team, as I (re)examined the work that the IE research team had undertaken to construct the final report of the ethnographic research project.

The decision to adopt this conceptual argument for the present study and for the original work of the IE research team is captured in the following description of the ZPD. The concept of ZPD, suggests that, learning occurs when given an appropriate assistance by a more knowledgeable other, which could either be a peer or a professor, for this particular study. From this perspective, it is the professor's responsibility to orchestrate such flow of activities to maximize the potential learning opportunities for this particular research project. Mercer and Dawes (2008) emphasized the importance for teachers, professors, or instructors, to provide opportunities for the students [by extension, to other members of both the internal and external research teams] to participate in focused discussions. In order to develop language and thinking skills that enables them to collectively, and in turn personally, to *come to know and understand* the phenomena under study.

From this perspective, central to the understanding of how the LTFT research team, particularly the Lead Professor with the Project Consultant, developed a logic of (re)formulation and interdisciplinary processes and principles, we had to consider the collaborative dynamic work among the members, who did what, with whom, when, where, in what ways, for what purpose leading to what outcome across the different phases of the course development of the project. Further, we had to continually examine the roles and relationships among the actors in the LTFT developmental process in order to identify who was the MKO at a particular point in time for a particular purpose as well as when an individual actor became the MKO. This process was also central to my approach to reflexivity underlying the present study, a process that often required me to construct a local and situated ZPD in order to gain deeper understanding of the work of the IE research team and to step back from personal ethnocentricism gained from my work on the IE research team.

Waring (2012) adds to this developing logic by arguing that the ontological assumptions of constructivism correspond to interpretivism, as a way of knowing the social constructions of realities of a social group. He added that the "accounts or observation of the world that provide the indirect indications of the phenomena; thus, knowledge is developed through series of interpretations" (P.16). From this perspective, if the IE research team needed to develop knowledge of the LTFT team's processes and principles of course integration, then, it was crucial for us to strive for insiders' accounts or observation of the participants. Moreover, if we adopted the perspective that multiple realities are constructed through the social and discursive interactions with other members of the social group in relations with the cultures and contexts, then it is crucial for the IE research team to engage in social and dialectical interactions (Marshall, 1996) with the participants, as well as each other, in order to develop an understandings of insiders' meanings or accounts of the phenomena under study. Further, if cultures and contexts shaped the construction of meaning; then, it was imperative for the IE research team to discuss their ontological and epistemological assumptions on theories of cultures and language; conceptualizations of discourse, text and intertextuality; and views of contexts and actors within a social group. Given this argument, then, as I argue in the (re)analysis of the process used undertaken for the present study, it was also crucial to examine the work of the IE research team as a developing cultural context for the ethnographic research project.

Perspectives on Culture And Language: Languaculture

Given the conceptual argument that knowledge is constructed, in a socioconstructivist perspective, and that this process is dependent on the culture(s) that are being shaped by the actors through the social and discursive interaction among participants within the social group, this section presents the IE research team's conceptual framework on culture. Building from this perspective, we adopted Michael Agar's (1994, p.106) argument that language and culture are interdependent and are inseparable, as previously discussed in Chapter I. Agar explained this relationship in the following:

> *The* two concepts (culture and language) have to change together, Language, in all its varieties, in all the ways it appears in everyday life, builds a world of meanings. When you run into different meanings, when you become aware of your own and work to build a bridge to others, "culture" is what you're up to. Language fills the space between is sound; culture forges the human connection through them. Culture is in language, and language is loaded with culture" (pp.28).

Table 2.1. (re)presents Michael Agar's Concepts of "Langua" and "Culture," that our team adopted, which contributed to the IE research team's approach in (co)constructing the logic-in-use for data construction and analysis.

Table 2.1

Michael Agar's Concepts of "Langua" and "Culture" (From Language Shock, 1994)

Michael Agar's concepts of "culture" and "language"	
Language	**Culture**
"Language has to include more than just language inside the circle. To use a *langua*, to live in it, all those meanings that go beyond the grammar and dictionary have to fit in somewhere." (P.20)	"Culture is no longer just what some group has, it's what happen to you when you encounter differences, become aware of something in yourself, and work to figure out why the difference appeared. Culture is awareness, a consciousness, and one that reveals the hidden self and open paths to other ways of being." (P.20)
"What do speakers care about? They care about communicating with each other. From the point of view of the speakers, language is a symbolic system that they use to communicate." (p.34).	"Culture happens when you learn to use a second language… But it also happens inside your own language." (pg. 20)
"Language carries with it patterns of seeing, knowing, talking, and acting. Not patterns that imprison you, but patterns that mark the easier trains for thought and perception and action." (p. 78).	"Culture" happens when you realize that you've got a problem with language, and the problem has to do with who you are." (p.20).
	"Culture has to do with who you are." (p.21) "Culture changes you into a person who can navigate the modern multicultural world" (p.21) "Culture lights the darkened countryside into a landscape of new choices. It changes the way you look at things." (p.25) "Culture is something that happens to people when they realize that their way of doing things isn't natural law, that other ways are possible." "Culture is a conceptual system whose surface appears in the words of people's language." (P.87)

Building on the perspective of *languaculture*, our research team sought to strive to develop an emic understanding of the LTFT team's developing *languaculture*, by engaging in an ongoing social and discursive interactions with the members of the Pilot Instructional Project. Further, we considered the need to conduct a series of interview-conversations, rather than just one interview, in order to learn from them about their local language, meanings of the references used by members of the LTFT project and their cultural practices. Through our social and discursive interactions, our team developed collaborative working relationships with the members of the LTFT, in which my team and I were able to identify the boundaries of events, where we identified the need to view the Lead Professor, as our tracer unit of analysis (Green, Skukauskaite, & Baker, 2012) to understand this developing process. The interview-conversations enabled my team and me to apply the principle of "leaving ethnocentricism aside," suspending our beliefs and "bracketing our own expectations" to adopt the insider's language and inferences (Green, Skukauskaite, & Baker, 2012).

In order to gain the insider's knowledge and inference, we traced and analyzed what the LTFT team members were proposing, acknowledging, and recognizing, as academically and interactionally significant (Bloome & Egan-Robertson, 1993), through their oral and written discourse from multiple texts and intertextual references. This process is one that I also used to develop the reflexive analysis in this study, a process that involve ongoing dialogues with particular members of my team in order to step back from my own assumptions as I (re) analyzed the work we had undertaken. Therefore, the following section provides the IE research team's and my conceptual framework on the social construction of texts and intertextuality as a basis for understanding how what both the IE research team (external) and the LTFT research team's (internal) from their discursive and social interactions, not only shaped the construction of the logic-in-use for data representation and analysis in the main study but also the reflexive process that I undertook for the present study.

Perspective on Discourse, Intertextuality, Text

If we take the social constructionist view (Bloome & Egan-Roberson, 1993) of text construction as a social process, then building on Bahktin (1986), we need to view the process of that individuals engage in (co) constructing and (re)negotiating meaning across time and events. These texts, Bahktin (1986) argues, can be oral or written, or artifacts texts as well as artifacts, are constructed for others as well as for themselves. In turn, these texts are read as a dialogue develops and can be read and interpreted by others, (both insiders and outsiders --i.e., ethnographic researchers) who are seeking to understand the cultural practices with their particular social world from an emic or insider's perspective. The processes of (co) construction and negotiation of meaning are, therefore, accomplished through discourse (Bloome & Egan-Robertson, 1993).

Given this way of conceptualizing the socially constructed and textual nature of life in and out of schools (Bloome & Egan-Robertson, 1993), our IE research team found it necessary to make visible the conceptual framework on discourse that we adopted to conduct the larger ethnographic research project, before framing the concepts of texts and intertextuality. Given there are multiple and diverse definitions of discourse (Cameron, 2001), the IE research team adopted a definition of discourse as *language/discourse-in-use* building on the work of Bloome and his colleagues (Bloome & Egan-Robertson, 1993; Bloome and Clark, 2005), who in turn built on arguments by Bahktin (1986) as well as the distinctions among traditions identified by Cameron(2001). By viewing the phenomenon under study in analysis as *language/discourse-in-use*, we drew on theoretical arguments in which discourse is viewed as a process in which participants in events engage in a process of meaning construction associated with what is being undertaken and/or accomplished in the real world contexts, then we are able to read and interpret (Cameron, 2001). From this perspective, the study of *discourse/language-in-use* is related to the study of what the participants are socially and interactionally accomplishing in and through discourse and social actions (Bloome & Egan-Robertson, 1993).

To further conceptualize this process our research team also adopted Fairclough's (1995) conceptualization of the tri-partite nature of any utterance as proposed within texts (e.g., interviews, conversations, newspaper articles). Fairclough argued that utterances in such events can be viewed, *as texts, as instances of discourse practices, and as instances of social practices* (p.269). This argument added additional conceptual arguments to our developing logic of inquiry that guided our data analysis. He also argued that in these texts are traces of other texts, a conceptual argument related to the discussion of intertextuality above.

Just as there are multiple definitions of discourse, what counts as intertextuality varies based on perspectives or theoretical framework of the author. From a critical discourse analysis framework, Fairclough (1995) proposed that intertextuality should be the central focus in discourse analysis, in that "it points to the productivity of texts, to how texts can transform prior texts and restructure existing conventions(genres, discourses) to generate new ones" (p.270). From a semiotic perspective, Lemke (2012) can be viewed as adding to this argument, when he proposed that "the principles of intertextuality are also fundamental resources from making meaning within texts" (p.257). Complementing these arguments is one from a socio-construction perspective by Bloome & Bailey (1991) who defined *intertextuality, as* "the relationship between two or more texts, either written or conversational" (p.183) and "the juxtaposition of different texts" by actors in an event (Bloome & Egan-Robertson, 1993, pg. 305; Bloome, Carter, Christian, Otto, and Shuart-Faris, 2005, pg.40). Bloome and colleagues (2005) further elaborated on their definition of intertextuality:

> A word or phrase, stylistic device, or other textual feature in one text refers to another text; two or more texts share a common referent or are related because they are of the same genre or belong to the same setting, or one text leads to another (as occurs when the writing of one letter leads to the writing of one another, or when the buying of theater ticket provides admission to a play) (p.40)

As the analysis in Chapter IV and V will demonstrate, my team and I traced the chains of intertextual references leading to the identification of multiple forms of intertextuality that were defined by Bloome and colleagues. In particular, in (re)constructing our analysis of the history of the pathways taken by the LTFT team between 2012 and 2015, (as indicated in Chapter 1), we followed a phrase made by the Lead Professor, a statement that this *was our best course to date.* Specifically, we identified two or more texts that shared a common referent across time and events, as a form of triangulation, in which one text led to another text. Our research team adopted Bloome and colleagues' (Bloome & Egan-Robertson, 1993; Bloome et al, 2005) criteria for identifying the social intertextual construction, i.e., that intertextual connections have been achieved if the text(s) had been proposed*, acknowledge, recognized, and have social consequences (p. 41).*

Bloome and Egan-Robertson (1993) offered their definitions of texts to frame what they count as *social construction of intertextuality,* which is (re)presented on Table 2.2, Definition of texts to frame the meaning of social construction of intertextuality (Bloome & Egan-Robertson, 1993, pg.440).

Table 2.2

Definition of Texts to frame the meaning of social construction of intertextuality (Bloome & Egan-Robertson, 1993, p.440)

- A text is the product of *textualizing*. People *textualize* experience and the work in which they live, making those phenomena part of a language system.
- The result of *textualizing* experience can be a set words, signs, representations, etc.
- But it might be other forms not usually associated with text: architecture, rock formation, the stars in the sky, the wind, the ocean, emotion-these can all be texts, but their being texts depends on what people do… if they have been *textualized*
- In brief, text is something done by people to experience (broadly define)
- Text can be written, oral, signed, electronic, pictorial etc.
- Text can refer to a string of words, a conversational or written routine or structure (such as sharing-time), a genre of written language (e.g. poetry), as well as genre of social activities or event types (e.g. eating events)
- Following-the work of Bahktin and his colleagues-no text-either conversational or written-exists in isolation; every texts exists in relation to previous and forthcoming texts

From this perspective, the challenge that our IE research team encountered was one of developing further an understanding of what counts as "texts." Lemke (1995) provided an additional conceptualization that we drew on, also building on conceptual arguments by Bahktin (1986). He argued, that "every text, the discourse of every occasion, makes its social meanings against a background of other texts, and the discourses or other discourse" (p.257). This view provided further support for how the (re)analysis of written texts supports the exploration of emic and insider's perspectives, and why I was able to (re)construct, in part, the work of the IE research team inscribed in the final report as well as in emails and discussions among team members recorded over time.

From Theory to Methodology: Analyzing Texts in the LTFT Ethnographic Research Project

For the larger LTFT research project, our research team used multiple kinds of institutional written documents as well as the LTFT project initiative's website and the university (PRU) website along with course artifacts, syllabi, lesson plans, transcripts of video records and interview-conversations. The email conversations between the Lead Professor and the IE research team members, particularly in which I requested information or further clarification of observed phenomena, were also used as a form of text. Drawing on the definition that the existence of particular text(s) was in relations to past texts and future texts, my team and I conducted a progressive level of analytic scale to trace the historical roots and routes of the a particular texts in the Pilot Instructional Project study. These texts became anchors also for the (re)analysis of the work of the IE research team's research process in uncovering the layers of iterative, recursive, and non-linear development processes undertaken by the LTFT team.

Building from the principle of "ethnography as non-linear system", our team engaged in an abductive non-linear systemic approach, where we followed the referential cues (a form of contextualization cue), in particular text (e.g., use of past tense, use of particular labels for events, use of inscribed actions, among others). For example, as the analysis will show, our IE research team started with an "utterance" (a text) made by the Lead Professor referring to the course offered in Spring

2014, as “our best course to date”, (e.g., Bahktin, 1986; Fairclough, 1995) as a way of “*textualizing” (Bloome & Bailey, 1991)* his process of interdisciplinary course integration. This analysis led to the need to interview of the Lead Professor to probe what he meant by this phrase, which in turned led to the construction of transcripts, and a series of multiple cycles of analysis. By tracing a particular reference as an anchor, we were also able to identify a series of inter- related texts that then formed the basis for analysis of the intertextual references made by the speakers of oral texts as well as the authors of the written texts. This process represents the way in which we adopted the ethnographic *principle of operation of building connections*, which is connecting one text to other texts across time and events (Green, Skukauskaite, & Baker, 2012).

Building from the complementary concepts of discourse, texts, and intertextuality provided a fundamental basis for the IE research team to develop understanding of emic perspectives of different member of the LTFT team as they developed the processes and principles of design of the interdisciplinary course and the integration decisions and processes throughout the two year development period. This approach also enabled the IE research team to explore how the LTFT team maintained the academic demands of the communication discipline as well as the expectations of the multilevel institutional contexts. The next section presents the IE research team’s conceptual framework of the term *context(s)* and actors in a social world, which influenced how the team’s shared assumptions informed the development of the logic-in-use to guide both the analysis they used and the one guiding my (re)analysis of the research process the IE research team undertook to carry out the LTFT ethnographic research project.

Perspective on Actors within the Social Context

My review of literature focusing on the concept referred to as "context" lead to our understanding that "context", like texts and discourse, also has multiple definitions depending on theoretical perspectives or program of research (Strike, 1989), guiding the logic of inquiry in particular research studies. For example, Oulasvirta, Tamminen, & Hook (2005), from socioconstructivist perspective on the context of human computer interaction, argued that "interpretation of context is always constituted within a frame of reference" (pg. 196). From this perspective, context is situated within a particular event created by the particular actors or group of actors within a particular social group, engaging with a particular artifact, within a particular point in time. Schuch & Barab (2007) explained, drawing on Prawatt and Floden's (1994) definition of context. They argued that Prawatt and Floden "discussed socioconstructivism from a contextualist worldview, supporting the notion that from this perspective, knowledge verification is linked to actions and events that occur." Lemke (1990), from a semiotic perspective, added to this developing conceptualization of texts when he emphasized that, "individuals juxtapose the actions or events in many contexts to make them meaningful, a process of "*contextualizing practices"* (P.187).

Erickson and Shultz (1981), provide still another perspective on context, when they suggest that contexts are interactionally and socially constructed and can shift from moment to moment or with different configurations of actors. Thus, like Bahktin (1986), Bloome (1991; 1993; 2005) Lemke (1995) and others, they argue that people define "when" and "what" context is as well as it become contexts for each other:

> Contexts can be thought of as not simply given in the physical setting-kitchen, living room, sidewalk in front of drug store-nor in combinations of person (two brothers, husband, and wife, firemen). Rather, contexts are constituted by what people are doing and when and where they are doing it (Erickson & Shultz, 1981; p.148).

Based on these arguments about the constructed nature of context in and through actions and interactions of participants in particular social events, our research team adopted this definition of context as:

- Contexts are constituted by what people are doing, when, where they doing it, and *with whom, by whom, with what purpose, under what conditions, leading to what outcomes.*

Central to this perspective on context is the conceptual argument from ethnomethodology in which people are viewed as actors within the social system, not merely in the social world (Heap, 1991; Castanheira, Crawford, Green & Dixon, 2001) a perspective that Heap (1991) calls a Social Model that was grounded in Ethnomethodology. Heap argues that a sociological approach to understanding the meaning of the actions and discourse of the actors can shed light of what might be invisible or taken for granted dimensions and relationships. Therefore, our team argued that if we accept these premises presented in Table 2.3; Heap's Social Models in Relations to Pilot Instructional Project Research Project, then, it was crucial for our team to examine further the roles and relationship of actors, and how and in what ways they are orienting to each other, for what purpose, under what conditions leading to what outcomes. Therefore, the following implications for our research are represented in this table was considered in relations to the Heaps' social model and how it guided our methods and methodologies for data construction and analysis process.

Table 2.3

Heap's Social Model in Relations to the Pilot Instructional Project Research Project

Heap's Social Model	IE Research Team Conceptual Approach to the LTFT Ethnographic Research Project	Implications to the Logic-In-use Developed by the IE research team (External Research Team)
The individual is defined as an actor in a social system.	This individual brings in his/her socio-cultural and linguistic presupposition (Gumperz, 1997); as well as resources into the LTFT, which in turned shaped the development of the program and the languaculture of the group.	This premise led to the analysis of the intellectual histories of the Lead Professor and the Project Consultant, in order to trace how and in what ways they contributed to the development of the project. It also led to identification of the multiple actors, and their roles and relationships to the program and to each other.
It is imperative to define situation as formulated by the actors	In accordance with Heap, the IE team adopted the principle of operation in conducting ethnography, in which we suspended our beliefs and bracketing our own expectations, leaving aside ethnocentricism, in order to seek insider's folk terms and trace interactional exchanges (Green, Skukauskaite & Green, 2012, pg. 313).	This concept framed for the IE team the need to conduct series of interview-conversations with the Lead Professor, the Project Consultant, and the Principal Investigator multiple points of viewing, and adopt their developing languaculture. It also led the need for me to conduct an analysis of the content of the Organizational Communication and other supplemental texts being presented within the course in order to obtain and learn the local language.
An actor acts consciously. An actor has preference	These premises parallel the social socioconstructivist perspective that each actor individually constructs meaning as s/he negotiates or interprets meaning accordingly as well as the choice to take up or not what is being made	These premises framed the need for the IE research team to trace the actions and decisions of the Lead Professor in (re)formulating his pedagogical approaches or what key constructs to integrate each (re)iteration of a course or each

	available.	quarter.
Each actor aligns his/her actions to the actions of others by ascertaining what they are doing or intends to do-in other words, by "getting at" the meaning of their acts.	In the processes of communication, our team adopts the Bahktinian dialogic concept that each speaker speaks with implicated hearer.	This premise frames the need for the IE team to transcribe the video recorded interview-conversations to capture any contextualization cues that might potentially contribute to the discourse analysis of the transcripts. This also led the need to conduct a joint interview with the Lead Professor and the Project Consultant.
Social structures are stable and governed by rules (norms, values) which may, or may not, be complete and are observable through actions of others.	In accordance with this premise, my team and I understand that each actor is interrelated to the contexts of the phenomena. For instance, the Lead Professor is accountable towards the school of the discipline and its department, the institution, the field of study as well as the expectations of the project initiative. The Project Consultant is bound by her negotiated roles and responsibilities in relations to the project initiative.	This premise framed the need for my team and me to uncover the historical roots of the project initiative situating our contracted ethnographic research project within the multiple layers of context and set the boundary of unit of analysis, guided by the principle of operation of "identifying the boundaries of events" (Green, Skukauskaite, & Baker, 2012).

Summary

In the discussion of the concepts presented in this section, I described the ontological and epistemological assumptions that framed the IE research team's construction of logic of inquiry, which in turned guided the development of our (and by extension for the present study, my) logic-in-use for the abductive and non-linear work of data collection-construction-analysis. Furthermore, I also provided the team's conceptual framework of the underlying theories that guided the ontological and epistemological perspective that the IE research team constructed for the LTFT ethnographic research project, and which I then used to guide my (re)analysis processes in the present study of the reflexive nature of ethnographic research. As argued in this section, the conceptual logic-of-inquiry guiding both the IE research team's work and my work about their process included a series of inter-related concepts, i.e., the concepts of language, culture, discourse, text, intertextuality, context and actors within a social model. Embedded in the discussion of our conceptual framework was an explanation how these theories and perspectives shaped our collective methodologies and methods as well as my personal methodology for data collection, construction, and analysis. The next section, I present the IE research team's rationale for choosing Interactional Ethnography as theoretical framework that guided our logic-in-use for data construction and analysis process.

Section 2: Interactional Ethnography in Uncovering the Co-Construction of the Unknown

In this section, I present the rationale for adopting Interactional Ethnography in order to study the social construction of ways in which the Lead Professor and LTFT research team designed courses that integrated long term and futures thinking with ongoing courses content in Organizational Communication theory in an ongoing higher education course of study. Interactional Ethnography, as a philosophy of inquiry, has its roots in theories from anthropology, cognitive science, education, linguistic, and sociology. This philosophical perspective, therefore, constitutes a logic-of-inquiry that provides a principled approach to examining the local theories, cultural practices, and situated processes that members of a sustaining social system (co)construct through their daily discursive and social interactions (Heap, 1981; Baker, Green, & Skukauskaite, 2008). Rooted in anthropological theories of culture, and sociolinguistics and discourse analysis, Interactional Ethnography (IE), provides a conceptually-driven approach to the study of the social construction of daily life (e.g., Castanheira, Crawford, Green & Dixon, 2001; Santa Barbara Classroom Discourse group, 1991; Green, Skukauskaite, Dixon & Cordova, 2007; Baker, Green & Skukauskaite, 2008; and Green, Skukauskaite & Baker, 2012). IE ethnographers seek to make visible how local members within a social group inscribe and signal to each other, particular ways of knowing, being, and doing through their interactions face-to-face [by extension, virtually] within and across events, as well as through their (co)construction of local and situated artifacts.

Underlying this approach to ethnographic research is an argument developed by Green and Dixon along with their colleagues from Santa Barbara Classroom Discourse

Group (1991) as well as Green & Bloome (2010), who claimed that ethnography can be viewed as encompassing multiple logics that can be use within and across sites, rather than having a single set of criteria for which ethnographers to use. From this perspective, Interactional Ethnography encompasses sets of multiple and complementary theories guiding the development of the logic-in-use for data construction and analysis within and across the research process.

Given the aforementioned multiple challenges faced by the IE research team of this ethnographic research study, the theoretical perspectives and the complementary theories of Interactional Ethnography complemented with the team's conceptualization of the social nature of realities as well as their conceptual assumptions about the created nature of knowledge construction as discussed in the first section of this chapter.

Grounded by the theories of *discourse/language-in-use* (see Section 1 above) and practice centered theories of culture (Green, Skukauskaite & Baker, 2012, Interactional Ethnography provided my team and me, a logic-of-inquiry that drew on to construct our logic-in-use in our particular studies that examined on what counts as knowing, being, and doing local and situated cultural practices in the LTFT ethnographic research project for the IE research team for this dissertation study. The IE logic-of-inquiry also framed ways of identifying, "rich points' (Agar, 1994) to anchor particular levels or angles of analysis of the work of the actors in both research sites (LTFT and the IE research team) to develop deeper understanding of the purposes of the decisions made and the actions taken by actors in these two sites. IE, therefore, provided my research team and me, collectively and individually, a theoretically driven logic-of-inquiry that guided our selection of anchor of events (e.g., utterances, social activity/events) for analysis as well as the identification of tracer units (e.g., texts, individuals, processes, practices) of analysis. The units of analysis provided a basis for uncovering chains of the actions/interactions of a particular individual within a social group, the actions of others in relationship to the tracer unit, and/or analysis of what the whole group (the collective) was accomplishing across events, times, and actors. For tracing a particular tracer unit of analysis, we were able to record or to uncover all the actors. By tracing a particular tracer unit of analysis, we were able to uncover the actors with whom a particular individual interacted with, when, where, in what ways, with what purpose, under what conditions leading to what outcomes. Thus, the IE logic-of-inquiry provided a foundation for identifying the patterns of work undertaken, individually and collectively, by member(s) in particular social groups, within a particular point of time (Mitchell, 1984).

Distinguishing Doing of Ethnography from Developing an Ethnographic Perspective

In this section, I define what I mean by an ethnographic perspective, and how this differs from ethnographic tools. Drawing on Green & Bloome (1997), I make a distinction between of doing ethnography, adopting ethnographic perspective, and using ethnographic tools.

Green and Bloome provide the following distinction:

> **Doing ethnography -** involves the framing, conceptualizing, conducting, interpreting, writing, and reporting associated with broad, in-depth, and long-term, study of a social or cultural group, meeting the criteria for doing ethnography as framed within a discipline or field (e.g. anthropology, education, and sociology).
> **Adopting an ethnographic perspective -** means that it is possible to take a more focused approach (i.e., do less than a comprehensive ethnography) to study particular aspects of everyday life and cultural practices of a social group. Central to an

ethnographic perspective is the use of theories of culture and inquiry practices derived from anthropology or sociology to guide the research.

Using ethnographic tools -refers to the use of method and techniques usually associated with fieldwork. These methods may or may not be guided by cultural theories and questions about the social life of group members. (Adapted from Green & Bloome, 1997, p.183).

From this definition of ethnographic perspective, guided by the IE research team's shared conceptual framework of culture, we conducted cycles of analysis each focusing on particular dimensions of the development of the Pilot Instructional Project. In particular, we conducted cycles of analysis in order to uncover the historical roots of the project initiative from its inception and implementation, leading to our initial point of entry. This ethnographic approach focusing on theories of culture focused our analysis on a process of constructing understandings of how the members of the LTFT research team and the LTFT project initiative were orienting to each other, and were holding each other accountable to particular social processes being mutually constructed. It also focused our analysis on how members of the group were engaging, interpreting, and constructing texts for what purpose, under what conditions, leading to what outcome (e.g. Bloome, 1983, 1991; Bloome & Green, 1984, 1992; Green & Harker, 1982; Heap, 1980; 1991; Heath, 1982; Santa Barbara Classroom Discourse Group, 1992a). This ethnographic approach, grounded in anthropological or sociological perspectives on the social construction of everyday life within a sustaining social group also provided our team with a language to frame the questions for our analysis that focused in a particular segment of life. The following interdependent sets of question were central to this approach: ask specific

- Who did (said or wrote) what

- With whom
- When
- Where
- How
- In what ways
- Under what conditions
- For what purpose
- With what outcome

The following set of questions provides a telling case (Mitchell, 1984) of the questions generated throughout the analysis of the LTFT project. Drawing from Baker, Green & Skukuaskaite (2008, pp. 88), we adapted these questions to construct particular set of questions as we sought to develop insiders' perspectives on the local and situated knowledge being constructed by the LTFT research team through their abductive, iterative, recursive non-linear system approach to integrating LTFT concepts with ongoing organizational theory courses in communication. The following questions guided our system of data construction and data analysis

- What counts as knowing, being and doing in each iteration of this social group called a "course"?
- How are the processes, practices, referential systems, academic contents, common knowledge(s), identities, roles and relationships as well as norms and expectations of the events and texts of everyday life being constructed within the observed (or recorded), for particular groups within the

LTFT ethnographic research project, discursively and interactionally constructed?

- Who had access to these processes, practices, identities, and other social constructions, when, where, under what conditions, in what ways, for what purposes?
- What were outcomes or consequences for students and teachers [for this research project, the LTFT research team] across times and events?
- How do these shape the repertoires for learning and students [for LTFT research team] have available to guide their actions and interpretations in other events, groups, or discipline.

Adopting the four principles of operations of ethnography (See Appendix A) as a philosophy of inquiry (Anderson-Levitt, 2006), and a way of knowing (Agar, 2004), enabled our team to confidently communicate with each other drawing on our shared logic-in-use throughout the process of conducting the intersegmental ethnographic research project. Further, it provided us a logic-in-use that enabled us to conduct a non-linear system of analysis that was iterative, recursive and abductive and framed what we needed to know, understand, and undertake to address the challenges we encountered in developing an understanding of the insiders' perspectives of the principles and processes of designing integrated interdisciplinary courses embedded within a Pilot Instructional Project from multiple points of viewing.

The following table, Table 2.4, presents a summary of the research questions that the IE research team developed in order to gain an emic perspective of the logic of design developed by the Lead Professor with the support of the Project Consultant and input from the Principal Investigator. It also makes visible the two cycles of analysis undertaken in that study. This table, therefore, provides an overview of the records of the research processes that were available for (re)analysis in this dissertation study of the IE research team's logic and processes. The research questions are categorized in three kinds of question: overarching question; initiating question; guiding questions, is (re)presented in Table 2.4: The Overview of the Research Questions of the Larger Ethnographic Research Undertaken by the IE Research Team

Table 2.4

The Overview of the Research Questions of the Larger Ethnographic Research Study Undertaken by the IE Research Team

Overarching Question	How and in what ways the Lead Professor, Project Consultant did with university support team, led by a Principal Investigator conceptualized the processes of integrating external disciplinary framework into established undergraduate courses in higher education?	
Cycles of Analysis	First Cycle of Analysis	Second Cycle of Analysis
Purpose	Uncover the multiple histories of the larger institutional Project Initiative situating the Pilot Instructional Project leading the IE team's point of entry	Trace the developmental pathways of the processes of course (re)formulation across the two-year period of the Pilot Instructional Project
Initiating Questions	4.0: How was the Project Initiative initiated, developed, and implemented, by whom, for what purpose, under what condition leading to what outcome?	5.0: How were the processes of course (re)formulation developed across the two year period of the Pilot Instructional Project?
Guiding Questions	4.1 What is the background of the Project Initiative from its inception leading to the Interactional Ethnography team's entry to the LTFT ongoing ethnographic research?	5.1: How, in what ways, drawing on what interdisciplinary and inter-segmental project team expertise, did the Lead Professor develop conceptually grounded approach for teaching long term and futures thinking to undergraduate students within a Communication program across time in this two-year Pilot Instructional Project?
	4.2 Who are the different actors and what roles did they contribute to the development of the Project Initiative? 4.3 What are the intellectual histories of the two primary actors responsible for the (re)formulation of the embedded Organizational Communication courses within the LTFT that enabled them to collaborate successfully?	5.2: How, and in what ways, did this grounded recursive approach support the Lead Professor in engaging students in developing understanding of both organizational communication theories, and in long term and futures thinking processes and practices in relationship to societal collapse and organizational development?

Drawing on the archived records of this complex and multi-faceted project, this dissertation, I (re)analyzed the work of the IE research team in these two cycles of analysis to reflexively uncover how and in what ways the intersegmental research process to study the developing program from a regional public university over a two-year period.

Summary

In this chapter I discussed the ontological and epistemological assumptions that framed both the IE research team's construction of logic of inquiry, which, in turn, guided the development of our logic-in-use. I also described how the logic-in-use guided an abductive and non-linear system of data collection-construction-analyses, as well as the reflexive analysis approach for this dissertation study. Further, I also provided theories underpinning the ontological and epistemological perspective that we adopted to conduct the ethnographic research project, which was also then taken up and used to guide parallel processes in this dissertation study. These complementary conceptual frameworks consisted of theories of language, culture, discourse, text, intertextuality, context and actors within a social model. In the process of explaining the shared conceptual framework of the IE research team, I explained how these theories and perspectives shaped the IE research team and my methods and methodologies for data collection, construction, and analysis for the larger ethnographic research project and for this dissertation study, respectively. In the last section, I presented the IE research team's rationale for choosing Interactional Ethnography as the theoretical framework that guided our logic-in-use. Lastly, I presented the sets of research questions undertaken by my team to conduct the larger ethnographic research project, questions that enabled us to uncover the principles and processes of integrating external disciplinary framework with established courses in higher education.

In the next chapter, I present the methodologies and methods that I constructed in order to conduct this dissertation study. The (re)analysis of the methodologies and methods undertaken by the IE research team to conduct the larger ethnographic research are presented in Chapters IV and V.

Chapter III: Methodology and Methods

The purpose of this chapter is to present an overview of the methodology and methods adopted for data collection and analysis for the reflexive (re)analysis project that is the basis for this dissertation study. Adopting the argument of the interdependence of methodology and methods, (Waring, 2012; Green, Skukauskaite, Baker, 2012), (See Chapter I), in this chapter, therefore, I present the methodological processes and methods of constructing a data set for the reflexive analysis study, a concurrent process that involved data construction and analysis. As previously indicted, this dissertation adopts a reflexive analysis approach that employs an ethnographic perspective to uncover the chains of actions and decisions undertaken by the external research team (IE research team) to carry out a multifaceted and technology-enabled research project. Adopting the use of telling case, (Mitchell, 1984), I analyzed key cycles of analysis undertaken by the external research team (IE research team), in order to strive to understand insiders' perspectives from multiple points of viewing, of the work undertaken by the LTFT research team, as indicated previously. Therefore, this dissertation was guided by the overarching question:

> How and in what ways an external research team of Interactional Ethnographer conducted a multi-faceted and technology-enabled ethnographic research study of a developing program from a regional public university over a two-year period?

Adopting Telling Case Approach

In Ethnographic Research, by R.F. Ellen (1984), Clyde Mitchell provided insights about case studies. He defined case studies as, “detailed presentation of ethnographic data relating to some sequence of events from which analyst seeks to make some theoretical inference,” in which the events may be related to a society, segment of a community, a family, or an individual (p.237). He claimed that researcher(s) can trace an individual through society overtime and create a telling case anthropologically that makes visible what we have not known previously. Further, he differentiated the typical ethnographic reportage from case studies, in that, case studies provide “detail and particularity of the account” (p.237). He further clarified that each case study is a “description of a specific configuration of events in which some distinctive set of actors have been involved in some defined situation at some particular point in time” (p. 237). Central to adopting telling cases, was the decision in identifying the boundaries of events in advance (Green, Skukauskaite & Baker, 2012), which meant that I had to decide at what point of a particular facet of the research to enter in order to engage in the iterative, recursive, abductive, non-linear process involved in ethnographic research, and when to withdraw from it (Mitchell, 1984; p. 237).

Adopting this perspective, the use of telling case sets the stage for my selection of key cycles of analysis that I needed to reconstruct and analyze in order to frame what the IE research team needed to know, understand, and undertake to overcome the challenges they encountered in order to carry out the ethnographic research study. Mitchell (1984) further argued that a search for a ‘telling’ case enables the analyst to uncover unknown theoretical relationships or concepts surrounding a particular bounded event. The use of telling case in Chapter IV enabled me to unfold the IE team's logic-in-use to uncover the multiple embedded histories of the Pilot Instructional Project. As the cycle of analysis unfolds, starting with the Lead Professor, as a tracer unit of analysis, an abductive progression of analysis was undertaken tracing the intertextual references (Bloome & Egan-Robertson, 1993) that were made in their discourse-in-use (Cameron, 2001). This logic-in-use, made visible the particularities of events and actors within a particular point of time across the two-year period of the Pilot Instructional Project. The telling case of the processes involved, and leading to the reconstruction of the cycle of analysis that traced the reformulation of pathways of the established courses within the Organizational Communication allowed me to uncover the logic-in-use developed by the IE research team in order to uncover particularities of the transformation of the adopted pedagogical approaches and the process of the integration of key constructs from both Organizational Communication and long term and futures thinking.

Research Questions

The first telling case was an investigation of the cycle of analysis was designed to uncover the multiple embedded histories of the larger institutional Project Initiative from multiple perspectives. The guiding question for this telling case was, "How and in what ways did the IE research team engaged in a cycle of analysis that uncovered the multiple embedded histories of the larger institutional Project Initiative?" The second telling case was an exploration of a cycle of analysis that were undertaken to trace the developmental pathways of the pedagogical approaches that were developed for each course as well as the process of interdisciplinary integration of the courses leading to the "best course of to date" as it was referred to by Lead Professor. This telling case was guided by "How and in what ways did the IE research team engaged in a cycle of analysis tracing the developmental pathways of the adoption of pedagogical approaches and process of (re)formulation of interdicisplinary integrated courses. Both telling cases of the cycles of analysis involved the following sub-questions:

- What series of decisions and actions were undertaken for each level of analysis, by whom, with what purpose leading to what outcome?
- What questions guided every phase of the cycle of analysis?
- What sources of records did they draw on to construct data for what purpose?
- What additional information that was required and needed to collect across the cycle of analysis?

Given that the IE research team's point of entry was at the end of the first year of implementation, the first key cycles of analysis that I reconstructed was a chain of cycles of analysis in order to uncover the historical roots of the larger institutional Project Initiative, to provide a frame what the IE research team needed to know, understand, and undertake in order to systematically analyze the (re)formulation process of the interdisciplinary integration. The second key cycles of analysis was explored in order to trace the developmental pathways of the Pilot Instructional Project examining the pedagogical approaches and the integration process of the key constructs and framework from both disciplinary areas of knowledge. Further, I also had an ongoing consultation with the Senior GSR via Google Hangout and e-mail exchanges in order to confirm the processes and the IE notes taken by the team. Multiple discussion and interview-conversations with PI for the IE research team that were undertaken to reflect on the research process and coming to understand the larger institutional LTFT project initiative and the work undertaken by the key actors of the Pilot Instructional Project research team. Therefore, this approach provides a basis for making transparent the inter-relationship between methodology and methods, in which methodology refers to the procedures or logic-in-use that was followed in both data construction and data analysis, a process that reflect the ontological and epistemological assumptions guiding each cycle of analysis; whereas, methods refer to the particular techniques of data collection and analysis used throughout the research process, which were guided by the methodological assumptions, i.e., the logic-of-inquiry (Waring, 2012).

Before turning to the discussion of the methodology and methods, I present a summary of the contextual history and background of the LTFT ethnographic research project to provide the historical roots of the dissertation study. The second part of this section, I present the participants, the site, and the multiple entries of the IE research team to the LTFT ethnographic research project. The second part of this chapter, I present the methodology and methods, including the purpose of the dissertation, the sources of records, methods of data collection and analysis, which includes a discussion of a telling case (Mitchell, 1984). The chapter concludes with a summary.

Ethnographic Research Project Background

The present interactional ethnographic research study that is reported in this dissertation was undertaken following the conclusion of a longitudinal ethnographic research project undertaken by two “intersegmental” research teams, one is a Regional Public University (PRU) and the other is a Major Research One University (MROU). The intersegmental research project that formed the basis of the dissertation study was undertaken to conduct an ethnographic research and evaluation process of the Pilot Instructional Project (PIP) that was being developed by an instructional team at the PRU, a project that began in the fall of 2012. As indicated in Chapter I and Chapter II, the PI from PRU, had an ongoing professional relationship with the Director of a research center, Center for Interactional Ethnographers In-Action, (CIEIA), at the MROU, who served as the PI of the IE research team. The PRU PI recruited our IE research team in the summer of 2013, a year after the LTFT began to be conceptualized and initial set of courses (5) that constituted Long Term and Future Thinking (LTFT) integration with Organization Communication were developed and taught. The IE research team consisted of three doctoral students with varying levels of residency in their PhD programs. I was the Lead Graduate Researcher.

This brief description of the history of the study, therefore, provides a contextual foundation for the present study of the processes undertaken by the IE research team. In the remaining sections of this chapter, therefore, I provide description of the methodological processes used and the particular methods of analysis undertaken to closely examine what counted as the work of the IE team in constructing an ethnographic study of the developing LTFT project initiative at the PRU through a technology-mediated and multi-faceted approach.

The description of the methodology and methods of this dissertation study, that follow provides a description of the processes involved in technology-enabled ethnographic research. As argued previously, the need for such description and analysis is grounded in the limited information represented in textbooks on how to engage in how to construct the logic-of-inquiry guiding the ethnographic logic-in-use in ethnographic study. What follows, therefore, provides a description of the research process including description of participants in both the funded study and the present study.

The Data Base of Participants And Their Actions: A Foundation For The Reflexive Analysis

As indicated previously, the data for the present study were records of the work undertaken by two major teams, who were considered participants in the LTFT (See Chapter I) that forms that basis for the exploration of processes in the present study-the Interactional Ethnography (IE) research team and the Pilot Instructional Project (PIP) research team for this ethnographic research project (See Table 1.1). In this section, I present an analysis of the intellectual and research background of the

IE team to make visible their intellectual matrix and their roles in relationship to the ethnographic research, followed by the participants of the PIP research team.

The Interactional Ethnography Research Team

The data basis of this study was the work of the Interactional Ethnography Team (IE), a team that consisted of three doctoral research students under the leadership of a senior Professor, who developed, Interactional Ethnography with a group of colleagues (Castanheira, Crawford, Dixon, 2001; Green, Dixon & Zaharlick, 2003). This PI was the director of university research one center, which I refer to as Center for Interactional Ethnographers in-Action (CIEIA). She was also the advisor/Co-advisor for all of the doctoral student researchers and the PI for the IE team's ethnographic research project. As indicated previously, she also had a sustaining professional relationship with the PI of the LTFT research team. Through this collaboration, the IE research team had strong professional as well as personal ties with the PRU PI and the Program Managers of the LTFT research team (See Chapter 1 for additional information).

The doctoral students that composed this IE research team ranged from first-year, second-year, fourth-year and fifth-year students in a PhD program. Given that I had the most seniority, I was appointed the Lead Graduate Student Researcher (Lead GSR) for this particular LTFT research project. For the reporting of the cycles of analysis in Chapter IV and V, respectively, I referred myself as the Lead GSR, to position me as the analyst as well as the Lead GSR of the reflexive research study. A second major contributor to the research LTFT ethnographic research project was a fourth-year doctoral student, who I refer to as the Senior Graduate Student Researcher (GSR). She and I had a history of collaboration on a series of earlier studies and in course projects. We had also co-authored papers, posters, and proposals related to this research project that were presented at national meetings (e.g., the American Educational Research Association) and had collaborated on the data analysis and writing of the Final/Evaluation Research Report with the PI of the MROU. Thus, the Lead GSR and the Senior GSR were the two sustaining researchers for the IE research team. She also provided consultation and support for my reflexive analysis work undertaken by the IE research team as well as helped me locate particular documents and archived records that I then analyzed to make visible the work of the IE research team.

Work by two other doctoral students were members of the IE research team and contributed to the data set base for the present study of the work of the IE research team. These team members entered and exited at different points in time over the two-years of this ethnographic study. I refer to one of them in the analyses presented in Chapters IV and V as Junior Graduate Student Researcher 1, (GSR1) who assisted the IE team during the Pre-field work phase and during the early stage of the funded work, who conducted part of the analysis. The Junior Graduate Student Researcher 2 joined the IE research team during the latter part of the funded phase of the research project. The IE research team also hired an undergraduate to assist with the workload of transcribing video records of the interview-conversations (c.f, Spradley, 1979). She also attended several of the IE research team working sessions, and served as an outsider informant, providing insights critical information that made visible what I needed to understand when analyzing the work of the two teams. A graphic representation of the roles and responsibilities of the IE team is presented in Table 3.1, Roles and Responsibilities of the IE Team Members Across the Two-Year Research Process.

Table 3.1

Roles and Responsibilities of the IE Research Team Members Across the Two-Year Research Process

IE Research Team Members	Roles in the Team	Responsibilities	Longevity in the Research Project
PI	Principal Investigator	Oversee the development of the research project Facilitate/Lead the Team's Dialogues Attends meetings, presentations, Trains IE teams to transcribe, create running records, and analyze video records Corresponds with Public Urban University (PRU) Team Write reports with the team Presents research reports to the PRU team and the Advisory Committee	2 years
Lead GSR	Junior Research Specialist/Graduate Student Researcher (official titles) Lead Analysts on Interview Transcripts, Curriculum Design, Content, Course Resources, and Student Work	Attend Meetings with the embedded ethnographers team Attend Collaborative Meetings with the IE team Participate in interviews-conversations Transcribe video recorded interviews Collect, organize, compile and archive sources of records Analyze transcript, syllabi, students archived discussion board assignments, other project documents Correspond with the Lead Professor via email regarding new questions Write reports with the team Analyze student work with Senior GSR Analyze the roles and relationship of actors with Network Theories with Senior GSR and wrote a paper on the analysis and presented it on a Graduate Course Construct Graphic representation	2 Years
Senior GSR	Graduate Student Researcher (official	Coordinate meeting schedules	2 years

	title) Created Timelines of the Project and Intellectual Timelines Led on Transcribing Conversation Interviews and Video Recorded Class Sessions	Participates in conversation interviews Collect, organize, compile and archive sources of records Transcribe video records of face-to-face class sessions Transcribe video recorded conversation interviews In-charge of video-recording and technology support Train Undergraduate students how to transcribe conversation interviews Analyze student work with Lead GSR Analyze the roles and relationship of actors with Network Theories with Lead GSR and wrote a paper on the analysis and presented it on a Graduate Course Construct Graphic representation	
Junior GSR2	Graduate Student	Attend meetings Review Communication course content and texts Transcribe a video-recorded face-to-face class session Review written research report	7 months
Junior GSR1	Graduate Student Researcher	Attend meetings Participates in the conversation-interviews Transcribe conversation-interviews	1 year; 2 months
Undergraduate Student	Transcriber	Transcribe	3 months

Given the exploration of the reflexive approach undertaken by the IE research team that was the focus of this dissertation, it was important for me to formally gain a deeper understanding of the diverse nature of the IE research team's background. Thus, in order to understand the composition of the IE team members' professional, academic, research and collaborative experiences, I sent a formal request to the IE team members via email to complete a matrix that I had started, in order to provide a model of the information being requested. The following Table 3.2: Matrix of Intellectual Biographies of Doctoral

Students IE Research Team Members represents the diverse intellectual, research and professional background of the three members of the IE research team who participated in the collection and analysis process through the completion of the research project.

Table 3.2

Matrix of Intellectual Biographies of Doctoral Students IE Members

IE Graduate Student Researchers	Professional Background	Educational Background	Research Experiences (Individual or Team)	Collaborative Teamwork	Other contributing experiences/background
Lead GSR	Teacher K-8 for 20 years Mentor/Support teacher for the district Adjunct Instructor for Azusa Pacific University	Candidate of Philosophy in Education: Teaching and Learning With the Emphasis of Qualitative Research M.A. in Education: Teaching and Learning M.A. in Education: Curriculum and Instruction B.A. Liberal Studies Multiple Elementary Teaching Credential with Cross-Cultural Language Development	M.A. Thesis Action Research Writing Development: Dialog through Journal M.A. Thesis: Curriculum Analysis: Common Core Standards in Mathematics	Part of a Curriculum Writer Team for Common Core State Standards in English Language Arts Member of numerous educational committees Member of the LINC team	Completed multiple graduate research courses Senior member of the LINC team Directed educational projects and committees Trained teachers Provided professional development for teachers, parents, and school administrators
Senior GSR	Assistant Director for Outreach and Diversity Initiatives for Graduate Studies Researcher and professional working with interdisciplinary programs in higher	Candidate of Philosophy in Education: Teaching and Learning M.A., Education Policy M.S., Food Science and Technology with Emphasis in Sensory Analysis B.S., Food Science with Minor in Packaging	PhD Group – Presentations and work on: - Potential science teachers' understanding about students and student learning using intersectionality framework (gender, ethnicity, first language, and coursework) -Cognitive resources of students relating to environmental literacy	Member of admissions and outreach group for graduate studies Member of numerous research groups (mainly qualitative focused studies) for STEM and non-STEM	Taken multiple graduate research courses Senior member of the LINC team Experiences with organizing records and coordinating research team meetings

	education Researcher and working with diverse and underserved (economic, ethnic, gender, disabled) populations to succeed in higher education and graduate settings		Individual – MS Thesis: *Parental Influences on Adolescent and Preadolescent Calcium Consumption in California Youth* MA Thesis: *An Examination of African Americans' Experiences in Postsecondary Education in Two Areas: Historically Black Colleges and Universities and Science, Technology, Engineering, and Mathematics Disciplines* BA Senior Project: *Imported Food Compliance with United States Governmental Regulations*	areas Member of LINC	
Junior GSR2	Internships in multiple news press in China Internships in Language Public Relation Firm in China	Second year doctoral student in education with an emphasis in learning, culture and technology M.A in communication and media studies B.A in film production	Independent research project on how three international groups of students interpreted and constructed a same learning assignment different in an intercultural contexts M.A thesis on the frame of US's elite newspapers' coverage of Chinese issues in the 2012 Presidential Campaign	Member of the LINC team Member of interdisciplinary research team on iPodia between UCSB and USC	Academic background in communication and the public relation of professional organizations Interest in science fiction movies and novels

As indicated in Table 3.2, the three IE doctoral student members each had particular backgrounds and knowledge bases that contributed to the particular elements of the IE research team's ethnographic research study. For example, the Lead GSR had two decades in the classroom setting in K-8 and some experiences in teaching in higher education, which she drew on to provide insights into practical life experiences in the classroom as well as professional insights into curriculum design and development as well pedagogical practices. The Senior GSR also had background in higher education, which provided insights into higher education organization process, which contributed to the processes of coordinating and organizing research teams. The Junior GSR2 had a background in communication and media production, which provided insights into the communication discipline. What the table also made visible is the range of collaborative work and research experiences, among the team members, which served as rich resources for the team's analytic work, and provided insights that they brought with them that contributed to the discussion and working group sessions.

Given the diverse experiences of the IE research team members, I found it crucial for me to gain additional information about the IE team member's formal academic research education, in order to uncover convergences or differences in knowledge and experience in research methodologies and methods for data construction, analysis, and interpretation. In particular, I wanted to identify what courses that they had completed with the PI of the IE research team and research courses with other professors. The contrastive analysis table is presented in Table 3.3 Graduate Research Courses Completed by the IE Team Members.

Table 3.3

Graduate Research Courses Completed by the Doctoral Students of the IE Research Team

Graduate Research Courses	**Lead GSR**	**Senior GSR**	**Junior GSR2**
Courses Completed with the PI of IE Team			
Classroom Ethnography	X	x	X
Ethnography and Sociolinguistic Data	X	X	X
Research Methods in Education	X	X	
Classroom Cultures	X	X	X
Epistemology and Education	X	X	
Seminar on Teaching/Learning	X	X	X
Research on Classroom Teaching	X	X	X
Discourse Analysis in Education	X	X	X
Introduction to Qualitative Methods	X	X	X
Qualitative Interviewing	X	X	X
Observation & Small Group	X	X	
Narrative Analysis	X	X	
Education Policy and California Policy	X	X	X
Textual Analysis			X
Seminar on the History of Higher Education in the Global Context			X
Seminar on Curriculum Literacy	X	X	
Applied Rhetoric, Poetry, and Linguistics	X		
Cross Cultural Psychology	X		
Cultural Studies in Education	X		
Action Research in Education	X		
Assessment and Evaluation	X		
Learning Theories and Instructional Practices in Science *Education*		X	
Learning Sciences and Education		X	
Seminar in Curriculum: Science		X	
Language, Culture and Learning		X	
Quantitative Focused			
Introductory Statistics	X	X	X
Inferential Statistics		X	
Regression and Multivariate		X	
HLM		X	
Survey Design and Research		X	

From this macro level, what was visible in this contrastive analysis table was that all of the three doctoral students had completed multiple numbers of graduate research courses. All three had completed more qualitative courses than quantitative courses. It also made visible the range of research perspectives that they brought into the team, which framed the need for examination of the weekly meetings and working sessions in order to identify what was being undertaken by the team members, a process that laid a foundation for then using this level of analysis to discuss and to confirm with these members, what counted as, individual and collective understandings of the developing logic-in –use constructed by the IE research team for this ethnographic research project. This contextual information on the actors in the IE research team was critical of the work that was undertaken to explore the developing work of the LTFT team members.

The Long Term and Futures Thinking Research Team

In this section, I present a description of the PIP team members, who were also inscribed in the data bases for this study. Given that this ethnographic research was an “intersegmental” research partnership with the public regional university (PRU), to contextualize these actors and their contributions, I also analyzed the background of the LTFT research team, the second group of participants contributing to the design, collection, and data analysis processes of the LTFT project initiative. The PIP research team consisted of the Lead Professor, the Principal Investigator, the Program Manager(s) and the support team. Two of the three participants had PhD degrees on which the PI of MROU IE research team served as their advisor and dissertation director. These actors had completed similar courses to those taken by that the IE doctoral students, during their doctoral study. The third member of the PIP research team was completing her Ph.D. under the direction of the MROU PI, while working on the LTFT and other project at the PRU under the direction of PI of the PIP within the LTFT project initiative. She had also completed similar courses with the PI at the MROU, who was her dissertation advisor. Additionally, as indicated previously, these participants published work with the PI of the IE research team, and presented nationally with other members of the IE research team. Thus, the two research teams had a common history that made it necessary to explore the underlying logic-of-inquiry in order to develop a more transparent and understanding of the IE research team's research process.

The PRU team, therefore, served as the internal ethnographers (LTFT research team), and were the ethnographers who collected and archived the raw sources of records of the Pilot Instructional Project, as it developed in situ. These artifacts were my primary data source of records for this dissertation as well as primary sources of records for the larger ethnographic research project undertaken by the IE team, as indicated in Chapter I. Further analysis of their roles and relationships within the LTFT as well as their intellectual biographies and professional background will be presented in the Chapter IV. Additionally, the subsequent cycles of (re)analysis of these records will explore further how the PIP research team's participation as embedded ethnographers, particularly, the Lead PRU PI, played a critical role in gaining the emic perspective of the roots of the larger institutional Project Initiative, and uncovering the developmental pathways they undertook as they developed the Pilot Instructional Project.

Sites of Work Analyzed in the Reflexive Research Study

In this section, I present a description of two sites for the work of the IE research team to contextualize the processes and decisions that were then analyzed through the archived and virtual records constructed prior to as well as during my reflexive analysis for the work of this team. I present this as part of the context for the present study in this dissertation, given that the LTFT study was a technology-mediated study, and not an in situ study.

There were two major sites constructed by the IE research team, the first of which was face-to-face site that invisible to the internal ethnographic team and the second, virtual dialogues between the LTFT team, PIP team and the IE research team members both collectively, and individually (the Senior GSR with others). The face-to-face space in which the IE research team conducted most of the collaborative work sessions was located in a university research one research center, Center for Interactional Ethnographer-in- Action (CIEIA). This room was a rectangular room with two doors and four large windows, located in the second floor of the School of Graduate Education building within MROU. It housed multiple desks with chairs on the side of the walls for the Interactional Ethnographers to conduct their work, individually. In the center of the room, there were two conference tables at each opposite side of the room for meeting and collaborative work and group discussion. The two tables were strategically placed in the center of the room and its opposite side allowing for small groups to work concurrently. In addition to the desk and tables, the center was replete with technological resources such as computer desktops, printers, television and VCR, devices that the IE members used in order to watch and transcribe video recorded raw sources of records. On one end of the wall, were archived sets of video recorded classroom interactions in span of ten years in multiple settings and years. The opposite wall of the room stood a row of bookshelves cradling books with diverse topics as resources. Research posters that were presented in seminars and conferences, nationally, covered the walls opposite to the windows and the walls above the cabinets holding the archived video records.

This center was the hub where the IE research team engaged, whose members engaged in weekly dialogues and collaborative work throughout the two-year ethnographic research project. This was also the place where, the IE research team held a meeting with the Private Funder during the Pre-fieldwork of the ethnographic research project, and the face-to-face interview-conversations with the Lead Professor and the Project Consultant. Additionally, this was the room where we held most of our virtual meetings via Google Hangout or conference calls with the members of the Pilot Instructional Project research team. Occasionally, the IE research team used the seminar room opposite to the center, where a plasma screen was used, in order for the IE research team to hold monthly meetings with the LTFT research team or to view the video records collectively. There were rare occasions when the team met at the residence of the PI of the IE team, in restaurants, or in coffee shops. Records of these meetings were used for the present reflexive analyses undertaken to examine the work of this team.

The second site analyzed for the present reflexive analysis study was the site created in virtual space created through telecommunication devices or computer-mediated communication. The IE research team's primary medium of communication and sharing information with the LTFT research team was accomplished through email exchanges (more than 120 were written and responded to). Occasionally, we communicated through phone conversations or text messages. If we were not meeting face-to-face, we held meetings and working sessions virtually through Google Hangouts. We shared our information through Dropbox and we conducted our collaborative written work through Google Docs, a process that enabled members to add, modify, and develop our collective understanding or knowledge on particular facets of the ethnographic research project. Each of these meeting had fieldnotes taken to record the chain of information presented and the actions taken by different participants in the conversations. In a few occasions video records were also made of the developing events.

Records of both sites were shared through Dropbox and our collaborative written work was recorded through Google Docs, a process that enabled members to add, modify, and develop our collective understanding or knowledge on particular facets of the ethnographic research project. These records, therefore, contributed direct information about the ongoing work of the IE research team and provided grounded information about the collective work of different configurations of team members.

Multiple Entries into the Research Project

For this particular IE ethnographic research project, the term entry is used differently than in many traditional ethnographic research studies, where the ethnographer(s) negotiate entry and re-entry into the physical site of the study. As indicated previously, our IE research team was never physically present in the physical setting of study. This state of affairs occurred when a challenge occurred in transferring funds between the two institutions, leading to a delay in the observation processes that had been planned. Given that this ethnographic research study was also defined as intersegmental, there were two different institutions with different systems coordinating the funding and the initiation of the research project.

A second use of the team relates to (re)entry into the archived records of this project, both those at the PRU that were then made available to the IE research team, and thus to me for our research analysis as well as the analyses undertaken for the present study, and those directly related to the work of the IE research team archived in virtual space (e.g., Dropbox, and Google docs). These archived records, as described in the section that follows, formed the basis for constructing the data sets for the reflexive analysis study of this dissertation.

An Overview of the Construction of Data In- Situ and Virtually for the IE Research Team: A Source of Data for the Reflexive Analysis

To make visible the scope and depth of records on which I drew from the reflexive study, in this section, I describe the processes of (re)entry that led to different forms of records that were archived by the internal ethnography team at the PRU and the IE research team located at the MROU. As indicated previously, the IE research team had a two-phase entry into the LTFT ethnographic research study: one was referred to as unfunded Pre-fieldwork research phase between July 2013-March 2014 and the other was the funded ethnographic phase from April 2014-January 2015. A third phase can be added in the present reflexive analysis study. In this study, I (re)entered the archive of previously collected records to construct data sets for the present analysis of the work of the IE research team in developing the final report on the LTFT process. This form of (re)entry will be discussed in the methods and methodology section that follows the historical context presented in this section.

During the pre-fieldwork phase, our team engaged in multiple interactive discussions, with the support of computer mediated communication (Google Hangout) with the key actors, who were involved in the development of the LTFT project initiative. These computer-mediated interactions were undertaken to develop an understanding of how the goals of the research project and PRU LTFT project initiative were perceived by our partners at the PRU as well as to identify the phases of work previously, as well as, then being undertaken. Given that the IE research team was unfamiliar with the in situ physical contexts of the study and disciplinary content of the Organization Communication program and long term and futures thinking project, this phase was crucial in building relationship with the LTFT research team, particularly with the Lead Professor, Project Consultant, and the PI of the LTFT research team. During this phase of the research, the Private Funder also came for a three-day visit to our research center to meet the PI of the IE research team and its members and to learn more of the potential direction of the research that we would contribute to the LTFT project. Furthermore, this unfunded, pre-fieldwork phase enabled our IE research team to develop an emic understanding of the historical background of the institution, in which the LTFT project initiative as it will be discussed more fully in Chapter IV.

My second institutionally defined entry was during the funded research evaluation phase between April 2014-Janaury 2015, in which I was officially hired as a Graduate Research Assistant and Junior Specialist (a MROU designation), respectively, to work on the ethnographic research project with two other doctoral students, who were officially hired as Graduate Student Researchers, as described in the previous section. During the "official" phase of entry to the research project, we began to organize and archive the rich sources of records provided to us by the LTFT research team and also began the iterative, recursive, abductive, non-linear systems of data construction, data analysis, new data collection, and/or retrieval of additional archived sources of records. Our IE research team considered the archived cultural artifacts (e.g. video records, annual reports, syllabi, and lesson plans) collected by the LTFT research team as sources of records from which we constructed data for analysis, as argued by R.F. Ellen in *Producing Data* (1984). The processes of data construction are further explicated in Chapter IV.

As indicated earlier, one of the challenges that our team encountered was that we did not collect these sources of records; therefore, we had limited understanding how and in what ways they came to being, under what conditions, for what purpose, and with what outcome. This state-of-affairs led to ongoing communication with the onsite ethnography team members during the initial phases of the IE research team as well as throughout the analyses undertaken by the IE research team and my own analyses of the archived records. During the funded phase, we conducted series of interview-conversations, both virtually through Google Hangout and face-to-face with the Lead Professor and the Project Consultant. In addition, the IE research team also engaged in ongoing interactive and collaborative discussions via email or Google Hangout, leading to the writing of the final report, which enabled our IE team to gain a “being there” experience, without actually being on-site each day of the course(s). Within each phase of the collaboration of the LTFT research team and the IE research team, multiple actors participated in dialogues about the project, providing multiple sources of insider information about the PIP initiative within the institutional LTFT project initiative. Some of these discussion, I either participated in the discussions or helped in the interview-conversations by taking on the role of a field note taker. I transcribed the video records of the interactive discussions between the two intersegmental teams, adding written text to the archive, texts which were then drawn on for the reflexive analysis undertaken for the present study.

Furthermore, as indicated previously, the IE research team engaged in an ongoing dialogue via email between the members of the LTFT research team and the IE research team, a process that provided clarification and additional information about particular facets of the project during the funded phase of the ethnographic research project. Some of these emails were made to share our research publicly with the LTFT research team members, while other emails were between the IE research team and particular LTFT research team members. We archived more than 120 email exchanges throughout the two year research period. Some of these emails were initiated and/or responded to by the Lead Professor providing detailed information about the developmental process of (re)formulating the courses. Most of the emails were initiated by the IE research team, the majority were ones that I specifically directed to the Lead Professor. These emails were ones requesting clarification of particular observed phenomena, and follow-up questions or confirming emails to gather additional information.

This series of email exchanges was made possible given that the Lead Professor's interest in being part of the ethnographic research. He was also well-aware that I was conducting more focused analyses of the archived records of his work with the PIP and LTFT team for my dissertation, a process that he supported. An analysis is presented in Chapter V, of how one thread of email exchanges provided a rich set of records that I drew on to analyze what such records afforded the IE research team and how these records made it possible for the IE research team to draw on in overcoming the challenge raised by the distance between the IE research team and the LTFT research team. Additionally, his participation and that of the members of the LTFT research team, made possible the gathering of insider(s)' meanings and understandings of the logic of design that insider(s)' i.e. members of the PIP team inscribed in multiple kinds of documents. These records also enabled analysis of the kinds of pedagogical approaches being undertaken, and the developmental histories of the LTFT project initiative, itself.

The PIP and the LTFT participants' willingness to participate in multiple collaborative discussions and ongoing dialogue exchanges through emails can be viewed as evidence of the levels of commitment to the IE research team's research process as well as to my reflexive analysis. These records made possible the examination of the decisions leading to a developing process as it was constructed by members of the PIP team. It also laid a foundation for tracing the processes they engaged in to (re)formulate the instructional and learning opportunities afforded students in the established Organizational Communication courses taught by the Lead Professor. This collaboration also enabled the IE research team to explore insider perspectives that guided the integration of external disciplinary framework (i.e., long term and futures thinking) while preserving the academic integrity of the discipline and meeting the expectations of the department, institution, and the LTFT project initiative.

As indicated previously, the IE research team's formal point of our entry
was different than how the traditional uses of this term. Therefore, I now define the term

“entry” and “site” for this ethnographic research project. We counted “entering”, not entry, into the “site” each time my team and I engaged in any particular dimension of the IE team’s research project or my reflexive analysis study. In this way, I had the opportunity to engaged in multiple points in time for multiple purposes creating unique opportunities to explore further what was happening as well as my own growing understanding of the pathways of this ethnographic research project, opportunities therefore, that served as headnotes for making links between events in the archive as well as between different phases of the reflexive research process.

The term *site* for the LTFT initiative, as indicated in the section above, was not just the physical setting; rather we considered site as the contextual surround of the phases of the IE team’s ethnographic research project, including the research and analysis work of the IE research team as well as my own reflexive study of this work process. This definition of site contributes to the earlier definition of site as face-to-face and virtual. From this perspective, my team and I had multiple points of “entering” and “re-entering” to the *site* of study. In particular, I consider entering to the “site of study” each time I worked on any of the facets of the ethnographic study from the IE research team’s collaborative sessions, to retrieving archived records, to constructing data or analyzing data, to collecting new information. Given that this is a reflexive study of these points of entry and the work undertaken in different sites, I had multiple entries to the site of this LTFT ethnographic research project.

To illustrate, my first point of entry to this ethnographic research study, as indicated earlier, was my invitation to join the IE research team on this research endeavor, in which I was entertaining the idea of collaborating with a team of intergenerational (multi-year doctoral students and faculty) researchers researching higher education. Other points of entries came when I encountered to rich points, i.e., frame clashes (Agar, 1994). At such points of entry, I suspended the analysis that was then being undertaken to seek further information through a process of (re)entering the archive of records, or by sending follow-up or clarifying questions through email to the Lead Professor. These ongoing email exchanges were evidence of (re)entering into the “site of study” in particular points in time, for particular points requiring clarification, and for further exploration of what was invisible to me in my role as observer/analyst of the ongoing processes being constructed by others in the project (e.g., the Lead Professor and cultural guide for, and with, students as well as with other members of the LTFT team).

METHODOLOGY AND METHODS:

MAKING VISIBLE THE LOGIC-IN-USE FOR REFLEXIVE RESEARCH STUDY

In this section, I present my logic-in-use, the methodological approach I constructed that guided my methods of data collection, construction, and analysis for this dissertation. First, I present the purpose of the study. In the second section, I provide a more elaborate discussion of my methodology and the methods I employed in Chapter IV and Chapter V. The chapter concludes with a discussion of the specific techniques I used for data collection, construction and analysis process.

Purpose of the Reflexive Research Study

The purpose of this dissertation was to examine how, and in what ways, the IE research team of interactional ethnographer conducted a multifaceted and technology-enabled ethnographic research study of a developing Pilot Instructional Project from a regional public university across a two-year period. In particular, it seeks to uncover how, and in what ways, did the IE research team engaged in conceptualizing and constructing a logic-in-use to navigate through the challenges they encountered in engaging in a multifaceted and technology-enabled ethnographic research project, in order to develop emic perspectives on the processes and principles of (re)formulating established courses that required long term and futures thinking integration. Findings from this dissertation was designed to contribute fundamental understanding on what it means to adopt ethnography-as-an epistemology, as a logic of inquiry, that guides the construction of the logic-in-use throughout the research process.

Methods of Data Collection

A process of reflexive reviews of the archived records constructed and collected by the IE research team members were undertaken to systematically retrieve key records that were used to (re)construct the aforementioned key cycles of analysis undertaken by the IE research team across the two-year period of the ethnographic study in order to ground the work of this reflexive analysis in the work of the IE research team. These archived records included the following:

- Research/Evaluation Final Report
- Interim Report
- IE team's threads of email exchanges surrounding the research project
- IE team's schedule calendar of collaborative work and meetings
- IE teams field notes of the meetings with LTFT team and the interviews
- IE individual notes and collective notes of IE team's collaborative work
- Posters and papers done on the project for particular qualitative research course completed on the project by an individual or in groups
- IE team's web research on the biographies of the actors involved in the project and the authors of the text, reviews of the texts used
- IE team Interactional Ethnography Guide Book
- IE teams' thread of email exchanges between the IE team and the LTFT team, particularly, with the Lead Professor
- Transcript of the 90 minute video record of the first day
- Transcripts of the series of interviews
    - 2 2-hr interviews with the Lead Professor
    - 2 2-hr interviews with the Project Consultant
    - 1 2-hr interview with the Lead Professor and the Project Consultant
    - 1 2-hr interview with the Primary Investigator of the Project

Through the process of retrieving and (re)constructing the cycles of analysis, I also drew on a secondary set of archived records collected by the Pilot Instructional Team which included the course syllabi, the annual report, lesson plans as well as the LTFT project initiative website.

Selecting Telling Cases

In order to step back from ethnocentricism and to distance myself from the larger ethnographic research study, I reviewed the archived collections of records, previously mentioned that served as records of the two-year process that my team and I undertook in order to successfully carry out, what I experienced as an extremely challenging ethnographic research project. With further review of the Final/Evaluation Report, and discussions with the PI of the IE research team, I identified two major challenges that the our team had to addressed in order for us to understand what we needed to know, understand, and undertake in order to gain an emic perspective of the processes and principles of (re)formulating the courses with the Organizational Communication department, in order to integrate an external disciplinary framework for long term and futures thinking.

The first major challenge was the fact that we were invited to engage in an ethnographic research study at the conclusion of the first year of implementation. This condition of entering this LTFT project framed the need to reexamine how my team and I traced backward in time from our point of entry to the initiation of the larger institutional

LTFT project initiative. In our initial analysis presented in the final report, we traced the multiple embedded histories of different actors as well as phases of development that enabled us to gain a deeper understanding about the research project. By tracing the different actions of my team in engaging in this process, and by analyzing additional records as well as those previously used, I was able, as Chapter IV and Chapter V will show, to make transparent the phases of, and processes used in, undertaking this form of epistemological work.

The second challenge that we encountered was also (re)analyzed for the present study. This challenge resulted from the fact that in tracing the history of the courses recorded by the LTFT research team, we uncovered the existence of eight courses across the span of six quarters, courses that were all different in content, requirement they met in the Communication Program and focus. Hence, in this reflexive analysis of the work of our IE research team, I (re)traced the (re)formulation of the pathways of all these courses that the team undertook. This process involved (re)analysis and further analysis of the historical development of the courses of the first quarter of initiation of the LTFT, Fall 2012 through the Spring 2014, the last quarter of the Pilot Instructional Project, which was referred by the Lead Professor as “our best course to date.” Therefore, by (re)analyzing the cycle of analysis undertaken by the IE research team on uncovering the historical roots of the larger LTFT project initiative leading to the IE team’s point of entry enable, I was able to construct a telling case of the actions taken by the IE research team to uncover the decisions and reasons for the course (re)formulation.

Summary of The Reflexive Analysis Processes

In this chapter I presented my methodology and methods for this dissertation. Before the discussion of the methods and methodology, I presented the purpose of the dissertation, the research questions, which were followed by the contextual background of the ethnographic research project providing the historical roots of the ethnographic research project. This section, therefore, focused on making visible the participants, defining the sites of analysis, and the multiple points of entries of the IE team to the LTFT ethnographic research project that constitute the archive on which I drew to construct telling cases. In the second part of this chapter, I presented the methodology and methods, including the sources of records, methods of data collection and analysis. The chapter ended with the discussion of selecting the telling cases presented in this dissertation study and a summary.

Chapter IV: The Uncovering the Embedded Histories of the Project Initiative

The goal of this chapter is to establish a frame for what the IE team needed to know, understand, and undertake in order to uncover the processes and practices of integrating novel concepts that are external to the disciplinary framework with the ongoing disciplinary content. This goal was designed to support the analysis of this integration process from the insider's perspective, by tracing the decisions made by the Lead Professor with the Project Consultant and the LTFT research team over the two-year period of the Pilot Instructional Project. In this chapter, therefore, I trace the decisions made by the IE research team as they engaged in a parallel process of tracing the decisions that the Lead Professor and the PIP research made over the two-year period of the Pilot Instructional Project.

At the center of this reflexive analysis process, therefore, was an investigation of what the IE research team developed to understand the Lead Professor's reference to the Spring 2014 course, the last course offered within the Pilot Instructional Project (PIP), as "our best course to date" and how this challenge led the IE research team to explore the historical roots of the decisions and actions of the PIP team that led to his utterance. In this chapter, therefore, I present the reflexive analysis that I undertook to gain a deeper understanding of how the IE research team conceptualized and developed a logic-of-inquiry guiding their logic-in-use in their analysis of two cycles of inquiry analysis as they undertook. This chapter, therefore, constitute a telling case (Mitchell, 1984) of how employing an ethnographic perspectives enabled me to uncover the embedded multiple histories of the IE research team's work.

The following questions anchored the reflexive analysis of ethnographic process of each cycle of analysis is (re)presented in Table 4.1

Table 4.1

Guiding and Sub-questions for the (Re)Analysis of Uncovering the Multiple Histories

Guiding Question	How and in what ways did the IE research team engaged in a cycle of analysis that uncovered the multiple embedded histories of the larger institutional Project Initiative?
Sub-questions	What series of decisions and actions were undertaken for each level of analysis, by whom, with what purpose leading to what outcome?
	What questions guided every phase of the cycle of analysis?
	What sources of records did they draw on to construct data for what purpose?
	What additional information that was required and needed to collect across the cycles?

Guided by the interactional ethnography, conceptual framework discussed in Chapter II, multiple cycles of analysis, were undertaken drawing from various sources of records, including the Final Research/Evaluation Report, IE Team's calendar schedule, field notes of the IE team's collaborative meeting, and email conversation threads among the members of the IE team and/or the members of the Project team. For each cycle of analysis, I present specific methodological processes that were undertaken to construct data for analysis from the different sources of records, using a reiterative, recursive, non-linear and abductive process of data collection, construction, and analysis (Agar, 1994; Green, Skukauskaite, Baker, 2012). Through this process, I make visible when, where, how and in what ways particular analyses were undertaken, in various points of time within the analytic period of the research project. As part of the description of these processes, I make visible the particular purpose guiding a particular level of analysis, and unanticipated questions that arose from what was made visible or not from the different levels of analyses.

Therefore, this chapter is divided into two parts each consisting of four separate sections. The first part presents a telling case of how and in what ways the IE research team undertook a particular cycle of analysis in order to uncover the actions that the IE research team undertook to develop emic perspectives of four key participants who contributed on the historical roots of the larger institutional LTFT project initiative. The first section examines the ways in which the IE research team engaged with the Lead Professor, early in their entry period, to develop an understanding of his perspective, one that they understood, guided the historical roots and routes of the PIP project. The second section provides an examination of what the IE research team uncovered through an early interview with the Project Consultant as they sought to uncover her perspective on both her personal history that she brought to the PIP Project, and her perspective on the actions being undertaken within the project itself. The third section presents ways in which the IE research team undertook an analysis of the formal institutional inscription of the background of the LTFT project by examining inscriptions of the background of the LTFT project initiative embedded in the Annual Report of the first year of the LTFT and the LTFT project Initiative's website. The fourth section provides a (re)construction accounts of the LTFT' historical roots by the Principal Investigator for the Pilot Instructional Project to create an additional angle of analysis from her emic or insider perspective. Together, the analysis to uncover emic perspectives of these four central actors/participants provided an orienting perspective for the IE research team, and led to the team's understanding that seeking an emic perspective is an ideal that involves collection of perspectives on the common project from multiple points of views.

The second part of this chapter presents the findings from the triangulations of the information constructed through the analysis of the multiple perspectives (i.e., Lead Professor, Project Consultant, PRU PI, and written documents). The first section offers the Background of the Project Initiative providing a contextual understanding of the ethnographic research study undertaken by the IE research team. The second section provides the contextual setting of the Pilot Instructional Project situating it to the larger university contexts. The third section offers the domain analysis of the semantic relationships of the kind of actors involved in the initiation, development, and implementation of the LTFT project initiative at a macro level. The fourth section presents a contrastive analysis of the intellectual histories of the Lead Professor and the Project Consultant. The chapter concludes with a summary.

Framing the Analysis Intertextual Relationships: A Brief Overview

In Chapter II, I presented key construct guiding the development of the logic-of-inquiry that guided the work that both the IE research team and I undertook in our particular studies. Before turning to the report of the analyses undertaken in this chapter, I present a brief discussion of two concepts that were central to the development of the telling case presented in this chapter. The first draws on Bahktin's (1986) argument that an "utterance leaves traces of history," which were later adopted by scholars like Fairclough (1995), Lemke (1995), and Bloome (Bloome & Egan-Robertson, 1993; Bloome & Bailey, 1991). Given the timing of the IE team's entry into the ongoing research on LTFT and its development, this argument framed the need for the IE research team to trace the developing course development process backwards in time, in order to uncover the history of the project from its initiation to the creation of the Pilot Instructional Project. This conceptual argument, therefore, was also central to the logic-in-use that I used to engage in a reflexive analysis of the decisions and actions of the IE research team as they engaged in this process of (re)constructing the history of the PIP's work.

Central to this approach was a second argument by Mitchell's (1984) who argued that "each case study is a description of a specific configurations of events in which some distinctive set of actors have been involved in some defined situation at some particular point in time"(p.237). From this perspective, this chapter presents a telling case of how the IE research team engaged in cycles of analysis to uncover the multiple embedded histories that shaped the historical development of the larger institutional LTFT project initiative. By tracing the IE team's historically undertaken processes of collection and analysis, I make visible how this reflexive analysis logic-in-use that I developed to trace the work of the PIP research team provided a basis for systematic (re)analysis of the work of the IE research team.

A. In Seeking Multiple Histories from Multiple Emic Perspectives. This section presents a telling case of the chain of cycles of analysis in order to uncover the perspectives of multiple participants that the IE research team undertook to reconstruct the historical roots of the institutional project initiative, LTFT. The analysis of the multiple perspectives by the IE research team was guided by the following question:

- How was the project initiative, LTFT, initiated, developed, and implemented, by whom, for what purpose, under what condition leading to what outcome?

Guided by the ethnographic perspective presented in Chapter II, the IE research team undertook a series of discourse analyses, within and across multiple cycles of analysis. These analyses were undertaken drawing from multiple sources of records, including a series of interviews with the Lead Professor, the Project Consultant, and the PRU's Principal Investigator as well as email correspondence among the LTFT research team and IE research team. This chain of analyses also included analysis of written documents, including the First Annual Report, and the university website as well as the LTFT project initiative website. As presented in Chapter II, central to this approach was the need for multiple points of view or perspective as argued by Green, Dixon, and Zaharlick (2003).

> *This state of affairs comes from the fact that no individual holds all cultural knowledge; cultural knowledge is of a group, and individuals, depending on what cultural activities and practices they have access to, will have particular knowledge of particular aspects of a culture. Thus, an ethnographer cannot rely on a single informant to assess the adequacy of the interpretations of the data (p.207).*

Thus, the triangulation of multiple perspectives provided, as the analyses that follow will show, a more comprehensive account of the phenomena under study. These analyses provided a "description of *specific* configurations of events with distinctive actors involved at some particular point in time" (Mitchell, 1984; p.237). Additionally, as the triangulation of perspectives will show, as the specificity of the historical events unfolded, sets of distinctive actors were uncovered who were involved within a particular point in time across the two-year development of the LTFT project initiative.

1. The emic perspective of the lead professor. Adopting Mitchell's (1984) argument of telling case, that an ethnographer can trace an individual within a social group to make theoretical inferences, the IE research team decided to trace the Lead

Professor as a tracer unit in order to develop an emic perspective guiding him as he engaged with particular actors as the LTFT developed. Therefore, for the first cycle of analysis, the IE research team decided to conduct an interview-conversation (Gubrium & Holstein, 2003) with the Lead Professor using computer-mediated communication through Google Hangout on April 25, 2014. The interview-conversation was designed as a form of ethnographic interview (Spradley, 1979) to gain "native's point of view" of the experiences of the informant's cultural and social practices, in the form of a dialogue among the participants (Spradley, 1979; p.3). This two-hour virtual interview-conversation on April 25, 2014, was facilitated by the PI of the IE research team with two other members of the IE research team. The interview-conversation was video recorded and was then transcribed by an IE research team member and was later shared with the team, who then engaged in a process of data construction and analysis. These transcripts were then added to the IE teams' archived records.

The field notes were also shared with the IE research team during the team's face-to-face discussions following the interview-conversations, in order to capture the events from multiple accounts (See Appendix B1). The IE research team collectively reviewed the field notes and wrote questions as they arose through the review process, as indicated in Appendix B1. Both the field notes and the interview transcripts were triangulated during data construction and analysis to identify insider perspectives on what was being undertaken by the PIP team. The following table, Table 4.2, *An Excerpt of the Interview-Conversation with the Lead Professor*, presents an excerpt of the interview-conversation to illustrate how and in what ways the IE research team transcribed and analyzed the transcript to answer the aforementioned guiding question for the chapter. The interview-conversations was transcribed with each line containing a *message unit,* a minimal unit of speech capturing contextualization cues (pitch, stress, pause) to make visible the flow of the dialogic exchanges among the participants (Gumperz & Berenz, 1993; Green & Harker, 1988; Green & Wallat, 1979, 1981). In the graphic representation of the transcript, based on IE approach to transcribing the dialogic work of participants (e.g., Castanheira, Crawford, Green & Dixon, 2001), the interviewee and interviewers are positioned side by side to simulate the conversation style, as opposed to a linear transcript of what was spoken by the participants. The column under the Lead Professor was strategically designed to be slightly wider than the PI for the IE team to signal as the dominant speaker for this particular excerpt. The empty rows signify a pause by all participants in the interview-conversation, as they occurred throughout the interview-conversation, to show the natural ebb and flow of the conversation suggesting the ongoing (re)formulation and negotiation for sense making by the participants during the conversation. Given that this interview-conversation was video recorded, the transcriber was able to capture the contextualization cues and actions of the participants (e.g. smiling, nodding…etc.); therefore, they were added to the transcript as message units.

Table 4.2

An Excerpt of the Interview-Conversation with the Lead Professor

Interview -Conversation of the Lead Professor via Google Hangout
Date: 4/25/2014 Time: 1:00 P.M. -3:00 P.M.
Participants: PI for the IE Team (Residence); Senior GSR (Residence)
Recording initiates in the middle of an ongoing conversation

Time	Line Number	Lead Professor of LTFT	PI for IE Team
00:06:58	0197		Tell us about (thxxxxx) roots and routes
00:07:00	0198	ah	
00:07:01	199		Like the roots of it
00:07:03	200	yeah	
	201		And what route did it take to get where it is?
	202	(Pause)	
00:07:06	203	and	
	0204	I mean It makes it makes sense for me too coming from	
	0205	You know	
	O206	a	
	0207	a	
	0208	A Critical Cultural Studies Background	
	0209	To look at things that way	
	0210	So I kind of accepted as	
	0211	Ok well	
	0212	You know with AS (Project Consultant) we were like	
	0213	(voice change) well let's do it. You know?	
00:07:23	0214	um	
	0215	(pause)	
00:07:25	0216	Again Interrogated Too much	
	0217	Initially	
	0218	Just you know as a	
	0219	A	
	0220	As a	
	0221	Something to use	
	0222	I was kind of looking for a tool	
	0223	An easy tool to use	
	0224	to	
	0225	Teach long term thinking with	
	0226	(Pause)	
00:07:39	0227	Um that would kind of resonate with	
	O228	With my cultural	
	0229	Critical Cultural Studies Background	
	0230	And so that Hit a sweet spot	
	0231	That um	
	0232	That	
	0233	HOPEFULLY (raises voice) Is working	

Adopting a social constructive perspective on discourse analysis as an analytic framework, the IE research team analyzed what the Lead Professor proposed, acknowledged, and recognized as socially accomplished and interactionally significant across the interview-conversation (Bloome & Egan-Robertson, 1993). From this excerpt, the Lead Professor acknowledged that the importance of his intellectual *and theoretical background* served as a foundation of his logic of the integration process (Line 0228-0232). His reference to his *background* framed the need for the IE research team to explore further on the significance of his background in relations to the Pilot Instruction Program and the larger institutional LTFT project initiative. Another crucial reference from this excerpt was the recognition of the Project Consultant's willingness to start the process of the curriculum integration with him. His reference to the Project Consultant signaled the need to explore her historical involvement in the LTFT project initiative, which is presented in the next section.

2. The emic perspective of the project consultant. Given the Lead Professor's acknowledgement of the Project Consultant as a key actor involved in the development of the Pilot Instructional Project, our IE research team negotiated to have an interview-conversation with her in May, 2014 via Google Hangout. Parallel to the Lead Professor's interview-conversation, a similar approach was undertaken in the interview-conversation to explore how she inscribed (orally) her perspective on her historical involvement of the larger university sanctioned LTFT project initiative from her perspective. A field note of this interview-conversation process constructed by Junior GSR1 during the conversation is located is in Appendix B2. This inscription of this interview-conversation was used by the IE research team at later point in time to triangulate what was inscribed with inscription in other field notes taken by the Senior GSR and the interview transcripts. Table 4.3, Interview-Conversation Excerpt of the Project Consultant, an excerpt from her interview-conversation, narrating an excerpt from the transcript of the Project Consultant's interview conversation and provides her perspective on how she was positioned within the project as well as what she brought to this project.

Table 4.3

Interview-Conversation Excerpt of the Project Consultant

Interview-Conversation with the Project Consultant via Google Hangout
Date: May 7, 2014 Time: 1:00P.M.-3:00 P.M.
Participants: PI for IE Team (Residence); Senior GSR (Residence) Junior GSR (Research Center)

Line Number	Time	Project Consultant	PI for the IE Team
00405			
00406			I'll let you start
00407			wherever you *want*
00408			
00409	0:07:22	well um	
00410		well	
00411		the deep dark history	
00412		goes back	
00413		with me even before	
00414		Lead Professor was involved	
00415		I don't know	
00416		if you want	
00417			
00418			that's good [nods strongly in the affirmative]
00419			
00420	0:07:36	okay	
00421			
00422			[smiling]
00423			
00424	0:07:42	okay	
00425		an uh	
00426		so I guess	
00427		I got involved in the project	
00428		with	
00429		um	
00430		when	
00431		Program	
00432		Developer	
00433		was um	
00434		he contacted me	
00435		about	
00436		this opportunity of doing	
00437		um	

long term thinking with
kids

0:08:06 how does he
know you
or know to contact you

0:08:07 he knew to contact me
because he talked to
um
Paul Saffo
who was a
former colleague of mine
and a very well-known futurist
forecaster
technology kind a forecaster

um
and at an event
which I don't remember
what the event was
um
The Program Developer went up to him and said
I want to corner you for two seconds
this is
what we're interested in doing
and they had been doing a bunch of things
I think
at our university
around
kind of futures
and innovation
and
um

whatever it was
that Program Developer said to him
which I can't recall now
he said
oh you'll have to talk to AS (the Project Consultant)
um

and
it’s because I had done stuff
um
with
uh
8th graders and high schoolers
around
um
long term thinking

and how do you
I was interested
at the time
when I was working at
Institute for the Future
of taking the things
that I was doing there
with
ya know
adults
um
in trying to figure out
how do you
think long term
how do you look
10, 20, 30, 50, 100 years
ahead
in a way that’s informed
and that makes sense
and is useful

um
and why are we just
doing that with adults
ya know
how come
we’re not doing that
with young people

and so I started
kind of

00520		poking around in that area
00521		and doing
00522		little pilot projects
00523		and trying to
00524		develop that area
00525		
00526	00:09:45	and so
00527		when the Program Developer
00528		uhh
00529		talked to *Paul*
00530		about doing this
00531		kind of long term thinking
00532		he said
00533		to talk to *me*
00534		
00535		so that's how we
00536		um
00537		got together
00538		and you know
00539		had lunch
00540		and he kinda told me
00541		about
00542		um
00543		bringing long term thinking
00544		into the
00545		uh
00546		The university

Using a parallel approach to the one undertaken for the analysis of the Lead Professor's interview-conversation, the IE research team identified what the Project Consultant proposed, recognized, acknowledged as academically and interactionally significant (Bloome, Carter, Christian, Otto, Shuart-Faris, 2010; Bloome & Egan-Robertson, 1993) across the course of the interview-conversation.

My reflexive analysis of this transcript led to further understanding of the value of gaining understandings of the perspective of multiple actors/participants, rather than relying on single actors. As indicated in the table, the Project Consultant's account of her involvement of the project provided key references to processes and histories that made visible to areas that they needed to explore further and thus framed what the IE research team needed to know, understand, and undertake in order to develop a deeper understanding of the historical intellectual roots of the LTFT project initiative. First, she made reference to her involvement with the LTFT was rooted in her personal history, a history that included collaborative work with the Lead Professor before her entry into the LTFT project (Lines 411-416). She also made reference to her previous professional work surrounding long term and futures thinking with adults (Lines 490-512), her previous projects with high school and 8th grade students, (Lines 484-487) and her current pilot projects with students (Lines 514-524), all factors that contributed to her invitation to participate in the LTFT project initiative. These references, therefore, signaled to the IE research team the need for the IE team to explore further her intellectual and professional background before her entry to the LTFT project initiative at the university level. The exploration and analysis of the intellectual and professional histories of the Lead Professor and the Project Consultant will be explored further to assess its significant to the overall development of the LTFT in the latter section of this chapter on triangulating perspectives. Secondly, her acknowledgement of two key actors, who were as instrumental in her involvement of the LTFT project initiative within the university, the Program Developer (Lines 431-432, 460, 474, 527), and another actor, whom she identified as a former colleague and lead futurist (Lines 448-453), framed for the IE research team the need to identify all of the actors involved in the development and explore their roles and relationship within a particular point in time as well as across the different phases of the development of the LTFT project initiative. This latter understanding was critical to my reflexive analysis, given my growing understanding of the need to reconstruct the personal histories of actors, not simply triangulate observations. A subsequent analysis of the key actors involved in the project will be presented in the third part of this chapter. Further, the identification of these actors implicated the involvement of the institution, which framed the need for the IE research team to seek the institution's emic perspective.

The Formal Inscribed Perspective of the Institution

The interview-conversations of the Lead Professor and the Project Consultant provided the IE research team with an initial opportunity to examine these actors' respective insider's "lived" experiences (Spradley, 1979) as they entered the LTFT project initiative. Missing from the interview-conversation accounts of the project was the institutional perspective as well as their definition, of its missions and goals. Therefore, the IE research team conducted another angle of analysis drawing from sources of records from the institution's perspective; the first annual report and the Project Initiative website. As the Lead GSR, I was responsible for conducting the analyses of these two sources.

Analysis of the 2012-2013 Annual Report. As the Lead GSR, I analyzed an archived document entitled, 2012-2013 Annual Report of the Project Initiative, which was collaboratively written by the LTFT team as a draft on August 17, 2013 (confirmed by Project Manager for Year 1 over phone conversation, 11/13/2014). Given the goal of this chapter which is to present what the IE research team uncovered as the historical roots of the Project Initiative, this related documents were analyzed by identifying the intertextual references to the history of the LTFT project initiative as inscribed by the authors of these documents; therefore, the analysis of the Annual Report in Year 1 was viewed by the IE team as a series of formal inscriptions of the background of the project. In analyzing the document, the IE research team identified six purposes as (re)presented in Table 4.4: Institution's Inscription of the Background of the Purposes of the Project Initiative.

Table 4.4:

Institution's Inscription of the Background of the Purposes of the Project Initiative

Sentence	Text as it was inscribed in the official document	Proposed Elements	Ethnographic Questions	Sources of Archived Records for Analysis
S1-S2	In the fall of 2012, PRU launched a new initiative aimed at furthering students' capacity to think long-term and to explore ways of taking actions that have the potential for impact 5-10,000 years into the future. The purpose of the initiative is as follows:	Fall 2012-beginning new initiative	What actions taken prior the stated beginning? If they were actions, who undertook the actions, with what purpose,	Interviews of the Lead Professor, Project Consultant, Principal Investigator Syllabi Project Initiative
		furthering students' capacity • to think long term and • to explore ways of taking actions	How and in what ways did the Lead Professor (re)construct learning opportunities for the students, in order to meet these goals?	Interviews of Lead Professor and Project Consultant Syllabi
		that have the potential for impact 5-10,000 years into the future	How long does it take or how many courses are required to achieve these goals?	Student's Archived Responses to Discussion Board Assignments
		purpose of the initiative	The word "potential" as opposed to absolute or certainty.	

S3	1. To encourage students and faculty at PRU to think more critically and creatively about long-term futures.	to encourage student and faculty • to think more critically and creatively about long term futures	How and in what ways were the students encouraged to think more critically and creatively about long term futures? How and in what ways was the faculty members encouraged to think more critically and creatively about long term futures?	Interviews Syllabi
S4	2. To teach faculty and students to understand, develop, practice and value long-term thinking.	to teach faculty and students to • understand, • develop, • practice and • value long term thinking	How and in what ways did they "teach" faculty and students to understand, develop, practice, and value long term thinking? What resources and materials were used or adopted?	Interviews Syllabi Email trails Video records –day 1
S5	3. To incorporate long-term thinking into curriculum and student development in support of PRU Institutional Learning Outcomes, particularly the development of critical, creative and collaborative thinking about complex challenges at multiple levels.	to incorporate long-term thinking into curriculum and student development in support of PRU Institutional Learning Outcomes	How and in what ways did they incorporate long term thinking into the curriculum? What curriculum did they incorporate the long term thinking? How the Institutional Learning Outcomes were shaped the	Interviews Email trails syllabi

		particularly the development of • critical, • creative, and • collaborative thinking about complex challenges at multiple levels	"incorporation" of the long-term thinking into the curriculum?	
S6	4. To develop, test and apply models and techniques by which students at the K-12 levels will learn long term/futures thinking, and to expedite their adoption.	to develop, test, and apply • models and • techniques by which students at the K-12 levels will learn long term/futures thinking and to expedite their adoption	What models and techniques did they develop, test and apply that students at the K-12 levels can use to learn long term and futures thinking? How did the models and techniques developed, tested, and applied expedited their adoption to K-12?	Annual Report (Year 1 Deliverables and Year 2 Work Plan) Syllabi Interviews

S7	5. To extend and test the PRU student's abilities to develop effective and sustainable responses to personal, professional, and civic challenges.	to extend and test the PRU student's abilities • to develop effective and sustainable responses to personal, and civic challenges	How and in what ways did the Lead Professor extend and "test" the student's abilities to develop effective and sustainable responses to personal and civic challenges?	Students Archived Responses to Discussion Board Assignments
S8	6. To create a framework for an academic field of study of defining, understanding and achieving long term projects.	to create a framework for an academic field of study of • defining, • understanding and • achieving long term projects	What counts as "framework" in this text? Is this meant to be a stand- alone field or a conceptual Is this conceptual "framework "meant to support the purpose number 4.	

Using an analytic framework process that paralleled the one undertaken in the analysis of the interviews, the IE team engaged in the analysis of the content of the Annual Report document to identify what was being proposed, acknowledged, and recognized as academically and socially significant to the authors of this document, (Bloome & Egan-Robertson, 1993) in order to uncover additional historical roots of the LTFT project initiative. As indicated in Table 4.4, analysis of the background statements inscribed in the Annual Report was analyzed by constructing a five-column table. The first column indicated the location of the text within the document (e.g. S1 mean Sentence 1). The second column is a representation of the actual text as it was inscribed within the document; each line was separated by the end markers, to show the "grammatical structure" constructed by the authors. Each line was then analyzed through a line by line examination of what, or who, was being inscribed, in what ways and for what purpose. This analysis is presented in the third column. The fourth column lists the ethnographic questions that were raised based on what was proposed in the text. The fifth column comprises the list of sources of records that the IE research team was able to draw upon to construct additional data in order to answer the corresponding ethnographic questions raised by this level of analysis of the Annual Report.

As indicated in the table, the Annual Report acknowledged the project initiative began in the Fall of 2012 and identified it as a "new" initiative. The official inscription of the onset of the LTFT project initiative established the onset of the bounded time of the project, a process critical to identify the boundaries of the larger initiative in which the PIP was embedded. The identification of these inscribed boundaries, therefore, provided an additional rationale of the need for the IE team to trace backwards as well as forwards in time to reconstruct the history of the project, prior to the IE team's entry as well as to pathways that were undertaken to construct the "best course to date." Therefore, the inscription of the background and the six identified purposes for the LTFT project initiative inscribed in the Annual Report, raised ethnographic questions for the IE research team. These questions pointed the IE research team further areas for analysis as well as to what they needed to know, do and understand in order to uncover the processes and principles of integrating interdisciplinary curriculum. These ethnographic questions also provided evidence of the importance of the IE research team's involvement in carrying out an ethnographic study of the LTFT team's underlying work from the inception of the project initiative to the IE research team's point of entry to the final course defined by the Lead Professor as "our best course to date." Missing from this annual report and the preceding analyses from the interview-conversations was a definition of what the LTFT project initiative, information that the IE team needed to further gain a deeper understanding of the historical context of the project initiative, which framed the need for the Lead GSR to further analyze the LTFT website.

Analysis of Project Initiative Website

Before presenting the analysis of the content of Project Initiative website, it is crucial to provide a grand tour in Spradley (1980) sense, to present a general overview of what was being inscribed and made available for the public and for the students about the Project Initiative and the Communication courses that are embedded within the Project initiative.

Table 4.5 represents a visual representation of the content of the website at a macro-level to establish the context of the project's website and to present the different features of the website to which some of the analyses were drawn on.

Table 4.5

Content Structure of the Long Term and Futures Thinking Project Website

Heading	**Sections**			**Function**
Home	Our education system is in need of change	Join our movement		Welcome Page-introduction of the Project
Vision and Mission	What is Long Term?			Provides definition of the project, its objectives, and its origin
Our Approach	Project Overview	Curriculum Design	Student Resources	Links that provide more information about overview, curriculum design and student resources
About Us	Advisory Committee	Project Team		Provides a brief biography of the advisory team and the project team
News and Events	April 23rd Press Release	Long Term and Futures Thinking 2012-2013 Annual Report		Provides links to more information about the documents written about the project
Links	Long Term and Futures Thinking Journals	Institutes and Research Centers	Audio/Video	Provides links to journals, research centers and audio/video for additional resources for students and the public about Long Term and Futures Thinking
Contact	Contact Page			Provides the public ways to contact about the project via email or by telephone
Donate	Donate Page			Provide information on ways for the public to donate for the project

As indicated in the table, there were six headings, each with hyperlinks leading the reader to multiple sections of the web-page with additional embedded hyperlinks. To define the term simply, hyperlinks are a *word, phrase, or an image that anyone can click on to* *jump to a new document or a new section within the current document*.

(http://techterms.com/definition/hyperlink). As indicated in the table, the LTFT project initiative website contained several hyperlinks leading to multiple public documents that were written about the project by the university members well as hyperlinks to rich sources of journals, research centers and audio and video resources, which were made accessible to the general public and to the students who might be interested in learning more about the LTFT project initiative. As the subsequent analyses will show, some of the hyperlinks embedded within the LTFT website served as another resource for analysis that were recognized and acted on by the IE team as sources of records in order to triangulate information or findings with other sources of records. However, analysis of this rich corpus of resources and how and in what ways it influenced or shaped the development of the course transformation and/or students' take up or not, is beyond the scope of this dissertation. I identified the possibility for this level of analysis to make visible how, in ethnographic studies, new questions arise that can lead to new studies (as argued in Chapter I), and not simply to further analyses. Therefore, this finding provides a basis for potential future research studies.

For the purpose of this chapter, the IE research team drew under the heading, Mission *and Vision* linking to the section, what *is Long Term,* providing the definition of the LTFT project initiative. This section contained three paragraphs which included the institution's definition of *long term thinking*, the objectives of the LTFT project initiative, and the origin of the project. Given the previously presented analysis of the Annual Report which focused on the six purposes of the Project Initiative, analysis of the first paragraph and the third paragraph will be discussed in the following section. The institution's formal definition of the LTFT project initiative, and the public declaration of its origin, as the analysis of the text in Table 4.6 will show, added to the understanding of the histories of this project. Once again, by preserving the native's local language, the identification of an inscribed institutional definition of what is LTFT project initiative was possible to identify. This analysis is (re)presented in Table 4.6, Definition of the Project from the Project Initiative Website. The text constructed for this analysis by the IE research team was separated on a line by line basis using the sentences and grammatical markers to identify the message units that formed structure of the website texts.

Table 4.6

Definition of the Project from the Project Initiative Website
(http://www.longtermandfuturesthinking.org/vision-mission/)

Number	Sentences
1	We define long term and futures thinking in education setting by using relative, applied time horizons.
2	For example, fashion changes rapidly in yearly cycles, markets may change in decades, infrastructure in multiple generations, and governance in centuries and nature in millennia.
3	Our focus is on teaching how to understand the value of and build the skills to discuss issues appropriately at various time horizons, whether decades, century, or millennia
4	Long Term and futures thinking creates an emergent future informed by deep past and deep future thinking.

As indicated in Sentence 1 the institution defined long term and futures thinking using "relative time horizons", which was followed by examples of *relative time horizon* making reference the rate of change of *fashion as yearly; markets in decades;*

infrastructure in multiple generations, governance in centuries, and nature in millennia (Sentence 2). The specificity of this rate of changes signals the situated nature of this project, a project that has its own language through which common knowledge (Bahktin, 1986; Edward & Mercer, 1987) to the insider's within the social circle was constructed. Furthermore, this inscribed definition proposed to readers that the project's focused on "*teaching how to understand the value of and build the skills to discuss issues appropriately at various time horizons, whether decades, century, or millennia*" (Line 3) and claimed that LTFT *creates an emergent future informed by deep past and deep future thinking (Line 4).* A closer investigation of how, and in what ways, the project team designed the courses to meet the focus, i.e. to provide learning opportunities for students to explore the issues at *relative, applied* time horizons as well as to explore how *deep past and deep future thinking helped creates an emergent future* will be presented in the next chapter.

After I, as the Lead GSR examined the inscription of the institution's definition of the Project Initiative, I decided to explore the public inscription of the origin of the Project Initiative as inscribed on the Project Initiative's website. Drawing on the process described above (See Table 4.6), I separated by sentences, the paragraph is (re)presented on Table 4.7, Origin of the Project from the Project Initiative Website.

Table 4.7

Origin of the Project from the Project Initiative Website

Number	Sentence
1	The project was established in 2012 with a three-year seed grant from an individual donor and in partnership with the Long Now Foundation.
2	It is closely aligned with the University's institutional learning outcomes (ILOs) and shares the strategic commitments.
3	The Long Now Foundation was established in 1996 to creatively foster long term thinking and responsibility in the framework of the next 10,000 years.
4	Our work with the students is guided by the principles by many of the world's thought leaders in the field.
5	The Foundation's seminars about long term thinking provide an introduction to this field.

As indicated in the table, the three year LTFT project initiative was established in 2012 (Line 1) and was made possible because of a seed grant from an individual donor and in partnership with the Long Now Foundation, which was established in 1996 to creatively foster long-term thinking and was responsible in developing a framework for understanding the future of the next 10,000 years (Line 3).

The time marker for the LTFT project initiative was a three year project separated the time boundary of the Pilot Instructional Project (PIP), which was a two-year project. It also indicated that the foundation's seminars about long-term thinking provided an introduction to this field, and the LTFT project initiative aligned with the university Institutional Learning Outcomes (ILOs) in Line 2 and 4. These statements framed the need for the IE research team to trace the curriculum design and development across the two-year period of the PIP, analyzing how and in what ways did the Lead Professor with the

Project Consultant (re)formulated the courses such that it embedded the foundation's seminars of the long term and futures thinking within the courses and meeting the university's Institutional Learning Outcomes (ILOs.) The analysis of the curriculum design and development will be discussed in the following chapter.

The previous section provided a developing analysis of how and in what ways the IE research team uncovered the definition of the LTFT project initiative, its origin as well as its purpose. Missing from these multiple cycles of analyses of the formal and public texts surrounding the LTFT project initiative was the formation of the LTFT, which was the foundation of the entry of the IE research team. This missing information propelled the need for the IE research team the need to interview the PI of the Pilot Instructional Project, in order to develop an emic perspective on the history of the LTFT project initiative leading to the emergence of the Pilot Instructional Project.

The Emic Perspective of the Principal Investigator

This section presents the interview-conversation of the Principal Investigator, which was conducted by another member of the research center in order to fulfill a requirement for a graduate research methods course taught by the PI for the IE research team. Given his sustaining relationship with the PI of the LTFT research team, he knew some elements of the developmental history of the LTFT project initiative but was not aware of the ethnographic research process that was being undertaken by the IE research team. Given his professional expertise and background involved in "start-up businesses"; therefore, he was interested in exploring the layers of work involved in developing a project initiative in higher education, for his personal graduate course project. He conducted the interview-conversation, transcribed and analyzed it to fulfill the course requirement and made the transcript of the interview-conversation available for the IE research team to (re)analyze for their particular purpose, which provided another angle of institutional perspective of the LTFT project initiative. An excerpt from the interview-conversation with the PI of the LTFT discussing her entry and her involvement in the development of the larger university LTFT project initiative that led to the creation of the Pilot Instructional Project is (re)presented Table 4.8, Excerpt from the Conversation-Interview of the PI of the LTFT.

Table 4.8

Excerpt from the Conversation-Interview of the PI for the LTFT

Interview with the Principal Investigator – Pilot Instructional Project
January 11th 2015; LTFT Residence Start time 5.30 pm
Voice Recording on Samsung Galaxy, manual transcription then word processed (15-16 January 2015)
Prior to the meeting PRU PI was advised as to the purpose of the interview, so she was able to consult notes and documents to refresh her memory

Line Number	Interviewee (PI for the Pilot Instructional Project)	Interviewer (Graduate Student Member of Research Center)
1		What were the origins of the program?
2	I worked with LNF to produce a proposal for the Bill and Lucinda Gates Foundation called Long Kids. In the course of raising money for the project we met a potential donor (confidential). With potential funding in place UA brought together people on campus to talk about a project with LNF as the partner.	
3	Program arose when people from University Advancement (UA) thought it would be exciting to help kids think about the long term and a staff person thought about doing it in partnership with the Long Now Foundation (LNF) in San Francisco	

4 What were your involvement and the timing of that?

5 In my work with SI (Stem Institute) I work closely with UA to raise funds for programs in STEM. In relation to this project there was growing uncertainty that would own it and make it successful. I was asked to participate in several meetings and tried to avoid getting drawn in but when the Provost asked I could not say no.

6 I agreed to help and UA identified a faculty member who was a perfect fit from the College of Letters, Arts and Sciences. – but the Dean of the College did not want responsibility for day to day mechanics of running the grant. UA brought the funds in but they needed somebody willing to do the day to day for making sure the project was successful and project management – those were the origins of getting pulled in.

7 Why did the Dean not want the responsibility?

8 It was not a priority project and she did not want the workload of running a grant on campus, the processes and procedures around grant management – given these a problematic and their state of repair – the effort required and challenges.

9 **(6.19)** Were you ok with it?

10 Yes I was OK with it, especially Ok as conversations progressed from the initial idea and to engage K12 teachers in teaching K12 students in the importance of long term and future thinking and how to do it. The concept of this was so amorphous – I would not know to do it with our own students much less how to engage teachers – to engage them in a conversation like that. In the course of a dialogue about what to do the project shifted to let's try with our own students at East Bay (EB) and understand what it takes to even bring about thinking about long term and futures thinking (LT+FT). Then roll out to K12 was pushed out to future years within the project - but start **(7.20)** with our own kids and when able to talk that through and make that shift with the donors as part of the project plan then I felt very comfortable being the PI

(7.34) UA pushed Provost to appoint me as we worked so well together on STEM education projects. Then UA and I and Faculty started having meetings and then bringing the donor to get to a project plan that we felt good about and then I **(8.06)** worked through the dynamics with UA team to get the Dean's support so

	that required her signature.	
11		The Dean did not want the project but it was the faculty person, the project – outsourced the management to you….
12		Any Challenges in that? **(8.15)**
13	Reluctantly signed off	
14		When you came in had much of the work been done in terms of putting together a proposal or were you taking it on as was?
15	No – I had to help craft the project, budget – it was not that difficult **(8.54)**	How much time was taken?
16	80 hours for framework and Budget	
17	It was a standard grant process	
18	Well, OK, I guess I should say that the other part is taking on responsibility for the success of a program that I was not really a specialist in but could think about it was a little bit scary and so before really getting too far down the road and cementing the agreement I went and **met the Lead Professor with I would be working and in interviewing him – in his office – and looking at the books he has on his bookshelves I understood (10.08) that we really came from similar places in terms of our thinking about how students develop, what they need, different forms of research, including understanding LT+FT research and studies and so there was a real sense of we are so alike in our theoretical backgrounds, what we believe in in terms of research traditions that the project will work and so that is when I knew that even if it might be a little bit of wok that it could be successful, that we wouldn't …that we were going to be a good team**	
19		Had you met that person before? (10.39)
20	No	So this was a completely cold meeting in their office and you encountered readings and ways of thinking?
21	**Bookshelves, conversations, we had several common friends, work colleagues in common, people whose work we respected, because he had been at UC SD in some of my past work around Youth Development and digital literacy, (11.15) fans of the same people, There was a common base with which to work.**	
22		Would you say that it was critical to the

		initial grounding of the project?
23	It was critical to my enthusiasm to devote time above and beyond pure project management	

As indicated in Table 4.8, using discourse analysis as an analytic framework, the excerpt of the interview-conversation of the PI for the LTFT provided basis for exploring her emic perspective on how and in what ways this particular LTFT project initiative was created and approved by the Dean of the College. It made visible the processes and challenges entailed in creating an externally funded program initiative in higher education as well as the challenges and work required in order to manage a *grant on campus (Line 6).* Furthermore, it was made visible the challenges to the initial idea of the LTFT project initiative, the goal of engaging *K12 teachers, in teaching K12 students in the importance of long term and future thinking and how to do it (Line 10). A*s she stated, the shift in the initial goal of the LTFT project initiative to the university level led to the creation of the Pilot Instructional Project:

> *The concept of this was so amorphous – I would not know how to do it with our own students much less how to engage teachers – to engage them in a conversation like that. In the course of a dialogue about what to do the project shifted to let's try with our own students at UNIVERSITY and understand what it takes to even bring about thinking about long term and futures thinking (LT+FT). Then roll out to K12 was pushed out to future years within the project - but start with our own kids and when able to talk that through and make that shift with the donors as part of the project plan then I felt very comfortable being the PI (PI to Interviewee, January 2015).*

The institution and the donor's decision to shift the course of the LTFT project initiative to the higher education level created a research agenda that was built into the Pilot Instructional Project, leading to the invitation of the IE research team to join their ongoing research work to date. Therefore, given that the IE research team was entering an ongoing ethnographic research study, it was even more critical, the IE research team decided to uncover the history and the key actors involved in the initiation, development and implementation of the LTFT project initiative. Equally crucial was the need for the IE research team to trace the decisions and actions undertaken by the Lead Professor, the Project Consultant, and the Principal Investigator, who was leading the larger project initiative that the LTFT research team constructing to *understand what it takes to even bring about thinking about long term and futures thinking.* This process, therefore, was viewed as critical, *in* order for them to *roll out to K12* as a future goal for the LTFT project initiative. The exploration of the principles and practices of integrating long term and futures thinking concepts into established courses within the Organization Communication will be examined in the next chapter.

In the Table 4.8, in her accounts of the origins of the project, the PI of the LTFT research team also identified key actors who were external to the university as well internal actors from various departments within the university as contributors to the development of the project (Line 2, 3, 5, 6, 7, 18), which led to the need for the IE research team to explore the role within the project initiative of the different actors, as previously discussed in the preceding analysis. An analysis of the key actors and their roles and relationships within and across the two-year period of the LTFT project initiative will be presented in the latter part of this chapter.

Another reference that the PI recognized was that the University Advancement office *identified a faculty member who was a perfect fit from the College of Letters, Arts and Sciences* (Line 6). As indicated in the table, the PI acknowledged several similarities between the Lead Professor and herself that provided a "common base with which to work" to form a "good team." These similarities were recognized by the PI of the LTFT team, (Lines 18 and 20, bolded), which included similar ways in thinking about student's development and needs, research backgrounds and traditions, and people they both knew, worked with, or respected. In addition to the convergences in ways of thinking, the Lead Professor made reference to his interview-conversation (previously presented) where he stated that his professional and academic background were the roots of his involvement of the LTFT project initiative. As indicated previously, his intellectual history will be explored more completely in relation to the development of the Pilot Instructional Project, which will be presented in the latter part of this chapter.

Summary: In Seeking Multiple Histories from Multiple Emic Perspectives

This first part of the chapter provided a series of multiple cycles of analysis undertaken by the IE research team, (particularly by the Lead GSR), in order to develop multiple emic perspectives on the historical roots of the LTFT project initiative. As indicated earlier, the need to trace backward in time was due to the fact that the IE research team entered into the developing project at the end of the first year of implementation and that they saw the need to uncover the historical traces of what constitutes, "best course to date", a statement made in 2014 by the Lead Professor. As was demonstrated in this section in the multiple angles of analysis (the Lead Professor, the Project Consultant, the Institution formal and public texts, and the PI), the findings from each cycle of analysis made visible certain elements of the history of the LTFT project initiative as well as established the need to explore further investigation based on the intertextual references made by the actors, demonstrating an abductive (follow the data) logic-in-use.

To summarize, the analysis began with the Lead Professor as a tracer unit; his interview-conversation revealed that the key elements of his involvement were his academic and intellectual background; the interview-conversation also made reference to a key actor of the development of the project, the Project Consultant. This reference of the Project Consultant's involvement led the need to conduct an interview-conversation with her, which implicated the involvement of the institution, making intertextual reference to two additional actors, an internal member of the institution and an external actor, external to the institution. Consequently, her references to these actors established the need for the IE research team to explore the institutions formal and public perspective of the LTFT project initiative.

The analyses of the first year's inscription of the Annual Report and the LTFT project initiative's website provided confirmation and validation of the analysis from the Lead Professor and the Project Consultant's interviews and established a bounded time of analysis. Further, it revealed the origin of the LTFT project initiative, acknowledging the funders, as well as the institution's public definition, its purposes, missions and visions of the LTFT. Missing from these cycles of analyses was the insider's knowledge of how the LTFT project initiative developed, from its inception to the creation of the Pilot Instructional Project, a factor that led to the IE research team's invitation to join the ongoing LTFT ethnographic research project. Consequentially, this missing element led to the need to interview the PI of the Pilot Instructional Project, which provided the insider's account of series of actions and challenges in developing a project initiative in higher education, the LTFT project initiative, that led to the creation of the Pilot Instructional Project, which established the purpose of the IE research team's involvement of the ethnographic research project. The second part of the chapter provides the findings from triangulating the multiple perspectives of multiple actors analyzed in this cycle of analyses, actors who were involved in the development of the LTFT project initiative.

Triangulation of Multiple Emic Perspectives. This second part of the chapter presents the findings from the cycles of analysis triangulating the results from multiple emic perspectives. Therefore, the chapter is divided into three sections framed by the following guiding questions:

- What is the background of the LTFT project initiative from its inception leading to the Interactional Ethnography team's entry to the LTFT's ongoing ethnographic research?
- Who are the different actors and what roles did they contribute to the development of the LTFT project initiative?

- What are the intellectual histories of the two primary actors responsible for the (re)formulation of the embedded Organizational Communication courses within the LTFT project that enabled them to collaborate successfully?

The first section provides the history of the LTFT project initiative drawing from the triangulation of the analysis of the series of interviews, the annual report and the LTFT project initiative website. Additional research from the university website was undertaken in order to situate the embeddedness of the Pilot Instructional Project in the larger university context and followed by demographic composition of the institution making visible the diverse populations of the student body. The second section provides a (re)analysis of the interviews, the documents, the LTFT website and the university website, triangulating them with the fieldnotes of the first official intersegmental meeting to conduct an analysis of the key actors involved throughout the two-year course of the LTFT project initiative. Additional research from the internet was conducted to learn more about the key actors. By adopting Spradley's (1980) domain analysis and triangulating the multiple sources of records, the IE research team identified the kinds of actors who were involved in the development of the project and examined their roles and relationship in relations to the initiation, development, and implementation of the LTFT project initiative. The third section provides convergences of the intellectual and professional histories of the two primary actors responsible for the interdisciplinary integration of organizational communication course content and frameworks from long term and futures thinking. A (re)analysis of interview-conversation transcripts of both the Lead Professor and the Project Consultant was undertaken in order to trace the intellectual and professional histories in order to develop a fundamental understanding of what resources they brought into the Pilot Instructional Project. Additional research from their professional website was also undertaken in order to construct a comprehensive timeline of their intellectual histories.

The History of the Project Initiative: Insider's Perspectives. As described previously, this LTFT project initiative was originated by a private funder, who had a vision of providing support to the faculty within this particular public regional university, (PRU), to design curriculum modules that integrate theoretical and conceptual area of study that were external from the traditional university framework, i.e., long term thinking and forecasting. His long term goal was to develop curriculum modules that would be *transportable* for K-12 and would be made available in the internet. This phase of the project development involved a series of negotiations between a Program Development Officer and the funder along with a non-profit organization whose mission is to foster long term thinking more common.

The project initiative was then presented to the campus administrator, who negotiated with the faculty and the funders to develop a Pilot Instructional Project at the Undergraduate Level in order to gain a fundamental understanding of the work involved in integrating curriculum outside of traditional institutional framework before such curriculum modules would be presented to K-12 curriculum leaders and teachers. At this stage of the project development, the institution appointed a Professor, who had a background in long term thinking, as the Lead Professor, and given his instructional appointment, the

Department of Communication as a site for developing the courses sequence for student majoring in Communication with the emphasis of Organizational Communication.

The private funder and the non-profit organization recommended to the Program Developer, to hire an external Project Consultant, who had an expertise in forecasting. Her role was to provide the Lead Professor with concepts of forecasting and to collaborate with him to reformulate courses to integrate long term and futures thinking. The collaboration began in summer 2012 and the implementation of the three courses that were (re)formulated, commenced in the fall 2012. The Pilot Instructional Project ended in Spring 2014 with the course, in which the Lead Professor claimed as "our best course to date." As indicated previously, the IE research team selected this course as an anchor of analyses of the developmental pathways of the processes of the interdisciplinary integration across the two-year period of the Pilot Instructional Project. The analyses of the developmental process of the LTFT will be presented in Chapter V that follows.

The Pilot Instructional Project became the foundation of the larger institutional LTFT project initiative to meet the institutional goal to build future leaders, who can link the deep past, present, and the deep future. The departmental goal was to challenge students to think beyond the typical time horizons (e.g. quarterly, annually, fiscal reports, four-year elections, 10-20-or 30 year strategic planning), to think about more distant years into the future, 5-100 years into the future and to apply the disciplinary knowledge acquired in their Organizational Communication courses to forecast, design and articulate solutions to potential problems with reasoned ideas, theories and recommendations of the future. The

LTFT goal was to explore the layers of actions, decisions, and thinking involved in bringing non-traditional framework into established courses of study to meet the requirements of a B.A. major in Communication with an emphasis on Organizational Communication.

As previously indicated, the IE research team needed to uncover the historical roots in order to understand the mission and goals of the LTFT project initiative as well as the different contexts that were embedded within the LTFT project initiative. The cycles of analyses undertaken of the historical background made visible the different layers of contexts that were embedded within the LTFT project initiative. In order for the IE research team to gain a deeper understanding of the LTFT project initiative, another level of analysis was undertaken to examine the institutional context. Building on the concept that social construction of meaning is interdependent with the context(s), the IE research team uncovered the multiple layers of contexts related to the Pilot Instructional Project. Therefore, the IE research team conducted analyses of the university website and the Department of Communication in order to examine the part-whole relationship of the Pilot Instructional Project with the larger institutional LTFT project initiative. The Lead GSR and the Senior GSR conducted this level of analysis. The following section provides the (re)analysis of the contextual setting of the physical site of the study.

The Contexts of the Project Initiative. The process of triangulating the analyses of the series of interviews, the annual report, and the LTFT project initiative website, led to the identification of the relationship of different segments of the institution within the LTFT project initiative. As previously discussed, the reference in the interviews of the Lead Professor and the LTFT PI about the Pilot Instructional Project (PIP), established the need for the IE research team to understand how and in what ways other institutional levels shaped the developmental process of curriculum integration. Therefore, the Lead GSR and the Senior GSR engaged in a series of data collection and analysis process, using the university website, annual report and to course syllabi, to explore the part-whole relationship of the LTFT program to the university. As a result, they constructed a graphic representation of university context, situating the Pilot Instructional Project (LTFT) within the Department of Communication and the university, as represented in Table 4.9, *Situating the LTFT within the University Context*.

An additional feature of the table is a map of the different courses offered in each quarter within the two-year period of the Pilot Instructional Project, providing the boundaries of events. This aspect of the table provides a timeline of the LTFT, bounding the unit of analysis for the IE research team (Green, Skukauskaite, Baker, 2012). These courses and their transformation processes were examined to uncover the processes developed to integrate long term and futures thinking concepts with the Organization Communication theory of the particular courses; these analyses will be presented in Chapter V. For the purpose of this section, the table is presented to make visible the different levels of actors who contributed and shaped the development of the Pilot Instructional Project. Therefore, the following section provides the foundation for identifying the institutional contexts of the LTFT project initiative and establishes a framework that point to what the IE research team needed to know, understand and undertake in order to strive for a deeper understanding of the processes and principles of curriculum integration from the institutional contexts.

Table 4.9

Situating the LTFT within the University Context

<table>
<tr><td colspan="6">Public Regional University
Academic Degrees: 50 Baccalaureate Degree and 62 Minors; 35 Master's Degrees; 39 Credentials and Certificates; Doctorate in Educational</td></tr>
<tr><td colspan="2">College of Business and Economics</td><td>College of Letters, Arts, and Social Sciences (CLASS)</td><td>College of Education and Allied Studies</td><td colspan="2">College of Science</td></tr>
<tr><td colspan="6">College of Letters, Arts, and Social Sciences (CLASS)
17 Departments including Communication, 5 Programs, 38 Degrees</td></tr>
<tr><td colspan="6">Department of Communication</td></tr>
<tr><td>Chair Person (1)</td><td>Lead Professor (1)</td><td>Assistant Lead Professors(7)</td><td>Teaching Assistants (7)</td><td>Lectures(7)</td><td>Staff (2)</td></tr>
<tr><td colspan="6">Degree Requirements: 52 unit core courses and 44 units in 1 of 2 options</td></tr>
<tr><td colspan="3">Professional, Public, and Organizational Communication</td><td colspan="3">Media Production</td></tr>
<tr><td colspan="6">Organizational Communication</td></tr>
<tr><td colspan="6">Assistant Lead Professor (Appointed 2003): Lead Professor for Long Term and Futures Thinking Initiatives</td></tr>
<tr><td colspan="6">Pilot Instructional Project (LTFT)</td></tr>
<tr><td colspan="3">Academic Year One: 2012-2013</td><td colspan="3">Academic Year Two: 2013-2014</td></tr>
<tr><td>Fall Quarter</td><td>Winter Quarter</td><td>Spring Quarter</td><td>Fall Quarter</td><td>Winter Quarter</td><td>Spring Quarter</td></tr>
<tr><td>Sept | Oct | Nov | Dec</td><td>Jan | Feb | Mar</td><td>Apr | May | Jun</td><td>Sept | Oct | Nov | Dec</td><td>Jan | Feb | Mar</td><td>Apr | May | Jun</td></tr>
<tr><td>COMM 4107: Relational Communication: New Media and Organizational Life
COMM 4510: Public Relations Theory and Practice: Long Term Thinking in Public Relations: Energy Innovations 2037
COMM 4500: Gender and Identity and Representation in Media: Envisioning Gender Roles in 2112</td><td>COMM 3107: Introduction to Organizational Communication: Taking a Long Term Futures Thinking Perspective</td><td>COMM 4207: Introduction to Communication: Organizational Transformation</td><td>COMM 4107: Relational Communication in Organizations: Personal and Collective Futures</td><td>COMM 3107: Introduction to Organizational Communication: Taking a Long Term Futures Thinking Perspective</td><td>COMM 4107: Relational Communication in Organizations: Exploring Responses to Societies Collapse: Past, Present, and Futures</td></tr>
</table>

As indicated in the table, this research project was undertaken in one of the four campuses of a comprehensive, regional, urban public university located in northern California that remained on the quarter system, which was founded in the mid-1950s. The university houses four colleges: College of Letters, Arts, and Social Science, College of Business and Economics, College of Education and Allied Studies, and College of Science offering 50 Baccalaureate degrees 62 minors, 35 Master's degree, a Doctorate degree in Educational Leadership, and 39 credential and certificate programs. The degree programs consisted of Bachelor of Arts, Bachelor of Fine Arts, Bachelor of Science, Master of Arts, Master of Business Administration, Master of Science, Master of Social Work, and Doctorate in Education.

Furthermore, Table 4.9 shows that the five particular courses that were embedded within the LTFT project were under the department of Communication, one of the seventeen (17) departments in the College of Letters, Arts, and Social Sciences (CLASS). The department offers both a B.A. and M.A. degree in Communication with two interdependent options; Media Production and Professional Public and Organizational Communications. The table also indicates that a B.A. in Communication requires 52 units of core courses and 44 units in one of the two aforementioned options. Of the five courses with the LTFT, three of these courses were considered the core courses in the communication major and the two were required courses to meet the Professional Public and Organizational Communication emphasis. Most of the courses were considered a hybrid-online courses in which the students and the Lead Professor used the university online educational portal called a Blackboard in addition to a weekly face-to-face meeting in a classroom setting where they engaged in discussions about the course content, assignments, and quizzes within and across the eleven-week period.

Analysis of the part-whole relationship of the LTFT project initiative revealed that the multiple levels of actors and contexts within the institutional level, either indirectly or directly contributed to the development of the LTFT project initiatives. This analysis made visible the range of actors with particular sets of expectations and norms that the Lead Professor and the Project Consultant needed to consider and understand in order to integrate the external disciplinary framework and the established Organizational Communication theories.

The following section examines the student body population in the university and courses, which was another layer of context that LTFT research team, particularly the Lead Professor and the Project Consultant, needed to consider in their (re)formulation of the courses, both in designing what contents or framework to integrate and what approaches were appropriate to use in order to provide learning opportunities for all students. The following table (*Figure 4.1*) presents the distribution of the student body by race, ethnicity, and domestic background, to make visible the diverse range of background within the student population.

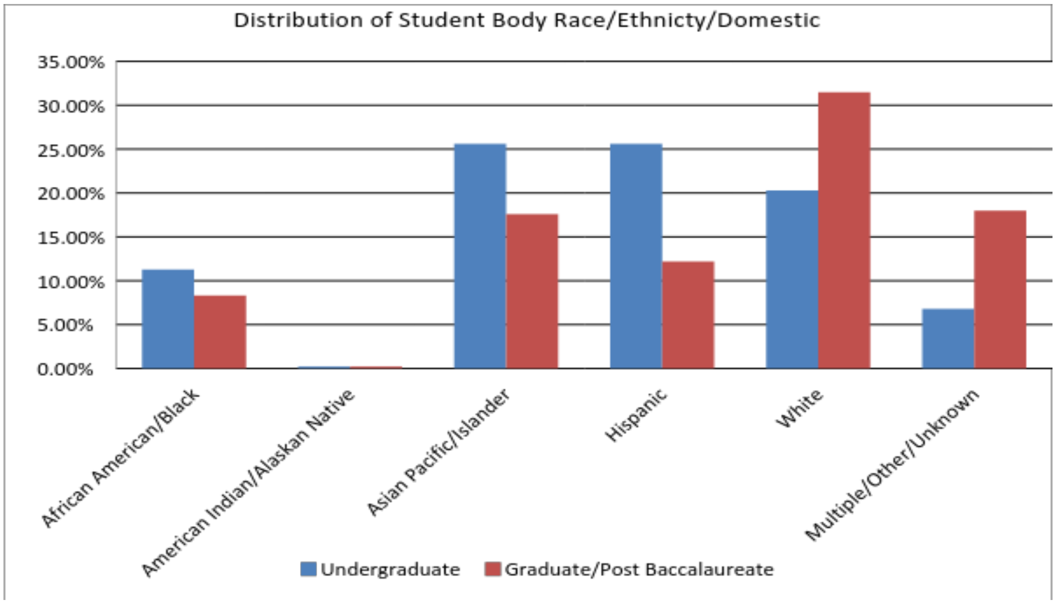

Figure 4.1. Distribution of student body race/ethnicity/domestic.

The university's student body had over 14,000 students at the undergraduate, graduate, and post baccalaureate degree levels. Within this culturally, economically, and linguistically diverse population, the PRU serves high percentages of upper-division transfer and returning students, (part-time, older, working), including a large number of "first generation" college students; however, the majority of the student body consists of full-time undergraduate students. Female students, both undergraduate and graduate comprise over 60% of this student body with male students make up over 30% of the student body. The existence of high percentages of upper-division transfers and returning (non-traditional) students, suggested to the IE research team that they needed to examine the ranges of diverse learning experiences, resources, and perspectives are being brought in and contributing to the development and transformation of the integrated courses.

The Developers of the Project Initiative. The analysis of the history of the development of the project made visible the multiple actors who were involved across the developmental phases of the LTFT project initiative from its initiation, development, and implementation. The process of uncovering of these multiple actors led to examine the history of the different actors' involvement in relations to the development of the institutional LTFT. Therefore, the IE research team, led by the Lead GSR, conducted another cycle of analysis, as previously indicated, one addressing the question, "Who are the different actors and what roles did they contribute to the development of the Project Initiative?" The IE research team defined "actor(s)" as an individual or a social group, department, organization, who may or may not directly shape to the construction of cultural practices and processes within a particular group or a development of a particular phenomenon under study.

To undertake this analysis, the IE research team adopted Spradley's (1980) domain analysis to identify the kinds of actors, involved in a particular event, within a particular point in time, across the history of the LTFT. Once again, these actors, who were referenced in the interview-conversations of the Lead Professor, Project Consultant, PI of the LTFT in the respective interviews, or inscribed by the authors of the annual report, the LTFT project initiative website and the university website. The domain analysis of the semantic relationships of multiple actors is graphically represented in *Figure 4.2*: Taxonomy of semantic relationship of the actors to the institution and to the IE Research Team.

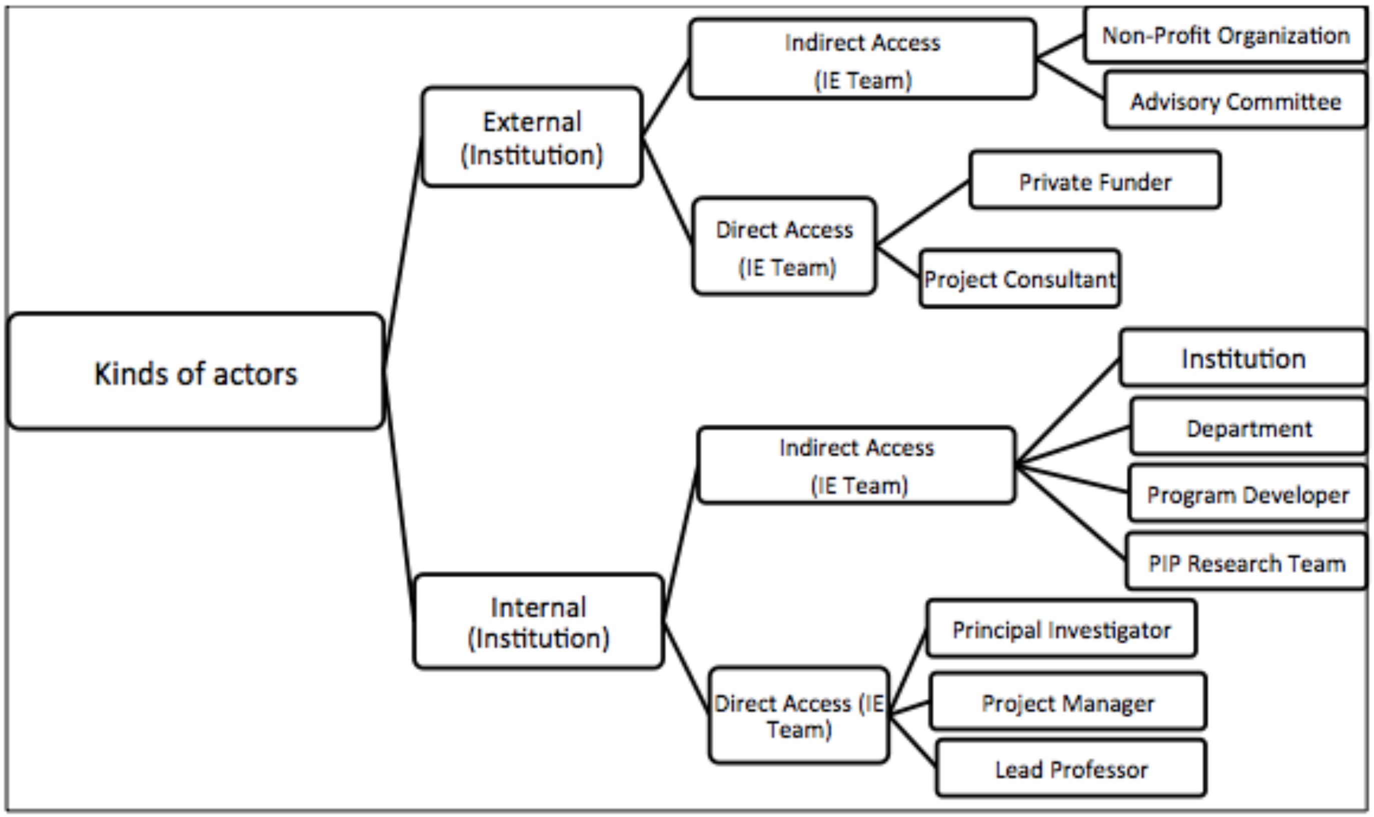

Figure 4.2. Taxonomy of semantic relationship of the actors to the institution and to the IE Research Team.

This taxonomy made visible the actors in relations to the institution as well as to the Interactional Ethnography (IE) research team, respectively. The decision to identify the semantic relationships among the actors in relationship to the IE research team was guided by ontological and epistemological understanding that people live in time and spaces who intentionally work to accomplish individual and/or collective goals in and through times, activity and actions (Spradley, 1990). As indicated in the Figure 4.2, the first level of semantic relationship was to distinguish the kinds of actors in relations to their relationship with the institution, whether an actor was an external or internal member of the institution. The second level of analysis that was undertaken was the reclassification of the actors in relations to the IE research team's access to the various actors. It makes visible the actors with whom the IE research team indirectly or directly interacted within the research study across the two-year period of the Pilot Instructional Project (LTFT).

Figure 4.2 enabled the IE research team to uncover the range of actors who were external member of the institution, with whom the IE research team had indirect access, i.e., the Non-Profit Organization and the Advisory Committee. The Non-Profit Organization was a university partner that provided financial support for institutional LTFT project initiative as well as material resources for the courses embedded within the Pilot Instructional Project. The Advisory Committee was composed of seven members, including the Private Funder, employees of the Non-Profit Organization and/or respected futurist. This Advisory Committee was established in April 2013 to provide support and intellectual directions to the institutional LTFT project initiative. Even though they did not have a direct access to the IE research team, the IE research team still decided that they needed to know the professional and intellectual histories and background of these two kinds of actors, the Non-Profit Organization and the Advisory Committee. The Private Funder's background was omitted given his request to remain anonymous. Having knowledge of their intellectual background and expertise, guided the IE research team in establishing a genre, i.e., a language to use when they communicating the results of the ethnographic research project.

The Private Funder, an external member of the institution, directly engaged with the IE research team members across the two-year period of the Pilot Instructional Project. His commitment to this project was made visible by his willingness to visit the research center, CIEIA, for a span of three days in order to meet with the IE research team face- to-face to learn about and gain insights into the direction of the project, during the initiation phase of the LTFT project initiative. His ongoing interaction among the LTFT research team and with the IE research team further provided evidence of the level of his support and commitment to understanding the layers of work involved in developing an institutionally sanctioned LTFT project initiative. As indicated in the previous section, he was the initiator of the LTFT, with a vision of developing a "transportable" curriculum with a long term and futures thinking orientation that could be integrated within K-12 prescriptive curriculum.

Another actor who was an external member of the institution with whom the IE research team had direct access to engage and interacted with was the Project Consultant. As indicated previously, the university, PRU, with the Non-Profit Organization and the Private Funder recommended the hiring of the Project Consultant to provide support to the

Lead Professor of the PIP project. Her specific roles were to develop concepts associated with forecasting and to work collaboratively with the Lead Professor to integrate these and other long term and futures thinking concepts with Organizational Communications Theory in a series of undergraduate courses embedded within the LTFT project initiative. Her role and contribution to the development of the LTFT will be further explored in the later sections of this chapter.

The second group of actors with whom that IE research team did not have direct access was the internal members of the larger institutional levels. This kind of actors included actors at the Institution Level, Department Level, Program Manager, and particular actors in the LTFT research team, who were directly responsible for collecting, archiving, and sharing artifacts across the two-year period of the Pilot Instructional Project.

The last kinds of actors, with whom the IE research team had direct access and interactively engaged with directly, were the internal members of the LTFT project initiative. This group of actors consisted of the Principal Investigator, Project Manager, and Lead Professor. As indicated in the previous section, the Lead Professor of the LTFT project initiative, an Associate Professor of the Department of Communication, was appointed by the University Advancement office, given that he had a background in long term and futures thinking. The Program Manager in the first year was a former fellow of the research center, CIEIA, and was concurrently completing her Ph.D. with the MROU while working at the public regional university (PRU). Her duty was to manage the daily activities or work required in collecting, archiving, and disseminating sources of records among the LTFT research team and the IE research team. During the second year, the Program Manager resigned from her position given competing academic opportunities and priorities. This position was then filled by another former fellow of the research center, CIEIA. This Program Manager also has a sustaining professional relationship with the PI of the IE team and was responsible in disseminating and sharing the archived records collected by the LTFT team. She also completed her Ph.D. program from the MROU under the PI of the IE research team's guidance and advice.

The Principal Investigator of the LTFT research team and the overall funded ethnographic research project, also completed her Ph.D. in MROU and has a sustaining professional relationship with the PI for the IE research team. They had worked together in multiple large-scale research and program development project initiatives. She supervised the operation and communicated the developments of the LTFT project initiative to all of the actors involved with the LTFT project initiative. She also negotiated with the external funders of the LTFT as well as the multiple actors in various administrative levels within the institution to create the Pilot Instructional Project. As discussed in the previous analysis, she added a research agenda within the project initiative, with the goal of understanding the process of how to engage the undergraduate students in learning how to think long term and futures thinking in relations to their disciplinary content of study. As indicated previously, this goal was undertaken to identify processes and practices as well as content that K-12 teachers would need in order to integrate the concepts of long term and futures thinking with their ongoing curriculum in the future. As previously presented, given the sustaining professional relationship and long history of collaborative work between the PI of the LTFT research team and the PI for the IE research team, the PI from PRU invited the IE research team to carry out an additional ethnographic analysis of the existing ethnographic research project that was embedded with the Pilot Instructional Project.

The different actors, who were involved in and across the historical development of the LTFT project initiative, were presented in this section. Additionally, the IE research team's analysis of the roles and relationships in relations to their connections to institutions and interactions with the IE research team was presented. The multiple ranges of actors uncovered from the cycles of analysis provided the evidence that it requires systems of actors to develop a new project initiative: Individual and/or institutional actors, and actors from different departments each bringing resources and perspectives. Furthermore, these analyses made visible the importance of shared intellectual histories to develop new instructional projects, as well as to conduct an intersegmental ethnographic research study. The next chapter will discuss further how these shared knowledge of ethnography made it possible for the IE research team to conduct the ethnographic research study with the LTFT research team.

Finally, the fact that the university appointed the Lead Professor and hired the Project Consultant provides further evidence the need for expertise in disciplinary knowledge when developing a state of the art institutional project initiative in higher education. The last section, therefore, explore the intellectual histories and professional backgrounds of the two primary actors responsible for (re)formulating the undergraduate courses within the

Organizational Communication that required long term and futures thinking are explore further.

Convergences of the Curriculum Designers' Intellectual Histories

This section focuses on the convergences of the intellectual histories of the two key actors who were responsible in (re)formulating the embedded courses within the Pilot Instructional Project within the ethnographic research study. The need for the IE research team to explore the intellectual history of the Lead Professor and the Project Consultant was the result of the first cycle of analyses of their interview-conversation transcripts, there were presented in the previous sections of this chapter. Both the Lead Professor and the Project Consultant made reference to their background as the roots of their invitation to participate in the development of the larger university LTFT project initiative. Consequentially, the IE research team conducted another cycle of analysis of the transcripts shifting the focus to their references about their education, professional experience, past and current work or projects. In addition, the IE research team also conducted their professional website as well as the internet in order to obtain additional information written about these actors, including analyzing their curriculum vitae. Follow-up questions about their intellectual biographies were then sent via e-mails and were responded to immediately. The guiding questions for exploring their intellectual histories were:

- What are the intellectual history of the two key actors responsible for the (re)formulations of the embedded courses within the LTFT?
    - What was his/her academic history?

    - What was his/her employment history?
    - What relevant experiences did he/she have in relations to the Project Initiative?
- Why were they able to work well together given that they came from different professional background?

Individually, each member of the IE Graduate Student Research team was responsible for a particular task:

- Lead GSR - trace the Project Consultant's intellectual history by analyzing the interview transcripts and website
- Senior GSR - trace the Lead Professor's intellectual history by analyzing the interviews transcripts and websites
- Junior GSR – trace and compile any reference in the Project Consultant or the Lead Professor's intellectual history from the archived email exchanges, fieldnotes of the first official meeting and the interviews.

Collectively, facilitated by the Lead GSR, the IE team worked collaboratively in the CIEIA center to construct a model of a timeline with a butcher paper, one for the Lead Professor, and one for the Project Consultant. Once the physical models were constructed, the IE research team laid the models side by side on the floor and drew arrows of their convergences. The Senior GSR took a picture of the physical models and (re)produced it electronically and shared it with the team to edit. The final electronic version of the graphic representation of the Lead Professor and the Project Consultant timeline is represented in *Figure 4.3*, Timeline of the Lead Professor and the Project Consultant.

Project Consultant's Timeline			Joint Interactions	Lead Professor's Timeline		
Education	1980-1984	Harvard University-B.A. Hispanic Studies		Shakespearean Theater Group and influence on his performance as instructor	[Youth]	**Education**
	1985-1987	University of California Berkeley-M.A. Latin American Studies		B.A. World Arts and Cultures, Theater History, University of California, Los Angeles	1990	
				M.L.I.S. in Library and Information Science, Cum Laude, University of California, Los Angeles	1995	
				Ph.D. Candidate in Communication, University of California, San Diego	1995-February 2004	
Employment	September 1987 – September 2008	Institute for the Future Palo Alto, California Research Director Director of the Technology Horizons Program		Internships: Los Angeles Times Editorial Library [Spring 1994] University of Southern California Medical Library [Spring 1995]	1994-1995	**Employment**
	November 2008	Project Consulting		Interval Research Corporation Graduate Student Researcher	1996	
	Prior Summer 2012	PRU Working with Chris Rivers on another futures program		El Camino Housing Project -Del Mar Boys and Girls Club Computing Center Director	1997	
				Laboratory for Comparative Human Cognition Research Associate and Distance Learning Coordinator	1997-1998	
				University of California, San Diego: Culture, Art, Technology Teaching Assistant, Sixth College	1998-2002	
				Institute for the Future Research Affiliate	1998-2009	
				Sun Microsystems Human Computer Interaction and Accessibility Team	2000	
				University of California, San Diego Lecturer in Department of Communications [2000-2002]	2000-2002	
Intersegmental Team LTFT Project	August 2012	PRU Working to construct course with Lead Professor		PRU Begin teaching in Department of Communications	Fall 2003	**Intersegmental LTFT Project**
	May 7, 2014	Interview-conversation between Project Consultant and MROU [Virtual]		PRU Working to construct course with Project Consultant	August 2012	
	July 8, 2014	Interview-conversation with Project Consultant and Lead Professor, and MROU [In-Person]		Long Term and Futures Thinking Meeting (MROU Team Virtual)	February 19, 2014	
	July 9, 2014	Interview-conversation with Project Consultant and MROU [In-Person]		Long Term and Futures Thinking Meeting (MROU Team Virtual)	March 19, 2014	
				Individual interview- conversation between Lead Professor and MROU Team [Virtual]	April 25, 2014	
				Interview-conversation with Lead Professor, Project Consultant and MROU [In-Person]		
				Meeting with Lead Professor, Project Manager and MROU Team regarding submission to CAE	August 1, 2014	
	August 13, 2014	Working with Lead Professor to construct for Fall 2014 regarding: Mapping Fall Quarter during the week of August 25th		Lead Professor detailing upcoming plans for Fall 2014 regarding: -Mapping Fall Quarter during the week of August 25th -Working with Ecology Professor at PRU to develop joint classroom projects -Publications - 1. [Submitted] Communication Teacher (a National Communication Association journal) and 2. [In-progress] Anticipatory anthropology journal (based on our deep time approach) 3. [In-progress] Games & Culture journal (classroom forecasting and long term thinking literacy) -Voiceover project for pace layers for online learning [Fall 2014] -Tracer student list - compiling Spring 2014 list [Fall 2014]	August 13, 2014	

Figure 4.3. Timeline of the Lead Professor and the Project

Although, it was not a comprehensive intellectual individual history of the Lead Professor and the Project Consultant, the graphic representation presents a history of their education, employment, and their involvement at PRU and the LTFT project initiative. *Figure 4.3* maps an individual timeline of the Lead Professor and the Project Consultant in order to trace their intellectual histories and professional backgrounds leading to their involvement of the LTFT project initiative. The color-coded arrows signal their convergences in multiple points in their histories. These shared histories suggest a common understanding of "futures thinking" as fundamental core of their logic of the course reformulation design. In particular, as indicated in *Figure 4.3*, both the Lead Professor and the Project Consultant were employed by the Institute for the Future. This prior connection was not known to the IE research team or to some of the members of the LTFT project initiative during the early phase of the project initiative. Another invisible element of their professional connection was the fact that the Lead Professor interviewed the Project Consultant as part of his dissertation research entitled: *Working In The Future Tense: Materializing Stories of Emerging Technologies and Cyber Culture At the Institute for the Future (*PhD dissertation, University of California, San Diego). Another crucial invisible convergence that was made visible through their interview-conversations was that they both have knowledge about ethnography, which was the foundation of the research agenda of the LTFT and key pedagogical approaches. As previously indicated, this shared knowledge and history and their mutual respect of their expertise contributed to the ways in which they were able to collaboratively engaged in recursive and iterative (re)formulation process, and how they were able to draw and build on their knowledge from this history.

Summary of the Uncovering of the Embedded Histories of the Project Initiative

This chapter presented telling cases of a cycle of analysis with multiple chains of analytic scale and angles of analyses undertaken by the IE research team in order to examine the chains of actions and decisions undertaken by the IE research team in order to uncover the embedded histories of the LTFT project initiative. These series of analyses were undertaken based on a challenge that they encountered, given that their point of entry was not at the outset of first year of inception of the LTFT project initiative. As was demonstrated, these cycles of analyses made visible the ways in which the IE research team conducted an iterative, recursive, abductive and non-linear process of data construction and analysis as well as collected new sources of records, that were necessary to further support the (re)analysis of archived records. This process, therefore, involved different forms of triangulations of the outcomes of the cycles of analyses undertaken to construct multi-faceted understanding the actions and decisions the LTFT research team undertook in constructing the integration of the long term and futures thinking with the ongoing courses in Organizational Communication. In presenting what was uncovered in the LTFT project, and in describing the process undertaken, this chapter also made visible the process undertaken by the members of the IE research team for each cycle of analysis, and the purpose each served as well as how one analysis led to the need for subsequent analysis. For each cycle of analysis, the guiding questions were presented along with sources of records analyzed and/or additional information required to construct data for analysis. Through this process or making visible the process that the IE research team engaged in, I made visible what was learned about the LTFT project initiative through the analyses as well as what questions were raised that required further investigation.

Furthermore, as part of the presentation of the cycles of analyses, I made visible the framework that the IE research team developed to explore what it needed to know, understand, and undertake to develop a grounded account of this complex and overtime project. The cycles of analysis also made visible that the IE research team's ontological and epistemological understanding of particular phenomena served as the foundation of their development of logic-in use, which, as demonstrated, was a recursive, iterative, abductive, non-linear process of data construction and analysis, making visible the theory-method relationship (Baker, Green, & Skukauskaite, 2008). Finally, these cycles of analysis uncovered the multiple histories embedded within the LTFT project initiative, with multiple actors and multiple layers of contexts who contributed and shaped the development of the LTFT project initiative, which contributed to the understanding of how and in what ways a team of interactional ethnographer conducted a multifaceted and technology-enabled ethnographic research study of a developing program from a regional public university over a two-year period, which is the overarching inquiry of this dissertation. The role of the external-internal research team, in which both teams had a shared understandings of the theoretical framework that guided the logic-of-inquiry made possible the (re)analysis of the rich corpus of archived records, in order to uncover the historical roots of the LTFT project initiative. Uncovering the multiple histories, actors, and contexts of the LTFT project initiative set the stage for the need for the IE research team to trace the developmental phases of the Pilot Instructional Project, which will be presented in the next chapter.

Chapter V: Developmental Pathways of Course Design: Common Goals, Uncommon Approach

Introduction

This chapter presents a telling case to examine a cycle of analysis that the IE research team conducted in order to trace the developmental phase of the Pilot Instructional Project. In order to distinguish the larger institutional LTFT initiative, the Pilot Instructional Project, (previously presented in Chapter IV) was developed with the goal of uncovering the layers of decision-making processes and actions required in integrating external disciplinary framework into established course content within the Organizational Communication department. The LTFT initiative, as made visible in Chapter IV, also had a second goal of building on this process to engage teachers and educators in K-12 in integrating long term and futures concepts into their pre-defined curriculum. Guided by the LTFT research agenda (previously presented in Chapter IV), the IE research team engaged in iterative, recursive, abductive, non-linear process of data collection and analysis to address the following questions:

- How, in what ways, drawing on what interdisciplinary and inter-segmental project team expertise, did the Lead Professor develop conceptually grounded approach for teaching long term and futures thinking to undergraduate students within a Communication program across time in this two-year Pilot Instructional Project?

- How, and in what ways, did this grounded recursive approach support the Lead Professor in engaging students in developing understanding of both organizational communication theories, and in long term and futures thinking processes and practices in relationship to societal collapse and organizational development?

These sets of questions framed the challenge for the IE research team--what did they need to know, understand, and undertake in order to address the aforementioned questions. An additional challenge was captured by the Lead Professor's partial response extracted from an email exchange between the Lead Graduate Student Researcher and the Lead Professor:

> *Thanks for taking an interest in this subject and looking forward to your analysis. I am currently writing an article to submit to the Journal of Futures Studies about my integration of futures studies and organizational communication too and I will share my draft with you later. Too often, this not mentioned as much and this perhaps why forecasting is not as widely understood across the disciplines and integrated among them… the integration has not been accomplished* (LAB to MC, 20/27/14, via email).

Given the Lead Professor's acknowledgement of the fact that the integration of the future studies has not been accomplished in his field prior to the project initiative that he was undertaking, the IE research team viewed this as a new challenge, one that required the IE research team and the LTFT team to (co)construct a language to articulate the principles and processes of interdisciplinary integration. This challenge extends the earlier ones described in Chapter IV, challenges faced by the IE research team in reconstructing the LTFT/PIP's histories given their entry was after the first year of implementation of the Pilot

Instructional Project, and given the IE research team's unfamiliarity of the disciplinary content and the PRU institutional contexts. Hence, in order to address these challenges, as described in Chapter IV, the IE research team engaged in multiple cycles of analysis of multiple resources and a process of triangulating multiple sources of records. From this perspective, the complex layers of analyses were viewed as a consequential progression, in that, it traced the intertextual relationship between and among chains of intertextual relationships in order to analyze how knowledge constructed in one context became socially and academically consequential in other events (Putney, 1997; Putney, Green, Dixon, Duran, & Yeager, 2000). In particular, it sought to trace the transformation of the pedagogical approaches and the integration process of the key constructs from both the Organizational Communication and the long term and futures thinking discipline. Therefore, the goal of this chapter is to frame further what the IE research team needed to know, understand, and undertake in order to uncover the processes and principles of integrating concepts of long term and futures thinking into established course content within the organizational communication program across the two-year period of the Pilot Instructional Project. The following questions parallel the ones asked in Chapter IV, and are the basis for the analyses presented in this chapter. These questions served to anchor the ethnographic analysis of each chain of analysis for this particular cycle of analysis, whose overarching question was: "How and in what ways did the IE research team engaged in a cycle of analysis tracing the developmental pathways of the adoption of pedagogical approaches and process of (re)formulation of interdicisplinary integrated courses?” The following questions were sub-questions:

- What series of analytical decisions and actions were undertaken for each level of analysis, by whom, with what purpose leading to what outcome?
- What questions guided every phase of the cycle of analysis?
- What sources of records did they draw on to construct data for what purpose?
- What additional information that was required and needed to collect across the cycle of analysis?

Thus, parallel to the theoretical framework guiding the analytic framework in Chapter IV, multiple chains of analyses within a developing cycle of analyses, were undertaken that drew on various archived records, including the Final Research/Evaluation Report, IE research team’s calendar schedule, fieldnotes of the IE research team’s collaborative meeting, and emails exchanges among the IE research team and the LTFT research team. For each level of analysis, as in Chapter IV, specific methodological processes and the description of these processes, the particular purpose guiding a particular analysis being undertaken, and unanticipated questions that arose from what was made visible or not through the different levels of analyses presented.

Therefore, this chapter is divided into two parts each consisting three separate sections. The first part presents a telling case of how and in what ways the IE research team engaged in a particular cycle of analysis in order to trace the developmental pathways of the interdisciplinary curriculum process. The first section provides a telling case on how the IE research team engaged in series of interview-conversations with the curriculum designers (Lead Professor and the Project Consultant) over a three-day period. The second section offers a telling case of how, and in what ways, the IE research team engaged in a dialogic exchanges using computer-mediated communication via email and Google hangout in order to seek further information from un-anticipated questions or to seek clarification or the LTFT research team's responses to the findings from previous analyses. The third section offers a telling case of how and in what ways did the IE research team engaged in a further cycle of analysis that drew on the archived artifacts, which included the 2012-2013 Annual Report, the course syllabus and lesson plans created by the Lead Professor and the Project Consultant.

The second part of this chapter presents the synthesis of the findings from the triangulations of the multiple resources that supported the analysis of the developmental pathways of the interdisciplinary curriculum integration. The first section offers analyses of the pedagogical approaches undertaken by the LTFT research team to engage students in integrating or inter-relating both the concepts of Organizational Communication theories and the long term and futures thinking framework made available in a series of courses across the two-year period of the integration process. The second section presents the developmental pathways of the interdisciplinary integrations, tracing what long term and futures thinking constructs were integrated or inter-related for each course of the two-year period of LTFT, leading to the Spring 2014 course that Lead Professor claimed as the "best course to date." Given the statement that the springs 2014 course as the "best course to date", the third section presents additional sets of cycles of analysis that focus on what makes this course the "best course to date."

Tracing the Developmental Pathways through Multiple Sources

In order to conduct an ethnographic analysis of the developing framework of integration principles and processes, multiple levels of analyses drawing on multiple sources of archived records, were undertaken by the Lead GSR of the IE research team, in order to address the aforementioned guiding questions of the ethnographic research analysis of the Pilot Instructional Project. In particular, as Lead GSR, I examined the conceptual systems developed by the Lead Professor and the Project Consultant, with the support of the PI of the LTFT research team, as they designed learning opportunities for students to engage in inter-relating long term and futures thinking in the context of organizational communication theories. The following sections provide a telling case of three cycles of analyses undertaken by the Lead GSR. The first cycle focuses on the series of follow-up and face-to-face interview-conversations of the Lead Professor and the Project Consultant. The second section focuses on the analysis of the 2012-2013 Annual Report and the course syllabi. The third section presents an analysis of an excerpt from an intertextual thread of dialogic email exchanges between the Lead Professor and the Lead GSR, which developed by the PI and the Lead GSR of the IE research team.

Analysis of the Interview-Conversation with the Curriculum Designers

This section presents a cycle of analysis in which the IE research team engaged in a three-day interview-conversations with the Lead Professor and the Project Consultant from

July 7-9, 2014, in order to further develop emic understandings of their logic in (re)formulating the courses to integrate or inter-relate both the theories of Organizational Communication with concepts of long term and futures thinking. The IE research team negotiated with the LTFT team for the Lead Professor and the Project Consultant to visit the research center, CIEIA, in the MROU for a follow up interview-conversations. This invitation was strategically designed, in order for the IE research team to show these key actors the analytic process that the team had undertaken to that point in time, as well as to provide a more elaborated explanation of the kinds of ethnographic research, in which the IE research team had engaged in. This aspect of the visit used the posters of the analyses and project that were presented at the American Educational Research Association. These posters were displayed on the walls of the research center and served as resources for the IE research team and for others who were interested in learning the IE research approach. Furthermore, the IE research team also scheduled the interview-conversation on three separate days, each session lasted two hours:

- An individual interview with the Lead Professor-July 7, 2014
- Joint interview the Lead Professor and the Project Consultant-July 8, 2014
- An individual interview with the Project Consultant-July 9, 2014

This model of ethnographic interview-conversations that the IE research team conducted, as indicated above, involved an individual interview-conversation with the Lead Professor, then a joint interview-conversation with both the Lead Professor and the Project Consultant, and final individual interview-conversation with the Project Consultant. This process was purposely designed in order for them to gain individual accounts as well as joint accounts of the processes and the thinking behind the decisions made in (re)formulation of the courses across the two-year period of the LTFT development (Putney, 1997; Green, Dixon, & Zaharlick, 2003). As indicated earlier, these interviews were conducted face-to-face, where most of the IE research team members as participants (with one notable exception) were present in the CIEIA center at the MROU. The Lead GSR joined virtually via Google Hangout during the Lead Professor's interview. These interviews were video recorded by the IE research team and were transcribed at a later point in time to permit analysis of the developing dialogic interaction using the message units approach presented in Chapter IV. Members of the IE research team, as also described in Chapter IV, took field notes that were shared and compiled in order to triangulate with these field notes with the transcript of the video records of the interview-conversations for multiple levels of analysis for a particular purposes. The following is a table of a running record (field notes) of the developing dialogues taken from the field notes of the joint interview of the Lead Professor and the Project Consultant, which is (re)presented in Table 5.1.

Table 5.1

Interview conversation with the Lead Professor and the Project Consultant with IE Team

Joint Face-to-Face Interview-Conversations: Lead Professor and the Project Consultant
Participants: Principal Investigator for the IE team and Senior GSR and Junior GSR
Date: July 9, 2014 Location: Research One University, Central Coast California: Research Center

Time in Interview	Line Number	Speaker	The dialogue as a running record of what was proposed (Fieldnote record of what was discussed and presented by different actors)

12:48	1	Lead Professor	Fall 2012 added LTFT to three classes and then realized that it was too much… 450 students in major at the university and 5 faculty The Project Consultant helped to create scenario structure for each one of those courses – 2112 what would gender look like, PR looking at energy in 2025
	2	Junior GSR1	Courses already in existence and were modified
	3	Project Consultant	Process agenda was quickly formulated after the project given the go Private Funder wanting long term used 3 time horizons, but chosen for legitimate reasons for PR chose energy eco-zones (put students in the future) and first realization about what teaching about LTFT (should describe future scenario, what content needed, where the students located (certain content knowledge), etc.) Together had to figure out the easiest way to get them into some sort of futurist thinking - Energy focus for PR gave them a set of information that provided zones (borrowed information from IFTF)
12:54	4	PI (IE research team)	There's a double design process when designing – to meet university expectations and how to integrate/reformulate
	5	Project Consultant	Redesigning the Lead Professor
12:55	6	PI (IE research team)	Suggesting "reformulation" of the infrastructure
	7	Project Consultant	Asked the Lead Professor what were the outcomes for their students in communication – presenting a campaign, what PR involved
	8	Lead Professor	In a syllabus can find some of the goals
12:56	9	PI (IE research team)	Asked for a matrix for Goals and Tasks – need Hangout times to walk us through their process Dialogic ethnography – trying to get to understanding and meanings with the assistance. "Beyond Surface Curriculum" written by ETS
	10	Project Consultant	First year learning how they were going to do it -What the Lead Professor needs to teach -How do you want students to practice it – what are the concepts -Forecasts, trends, scenarios, uncertainty, change References an example on Eco zones and 100 years for bio-innovation (different types of humans)
	11	Lead Professor	Gender and media representation of gender
	12	Project Consultant	Trends in bio-innovation – how trends in bio innovation would impact the role of media They provided context and the restraints on what issues/concerns that they would need to think about → Bio-innovations were in the world and

			create a reality series
1:04	13	PI (IE research team)	Time investment for faculty and those working with them
	14	Project Consultant	24 hours/7 days a week for the first quarter – trying to prepare material Last course (Relational Communication) brought on by Private Funder focus on 5,000 years in the future - organizational structure to enable and maintain language Need an organization around to maintain the structure – e.g. Long Now Was told to do one class
	15	PI (IE research team)	Limits of doing this work – key constraints
1:08	16	Lead Professor	Key constraints (via chair) faculty approval because a curricular change – keeping to communication courses Identified that would only adapt for one class because of the grading load and size of the course
	17	Project Consultant	Time constraint of the quarter system ….only came to 1 class and final course (eco zone and ancient forest – read final project and attend 1 gender course)
	18	Lead Professor	Project Consultant has extensive forecasting
	19	PI (IE research team)	Forecasting – what does it mean
	20	Project Consultant	Developing plausible visions of future with purpose of take action in present
	21	PI (IE research team)	Forecasting requires students to have "Eyes" for what is occurring in the present
	22	Project Consultant	Developing questions about change or phenomenon and then being able to think ahead about possible outcomes of futures will look like, so when you come back to the present can make changes (you have a prepared mind)
	23	PI (IE research team)	Suggest the litany of preparing the mind-→going public
	24	Project Consultant	Stewart Brand's quote about looking long term and Paul Saffo quote about taking meaningful action in the future
1:15	25	Lead Professor	How do I become an apprentice and in turn pass it along to others -> practice mind and looking from multi-faceted angles Second quarter was a mega section of 100 students for intro to Organizational Communication And in that class Principal Investigator for the LTFT suggested bring students to site visits
1:15	26	Project Consultant	Still learning her role – her agreement, but "high" – design of the project, authority was not clear-cut First year it took some time to figure out what her job was and responsibility

	27	PI (IE research team)	Started project 8 months before without paid Telling case (in anthropological format) The goals of the institutional needs – Scholars spend extraordinary amount of time
1:21	28	Project Consultant	Contract with Chris before the project solidified
	29	PI (IE research team)	Several months to get the transfer of money from one campus to another Challenges of external funding services –problems with obtaining money between two different schools. Need better understandings with outsiders.
	30	Project Consultant	Intersection of who is doing what and joining the institution
1:24	31	PI (IE research team)	Next steps - How to do the distributed workload – continuing hangouts and dialogues, video, etc.
	32	Project Consultant	End of year 1 Principal Investigator less involved Fall 2012 –Project Consultant and Lead Professor by themselves Winter and Spring 2013 – Principal Investigator for the LTFT was suggesting and providing opportunities
	33	PI (IE research team)	Difficult in putting together
1:27	34	Project Consultant	Technology and ethnographic questioning are difficult Struggling with how and what they were doing aligned with LTT and Loyalty and trust of what will contribute to LTT, which inhibited LTT Second year the Lead Professor and the Project Consultant stated that they were more by themselves

Analysis of the content of the table made visible the ways in which the Lead Professor and the Project Consultant discussed the history of the developing process of the Pilot Instructional Project at a macro level. As indicated in Line 1, In Fall 2012, the Lead Professor acknowledged that the LTFT research team added LTFT in three classes and then realized that it was too much, (Line 1). The Project Consultant added in Line 3 that "process agenda was quickly formulated after the project given the go". In this exchange she also made visible that the Private Funder wanted long term used in 3 time horizons that were chosen for legitimate reasons for PR on energy eco-zones to put students in the future. Later, the

Project Consultant acknowledged the inception of the LTFT (Line 32) and repeated in Line 34:

- End of year 1 Principal Investigator less involved
- Fall 2012 –Project Consultant and Lead Professor by themselves
- Winter and Spring 2013 – Principal Investigator for the LTFT was suggesting and providing opportunities
- Second year the Lead Professor and the Project Consultant stated that they were more by themselves

This timeline provided a bounded time unit for analysis and for the timeline of the Pilot Instructional Project, as one of the principles of operation adopting Interactional Ethnography as a theoretical framework (Baker, Skukauskaite, & Green, 2012). Furthermore, it framed the need for the IE research team to examine closely what was offered to students across the two-year period of the Pilot Instructional Project. The statements made by the Project Consultant recognized publicly the contribution of the PI of the LTFT research team (Line 32), and the Private Funder (Line 7) in the developing the complex and multi-faceted process, a process that made visible the involvement of the PRU as an institution as well as the actors surrounding the LTFT project initiative, who shaped the development of the Pilot Instructional Project**.**

The table (*Table 5.1)* also makes visible the challenges faced by both the Lead Professor and the Project Consultant in the developing process of integration as they indicated in their dialogues:

Lead Professor as LP ***Project Consultant as PC*** *Line 1: added LTFT to three classes then realized that it was too much (Lead Professor, LP)*

Line 2: process agenda was quickly reformulated… first realization about what teaching about LTFT (should describe future scenario, what content needed, where the students located (certain content knowledge), etc.)… together had to figure out the easiest way to get them into some sort of futurist thinking… (Project Consultant, PC)

Line 10: First year learning how they were going to do it..what the Lead Professor needs to teach… forecasts, trends, scenarios, uncertainty, change (PC)

Line14: 24 hours/7 days a week for the first quarter – trying to prepare material
Last course (Relational Communication) brought on by Private Funder focus on 5,000 years in the future - organizational structure to enable and maintain language. Need an organization around to maintain the structure – e.g. Long Now Was told to do one class (PC)

Line 24: How do I become an apprentice and in turn pass it along to others -> practice mind and looking from multi-faceted angles. Second quarter was a mega section of 100 students for intro to Organizational Communication…And in that class Principal Investigator for the LTFT suggested bring students to site visits (LP)

Line 34: Technology and ethnographic questioning are difficult ….Struggling with how and what they were doing aligned with LTFT and …Loyalty and trust of what will contribute to LTFT, which inhibited LTFT (PC)

These sets of challenges identified by both the Lead Professor and the Project Consultant provided further evidence their levels and kinds of commitments to the developing instructional processes. Furthermore, it made visible the collaborative works that were undertaken among the LTFT research team. It also made visible the chains of reflexivity that they undertook to provide students with learning opportunities that engaged to ground their understandings of long term and futures thinking in relationship to theoretical evidence. These processes were one of the challenges these actors encountered in the early phase of the curriculum integration process, as will be discussed in the subsequent analyses in the following section.

Summary of the Analysis of the Interview-Conversations

The series of follow-up interview-conversations with the Lead Professor and the Project Consultant made visible the dynamic and time-intensive work of the Lead Professor and the Project Consultant across the two-year period of the Pilot Instructional Project. The challenges that were presented in the dialogue captured what the Lead Professor and the Project Consultant needed to know, do, and understand in order to make present the concepts of long term and futures thinking and engage students with concepts of Organizational Communication theories with long term and futures thinking orientation. This chain of understandings was parallel to those that the IE research team members needed to understand, do and undertake in order to carry out the ethnographic research study, and thus to meet the goal that the IE research team were invited and eventually contracted to undertake. Additionally, the Lead Professor made reference to the *goals* of a particular course, as being inscribed in the *syllabus* (Line 8) and the Project Consultant made references to particular times across the two-year period of the Pilot Instructional Project. These references led the IE research team to recognize the need to engage in a new cycle of analysis, one that led them to retrieve the syllabus for each course and the 2012-2013 Annual Report, written collaboratively by the LTFT research team, in order to explore further the developmental pathways of the Pilot Instructional Project. This cycle of analysis, as presented in the following section, focused on the analysis of both the pedagogical approaches undertaken and the logic used to integrate long term and futures thinking constructs with those that appropriately support the Organizational Communication theories. The Lead GSR conducted the analysis of the syllabi and the annual report.

Analysis of the Archived Artifacts

This section provides a telling case of how, and in what ways, I, as the IE research team's Lead GSR engaged in further cycles of analyses, in which the aforementioned 2012-2013 Annual Report and the course syllabi (8), formed a data set that enabled me to trace the intertextual references from the interview-conversations. This data set, therefore, also provided a basis for making visible the logic-in-use that the IE research team undertook in order to trace the developmental pathways of the Pilot Instructional Project. Given the IE research team's point of entry was at the end of the first year of implementation, the team decided that it was necessary to trace the developments in what was undertaken by the PIP team backwards in time in order to strive for an understanding of the process and principles undertaken by the Lead Professor and the Project Consultant prior to, and following the IE research team's entry. Based on this decision, I with the PI of the IE team's guidance, I analyzed the second section of the 2012-2013 Annual Report entitled, *Year One (2012-13) Deliverables and Actual Accomplishment.*

Analysis of the Annual Report: Year One (2012-13) Deliverables and Actual Accomplishments

Adopting discourse analysis as an analytical framework, as lead analyst on this chain of analysis, I, with the PI of IE research team's guidance, examined what the research team's inscription of the *deliverables and actual accomplishment* during the first year of the implementation of the Pilot Instructional Project. This cycle of analysis was then shared with the rest of the members, which was used to write the final report of the project. For analytic purposes, the Lead GSR organized the text to (re)present, the course(s) offered, course assignments, course materials, and preliminary findings and/or revised approach for each quarter during the first year of Pilot Instructional Project as (re)presented in the following tables, respectively (Table 5.2; Table 5.3).

Table 5.2

First Quarter of Implementation with Three Courses Fall 2012

Courses	**Communication 4510**	**Communication 4500**	**Communication 4107**
Title	Theoretical Perspectives and Application to Communication Techniques and Goals	Gender as a Socially Constructed Category	Change and New Media
Course Assignments	Blog (Individual) Discussion (individual) Wiki (Group) Mini-Campaign-Final Presentation (Group)	Blog (Individual) Discussion (Individual) Wiki (Group) Final Presentation (Group)	Blog (Individual) Discussion (Individual) Wiki (Group) Final Presentation (Group)
Number of Students	70 students	55 students	41 students
Course Materials	Syllabus Textbook-Think Public Relations, 2/E	Syllabus Textbook-Gendered Lives and Race, Class and Gender	Syllabus Textbook-Network Publics
Preliminary Findings	Need to help students ground their forecast in evidence (as opposed to making guesses about the future in ways in which there is little evidence or a clear logic to support claims).		

As indicated in Table 5.2, the first quarter of implementation offered three courses with concepts of long term and futures thinking (LTFT) integration, a state of affairs that was corroborated by intertextual references made by the Lead Professor in July 7, 2014, the interview-conversations presented in the previous section, and the LTFT project initiative's website analysis presented in Chapter IV. Analysis of the Table 5.2 further revealed the range of activities that were required of the students, either individually or in a group configuration. Finally, the LTFT research team acknowledged that after the first quarter of implementation, the students required support in order to *ground their forecast in evidence* *(as opposed to making guesses about the future in ways in which there is little evidence or a clear logic to support claims.)* This statement, that was inscribed by the LTFT team, in the Annual report as the *preliminary findings* after the first quarter of implementation of the Pilot Instructional Project (PIP), that led to the need for the IE research team to analyze the course syllabi in order to conduct multiple contrastive analyses of the courses and their requirements from one quarter to the next in order to trace how, and in what ways, the Lead Professor with the Project Consultant (re)formulated the courses to provide opportunities for students to learn ways of grounding their forecast with evidence and ways of constructing a clear logic to support their claims. It also led to a close analysis of the second quarter of implementation, in order to identify areas that were revised, Table 5.3, Second Quarter of Implementation with Just One Course: Winter 2013, provides a foundation for exploring the revisions in course content.

Table 5.3

Second Quarter of implementation with just one course: Winter 2013

Revised Approach	• An ethnographic approach to analyzing long-term thinkers and their ways of knowing and being • SALT talks as a resource or "text" for forecasters • Analyzing discourse surrounding innovation in companies and organizations (site interviews and web) • Assessing links between innovation and long-term thinking
Course	Communication 3107
Title	Organizational Communication
Course Assignments	Discussion (Individual) Wiki (Group) Online Journal Entry Final Presentation (Group)
Number of Students	100 students
Course Materials	Syllabus Textbook-Organizational Communication: Balancing creativity and constraints and Online Reader SALT Talks
Video Analysis	6 weeks
Field ethnographic interpretation	6 weeks
Preliminary Findings	Revised approach created opportunities for a deeper understanding of what constitutes long-term and futures thinking and how to apply long-term thinking to challenges. However, the specific course components outline by the project team resulted in too much to cover given the limited time available in the quarter system

This graphic representation of the inscription of the second quarter made visible the differences between this course compared to the first quarter of implementation. It has only two columns signaling that this quarter only offered one course, entitled, Organizational Communication, a process that differed from the three courses offered in the first quarter of implementation. The decision to shift to focus only on one course was identified through the analysis of the Lead Professor's references in the interview-conversations in July 9, 2014, surrounding the challenges of the first quarter of implementation. The first reflection, therefore, was located in the interview-conversation (previously presented), in which the Lead Professor claimed, "*Fall 2012 added LTFT to three classes and then realized that it was too much" (Interview, July 9, 2014).* As the subsequent analyses will show, the Lead Professor emphasized this challenge, in his response to a chain of email exchanges on October 27, 2014, in which he stated that "*I had ambitious goals to include futures thinking across three courses in one quarter! This was way too much! "* Triangulation of this reference with that of the LTFT's PI, confirmed this as a challenge for the PIP team. Based on her background in developing innovative projects, and her ethnographic processes, she made the following recommendation to the Lead Professor and the Project Consultant, as it was inscribed in the transcript in her interview-conversation (January 2015):

> *Why don't we pare way back and let's just think about how to make shifts in one course not three. And I think everyone breathed with a sigh of relief laughter (PI interview with external member of the IE research team, January 11, 2015)*

This statement made by the PI for the LTFT research team raised the question for the IE research team of what constitutes the necessary amount of time required to integrate external framework into established course content. The question of time necessary for this LTFT course integration development, framed the need for the IE team to trace the developmental pathways across the two-year period of the Pilot Instructional Project.

Analysis of Table 5.3 revealed further evidence of how the LTFT research team inscribed the *Revised Approach* they undertook during the second quarter of implementation. As indicated in Table 5.3, in an effort to provide support for the students to gain a more grounded understanding of forecasting, the LTFT research team incorporated the following revised approach (Winter, 2013):

- An ethnographic approach to analyzing long-term thinkers and their ways of knowing and being
- SALT talks as a resource or "text" for forecasters
- Analyzing discourse surrounding innovation in companies and organizations (site interviews and web)
- Assessing links between innovation and long-term thinking

The revised approach further provided evidence that the LTFT research team developed the Pilot Instructional Project, with an ethnographic framework employing an ethnographic perspective in analyzing the ways of knowing and being as long-term thinkers as well as analyzing the discourse of innovation in local companies and organizations. The incorporation of the SALT talks as a resource or "text" for forecaster, supported the institutional claim from the LTFT project initiative's website, (presented in Chapter IV):

> *Our work with the students is guided by the principles by many of the world's thought leaders in the field. The Foundation's seminars about long term thinking provide an introduction to this field. (LTFT Project Initiative Website, May 14, 2014).*

Finally, as indicated in Table 5.3, as was inscribed in the Annual Report, Year One Deliverables, the LTFT research team's preliminary analysis of the adopted revised approach indicated that it provided opportunities for a *deeper understanding of what constituted long term and futures thinking and* how to apply the concepts to challenges, a goal that addressed, the first quarter's challenge that the LTFT research team experienced.

However, the LTFT research team also introduced a new challenge as it was inscribed:

> *However, the specific course components outline by the project team resulted in too much to cover given the limited time available in the quarter system. (Annual Report of Year 1, pp.3)*

This challenge raised a further question, how, and in what ways, did the Lead Professor (re)formulate the integrated courses to meet the time constraints of a quarter academic systems. This question led me, as the Lead GSR to identify the need to examine what key constructs and frameworks that were being integrated or to identify elements that were inter-related across the courses offered throughout the six quarters of the developing Pilot Instructional Project. This analysis examined the 8 syllabi as well as the email exchanges between the Lead Professor and the IE research team, between October 25-27, 2014. A telling case of how the IE research team analyzed the email exchanges will be presented in the next section while the analysis of the key constructs embedded within and across the courses offered for the six quarters is presented in the second part of this chapter. For the purpose of continuity, the following analysis of the revised approach is presented and the preliminary findings of the third quarter are described. This time period, marks the end of the first year of implementation, as (re)presented in Table 5.4, Third Quarter of Implementation: Spring 2013.

Table 5.4

Third quarter of implementation: Spring 2013

Revised Approach	• A focus on the City of Hayward and its General Plan update • Continued use of an ethnographic "lens" • Interviews with key city officials • Analysis of public documents • Focus on processes, practices, roles and relationships • SALT talks as a resource and source of evidence for "ground forecast"
Course	Communication 4207
Title	Organizational Transformation
Course Assignments	Discussion (Individual) Salt Paper White Paper Final Presentation (Group)
Number of Students	35 students
Course Materials	Syllabus Textbook-Reframing Organizations: Artistry, Choice, and Leadership SALT Talks
Preliminary Findings	It allowed for a more concentrated effort that required less effort on the part of students and the instructor. However, teaching this subject still required a complex approach to the work and students were still challenged with respect to their conceptualization of long-term and futures thinking

As indicated in this table, the course that was offered in the third quarter is entitled, Organizational Transformation. This table makes visible, recurring revisions of the LTFT research team's approach, a process that the contrastive analysis (triangulation) of the three quarters and the courses offered in these quarters made visible. That is, the contrastive analysis made visible what was revised every quarter, and how some elements were retained and new elements were introduced. The contrastive analysis to this point, provided evidence that the LTFT research team needed to conceptually developed an extended period of time to explore each iteration of their approach to designing an integrated process within particular courses.

In each cycle of analysis, the LTFT research team, in ways paralleling the IE research team's analysis of the LTFT research team's developing work, had to decide on what to focus on, and what activities and what resources were necessary to design a course in which long term and futures thinking could be integrated with the particular area of content focus and theory in the Organizational Communication program. This process was visible in the following process they undertook--they *continued the use of an ethnographic "lens*" and shifted the *focus to processes, practices, and roles and relationships for this quarter.*

After the first year of implementation, in which they offered five integrated courses, the Lead Professor and the Project Consultant reported to both the LTFT leadership team and the IE research team that their actions in examining how to integrate long term and futures thinking concepts and content had had a positive effect with each shift in approach; however, they also indicated that *teaching the* integrated course required complex approach and that the students still struggled with conceptualizing long term and futures thinking, after the third quarter of implementation. This challenge framed by the LTFT research team raised an additional question for the IE research team: What constitutes a complex approach to teaching the integrated courses in order to support students in conceptualizing long term and futures thinking in relations to the framework of organizational theories? This question framed the need for the Lead GSR to engage in a new cycle of analysis in which she examined the syllabi across the courses of the Pilot Instructional Project. This cycle of analysis required that she conducted a contrastive analysis of what constructs and framework were being integrated in each course.

Therefore, the following section provides an analysis of the course syllabi across the two-year period.

Contrastive Analysis of the Course Syllabi

The first level of the contrastive analysis involved the different courses that were offered across the two-year period of the Pilot Instructional Project. The process of contrastive analysis involved with triangulation of multiple sources of data: The interview-conversations, the Annual Report, and the LTFT project initiative's website. A graphic representation of the timeline of the developmental pathways of the Pilot Instructional

Project is presented in Figure 5.1.

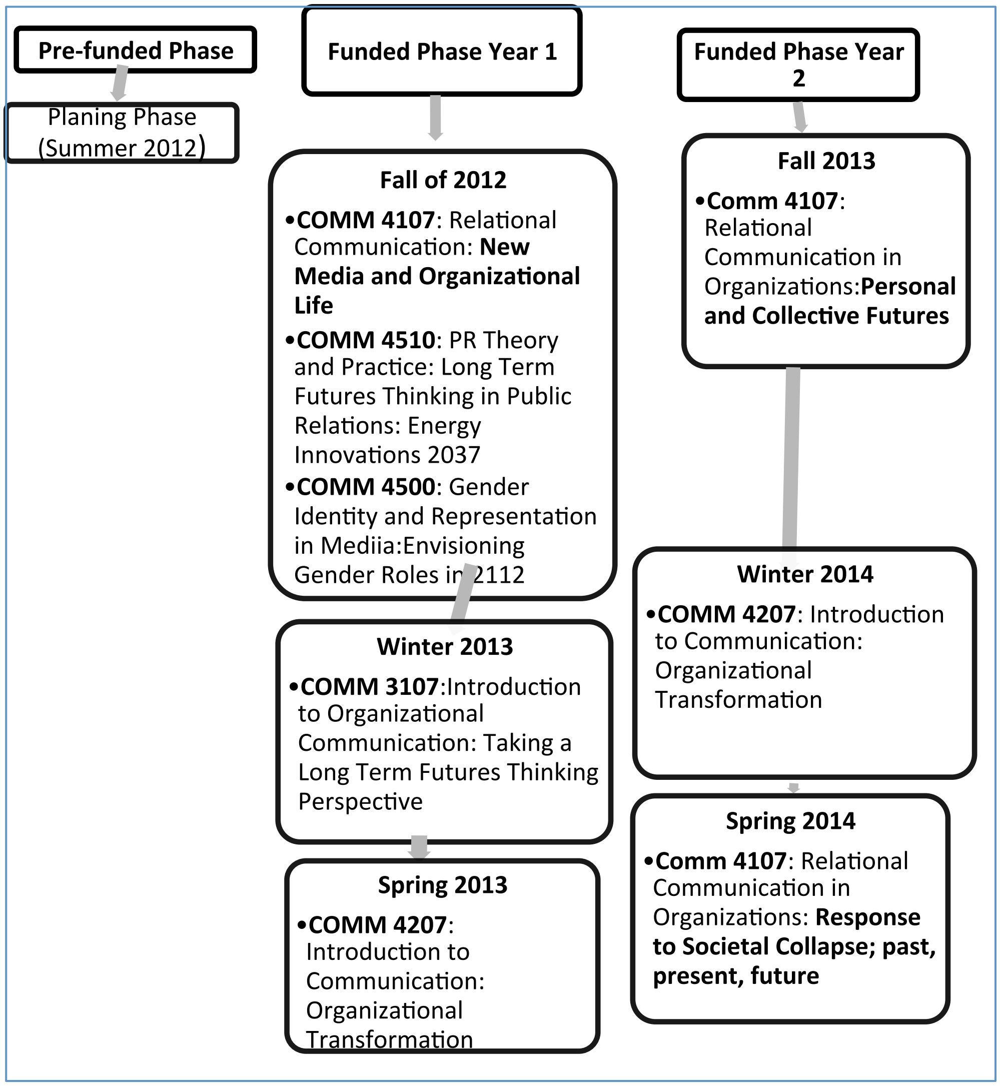

Figure 5.1. Timeline of the courses offered across the developmental phases of the LTFT.

Figure 5.1 revealed three phases of the developmental pathways of the Pilot Instructional Project. The first phase, which was the Pre-funded Phase, occurred during Summer 2012. This information was invisible in the examination of the archived documents, when viewed one by one, or in the public inscription of the LTFT project initiative, through the website; however, this inter-relationship was made visible through the interview-conversations of the Lead Professor and the Project Consultant (a joint interview of the Lead Professor and the Project Consultant, July 9, 2014; interview with Project Consultant, May 7, 2014).

In constructing the figure, and engaging in the process of triangulating how particular elements were inscribed in different documents, the Lead GSR made visible to the IE research team the need to examine the official titles of the courses as inscribed in the syllabi, which were missing from the Annual Report. The official titles of the course created a “rich point” (Agar, 2004)-- that one particular course with catalogue number Communication 4107 had different subtitles, as indicated in Figure 5.1.

This rich point led the need for the Lead GSR to understand the rationale for and significance of the differences in sub-titles of the Communication 4107 course that was offered in Fall 2012, Fall 2013, and Spring 2014. This difference also raised the question of whether the difference in sub-titles served different requirements for a particular program, such as a minor or certification in an area of Communication. After (re)viewing the transcripts for any intertextual references of the sub-titles or researching the university course catalogue for any information about the different sub-titles, these wonderings were left unanswered; therefore, the Lead GSR sent an email to the Lead Professor about the IE research team’s inquiries involving the differences in the subtitle for the different offering of the same catalogue course number.

This thread of e-mail exchanges will be presented as a telling case in the next section. This telling case made visible how such email exchanges provided the IE research team with insider information that was not available in published texts or archived written documents. It also raised the question about the limitation of what an analysis of only the archived records would make available to an ethnographer (or team of ethnographers), and framed the need for multiple (re)entries into the “fields” or “sites” (physical and/or virtually constructed) in order to collect additional sources of records, or information, as unanticipated questions arose throughout the process of this analysis phase of the IE research team’s research process. The need for further information or clarification throughout this cycle of analysis, therefore, framed the need for the IE research team, the Lead GSR in particular, to engage in sustaining dialogic interactions with the LTFT research team, primarily with the Lead Professor.

Summary of the Analysis of the Archived Artifacts

The analysis of the Annual Report: Year One Deliverables provided crucial information that enabled the IE research team to trace backwards from the 2014 course to uncover what pedagogical approaches were incorporated for each quarter of the first year. It also made visible the preliminary results of the analyses of the approaches undertaken for Winter 2013 and Spring 2013. This analysis also led to the identification of the modifications that the PIP team, particularly the Lead Professor and the Project Consultant, adopted guided by the PIP team’s preliminary analysis of the preceding academic quarter. Further, it revealed the ranges of required assignments and the adopted course materials for each quarter. This set of analyses, in contrast to the first annual report, which only contained the events in the first year, provided a more complex picture of the developing transformations and (re)formulations of the course content and requirements. Through a process of triangulation, therefore, the Lead GSR, by contrastively examining the interview-conversations and the course syllabi, was able to reconstruct the pedagogical approaches that were adopted during the second year of implementation.

The first level of analysis of the syllabi bounded a unit that was added to the time line of the Pilot Instructional Project, and led to the process of mapping the courses offered across the two-year period of the Pilot Instructional Project. Analysis of the timeline revealed that each course offerings had different subtitles, despite the similarities of the course catalogue numbers, a discovery that led to a frame clash that required further investigation. Despite the robust and rich archived of the corpus of sources of records, the rationale for the different subtitles was only answered by the Lead Professor during an email exchange. This analysis, therefore, made visible the limits of relying on archived records as the sole source of information in an ongoing ethnographic study. The importance of collecting additional information to develop an emic understanding is further made visible in the following section, which examines what was made visible when the Lead GSR needed to contact the Lead Professor to obtain his emic perspective surrounding the difference of subtitles.

Analysis of Email Conversations. This section provides a telling case of how, and in what ways, the IE research team engaged in sustaining dialogic interactions via computer-meditated communication to gain insider's knowledge that were not available in public texts, e.g., as the university or department website, the LTFT website, and in archived artifacts such as lesson plans, Annual Reports or course syllabi. These limitations led the need for the Lead GSR to (re)enter into the archived transcripts of series of interview-conversations (a total of 6 2hr- interview-conversations with the Lead Professor, Project Consultant, and the PI of the LTFT research team), but the (re)analysis of these transcripts also did not provide the answers surrounding the different sub-titles of the different iterations of a course with similar catalogue number. Consequentially, this led to the need for ongoing interactions with the Lead Professor, who because of his interest in what the ethnographic process was revealing, was willing to engage in this ongoing dialogue, making visible further evidence of his reflexive stance to the development of the course integration process.

Given the aforementioned challenges that the IE research team's faced (Chapter IV), the IE research team's primary methods of data collection of this ethnographic research study was the sustaining dialogue interactions enabled by computer-mediated communication through Google Hangout, chats, or emails. This process is visible in the first line of the initiating email, (Table 5.5), in the following --"last Tuesday." This reference is to the night before the IE research team presented the preliminary report to the LTFT research team and the LTFT advisory board committee. At that time, the IE research team wanted to consult with the Lead Professor and to confirm with the contents of the Preliminary Report (a point of triangulation). The following chain of email conversations occurred in a span of three days (October 25-27, 2014), between the Lead GSR and the Lead Professor and demonstrates the crucial role of such email conversations, a process that made it possible for the IE research team to develop understandings of insider's knowledge in situ without being physically present in the site of study.

The analysis of this exchange provided additional evidence of the importance of the role that the Lead Professor took up as a research partner (a form of embedded ethnographer) within the IE research/evaluation process. The Lead Professor's willingness to engage in dialogues across time enabled the IE research team to trace his logic of design in (re)formulating these particular courses with the Project Consultant and support from the PI of the LTFT research team. The graphic representation of the email exchanges is presented in Table 5. 5, Email Exchange to Gain Insider (Emic) Understanding of Course Syllabi. As indicated earlier, this analysis was conducted by the PI of the IE research team and the Lead GSR, in the process of writing the Final/Evaluation Report.

Table 5.5

Email exchange to gain insider (emic) understanding of course syllabi

Initiator: Lead GSR	Respondents in Chain: Lead Professor and Lead GSR
From Lead GSR to Lead Professor 10/25/2014 Hi Lead Professor, It was great "hanging out" (Google Hangout) with you last Tuesday. I am in the process of doing my first phase of the analysis and what I was not able to figure out was the difference in the subtitles for the COMM 4107 courses: Fall of 2012: COMM 4107: Relational Communication: New Media and Organizational Life Fall of 2013: COMM 4107:Relational Communication in Organizations: Personal and Collective Futures Spring of 2013: RCinO: Exploring Response to Societal Collapse, past, present, future Please help me understand some of my wonderings: 1) Are the different subtitles serve a particular program (minor, certification)? Or is it the focus of the LTFT concept that shifted? 2) Given that there were five different courses that integrated LTFT; what aspect/dimension of LTFT were integrated to each one? I thank you for guiding me gain a deeper understanding of how LTFT concepts were integrated within the traditional course. Best, Lead GSR	

From Lead GSR to Lead Professor 10/26/2014

I also discovered another syllabus of COMM 6551: Critical Ethnic Media Studies, Winter 2014

Is this part of the sequence of the courses of the project?
Thank you,

From Lead Professor to Lead GSR 10/25/2014

I can explain my rationale later this evening.

From Lead GSR to Lead Professor
Thank you... Enjoy your day...

From Lead Professor to Lead GSR 10/27/2014
Hi Lead GSR,

Great to be on the Google Hangout with all of you! So fun!

Thanks for taking an interest in this subject and looking forward to your analysis. I am currently writing an article to submit to the Journal of Futures Studies about my integration of futures studies and organizational communication too and I will share my draft with you later today. Too often, this is not mentioned as much and this is perhaps why forecasting is not as widely understood across the disciplines and integrated among them...the integration has not been accomplished :-)

Subtitles for the COMM 4107 courses:
Fall of 2012: COMM 4107: Relational Communication: New Media and Organizational Life

Comments: When I created this course, we were using this first course as a platform for looking 5000 years ahead with students and it was the first quarter that we were initiating our ideas without a firm administrative home yet except the Communication Dept. The PI for the LTFT had not been approached yet and we just wanted to get started. I had ambitious goals to include futures thinking across three courses in one quarter! This was way too much! However, I wanted to look to connect to student interests and my own from a communication perspective with New Media and to connect it to long term thinking. At the same time, I had to connect it to issues of relational communication. My question for the quarter was how would we relate in the future with emerging new media and how would we sustain organizations for 5000 years using new forms of media? The Project Consultant and I created an elaborate role-playing scenario for groups to use and some groups came up with some great ideas; others did not get it as well.

Fall of 2013: COMM 4107:Relational Communication in Organizations: Personal and Collective Futures

Comments: For this course, a year after our first start and covering similar course material, we had learned what not to do and how to improve our approach. The Project Consultant and I lowered the time horizon to 2040 for this course and taught students a specific forecasting framework known as the cone of uncertainty by Paul Saffo for mapping uncertainties based on Saffo's article in the Harvard Business Review. Students created a story imagining their future career trajectory around a specific moment in time in 2040. Up to that point they worked on exercises that prepared them to create a story. **For this exercise, they had to think not only about their personal futures but had to outline and imagine what the institutional and organizational context would be as well.** So the title reflects this approach. We will repeat this approach in Winter 2015 for organizational transformation.

Spring of 2013: RCinO: Exploring Response to Societal Collapse, past, present, future
Note: This was for Spring 2014 right? I think our title for Spring of 2013 was different? For Spring 2013 we explored the future of Hayward and discussed the future of cities. I'll have to go back and check the syllabus title. I think the first time we used Societal collapse was in Spring 2014 and I could be wrong of course...

Comments: This course was ***our best course to date*** [emphasis and color added] in part because our framework we adopted was to look at responses to societal collapse using Jared Diamond's account of the Norse in Greenland and using the novel Creative Fire. So the title was the best fit for what we decided to do.

Please help me understand some of my wonderings:

1) Are the different subtitles serve a particular program (minor, certification)? Or is it the focus of the LTFT concept that shifted?

So it really is a question of the LTFT concepts shifting with the catalog title staying constant and at the same time the subtitle shifted to signal to students what to expect and what I wanted to emphasize. This wasn't going to be your ordinary course...

2) Given that there were five different courses that integrated LTFT; what aspect/dimension of LTFT were integrated to each one?

I would say that in Winter 2013, we were trying to integrate the podcasts of Long Now Foundation in having students listen to long term thinkers.

However by Fall 2013, we taught them a specific forecasting approach using Paul Saffo's cone of uncertainty more explicitly and by Spring 2014, we used pace layers more explicitly.

The Grad course in Media and Ethnicity is one where we talked about the future of race and ethnicity using space exploration as an example and metaphor for questioning the future of new media and futures studies as dominated by white anglo perspectives. We used pace layers in this course as well and my course in Organizational Transformation taught in the same quarter Win 2014 used a similar framework.

Hope this helps,

Thanks much for asking,
Lead Professor

Lead GSR to Lead Professor 10/27/2014
Hello Lead Professor,
Yes, your response is very helpful! I will give you an update this week.
Best,
Lead GSR

As indicated in the Table 5.5, the chain of the email conversation was initiated by me, as the Lead GSR, by asking questions about the difference in the subtitle as discussed from the previous section. This exchange makes visible how I framed the questions that led to information that was not available through observations of class sessions, previous interviews from the key participants, or analysis of printed texts (course and inscriptions). Evident in this dialogic exchange was the Lead Professor's taking up the role as an embedded ethnographer that he provided rich insider's information that he thought, as an ethnographer, necessary to know and understand, in order to appropriately analyze the phenomena under study.

As indicated in Table 5.5, the Lead Professor responded to the questions and shared his logic of design for the particular courses in question and provided the rationale for the differences in subtitles, by making visible the series of actions that were crucial for the IE research team to understand about the layers of work that he and the Project Consultant had undertaken both prior to and following the official entry of the IE research team. It also provided evidence of the reflective thinking and range of decision-making that the Lead Professor and the Project Consultant, with the support of the Principal Investigator and the LTFT research team, undertook in order to (re)formulate undergraduate courses that engaged students how to think long term and futures thinking in the context of organizational communication theories. The richness of this information played a crucial role in the IE research team's selection of the 2014 Spring course as an anchor, the course that the Lead Professors stated in this exchange as "*our best course to date.*" This thread of email conversations framed the need for the IE research team to uncover the layers of decisions within the course of the Pilot Instructional Project. The multiple analyses that follow will demonstrate, how such email conversations, formed a foundation for triangulating the information gained through this process, with the course syllabi, and how this process of triangulation was critical in contextualizing and developing understandings of why particular Organizational Communication framework and long term and futures thinking constructs were integrated. This process also made visible why particular texts were selected for the courses, and particular assignments and activities were constructed to engage students in inter-relating and/or integrating long term and futures thinking and Organizational Communication theories in series of different time horizons.

Summary of the analysis of the email conversations. The first part of this chapter presented three telling case of the cycles of analysis undertaken by the IE research team in order to trace the developmental process of the Pilot Instructional Project. The series of face-to-face interview-conversations with the Lead Professor and the Project Consultant to follow-up with the initial conversation focusing on gaining insider's understanding of the layers of actions and range of decision-making required in integrating external disciplinary framework into established course content while preserving the academic integrity of the discipline and meeting the expectations of the institution. As was presented, the Lead Professor and the Project Consultant identified multiple challenges, as the analysis will show, was able to achieve with Spring 2014, as their best course to date. The series of interview-conversation provided rich information of their processes that required further investigation drawing from different sources of records. The analyses of the artifacts, the annual report and the syllabi, contributed another layer of understanding of the developmental pathways of the integration process. However, as was shown, even with robust corpus of records of sources, unanticipated findings, or frame clashes, required the need for the IE research team to re-enter the "field" sending additional questions to the Lead Professor via email. As a result, given the Lead Professor's knowledge of ethnography, he anticipated of further questions and provided rich texts that provided information beyond the initial questions presented by the IE research team. This particular chain of email conversations revealed the level of information gained through a sustaining and ongoing dialogue with the participants, particularly with the Lead Professor. The next part provides a comprehensive account of the developmental pathways of the Pilot Instructional Project from the triangulations of analysis of these sources of information.

The Developmental Pathways of the Course Design: Multiple Points of Viewing

This part of the chapter provides the developmental pathways of the Pilot Instructional Project from multiple points of viewing with the triangulations of multiple sources of records and analysis. In particular, it provides a description of the different approaches that were adopted by the Lead Professor and the Project Consultant throughout the eight courses offered within the Pilot Instructional Project. As indicated in Chapter IV, the IE research team entered at the end of the first year of the implementation of the Pilot Instructional Project, which propelled the need for them to trace the historical developmental pathways of the LTFT prior to the entry of their entry leading to the

"best course to date." Through the triangulation of the analysis of the multiple sources and points of viewing of the phenomena under study, the IE research team identified the fact that the Pilot Instructional Project unofficially began in Summer of 2012, when the Lead Professor and the Project Consultant began to collaborate and (re)formulate three undergraduate courses in order to integrate concepts of long term and futures thinking, which were implemented in Fall 2012. Each of the organizational courses each had a particular focused of the Organizational Communication strand:

- Relational Communication: New Media and Organizational Life
- Gender Identity and Representation in Media: Envisioning Gender Roles in 2112
- Public Relation Theory and Practice: Long Term Thinking in Public Relations, Energy Innovation 2031

Therefore, each of these courses had different Organizational Communication content that was crafted with different time horizons to engage students in different scenarios for the future. This approach to designing these courses required various resources and different ways of engaging students in learning how to think long term and futures thinking in the context of Organizational Communication theories. In addition to these demands, developing three new syllabi, and teaching 166 students in one quarter, the Lead Professor acknowledged as *challenging and overly ambitious* (Email to Lead GSR, October 27, 2014). This recognition of the challenges in integrating external disciplinary framework into contents of three established courses, led the shift to focus from multiple courses in one quarter to just one course for each quarter. Therefore, the second quarter focused on the Introduction to Organizational Communication: Taking a Long Term Futures Thinking Perspective serving 100 students. This quarter, the Lead Professor with the Project Consultant revised their approach to adopt ethnographic lens in analyzing the ways of knowing and being, as long term-and future thinkers as well as analyzing the discourse of companies and organizations in relations to innovation.

The analysis of this quarter also marked the onset of ethnographic data collection by the LTFT research team, in which video records and field ethnographic interpretation for six class sessions were collected and archived. The revised approach developed by the Lead Professor with the Project Consultant provided opportunities for students to gain deeper conceptual understanding of the long term and futures thinking. However, the limited time of the academic quarter systems presented constraints on what could be made present from all of the outlined components of the course, as planned by the LTFT research team.

In the third quarter, LTFT research team integrated concepts of long term and futures thinking into Introduction to Communication: Organizational Transformation with 35 students. The approach that was implemented in that quarter focused on the *processes, practices, roles and relationships* surrounding long term and futures thinking by engaging students in a process of interviewing city officials. In this phase of analysis, the LTFT research team continued to incorporate ethnographic lens and the use of interview as an ethnographic tool to understand the ways of doing and being like long term and futures thinkers. Drawing from the Lead Professor's response to the email conversations on October 27, 2014 (previously presented), what the IE research team identified, the fourth quarter of the integration/implementation process, which was also the onset of the second year of this developing Pilot Instructional Project. In the implementation of this course, the IE research team's analysis showed that the Lead Professor once again shifted the approach. In this course, the Lead Professor with the Project Consultant decided to lower the time horizons explored in the course. The course was offered, as the Relational Communication in Organization: Personal and Collective Futures. In this course, the Lead Professor, in collaboration with the Project Consultant, taught students Paul Saffo's (2007) Cone of Uncertainty model, a specific forecasting framework. In addition, they also developed a performance task that required the students to create a story imagining their personal future trajectory around a specific moment in time in 2040 in relations to their imagined institutional and organizational context.

The fifth quarter, which was Winter 2014, focused on a course entitled, Introduction to Communication: Organizational Transformation, a similar course to the one that was offered in Spring 2013. This course served 37 students. Drawing from the Lead Professor's email response on October 27, 2014, the IE research team learned that this course focused *on reflecting present trends that are transforming organizations as well as on analyzing how to sustain organizations over deeper periods of time, and how such organizations can adapt to change as humankind confronts global challenges and moves beyond Earth.*

During the sixth and last quarter of the Pilot Instructional Project, which was Spring 2014, LTFT research team offered a course entitled, Relational Communication in Organization: Response to Societal Collapse, past, present, and future, served 35 students. In his email from October 27, 2014, the Lead Professor shared that they used Stewart Brand's Pace Layers of Change explicitly. In the same email, the Lead Professor described this course as:

> *This course was our best course to date in part because our framework we adopted was to look at responses to societal collapse using Jared Diamond's account of the Norse in Greenland and using the novel Creative Fire.*

This statement led the IE research team's decision to use the Spring 2014 course as an anchor for analysis to trace the framework that was constructed across time and course offerings that were required to achieve the goal of integrating concepts of long term and futures thinking with theories of Organizational Communication framework. The next section explores how, and in what ways, did the IE research team traced the developmental process of the Lead Professor with the Project Consultant's construction of a conceptual system to integrate key constructs of long term and futures thinking that would support the Organizational Communication framework and would be possible to teach within the constraints of an academic quarter system.

The Developmental Pathways of Interdicisplinary Integration

In this section, I present analysis that make visible how, and in what ways, the IE research team uncovered the way in which the Lead Professor with the Project Consultant recursively and conceptually developed a grounded approach to engaging students in the process of inter-relating the Organizational Communication theory framework with the context of deep past, present, and deep future within the context of long term and futures thinking framework. To engage in the analysis of this anchor course, the IE research team drew on the analysis of the course syllabi and on the process of triangulating these analyses with one of the email exchanges and interviews, the fieldnotes as well as the lesson plans. This analysis process led me, as the Lead GSR, to map the Communication constructs, and the long term and futures thinking constructs to explore how they were formed an inter-relationship of Organizational Communication and the long term and futures thinking. The goal of the analyses in this section was to uncover how the Lead Professor, with the Project Consultant, developed an instructional model that met the challenges that they faced in achieving what the Lead Professor identified as, *our best course to date.*

Therefore, the following sections presents the analyses undertaken by the IE research team to map what key constructs from both Organizational Communication and long term and futures thinking that were made present to the students. This section, therefore, presents how these two sets of theoretical constructs were inter-related and/or integrated for each of the eight courses offered within the Pilot Instructional Project.

The multiple cycles of analyses are organized by the year of implementation and will be presented respectively. Therefore, the first year encompasses of five different courses, three courses in Fall 2102, one course in Winter 2013, and one course in Spring 2013.

Table 5.6, represents the courses taught in Fall 2012, the first quarter implementation of the Pilot Instructional Project. As indicated in Table 5.6, two of the courses had a media focus: New Media and Organizational Life, and Media and Media Gendered Lives 2112. The third course focused on Public Relations. Each of the courses had a different time horizon to explore times for innovations: 5000 years in the New Media and Organizational Life course; 100 years in the Media and the Media Gendered Lives course; and mixed time horizons in the Public Relations course. The column on integrating long term and futures thinking with each of these Communication foci provides a brief description of how this was accomplished.

Table 5.6

Courses taught in Fall 2012

Quarter & Year	Courses/Subtitles	Communication Construct	LTFT Construct	Integration (Inter-relationship) of Communication and LTFT
Fall 2012	**Comm 4107:** Relational Communication: New Media and Organizational Life	New Media and Organizational Life	Scenario Constructs for 5000 years Forecasting and long term thinking	Students immersed themselves in a particular time horizon and use concepts and skills developed in their communication course to address a particular futures challenge.
Fall 2012	**COMM 4500:** Gender Identity and Representation in Media:Envisioning Gender Roles in 2112	Media and the Media Gendered Lives 2112 Organizational Communication	Explore Gender Roles in 2112	Students became media professionals and were introduced to various bio-innovations that will emerge and develop over the next 100 years (prepared by the instructor). Their task was to explore how these bio-innovations would have an impact on how we define and construct gender in society and the role of media. The fictional company IDBIO is a bio-innovation design firm with several new products about to be released. They want to understand what issues may emerge after long term and widespread adoption of their products. The students' task was to explore gender in the year 2112 by developing a treatment for an episode of a reality series entitled *Gendered Lives.*
Fall 2012	**COMM 4510:** Public Relation Theory and Practice: Long Term Thinking in Public Relations: Energy Innovation 2031	Public Relations	Scenario constructs—mixture of forecasting and long term thinking from collected readings, focusing on long term trends and create energy innovations (e.g. Paul Saffo, Rich Cline)	Energy Ecozones of 2037 (25 years). Explore and imagine energy innovation in 2037 and create a PR campaign as if it were taking place in the year 2037

As indicated from the previous analysis, the second quarter of implementation, which was in Winter 2013, the LTFT research team made a shift to focus their effort on (re)formulating one course. This shift was recommended in order to focus on developing learning opportunities with appropriate resources to engage students in gaining a grounded understanding of long term and futures thinking, so they would be able to develop forecasts with clear logic evidence to support their claims. Therefore, as represented in Table 5.7, this quarter was an introductory course in Communication, 3107, *Introduction to Organizational Communications: Taking a Long Term and Futures Thinking Perspective.*

Table 5.7

Winter 2013 Course

Quarter & Year	**Courses/ Subtitles**	**Communication Construct**	**LTFT Construct**	**Integration (Inter-relationship) of Communication and LTFT**
Winter 2013	**COMM 3107:** Introduction to Organizational Communication: Taking a Long Term Futures Thinking Perspective	Organizational Communications	Long Term Thinking and innovations in the organization SALT Talks from the Long Now Foundation and interviews with the professionals in diverse organizations are the context for exploring long term thinking practices and their relationship to innovation	Students practice their own long term thinking by making a forecast of an innovation for their organization.

Given that this was an introductory course, it explored the foundational organizational constructs, while the Lead Professor integrated the SALT talks as “text”, a process inscribed in both the LTFT project initiative website and the Annual Report, Year 1. In this course, the students were provided an opportunity to explore the concepts of long term and futures thinking and its relationship to innovations in a real world context by interviewing professionals in diverse organization in the local community. In turn, the students were required to create an innovation for their own future organization grounded by key constructs from both the organizational Communication and long term and futures thinking. This quarter focused on innovations, in contrast to the courses offered in the Fall 2012, which focused on time horizons: 5000 years for Comm 4107; 100 years for Comm4500 and 25 years for Comm 4510. Following this discussion is the analysis of the Spring 2013 as presented in Table 5.8, Spring 2013 Course.

Table 5.8

Spring 2013 Course

Quarter/Ye	**Course/Subtitle**	Organizational Communication Constructs	LTFT Constructs	Integration (Inter-relationship) of Organizational Communication and LTFT
Spring 2013	COMM 4207: Introduction to Communicational Transformation	Organizational Transformation	Stewart Brand's Pace Layers of Change is a key concept and framework for developing greater sensitivity and sophistication in thinking about diverse time horizons and change.	Students partnered with the city of Hayward's planning office to explore the city in 2040 (Hayward's current future planning vision) and 2112 in terms of pace layers. Students looked back 100 years to Hayward's native populations and communities in order to think more critically about the long view of the city's future. Student groups picked a policy area included in the strategic plan and developed a 100 year foresight statements to describe possible long term futures for Hayward.

As indicated in Table 5.8, the Spring 2013 quarter offered another introductory course, entitled, Introduction to Communicational Transformation, with the focus on organizational transformation. The Lead Professor with the Project Consultant integrated Stewart Brand's Pace Layers of Change as a key construct for long term and futures thinking to engage students in developing 100 year foresight statements describing possible long term futures for the city of Hayward.

Summary of Year One:

The analysis of the year one courses provided a foundation for analyzing how, and in what ways, the Lead Professor and the Project Consultant (re)formulated the five courses embedded within the Project Instructional Project. In particular, the analysis of the developmental pathways of the course design made visible how the Lead Professor with the Project Consultant, shifted the focus on which key constructs were being made present, and how they engaged students in demonstrating their conceptual understanding of the inter-relationship of the two areas of knowledge(s).

Analysis of Year Two Courses

In this section, the IE research team conducted a parallel analysis of the transformational process of the three courses offered during the second year of implementation. Similar to the analysis conducted in the first year, the Lead GSR mapped the Organizational Communication Constructs, the long term and futures thinking constructs and the Integration (Inter-Relationship) of the Organizational Communication and Long Term and Futures Thinking. The contrastive analysis of the constructs and

their process of integration and/or inter-relation of the courses across the three quarters make visible the logic of design through the developing instructional model. The map of the courses that were offered in Year Two is presented in Table 5.9: Year 2 Courses: COMM 4107, COMM 4207, and COMM 4107.

Table 5.9

Year 2 Courses: COMM 4107, COMM 4207, and COMM 4107

Quarter &	Courses/ Subtitles	Communication Construct	LTFT Construct	Integration (Inter-relationship) of Communication and LTFT
Fall 2013	**COMM 4107:** Relational Communication: Personal and Collective Futures	Concepts of Organizational in the present and imagined how they might evolve in the future as they are shaped by future work structures and practices and new kinds of digital technologies and automation/robotics at work.	Paul Saffo's Cone of Uncertainty- as a core forecasting concept Students explored what kinds of changes in work and organization might emerge and with what level of certainty	Create a story creating and imagining their future career trajectory around a specific moment in time in 2040, thinking about their personal futures as well as outlining and imagining what the institutional and organizational context.
Winter 2014	**COMM 4207:** ORGANIZATIONAL TRANSFORMATION	**THEME**: DEEP TIME AND ENDURING ORGANIZATIONAL CONSTRUCTS/FORM Addresses theory of interactions between communication practice and culture in public and private communication situations. Analysis of organizational communication from perspective of theory, communication, and culture to foster and inhibit organizational change.	DEEP TIME AND ENDURING ORGANIZATIONAL CONSTRUCTS/FORM	Reflect on present trends transforming organizations today and analyze how to sustain organizations over deeper periods of time, especially how organizations can adapt to change as humankind confronts global challenges and ***moves beyond Earth***.
Spring 2014	**COMM 4107**: Relational Communication: Exploring Response to Societal Collapse: Present, Past, Present	Bolman & Deal Organizational Framework	Stewart Brand's Pace Layers of Change Jared Diamond's Five Point Societal Collapse	Use the frameworks to look at responses to societal collapse using Jared's account of the Norse in Greenland and the novel Creative Fire.

Two different iterations of the Communication 4107, in the second year of the PIP implementation process, which were offered in the Fall 2013 and Spring 2014, with different foci and pedagogical approaches, as it was highlighted in the telling case of the email exchanges between the Lead Professor and the Lead GSR. Given that the Lead

Professor proclaimed the iteration of Communication 4107 in Spring 2014, as "our best course to date," the Lead GSR decided to conduct a contrastive analysis between the two iterations of the course in order to gain a deeper understanding what led to the state of the Spring 2014 as the "best course to date." Therefore, a separate level of analysis was undertaken to analyze the differences in what constructs from both Organizational Communication and Long Term and Futures Thinking that were presented and how they were integrated or inter-related. By triangulating with what inscribed in the syllabi (Fall 2013, and Spring 2014, respectively) with the Lead Professor's reflections of these two iterations from the previously presented email exchanges, the IE research team was able to engage in a contrastive analysis of these two courses as (re)presented in Table 5.10, Contrastive Analysis of Comm 4107 (Fall 2013) and Comm 4107 (Spring 2014).

Table 5.10

Contrastive Analysis of Comm 4107 (Fall 2013) and Comm 4107 (Spring 2014)

Quarter & Year	Courses/Subtitles	Communication Construct	LTFT Construct	Integration (Inter-relationship) of Communication and LTFT
Fall 2013	**COMM 4107:** Relational Communication: Personal and Collective Futures	Concepts of Organizational Communication in the present and imagined how they might evolve in the future as they are shaped by future work structures and practices and new kinds of digital technologies and automation/robotics at work.	Paul Saffo's Cone of Uncertainty- as a core forecasting concept Students explored what kinds of changes in work and organization might emerge and with what level of certainty	Create a story and imagining their future career trajectory around a specific moment in time in 2040, thinking about their personal futures as well as outlining and imagining what the institutional and organizational context.
Lead Professor's Reflection		*For this course, a year after our first start and covering similar course material, we had learned what not to do and how to improve our approach. The Project Consultant and I lowered the time horizon to 2040 for this course and taught students a specific forecasting framework known as the cone of uncertainty by Paul Saffo for mapping uncertainties based on Saffo's article in the Harvard Business Review. Students created a story imagining their future career trajectory around a specific moment in time in 2040. Up to that point they worked on exercises that prepared them to create a story. For this exercise, they had to think not only about their personal futures but had to outline and imagine what the institutional and organizational context would be as well. So the title reflects this approach. We will repeat this approach in Winter 2015 for organizational transformation (Lead Professor to Lead GSR, 10/27/2014, via email).*		
Spring 2014	**COMM 4107:** Relational Communication: Exploring Response to Societal Collapse: Present, Past, Present	Bolman & Deal Organizational Framework	Stewart Brand's Pace Layers of Change Jared Diamond's Five Point Societal Collapse	Use the frameworks to look at responses to societal collapse using Jared's account of the Norse in Greenland and the novel Creative Fire.
Lead Professor's Reflection		*This course was our best course to date [emphasis and color added] in part because our framework we adopted was to look at responses to societal collapse using Jared Diamond's account of the Norse in Greenland and using the novel Creative Fire. So the title was the best fit for what we decided to do.*		

As indicated in the table, the difference in the sub-titles of each iteration signals that they are different courses: Relational Communication: Personal and Collective Futures (Fall 2013) and Relational Communication: Exploring Response to Societal Collapse: Present, Past, Present (Spring 2014). The course on Fall 2013 focused on the concepts of Organizational Communication in the present and forecast its evolution in light of future innovations while the Spring 2014, focused on Bolman & Deal Organization Framework. The long term and futures thinking key constructs that they adopted were also different. In the Fall 2013, they used Paul Saffo's Cone of Uncertainty model, in order to map uncertainties and to create an imagined personal future career trajectory around a specific moment in time in 2040, in light with the imagined institutional and organizational context. In Spring 2014, they adopted Stewart Brand's Pace Layers of Changed and Jared Diamond's Five-Point Societal Collapse in order to inter-relate long term and futures thinking with organizational theories. The purpose of these choices was to examine how societies response to societal collapse in the actual events in the deep past using Diamond's Collapse as well Cooper's Creative Fire (Ruby's Song) a science fiction novel set in the deep future.

Summary of the Developmental Pathways of Interdisciplinary Integration

The summary of the logic guiding the approach in reformulating the courses for the second year of implementation, integrating the two disciplinary constructs, was captured in the Lead Professor's statement from his reflection on the different approaches:

> *…a year after our first start and covering similar course material, we had learned what not to do and how to improve our approach (Email from Lead Professor to Lead GSR, 10/27/2014).*

Additional crucial information about the developmental pathways of the

interdisciplinary integration is represented in Table 5.11: Summary of the Interdisciplinary Integration.

Table 5.11

Please help me understand some of my wonderings: 1) Are the different subtitles serve a particular program (minor, certification)? Or is it the focus of the LTFT concept that shifted? *Lead Professor Comments*: So it really is a question of the LTFT concepts shifting with the catalog title staying constant and at the same time the subtitle shifted to signal to students what to expect and what I wanted to emphasize. This wasn't going to be your ordinary course... 2) Given that there were five different courses that integrated LTFT; what aspect/dimension of LTFT were integrated to each one? *Lead Professor Comments:* I would say that in Winter 2013, we were trying to integrate the podcasts of Long Now Foundation in having students listen to long term thinkers. However by Fall 2013, we taught them a specific forecasting approach using Paul Saffo's cone of uncertainty more explicitly and by Spring 2014, we used pace layers more explicitly.

Summary of the interdisciplinary integration process

As indicated in this table, the Lead GSR framed the question of whether the different subtitles served particular program such as a minor or certification, a process that made visible the inter-relationship of these courses to the departmental and institutional expectations. The Lead Professor’s response referred to the *catalog title staying constant.* This was a way of acknowledging the institutional connection to these courses. This process also provided evidence that although, the Lead Professor had the permission to craft the disciplinary content of his course, he was also connected to and bound by the institutional norms and expectations. These findings raised an additional question: "How and in what ways did the institutional norms and expectations shape the developmental pathways of the interdisciplinary curriculum integration?"

The remainder of his responses to the questions provided a succinct summary of the process of the interdisciplinary integration process. The Lead Professor stated that the Organizational Communication content remained constant and the concepts of long term and futures thinking were the variables that signaled to students what to expect and what the Lead Professor wanted to emphasize for a particular course. The Lead Professor's use of the subtitle to communicate to students what to expect and what he wanted to emphasize in a particular course provided an evidence of implicit existence of shared ways of communicating, common practices and knowledge exclusively known by the locals (Bahktin, 1986; Edwards & Mercer, 1987).

Furthermore, with the Organizational Communication as constant, the Lead Professor summarized the developmental process of integrating long term and futures thinking, indicating an experimental period in Winter 2013, in which he stated, they were ***trying*** *to integrate the podcasts of Long Now Foundation in having students listen to long term thinkers*. In stating the process in this way, he made visible that they were exploring the suitability of the concepts with the disciplinary contents. His second statement using the word, ***however,*** signaled a shift in the approach by Fall 2013, teaching the students *a specific forecasting approach using Paul Saffo's Cone of Uncertainty more explicitly*. The last phrase, **and by Spring 2014, *we used pace layers more explicitly***, provided evidence that he and the Project Consultant had arrived at a final decision. This statement provided a deeper understanding the embedded meaning of his statement of the Spring 2014, as “our best course to date.”

As the Lead GSR, throughout the analyses, I found that I had to step back from ethnocentricism, i.e., what I thought I knew from the earlier analyses, to (re)view the analysis that the IE research team had undertaken to trace the developmental pathways of both the pedagogical approach and interdisciplinary process. By (re)examining the scope of the exploratory work that were undertaken by the Lead Professor with the Project Consultant from its first quarter of implementation leading to the last quarter, I was able to construct new, and deeper understandings of the Lead Professor’s work. For example, the Lead Professor not only claimed that was the best course to date but made another intertextual reference in the Spring of 2014, in which he state during one of our intersegmental collaborative meetings, “we finally got it right.”

This statement led me to undertake a new analysis, on that adopting Lakoff & Johnson’s (1980) conceptual argument that the words we choose is a way to inscribed worlds. This analysis led me to examine this claim in relationship to previous analyses. To do this, I formulated an empirical interpretation of each word that drew on past analyses and interactions in dialogues with the Lead Professor and other members of the LTFT/PIP initiative teams:

- "finally" refers to the time it took for them to "get it right", meaning after six quarters, eight courses, two years of work, as well as it implicates other attempts were made
- "got" synonymous to "achieve" signaling that they "arrived" at a "finality"
- "it" refers to the interdisciplinary integration with an appropriate approach and resources and framework while meeting institutional and the LTFT project initiative's requirements.
- "right" refers to the "appropriateness" of resources, pedagogical practices and long term and future thinking constructs

This interpretation of these words along with the connections made to the work of the PIP team across times and iterations of their work provides evidence that the Pilot Instructional Project (PIP) required a minimum of two years to provide appropriate time to (re)formulate eight courses. This time period provided time to explore and experiment pedagogical approaches to incorporate, to identify and develop frameworks to adapt, and to develop resources to use to integrate interdisciplinary courses or curriculum. It also raised the question, of what constituted as the "best course to date" in which they "finally got it (integration) right." The next section provides the analysis undertaken by the Lead GSR, drawing on the syllabus of Spring 2014 course, and triangulating it with the video records of the first day to uncover further what counted as the "best course to date."

What Counts as the "Best Course to Date"

In this section, it provides a telling case of how the IE research team, with the leadership of the Lead GSR, engaged in cycles of analysis to examine what counted (c.f., Heap, 1980), as the "best course to date" in order to make visible the key elements of the course that students need to know, understand, and do to be able to participate, engage, and communicate appropriately within and across the eleven-week period of the course (Heath, 1982). Therefore, the goal of this section is anchored by a guiding question, "What constituted the "best course to date?" To address this question, the Lead GSR drew on the transcripts of a series of interview-conversation with the Lead Professor and the Project Consultants, the email correspondence among the IE research team and the LTFT research team, transcripts of the video records of the first meeting, course written artifacts such as the syllabus, and lesson plans. Additional records of information were also retrieved from the internet to search background information about the texts used in the course as well as the brief biographies of the authors of the texts, which were then added to the archived records.

Building on Bahktin (1968) conceptual argument that in every social circle, there are "authoritative utterance that set the tone" of which the actors in this social circle, "on which one relies, refers, which are cited, imitated, and followed" (p.88), the IE research team undertook a chain of cycles of analysis of the discourse-in-use. Central to this cycles of analysis was an analysis of the discourse-in-use (Cameron, 2001), in the video records as well as in the syllabi and books with which the students were engaged. This analysis processes was designed to build an understanding of the developing languaculture (Agar, 2004) of this particular course. From this perspective, the IE research team, analyzed the discourse-in-use of the transcribed records of what the actors were proposing, recognizing, and acknowledging as interactionally and academically significant (Bloom & Egan-Robertson, 1993). By triangulating these multiple sources of records through multiple levels of analysis, the IE research team identified the concepts that were made present to students, when and in what ways, for what purpose, under what conditions leading to what learning outcomes. Therefore, the following discussion focuses of the analysis of the interdisciplinary content of the Spring 2014 course, extracting separately the content of the Organizational Communication and the long term and futures thinking from the syllabus, the discourse on the first day, as well as by collecting information on the texts with which the students engaged.

Additional background information about the text and the authors was retrieved through a search of the internet to gain a better understanding of the source of the core content, and the authority and the credibility of the resources. In the second part of this section, I examine how the design elements afforded the students opportunities to inter-relate organizational theories with the embedded long term and futures thinking concepts. In particular, the analysis focused on the elements of engagements among the actors of the course, both the Lead Professor and the students with the content of the course in order to map the flows of conduct (Giddens, 1990) within the eleven-week course that afforded students learning opportunities to explore and engage with the interrelated concepts of the course both face-to-face and online interaction.

Analysis of Organization Communication Content

This section focuses on the analysis of the Organization Communication content of the course drawing on analysis of the course syllabus, the Lead Professor's interview-conversations and email correspondences. Some of the interpretations constructed of the worlds inscribed in these records were confirmed through analysis of the university website. As previously indicated, the Lead Professor indicated that this course was the "*best course to date in part of because of the LTFT framework they adopted,"* but did not mention the communication content of the course. This statement further supported the evidence presented previously that the communication content remained unchanged; thus, raising the question of what was the required communication content for this particular course, given that this is a required course for the BA in Communication, (confirmed from the university website).

Three levels of analysis were undertaken in order to uncover the organization communication content of this particular course. The first level of analysis examined the weekly topics of the course with the required weekly readings, which provided contexts for what was being read and discussed on a weekly basis. The second level of analysis explored the required core textbook of the course to gain an emic perspective of what was being made available to students as opportunities to discuss, explore, and think critically and creatively about the concepts being presented in the textbook. In addition to this analysis is a general exploration of the author's background to establish the credibility and authority of the textbook.

In order to understand the Organizational Communication content of the course, the first level of analysis involved analyzing the discourse in-use (Cameron, 2001) of the weekly topics and the required weekly readings. This cycle of analysis build on Bahktin (1986) argument, (previously discussed) on the situated and sustaining nature of discourse. This conceptual argument is restated here:

> *In each epoch, in each social circle, in each small world of family, friends, acquaintances, and comrades in which a human being grows and lives, there are always authoritative utterances that set the tone—artistic, scientific, and journalistic works on which one relies, to which one refers, which are cited, imitated, and followed (p.88).*

If we consider then that the students and the Lead Professor were the actors of the social circle who "grew and lived" together within and across the boundaries of the learning spaces and time horizons in this course, the Lead Professor's and the Project Consultant's choice of words can be considered "authoritative utterances that set the tone" on which the actors of this social circle were expected to *rely, refer, cite*, *imitate, and follow* (Bahktin, 1986). Therefore, I conceived of the words and phrases in the weekly topics as "authoritative utterances," of which the actors were to use in their discourse, both oral and written, to engage and formulate meaning within the context of the course discussions. From this perspective, this analysis, therefore, focused on identifying the "authoritative utterances" that were being inscribed in the weekly topics and required readings. In order to extrapolate the "authoritative utterances", an analysis of mapping of the weekly topics was crucial, given that this process provided a basis for identifying what words and concepts (topics) were being proposed, recognized, and acknowledged as interactionally accomplished as and as academically significant (Bloome & Egan-Robertson, 1993) as presented in Table 5.12: Weekly Topics of COMM 4107 Spring 2014. Table 5.12, provides the weekly topics and how they were inscribed.

Table 5.12

Weekly topics of the COMM 4107: Spring 2014

Weeks	**Topics**
1	Reframing Organizations and Societies
2	Getting Organized
3	Groups and Teams
4	People and Organizations
5	Investing in Human Resources
6	Interpersonal and Group Dynamics
7	Power, Conflict, and Coalition
8	Manager as Politician
9	Political Arenas, Political Agents
10	Organizations as Cultures and Theater

Analysis of the genre of the weekly topics made visible that students being asked to explore and discuss concepts of *organizations* and the *dynamics* of the *interrelations* of *people in groups, teams, organizations,* and *societies,* which reflected the title of the course, *Relational Communication in Organizations: Exploring responses to Societal Collapse, past, present, and future.* Furthermore, the choice of words of the weekly topics was reflective of the language of what was inscribed in the course description:

> *Personal, public, and professional relationships in contemporary organizational life rapid change. From family communication to entering and departing work situations, superior-subordinate relations* evaluating performance, harassment and

> conflict. Organizational pathologies and health communication. (Syllabus of Comm 4107; Spring 2014)

Mapping the weekly topic of discussion required further investigation to contextualize (Lemke, 1990) what was being discussed on a weekly basis; therefore, adding an analysis of the required reading from the required course textbook was crucial. The required textbook was entitled, *Reframing Organizations: Artistry, Choice, and Leadership,* 5th Edition by Lee G. Bolman and Terrence E. Deal (2014), which led the IE research team to conduct series of analyses of the textbook and a brief overview of the authors' biographies, which were essential to fully understand the rationale for selecting this textbook as the core text for the course. Therefore, as the Lead GSR, I undertook a process of research on the internet to collect information about the textbook and reviews of the book, as well as review the notes made by the Lead Professor about the textbook. This process provided, a brief overview of the textbook, and also led to the examination of brief biographies of the authors. The Junior GSR member of the IE research team conducted a textual analysis of the textbook, which were shared and reviewed by the IE research team members, which is in Appendix C.

The Organizational Communication Textbook and the Authors

Reframing Organizations: Artistry, Choice, and Leadership, 5th Edition, (2013) by Lee G. Bolman and Terrance E. Deal, was the textbook that guided their organizational framework which the Lead Professor used to construct relationships to the long term and futures thinking concepts. Bolman and Deal according to the internet research are worldwide leaders on leadership and organizations and have coauthored several books that have been translated into more than ten languages (Bolman, 2014). This assessment in supported by the work that they have published collectively and individually. In addition to the *Reframing Organizations: Artistry, Choice and Leadership, 5th Edition* (2013), they also published *How Leaders Think: The Art of Reframing* (2014); *The Wizard and the Warrior: Leading with Passion and Power (2006; Leading with Soul: an Uncommon Journey of Spirit (3rd Edition; 2011); Reframing the Path to School Leadership (2nd Ed. 2010); Escape from Cluelessness: Guide for the Organizationally-Challenged (2000); Becoming a Teacher Leader (1994); and Modern Approaches to Understanding and Managing Organizations (1984) (*http://www.leebolman.com/bio.htm.)

Lee G. Bolman is a Professor of Leadership and holds the Marion Bloch/Missouri Chair in Leadership at the University of Missouri-Kansas City. He also consults with corporations, public, agencies, universities, and schools worldwide. He has coauthored many books with Terrence Deal. He also published Reframing Academic Leadership with Koan V. Gallos (2011). A more detailed biography of Bolman can be found at http://www.leebolman.com/bio.htm. Terrence E. Deal is the Irving R. Melbo Professor at University of Southern California's Rossier School. He is an internationally known lecturer and published twenty (20) books and over 100 articles on change, culture, leadership, and organization (http:///www.schoolimprovement.com.) In addition to those written with Lee Bolman, he published the Corporate Cultures with Alan Kennedy in 1982, and Shaping School Culture with Kent Peterson in 1992. He was a professor at Harvard, Stanford, and Peabody College at Vanderbilt University.

Bolman describes the textbook in his website (http://www.leebolman.com):

> *The four frames remain the heart of the book, and the chapter structure is unchanged from the 4th edition, but we've edited and added new cases and research throughout to capture the state of knowledge and practice about organizations and leadership in 2013. The frames help in understanding, for example, why Steve Jobs needed to fail before he could succeed, and hoe Jeff Bezos (Amazon) and Howard Schultz (Starbucks) can both be obsessed with perfecting the customer experience but have very different ideas about to do it (Bolman, 2014, p.1).*

In this volume, Bolman and Deal propose a four-frame model that they characterized as a "providing our different perspectives through which organizations can be understood" (Bolman & Deal, 2014).

- Structural Frame-focuses on organization structure and provides insight into how leaders within organizations can better organize and structure organizations, groups, and teams to get results.
- The Human Resource Frame-focuses on the people in organizations and provides insight into how to tailor organizations to satisfy human needs, improve human resource management, and build positive interpersonal and group dynamics.
- The Political Frame-focuses on the political dynamics in organization and examines how managers and leaders in organizations can understand power and conflict, build coalitions, hone political skills, and deal with internal and external politics.
- The Symbolic Frame-focuses on meaning and culture in organizations, and provides insights into how leaders and managers can shape culture, stage organizational drama for internal and external audiences, and build spirit through ritual, ceremony, and story.

The four-model organization framework offered in this textbook was used to frame the students' analysis of actual society situated in the deep past, the Norse settlement in Greenland, and the science –fiction society, in Creative Fire (Ruby's Song), situated in the deep future. The subsequent analysis will show how these four models inter-related with the concepts of the long term and futures thinking concepts within and across the 11-week course.

This brief overview of the authors' biography makes visible that the Lead Professor and the Project Consultant purposefully selected a textbook that was authored by one of the leading contributors to the discipline and one that he viewed as best supporting the concepts required of the Organization Communication theories and perspectives. The abbreviated description of the Organizational Framework that students were required to understand and inter-relate with the concepts of long term and futures thinking provided a glimpse into the language that was being proposed to students and that they were expected to recognized, and acknowledged as academically significant.

After I gained a deeper understanding about the textbook used in the course, I mapped the required readings next to the weekly topics, in order to analyze the inter-relationship of the weekly topics and the content of the core textbook of the course, which are presented in Table 5.13, Weekly Required Readings from Organizational Theory (Bolman & Deal, 2014). This table made visible that the Lead Professor and the Project Consultant anchored their weekly topics of discussion from the Organizational textbook by Bolman and Deal and related the particular weekly topic to the concepts of long term and futures thinking, identifying the "authoritative utterances" from the Organizational Communication perspectives.

Table 5.13

Weekly Required Readings from Organizational Theory (Bolman & Deal, 2014)

Weeks	Topics	Required Readings
1	Reframing Organizations and Societies	Chapter 1: Introduction on the Power of Reframing Organizations Chapter 2: Simple Ideas, Complex Organizations
2	Getting Organized	Chapter 3: Getting Organized Chapter 4: Structure and Structuring
3	Groups and Teams	Chapter 5: Organizing Groups and Teams
4	People and Organizations	Chapter 6: People and Organizations
5	Investing in Human Resources	Chapter 7: Improving Human Resource Management
6	Interpersonal and Group Dynamics	Chapter 8: Interpersonal and Group Dynamics
7	Power, Conflict, and Coalition	Chapter 9: Power, Conflict, Coalition
8	Manager as Politician	Chapter 10: The Manager as Politician
9	Political Arenas, Political Agents	Chapter 11: Organization as Political Arenas and Political Agents
10	Organizations as Cultures and Theater	Chapter 13: Culture in Actions Chapter 14: Organization as Theater

Summary of the Communication Content of the Best Course to Date

The multiple levels of analyses of the communication content for this course made visible key principles in designing a course that met the disciplinary requirements. First, it was crucial that the weekly topics reflected and supported the description of the course title and description. Secondly, the analysis of the core course textbook selected made visible the ways in which it appropriately supported the academic requirements of the course. Finally, analytic mapping of the weekly topics and required readings, made visible “authoritative utterances” (Bahktin, 1986), common language on which students were expected to *rely, refer, cite, imitate, and follow* through their discursive interactions, both oral and written within and across the time frame of this particular course.

Analysis of the Long Term and Futures Thinking Concepts

In this part of the report of analysis in this cycle of analysis, focuses on the IE research team's analysis on the embedded LTFT concepts that were made presents to the students in order to engage in ways expected of long term, futures thinkers. As indicated in Lead Professor's statement (presented earlier in this chapter), what made this course the best course to date was, in part, the framework that he and the Project Consultant developed to involve students in exploring, responses to societal collapse using Jared Diamond's account of the Norse in Greenland and the science fiction novel, Cooper's, Creative Fire (Ruby's Song). Also, as presented previously, in the same email conversations (October 27, 2014), the Lead Professor indicated that they used Brand's Pace Layers of Change, more explicitly in Spring 2014 as a framework for forecasting in the future. Therefore, this section presents series of analysis of the three resources they used to engage students with concepts of long term thinking and forecasting. As later analysis will show, the Lead Professor with Project Consultant engaged students in a dynamic interactions by moving from deep past, as they engaged them in the case study of the Norse settlement by Jared Diamond, and to a case study of the deep future, through the novel, Creative Fire, Ruby's Song by Brenda Cooper. This case study was anchored in Stewart Brand' Pace Layers of Change as an overarching framework. Given that the concept of Brand's Pace Layers of Change was introduced at the onset of the course, the first section provides an analysis of the Brand's Pace Layers of Change. The second section presents an analysis of Jared Diamond's account of the Norse in Greenland and his brief biography, and the third section presents a brief synopsis of the novel, Creative Fire (Ruby's Song) and the author's brief biography.

Brand's Pace Layering. Stewart Brand, Founder of the Long Now Foundation, has proposed six *Pace Layers of Change*, each with a particular time horizon. The longest is nature, followed by culture, governance, infrastructure, commerce, and fashion, which is the fastest changing pace layer. These pace layers are a six-layered framework for how a healthy society functions as presented in Figure 5.2.

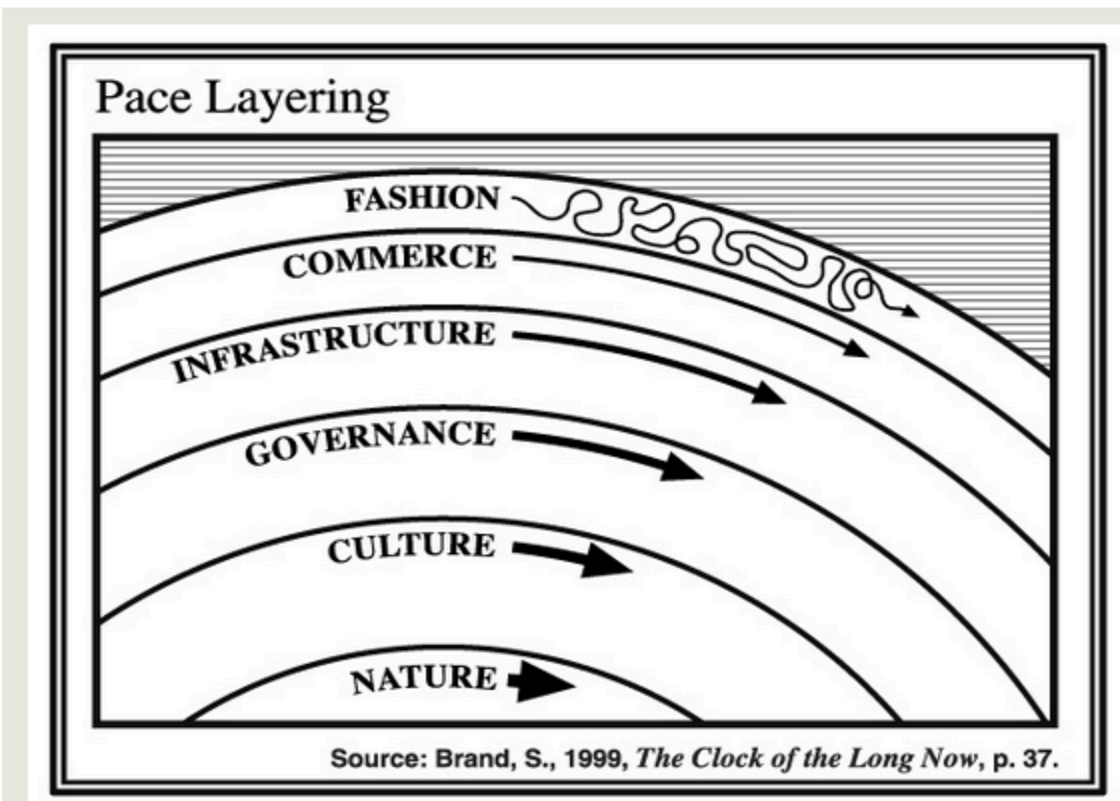

Figure 5.2. Brand's model of Pace Layers of Change.

(http://blog.longnow.org/02015/01/27/stewart-brand-pace-layers-thinking-at-the-interval/).

The following written statement from Stewart Brand was located on the Long Now Foundation Salt Talk Seminar website represents a definition of pace layers of change and how they related to what he calls, *a world made of cities.* http://longnow.org/seminars/02005/apr/08/cities-and-time/. This particular summary provided a way for the IE research team to develop a better understanding of how, and in what ways, the *pace layers of change* framework provided potential issues that relate to both the Diamond 5-point framework societal collapse and the Brand *pace layers of change.*

A world made of cities

1) Cities are the human organizations with the greatest longevity but also the fastest rate of change. Just now the world is going massively and unstoppably urban (governments everywhere are trying to stop it, with zero success). In a globalized world, city states are re-emerging as a dominant economic player. Environmental consequences and opportunities abound.

2) As the author of *How Buildings Learn* I kept getting asked to give talks on "How Cities Learn." With a little research I found that cities do indeed "learn" (adapt) impressively, but what cities mainly do is teach. They teach civilization.

3) I started with a spectacular video of a stadium in Philadelphia being blown up last year. The announcer on the video ends it, "Ladies and gentlemen, you have just witnessed history!" Indeed demolition is the history of cities.

4) Cities are humanity's longest-lived organizations (Jericho dates back 10,500 years), but also the most constantly changing. Even in Europe they consume 2-3% of their material fabric a year, which means a wholly new city every 50 years. In the US and the developing world it's much faster.

5) Every week in the world a million new people move to cities. In 2007 50% of our 6.5 billion populations will live in cities. In 1800 it was 3% of the total population then. In 1900 it was 14%. In 2030 it's expected to be 61%. This is a tipping point. We're becoming a city planet.

6) One of the effects of globalization is to empower cities more and more. Communications and economic activities bypass national boundaries. With many national governments in the developing world discredited, corporations and NGOs go direct to where the markets, the workers, and the needs are, in the cities. Every city is becoming a "world city." Many elites don't live in one city now, they live "in cities."

7) Massive urbanization is stopping the population explosion cold. When people move to town, their birthrate drops immediately to the replacement level of 2.1 children/women, and keeps right on dropping. Whereas children are an asset in the countryside, they're a liability in the city. The remaining 2 billion people expected before world population peaks and begins dropping will all be urban dwellers (rural population is sinking everywhere). And urban dwellers have fewer children. Also more and more of the remaining population will be older people, who also don't have children.

8) I conjured some with a diagram showing a pace-layered cross section of civilization, whose components operate at importantly different rates. Fashion changes quickly, Commerce less quickly, Infrastructure slower than that, then Governance, then Culture, and slowest is Nature. The fast parts learn, propose, and absorb shocks; the slow parts remember, integrate, and constrain. The fast parts get all the attention. The slow parts have all the power.

9) I found the same diagram applies to cities. Indeed, as historians have pointed out, "Civilization is what happens in cities." The robustness of pace layering is how

cities learn. Because cities particularly emphasize the faster elements, that is how they “teach” society at large.

10) Speed of urban development is not necessarily bad. Many people deplored the huge Levittown tracts when they were created in the ’40s and ’50s, but they turned out to be tremendously adaptive and quickly adopted a local identity, with every house becoming different. The form of housing that resists local identity is gated communities, with their fierce regulations prohibiting anything interesting being done by home owners that might affect real estate value for the neighbors (no laundry drying outside!). If you want a new community to express local life and have deep adaptively, emphasize the houses becoming homes rather than speculative real estate.

11) Vast new urban communities are the main event in the world for the present and coming decades. The villages and countryside’s of the entire world are emptying out. Why? I was told by Kavita Ramdas, head of the Global Fund for Women, “In the village, all there is for a woman is to obey her husband and family elder, pound grain, and sing. If she moves to town, she can get a job, start a business, and get education for her children. Her independence goes up, and her religious fundamentalism goes down.”

12) So much for the romanticism of villages. In reality, life in the country is dull, backbreaking, impoverished, restricted, exposed, and dangerous. Life in the city is exciting, less grueling, better paid, free, private, and safe.

13) One-sixth of humanity, a billion people, now live in squatter cities (”slums”) and millions more are on the way. Governments try everything to head them off, with total failure. Squatter cities are vibrant places. They’re self-organized and self-constructed. Newcomers find whole support communities of family, neighbors, and highly active religious groups (Pentacostal Christians and Islamicists). The informal

economy of the squatter cities is often larger than the formal economy. Slum-laden Mumbai (Bombay) provides one-sixth of India's entire Gross Domestic Product. The "agglomeration economies" of the burgeoning mega-cities leads to the highest wages, and that's what draws ever more people.

14) So besides solving the population problem, the growing cities are curing poverty. What looks like huge cesspools of poverty in the slums are actually populations of people getting out of poverty as fast as they can. And cities also have an environmental dimension, which has not yet been well explored or developed.

15) There has been some useful analysis of the "ecological footprint" that cities make on the landscape, incorporating the impacts of fuel use, waste, etc. but that analysis has not compared the per-person impact of city dwellers versus that of people in the countryside, who drive longer distances, use large quantities of material, etc. The effect of 1,000 people leaving a county of 1,000 people is much greater than that of the same 1,000 people showing up in a city of one million. Density of occupation in cities has many environmental advantages yet to be examined.

16. At present there's little awareness among environmentalists that growing cities are where the action and opportunities are, and there's little scientific data being collected. I think a large-scale, long-term environmental strategy for urbanization is needed, two-pronged. One, take advantage of the emptying countryside (where the trees and other natural systems are growing back fast) and preserve, protect, and restore those landscapes in a way that will retain their health when people eventually move back. Two, bear down on helping the growing cities to become more humane to live in and better related to the natural systems around them. Don't fight the squatters. Join them. --Stewart Brand

This statement provided a conceptual connection to understanding the *Pace Layers of Change* framework and how they were inter-related to social worlds of organizations as well as societies and cities across the time horizons, from deep past into deep future. In the statement above, Brand links the pace layers to the world of cities, and in this way frames how this particular conceptual approach to studying societies relates to Diamond's account of the collapse of the Norse.

Jared Diamond and Five-Point Framework of Societal Collapse and Accounts of Norse Settlement. In this section, I present a brief biography of Jared Diamond and a framework of Societal Collapse to make visible what this selection of text afforded students in the class as authoritative perspectives as well as language. Jared Diamond is a professor of geography at the University of California, Los Angeles. Among Dr. Diamond's many awards are the National Medal of Science, the Tyler Prize for Environmental Achievement, and a MacArthur Foundation Fellowship. He is a Pulitzer Prize winning author of Guns, Germs, and Steel. Diamond is one of the most distinguished experts in the field of evolutionary biology. He has written more than 200 articles for magazines such as Discover, Nature and Geo, and his work was influential in informing public discourse on a range of environmental and social issues. The following is an excerpt of was taken from one of Diamond's statement

Jared Diamond developed a five-point framework for factors that contribute to societal collapse. This framework was described by Diamond in a TED talk entitled Why Societies Collapse

https://www.ted.com/talks/jared_diamond_on_why_societies_collapse/transcript?languag e=en. The following are descriptions provided on the TED website that capture this framework in relationship to the Norse. The selection of this issue and the focus on the Norse provides a telling case of *deep time horizons.* Diamond begins with:

> But how can we make sense out of the complexities of this subject? In analyzing societal collapses, I've arrived at a five-point framework -- a checklist of things that I go through to try and understand collapses. And I'll illustrate that five-point framework by the extinction of the Greenland Norse society. This is a European society with literate records, so we know a good deal about the people and their motivation. In AD 984 Vikings went out to Greenland, settled Greenland, and around 1450 they died out -- the society collapsed, and every one of them ended up dead.

- **Environmental Damage**

  Well, in my five-point framework, the first item on the framework is to look for human impacts on the environment: people inadvertently destroying the resource base on which they depend. And in the case of the Viking Norse, the Vikings inadvertently caused soil erosion and deforestation, which was a particular problem for them because they required forests to make charcoal, to make iron. So they ended up an Iron Age European society, virtually unable to make their own iron.

- Climate Change

  A second item on my checklist is climate change. Climate can get warmer or colder or dryer or wetter. In the case of the Vikings -- in Greenland, the climate got colder in the late 1300s, and especially in the 1400s. But a cold climate isn't necessarily fatal, because the Inuit -- the Eskimos inhabiting Greenland at the same time -- did better, rather than worse, with cold climates. So why didn't the Greenland Norse as well?

- Friendly Trading Partners

  Third thing on my checklist: relations with friendlies that can sustain the society. In Montana today, more than half of the income of Montana is not earned within Montana, but is derived from out of state: transfer payments from social security, investments and so on -- which makes Montana vulnerable to the rest of the United States.

- Hostile Neighbors

  The fourth item on my checklist is relations with hostile societies. In the case of Norse Greenland, the hostiles were the Inuit -- the Eskimos sharing Greenland -- with whom the Norse got off to bad relationships. And we know that the Inuit killed the Norse and, probably of greater importance, may have blocked access to the outer fjords, on which the Norse depended for seals at a critical time of the year.

- A Society's Response to Environmental Challenges

  And then finally, the fifth item on my checklist is the political, economic, social and cultural factors in the society that make it more or less likely that the society will perceive and solve its environmental problems. In the case of the Greenland Norse, cultural factors that made it difficult for them to solve their problems were: their commitments to a Christian society investing heavily in cathedrals; their being a competitive-ranked chiefly society; and their scorn for the Inuit, from whom they refused to learn. So that's how the five-part framework is relevant to the collapse and eventual extinction of the Greenland Norse.

Diamond's framework added specific understanding and language to the conceptual arguments about pace layers, providing additional language associated with long term and futures thinking that the students were expected to draw on as well as conceptual arguments that students were expected to take up and use in their work individually as well as collaboratively in this class.

Brenda Cooper and Creative Fire (Ruby's Song). In selecting Creative Fire, (Ruby's Song), the Lead Professor added conceptual arguments to the developing languaculture of the course. This novel was written by Brenda Cooper which published in October 2012. The novel is first of the duology series; the sequel, The Diamond Deep, which was published in October 2014. The science-fiction novel is set on a class-driven generation starship, in which Ruby, the protagonist, used her voice to fight for the rights of her lowest-class peers. Paul Weimer (2012), wrote in his review of the novel,

> "What I expected to be solely a character study in a technological universe instead is a character-focused drama that touches deep themes and ideas that speak of the issues today, in high tradition of science fiction" (p.1).

Publisher's Weekly chose this novel as one of the Top Ten Fall 2012 release in science-fiction, fantasy and horror, claiming that "Cooper puts a science fiction spin in the life of Eva Peron in the fast-paced teen-friendly series starter." (http://brenda-cooper/rubys-song, p.1).

Brenda Cooper inscribed herself on her website (http://www.brenda-cooper.com/about) as a "writer, public speaker, and a futurist" who is "interested in how new technologies might change us and our world, particularly for the better" (p,1). In addition to the aforementioned duology, Cooper has written a trilogy series, *The Sliver Ship and the Sea; Reading the Wing; and Wings of Creation and* wrote *Building Halequin'a Moon* in collaboration with Larry Niven; all were published with Tor books. She also published a "historical fantasy/science-fiction mashup," *Mayan December* with Prime (p.1).

As a futurist, Cooper wrote in her website, "first and foremost, I am a science fiction writer-a writer futurist task". She had over forty stories that were published and her favorite magazine to write for is Nature Magazine. She also provided talks about the future on business events, schools, science fiction and futures conventions. She had appeared on World Science Fiction in Texas, Orycon in Oregon, and World Future in Society in Chicago 2013. She is also a member of the Futurist Board for the Lifeboat Foundation, in which it was inscribed as:

> "nonprofit nongovernmental organization dedicated to encouraging scientific advancements while helping humanity survive existential risks, and possible misuse of increasingly powerful technologies, including genetic engineering, nanotechnology, and robotics/AI, as we move towards the Singularity" (www.lifeboatfoundation.com/ex/about, p.1).

Summary of the Analysis of the Embedded Concepts of Long Term and Futures Thinking. In the section above, I presented two key frameworks that the curriculum designer's adopted to engage students with the deep past and deep future using Diamond's account of the Norse Settlement and the science-fiction novel, Creative Fire (Ruby's Song) by Brenda Cooper (2012). The research on the background of the texts used to engage students in long term and futures thinking provided a deeper understanding the inter-relationship of the contents of the texts and the frameworks that were adopted. The research on the abridge biographies of the authors, who were the major indirect contributors of the long term and futures thinking concepts, showed that they were all futurist, which made visible the basis for the selection of these texts, a process that was strategic and purposeful in order to support students in developing a grounded understanding of the inter-relationships of the two disciplinary areas of knowledge, Organizational Communication and long term and futures thinking. To gain further insights into the inter-relationships of the concepts framed the students' work in these courses, the Lead GSR engaged in a process of triangulating what had been identified in the previous analyses of the content of the Organizational Communication and the concepts of long term and futures thinking. This triangulations process led to the identification of the three framework models that were interwoven in the Spring 2014 course, as presented in Table 5.14: Framework Models Interwoven in COMM 4107: Spring 2014.

Table 5.14

Framework models interwoven in COMM 4107: Spring 2014

Bolman & Deal **Four-Frame Model of Organizations**	**Brand** **Pace Layers of Change**	**Diamond** **Five Point Framework Societal Collapse**
Structural	Fashion (most rapid)	Environmental Damage
Human Resources	Commerce	Climate Change
Political	Infrastructure	Hostile Neighbors
Symbolic	Governance	Friendly Trading Partners
	Culture	Societies Response to Environmental Challenges
	Nature (slowest)	

These three interwoven frameworks, as the following analysis will show, were used to engage students in grounding their analysis of societal responses to societal collapse, moving from actual societies in the deep past, using Diamond's account of the Norse Societal Collapse, and society in the imagined deep future, using Brenda Cooper's Creative Fire (Ruby's Song), as it is represented in Figure 5.3: Inter-relating the Framework in Deep Past and in Deep Future.

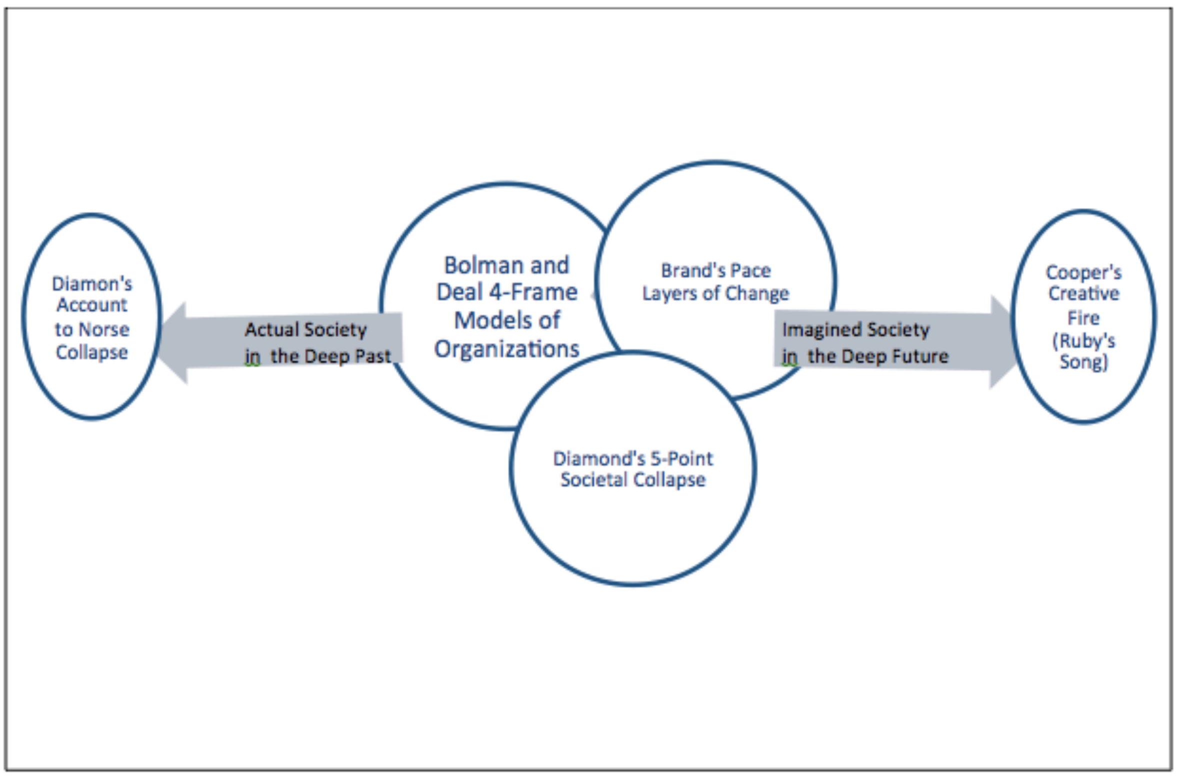

Figure 5.3. The movement from deep past to deep future with inter-relating construct.

(Re)Presenting the elements of engagement. The first part of this section presents the analysis of the interrelated concepts and frameworks that were embedded within this course and the texts that were used; however, it did not reveal how these concepts were designed for the actors, by the Lead Professor, to engage students with them. Therefore, this first section of this chapter examines the curriculum pedagogical approaches that afforded students the opportunities to engage and explore the interrelationships of these three frameworks presented above through the case study of deep past and the deep future in the context of relational communication in organization. The major sources of records for analysis in this part were the course syllabus, video records of the Week1, interview-conversations with the Lead Professor, email dialogic exchanges, and written lesson plans.

Framing the elements of engagement. Drawing on the framework presented previously, and their potential inter-relationships as a *contextualizing orientation*, (Lemke, 1990), the next analysis that follows examines how the Lead Professor framed the different elements the Spring 2014 course. Figure 5.4, Framing the Work in the Course: Comm. 4107, Spring 2014, explores how the Lead Professor introduced the elements of the course during the weekly course sessions, and how these discussions related to the topics that met the Communication Program expectations for the 11-week course. By expanding (swinging out) the findings of the analysis of what was proposed on the first day of the course, I make visible how the course session related to the syllabus that was posted on the course Blackboard website (not publicly available but provided to IE team).

As the *swing out* dimension (Green & Myer, 1991) of this figure shows that on the first day of the course, the Lead Professor engaged students in exploring two chapters from Bolman and Deal: Ch1. Introduction: The Power of Reframing and Ch2. Simple Ideas, Complex organizations. He also framed a quiz over these chapters that students would be required to complete by Wednesday following the class. This quiz, therefore, helped students gain insights into what the Organizational Communication focus of the course would involve and provided the Lead Professor and the Project Consultant with insights on what the students were understanding or not, in order to modify the planned cycles of activities. At the same time, the Lead Professor introduced a view image of pace layers and video clip of Stewart Brand explaining the meaning of the layers, which was followed by a role playing exercise that would be a recurring kind of event in this course. This part of the *flow of conduct* (Giddens, 1990) of the course involved reading and simulating the Creative Fire (Ruby's Song), by Brenda Cooper, a futurist author. Role playing exercises were based on the novel in most class sessions, which was then followed by the process of constructing groups for collaborative work in the class.

As the Lead GSR, I decided to use the concept of *flow of conduct* to the IE research team's logic of inquiry, to frame how in and through the design the Lead Professor and the Project Consultant engaged students in jointly constructing the course sessions, how this process foreshadowed subsequent work required of students individually and in teams (groups), and how these provided ongoing support for the ideas introduced in particular points in the course. Analysis of the flow of conduct on the first day also made visible that the Lead Professor introduced students to Stewart Brand and his conceptual framework on *Pace Layers of Change, which* set the stage for ways of engaging with the text. He also connected the concept of *change* to the topics for this Communication Course (Chapters 1 and 2) as well as introduced the science fiction novel, situated in the deep future. In this way, he tied the Pace Layer of Change framework to the Organizational framework, signaling to students that these two frameworks are interdependent, and are crucial elements of the course. By introducing Stewart Brand through the video, he brought Brand into the course as an actor, and provided a link between the author of the framework and the person himself.

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10
Topic	Reframing Organizations	Getting organized	Groups and Teams	People and Organizations	Investing in Human Resources	Interpersonal and Group Dynamics	Power, Conflict and Coalition	Manager as Politician	Political Arenas, Political Agents	Organizations as Cultures and Theater

Required Readings	Online Assignments	Flow of conduct in class	Concepts introduced	Actors Present and Roles
Ch1.Introduction: The Power of Reframing Ch2. Simple Ideas, Complex organizations	Quiz 1 Online Due Wednesday 11:59 4/9/14	View image of pace layers and video clip of Stewart Brand explaining the meaning of the layers Reading and Simulating the Creative Fire (Ruby's Song): role playing exercises based on the novel in most class sessions Group color selection	Brand's Pace Layers Organization Frames Long term societal change	Instructor and Students

Figure 5.4. Framing the elements of engagement in the course: Comm. 4107, Spring 2014.

As indicated in this figure, each week required multiple forms of engagement with different texts. Each of these assignments drew on the three identified frameworks as presented within the different course texts. The analysis of the flow of conduct (Giddens, 1990) and the contents of the different conversations with students on this day, make visible the adopted pedagogical approach that the Lead Professor incorporated throughout the course. This pedagogical approach involved the Lead Professor (co)constructing with the students on the directions of the course explicitly in what he proposed to them as course expectations. It also made visible how he brought leaders/ experts to students through print as well as social media texts, thus adding a multi-media and textual dimension to his pedagogical approach. This approach, therefore, is a multi-faceted approach to learning through engaging with multiple texts of various genres situated in different time horizons, deep past and deep future, in order to create a common text in the course sessions (Mercer & Edwards, 1987) The analysis of the first meeting of the course, framed the need to trace the weekly flows of conduct in order to examine how and in what ways were the inter-relationship of the three interwoven framework used across the time period of the course.

Tracing the Weekly Flows of Conduct

The analysis of the flow of conduct in the first week led the need for the IE research team to engage in another level of analysis to explore further this pedagogical approach and to identify how the course was designed to support student learning in multiple ways through and different opportunities to explore the relationship among the different frameworks. As part of this analysis, I traced how the Lead Professor designed

opportunities for students to develop communication perspectives (topics) related to the textbook for the course, *Reframing Organizations: Artistry, Choice, and Leadership,* 5th Edition by Lee G. Bolman and Terrence E. Deal as well as related to supplemental texts, including Jared Diamonds, *Collapse,* and Brenda Cooper's *Creative Fire.* The graphic representation of the weekly flows of conduct is presented in Figure 5.5: Tracing the Directions of the Inter-related Threads: Weekly Flows of Conduct**.** Included in this figure were writing assignments designed to engage students in exploring the critical arguments in particular texts collaboratively, as well as opportunities for students to check their understandings through a series of (co) constructed quizzes and discussion board assignments. Also visible in this graphic representation were the relationships among assignments. For example, the final paper was not the final assignment but rather a basis for a public presentation to the class by individuals of the final papers. This assignment took form of a brief synopsis of the issues presented in their final essays. These essays were expected to focus on what the students would preserve in the future and why. The model underlying this pedagogical approach is one that has the following recursive and developmental process:

- Preparing the mind with the weekly readings
- Engaging in a process with peers in the classroom face-to-face discussions
- Engaging with someone with expertise with professors in the face-to-face and virtual space

    - Re-formulating for self- through responses of discussion board assignments and providing responses to at least two peer's observations
- Going public—final presentation

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Finals Week
Flows of Conduct	View image of pace layers and video clip of Brand explaining the meaning of the layer Reading and Simulating the Creative Fire (Ruby's Song): role playing exercises based on the novel in most class sessions Group color selection	Read 2 Chapters of Diamond's Collapse	Norse Society structure vs. Inuit as a case							Begin Sharing Presentation based on the Final Paper	→
		Role-play exercises will be done in most classes									
								Continue discussions of Creative Fire and what would each color team would want to preserve from their society (from the perspective of their color) to survive across millennia. Examine how the Long Now Foundation as an organization is dedicated to cultivating deep time thinking Assign Final Project (See Syllabus in Appendix A for the full description of the final project)			

Online Assignments	Quiz 1 Online Due Wednesday 11:59 4/9/14	Discussion Board 1 Due Wed 11:59 4/16/14 Print copy of responses Identify and map the events from Diamond's account of the Norse and apply to Brand's pace layer framework. Select at least 3 pace layers. Comment on at least two other students' observations.	Quiz 2 Online due-4-23-14	Quiz 3 Online Discussion Board Due Wed 11:59 5/7/14 print copy of responses and bring to class to share …how do these frames enable or constrain the Norse to respond to their internal and external threats?			Quiz 4 Online due Wed 11:59 5/21/14 Discussion Board Due Wed 11:59pm 5/21/14 print copy of responses and bring to class to share Comment on at least two other students' observations. What did the Norse preserve or not preserve and why? How/why did the Inuit survive in			Quiz 5 online	

				Comment on at least two other students' observations.			the same geography? Why didn't the Norse learn from the Inuit?				

Figure 5.5. Tracing the directions of the inter-related threads: weekly flows of conduct

Analysis of Figure 5.2 made visible the questions, directions, and actions required across time and kinds of activities taken in relationships to particular texts. Thus, this analysis provided evidence of a *directed learning approach,* where students set personal goals for learning with the professors scaffolding, mentorship, and advice. For example, the thread focusing on the Norse Society, *deep time in the past*, co-occurred with, and created a platform for students to explore both societal collapse through different elements of organizational framework and the pace layers of change by Stewart Brand. Each cycle, as indicated in this figure, focused students on particular themes and time horizons. These cycles of activity, therefore, provided a *developmental progression* across the times and events of the course (Putney, Green, Dixon, Duran & Yeager, 2000). Further, the figure illustrates a model of iterative, recursive, and abductive pedagogical approach that was present in each *cycle of activity* (Green & Meyer, 1991; Green, Castanheira & Yeager, 2011). These processes laid a foundation for subsequent work by both groups and individuals as they engage with the texts, assignments, and activities of this multi-faceted course. This analysis provided evidence about the complex approach to teaching long term and futures thinking, a goal that LTFT research team achieved in this course, which further supported the Lead Professor's claim that this iteration of the course was the best course to date.

Summary of What Counts as the Best Course to Date

The multi-level analyses of the multiple layers of contexts for this particular course helped the IE research team to develop a grounded understanding of the challenges that the Lead Professor with the Project Consultant had to address in order to afford students learning opportunities to think critically and creatively, in the context of Organizational Communication with the long term and futures thinking orientation. In particular, it contributed to the IE research team's understanding of what the Lead Professor and the Project Consultant needed to do, know, and understand in order to 1) to prepare students' mind to engage in both organizational theories and the long term and futures concepts; 2) to make present to students what counts as long term and futures thinking processes and practices; 3) to engage students in processes and practices of the long term and futures thinking concepts in relations to Organizational Communication theory; and 4) to support and guide students to think, reason, and communicate with others using long term and futures thinking concepts in the context of Organizational Communication.

Chapter VI: Discussions, Reflections, and Projections

Overview

This dissertation study was conceived in order to gain a deeper understanding of the ethnographic approach to conceptualizing and developing a logic-of- inquiry guiding the logic-in-use for data construction and analysis in an internal-external ethnographic teams study of the development process of a developing instructional project at a Public Regional University in California. The instructional initiative was an institutionally sanctioned and externally funded project that was design to integrate concepts long term and futures thinking into established content of the series of undergraduate course in Organizational Communication. This instructional project was embedded within a larger institutional Long Term Futures Thinking project initiative. As part of this initiative, I was invited to coordinate an external ethnographic research team that was invited to join an internal team to document and research the work of the PRU faculty and institutional team members of this initiative as they engaged in developing this project over a two-year period.

My goal in studying this developing initiative was to develop a reflexive analysis approach to how, and in what ways, did my team and I conceptualized a logic of inquiry that framed the (co)construction of our shared logic-in-use in order to gain insiders' (emic) understandings of the processes and principles of designing an interdisciplinary integrated undergraduate courses in higher education. In particular, I wanted to come to explore further what was entailed in learning how to "think ethnographically" and as well as how to "conduct ethnographic research with an intergeneration research team" from a distance (the external perspective).

In this first part of this chapter, I present conceptual understandings that were based on the findings from my analysis of the two reconstructed cycles of analyses that my team and I undertook in order to successfully address the challenges we encountered in conducting an ethnographic study of the developing program in higher education, given that were not physically present on the site where the project initiative was being developed but has to depend on archived records that the internal ethnographic research team had collected as well as an ongoing interview-conversations and dialogues (virtual and written) with the faculty and actors involved in the curriculum development project. These conceptual observations are not meant to provide prescriptive procedures or guidelines; rather they proposed as principles to consider in conducting an ethnographic research, particularly in higher education, with an intergenerational research team enabled by computer-mediated communication technology. The second part of this chapter, presents my reflections and implications for future ethnographic research studies. The third part provides potential future ethnographic research studies based on what was learned through this study. The chapter concludes with my reflection on how my expectations and goals developed across time after joining the IE team to conduct this ethnographic research project.

Discussions of Findings

This section presents a discussions of findings developed through on my analysis of the process involved in reconstructing of the cycles of analysis that I and my Interactional Ethnography research team undertook, in order to gain insiders' perspective on the processes and principles of integrating interdisciplinary concepts into established courses within an Organizational Communication courses in higher education. This approach to the research constitutes a form of reflexive (re)analysis of the work undertaken by the IE research team in this research project. This process involved what Heath (1982; Green, Skukauskaite, & Baker, 2012) framed as stepping back from ethnocentricism in order to reflect on the multiple chains of analysis that were undertaken in two key cycles of analysis, I present a series of principles that I and my team, as an intergenerational group of interactional ethnographers needed to consider when conducting an ethnographic research study with an internal research team that was located in a sister university more 300 miles to the north of our university. In presenting these principles, I make visible the range of decisions needed to conduct this multi-faceted, intersegmental ethnographic research project and through this process, to make visible what was entailed in working collaboratively to conduct an interdisciplinary research study in higher education setting.

As inscribed by many scholars and leaders in the field of educational as well as educational research (e.g., Arthur, Waring, Coe, Hedges, 2012; Green, Skukauskaite, & Baker, 2012; Anderson-Levitt, 2006; Green, Camilli & Elmore, 2006; American Educational Research Association, 2006; Heath, 1982) the basic foundation of any educational research is an understanding of the researcher's ontological and epistemological assumptions on the nature of the phenomena under study. This dissertation explores the logic-in-use constructed by an intergenerational Interactional Ethnography research team, which engaged in an internal-external ethnographic research project. A central goal of this dissertation was to explore how the logic of inquiry was constructed by an intergenerational ethnographic researchers (first-year to fifth year graduate students) that guided the logic-in-use they developed to trace and analyze over a two year period the developmental work of a Lead Professor and his instructional development team, as he developed and implemented a series of Organizational Communication courses in which long term and futures thinking (LTFT) conceptual framework were integrated with the disciplinary content. Specifically, I examine the iterative, recursive, abductive and non-linear process that the intergenerational team, guided by a faculty member who served as PI for the ethnographic team, undertook to develop emic understandings of the work of the internal instructional development team. The project, therefore, constitutes a reflexive (re)analysis of the work of the team for which I served as Lead Graduate Student Researcher. The goal of this study was to identify principles that guided the ethnographic analyses processes undertaken to develop understandings of what the developers, and by extension the ethnographic team, need to know, understand, and do to accomplish their goals as well as to meet the challenges in engaging in these complex research/development projects.

One root of this study was the extensive discussions of individuals beliefs and assumption of the form and nature of the social world, (ontological) and the way of learning (epistemological) that members of the team of researchers engaged in throughout this complex and multi-faceted research project (e.g., Cole, 2012; Waring; 2012; Green, Skukauskaite, Baker, 2012; Agar, 2004). A second root of this study is the call for transparency by AERA (2006) in its Standards for Reporting on Empirical Social Science Research. As novice researchers, we soon became aware that although we had taken a broad range of course within our doctoral program, there was a limited set of readings that uncovered to engage in iterative, recursive, abductive, non-linear processes in an over-time ethnography study. In the ongoing discussions of the research processes, therefore, we sought to develop levels of transparency that enabled our team to (co)construct a common logic- of-inquiry that guided our logic-in-use for methods and methodology for data construction and analysis. For this particular ethnographic research, as it was discussed in Chapter II, our theoretical framework was guided by Interactional Ethnography-which complemented the team's ontological and epistemological assumptions about the social construction of realities. My team's discussion on the theories of language, culture, discourse, text, intertextuality, context, and actors within a social world, enabled us to construct a logic-in-use that was iterative, recursive, abductive, non-linear system of analysis (Green, Skukauskaite, & Baker, 2012; Agar, 2006). In particular, our adoption of Bahktin's (1986) argument that every utterance depicts traces of history as well as Bloome and colleague's (1993) conceptualization of intertextuality (previously discussed in Chapter II) enabled us to use as an anchor for collection and analysis, the Lead Professor's statement that the Spring 2014 course was, "our best course to date." To understand what this statement referred to and to gain an emic understanding of this phrase, we engaged in a process of uncovering both the in-time and over-time decisions and actions of the work of the Lead Professor, and a Project Consultant with whom he work over time over a two-year period to develop the “best course to date.”

Central to the decisions we made throughout the ethnographic project was an argument by Lakoff and Johnson’s (1980) argument that the words we choose as we speak (or write) inscribe particular worlds. This argument about the discourse and on the intertextuality above, framed the need for my team and me to conduct a chain of cycles of analysis to uncover how and in what ways, the development team inscribed in the materials they developed for students particular world views relevant to Organizational Communication processes as well as long term and future thinking (5000 to 100,000 years in the future).

As the analysis in this dissertation made visible, the initial cycle of analysis was initiated by an interview-conversation of the Lead Professor, in which he made a number of intertextual references, which framed the need to (re)examine a series of abductive data construction and analysis process the IE research team had undertaken to construct a Final Report for the intersegmental ethnographic research project for which the team had been invited to serve as external ethnographers. As was presented in Chapter IV, these cycles analyses enabled my team and me to uncover the multiples of histories of the Project Initiative, to explore the roles and relationships of the multiple actors identified through multiple cycles of analysis as well as to situate the ethnographic research project we were invited to undertake within Project Initiative through analysis of the multiple layers of the larger institutional context. The findings of this study, therefore, constitute a telling case of the research process in order to uncover what the IE research team needed to know, understand, and do to develop understandings of the work of the development team from the perspective of those engaged in developing the LTFT initiative in this institution of higher education. The findings from this study are presented as set of principles of operation (c.f., Heath (1982); Green, Skukauskaite & Baker, 2012) that we developed to reflect on and to interrogate the ontological as well as epistemological theories guiding the methodologies of data collection, construction, analysis, and interpretation at multiple points across the research process.

Principle 1: Presence of Ontological and Epistemological Decisions Across the Research Process

This goal of transparency and what it entailed led me to engage in, and construct a series of parallel construction of telling cases of our analysis process. While the first cycle of analysis focused on tracing the roots of the history of this initiative, the second cycle was explored a by a series of follow-up interviews and on-going virtual and written technology-enabled dialogues in order to gain a deeper emic perspective on the developmental pathways of the interdisciplinary curriculum integration process. This study, therefore, made visible the progressive cycles of analysis undertaken by the IE research team in order to understand the logic guiding the work of the LTFT research team. By tracing the multiple cycles of analyses and what guided the IE research team at each point of analysis, this study make visible what abductive, iterative, and recursive non-linear system of analysis "looked like" and "sounded like" in action. Thus, through the reflexive (re)construction of these processes, I make transparent or team's ontological and epistemological assumptions that guided with the relationship between methodologies and methods for data constructions and analysis in this ethnographic study. As the report of the findings of this study will show, this process made visible how, guided by a particular set of ontological and epistemological assumptions, we were able to make transparent to each other about our logic-in-use and how this framed ways to triangulate theory, method, data, and analysis across the course of the research process (Corsaro, 1981).

Principle 2: Complementarity of Theories and Methods

Another principle that was guided the epistemological perspectives and methodological decisions for this study are the complementarity of theories and methods for data collection, construction, and analysis. In particular, my team and I chose the interview-conversation (Gulbrium & Holstein, 2003), rather than a structured ethnographic interview, which was grounded with the conceptual argument that interviews should be more of a conversation form that should allow for the natural flow of the dialogue. Further, our team decided to initiate the interview-conversation with a grand question and use the references that the interviewee made to guide the subsequent questions, in order to gain an insider's accounts of their "lived experiences" (e.g., Gulbrium & Holstein, 2003; Spradley, 1980). In addition, to the initial interviews with the Lead Professor and the Project consultant, we engaged in what we called, follow-up interviews that were designed to support face-to-face interview-conversations, in order to build the professional relationships between the participants in the development project and our external ethnography team. These interview-conversations were undertaken to learn more of their cultural practices and local language, languaculture (Agar, 1994). As presented in Chapter V, the face-to-face interviews were also conducted in our research center, not on their PRU site, in order to share the work that my team and I had undertaken to that point in time. By sharing the work that the IE research team had undertaken, we sought to gain deeper understandings of the perspectives as well as their assessment of how our analyses reflected (or not) their work. Another layer to the face-to-face interview-conversations was that it was strategically designed to have an individual-joint-individual interval schedule, in order to gain the individual's interpretation as well as joint accounts of the phenomena under study. Video recording the conversation interviews also allowed us to capture the contextual cues (Gumperz, 2006) of the participants, not just their words, for a deeper interpretations and inferences that formed a basis for analyzing the developing interview conversation (c.f., Green & Wallat, 1979; 1981) in order to identify how they inscribed their understanding, goals, and actions of design and implementation (e.g., Lakoff and Johnson, 1980; Bahktin, 1986).

With the view that video records are considered as a form a fieldnote (Baker, Green, & Skukauskaite, 2008), these video records allowed us to view the video records multiple times for multiple purposes. For instance, we watched the video as a group as our first viewing, then we watched again to create a running record of events in order to

create a common basis for triangulating how we developed our transcripts as well as interpreted what was being proposed, recognized, and acknowledged by the participants, and accomplished as personally and collectively significant to the participants (e.g., Bloome & Egan-Robertson, 1993). We then selected a segment of the video to transcribe. In this way, our team shared common logic-in-use to video analysis and transcribing. To support a dialogic approach, our team decided to have at least two members of the IE research team participate in the interview-conversation in order to take field notes. The rationale for at least two members of the IE research team to participate in the interview-conversation was to break the interviewee-interviewer expectations of the participants. This approach enabled the IE research team to engage dialogically as well as to compare their understanding of the interview-conversation and to compile their field notes to reconstruct the event as complete as possible. These field notes were triangulated later with the transcripts of the video recorded event.

Underlying the way in which we transcribed the video records is guided by Och's (1979) argument that transcription is theory driven, and that the transcriber(s) inscribe his/her own theory of language as well as what is being accomplished. Building on this argument, we recorded the systematic decisions for transcribing and reconstructing the interview as well as how we used the reconstructed texts of the interview-conversations to explore the interviewee-interviewer relationships. In this way, we documented our ontological and epistemological assumptions on how to transcribe, read, and interpret the texts constructed. Drawing from this perspective, we (re)constructed the developing dialogue on an utterance by utterance, i.e., message by message (Green & Wallat, 1981) approach. Each speaker was also was placed in one column, side by side in with other speakers, order to capture and make visible the natural ebb and flow of a dialogic event. Thus, the interview-conversation was also transcribed in message units, not in full sentences, in order to capture the processes that Bahktin (1986) argued was central to speech genres; he argued that as "a speaker speaks with an implicated hearer." The pauses or the frequent "ah" or "you know" were theoretically viewed as filler words that provides the speaker with time to locate and construct the appropriate language to use in order to convey his/her meaning to the other, hearer. Finally, as was demonstrated in Chapter IV and Chapter V, by holding this process constant, we were able to engage in the multiple levels of analysis of the transcripts of the interview-conversations and to (re)examine them for particular purposes leading to different outcomes. This argument was also consistent with arguments framing the microethnographic approach to discourse analysis developed by Bloome and colleagues' (Bloome & Bailey1991; Bloome & Egan-Robertson, 1993; Bloome, Carter, Christian, Otto, & Shuart-Farris, 2005). As was demonstrated, the series of interview-conversations and their analyses were theory driven that informed the methods throughout the research process. These ontological and epistemological perspectives guided the logic of inquiry guiding the following series of actions undertaken during the process of from conducting the interview-conversations:

- Planning approach and protocol of the interview

- Conducting the interview-conversation
- Video recording the interview-conversation

- Transcribing the interview-conversations in message units
  - Triangulating the transcripts with the field notes
  - Constructing data for analysis
  - Analyzing and interpreting the transcript

The range of actions and decisions undertaken to conduct, produce sources of records, therefore, led to particular constructions of data (i.e, data representations)that were then analyzed to identify evidence of the insiders' account of their "lived experiences" throughout the two-year period of the Pilot Instructional Project.

Principle 3: Triangulations of Perspectives, Analysis, Sources, Resources

The reflexive approach in examining the actions and decisions that my team and I had undertaken in order to carry out the ethnographic research study that we were invited and contracted to complete, shed light to the multiplicity of multiple resources and multiple perspectives that were either used in or brought to particular analysis processes that shaped the development of the logic-in-use. Analysis of how these texts were analyzed and used to triangulate inscribed worlds led to the construction of particular accounts of the observed phenomenon/a. The reflexive approach undertaken by the IE research team, made visible the importance of triangulation of multiple resources, perspectives, and data analysis processes in order to gain a more comprehensive understanding of insider's knowledge as well as perspective on particular phenomena. This approach was supported by conceptual arguments by Green, Dixon, & Zaharlick (1993) that knowledge meaning resides in the individual's interpretation, as well as the group's interpretation, and thus access to the meanings of a particular event requires tracing the development of both. From this perspective, they argue that "ethnographer cannot rely on a single informant to assess the adequacy of the interpretations of the data" (p. 207).

The first evidence of multiplicity of perspectives that were brought into the ethnographic research project, stemmed from the diverse professional, academic, and research backgrounds (presented in Chapter III) of the IE research team as well as the PRU LTFT research team. Members of the two research teams, the PRU team and the MROU IE research team, shared a common history with ethnographic research and many had worked together previously. Additionally, the intergenerational graduate student researchers entered the project having multiple shared theoretical frameworks and research interest as well as shared academic histories developed through their extensive research coursework in qualitative and ethnographic research (see Chapter III). Thus, although, their personal research interest differed, they shared a common interest in developing a common ethnographic logic-of-inquiry and approach to analyzing the discourse and dialogic work both among the members of their team and in the larger project. This common framework also enabled them to triangulate interpretations of such events as the virtual teams meetings, interview-conversations, and fieldnotes. The common conceptual framework for construction, analysis, and interpretation of particular text, enabled team members to share and confirm our individual interpretations and observations of particular events, a process that enhanced our developing understanding of the phenomena under study.

Having a common framework also allowed us to triangulate our field notes, ethnographic observations and interpretations of any events that were developed by the particular groups of actors throughout the two-year period of the ethnographic research project.

Another resource that provided opportunities to explore both the intertextual references and multiple perspectives was the rich corpus of archived records that we were collected by the internal ethnography team and made available to our research for analysis. These records also provided a resource for triangulating particular analyses with other artifacts previously collected (e.g., video records, field notes, written documents, transcripts from prior analyses). It also enabled us to add newly collected sources of records by the IE research team. The value of this archive can be seen in the following example. In our overtime analyses, we were able to triangulate information inscribed in the annual report, the project initiative website, and the course syllabi as well as to triangulate these analyses with the series of interviews in order to validate such phenomena as the time boundary of the Pilot Instructional Project. Viewed in this way, archiving as a research actions was a key principle of operations and like other researcher processes involved the IE research team in constructing logic-in-use to search and retrieve resources from the archive (Green, Skukauskaite, & Baker, 2012). Throughout the multiple chains of analysis that were undertaken in each cycle of analysis presented in Chapter IV and V, triangulation was a central process that supported contrastive analysis of sources of records or findings from the analysis of different constructed data from multiple resources or multiple perspectives, including recorded interview-conversations.

The series of triangulation processes provided served as a basis for providing validation of the findings from the multiple analyses of different resources. The triangulation of these multiple sources of records, multiple resources, and multiple perspectives enabled my team and me to construct empirical interpretations of the principles and processes of that the curriculum designer team at the PRU undertook in constructing an interdisciplinary courses that met both the goals of the Long Term and Futures Thinking project and the requirement for a Bachelors of Arts in Communication with the emphasis of Organizational Communication with corroborated evidence.

Principle 4: Cultivate Relationships to Develop Shared Ways of Thinking

Given the challenges that my team and I encountered throughout this ethnographic research project, as we gained experience with ethnographic work, one of the major contributing factor that led to the successful completion of this project were the relationships that were established between the intersegmental research teams. This collaborative working relationship was anchored with a shared commitment to understanding the basic human activity within a social system in a particular point in time. The willingness of the internal PRU team to engage in ongoing email conversations with my (presented in Chapter V) provided evidence of a shared commitment to wanting to come to understand the layers of work involved in integrating external disciplinary framework into established courses in Organizational Communication. The Principal Investigator's facilitation for the IE team and the LTFT research team collective work that cultivated

and built the working relations began during the Pre-field work phase of the research project. This phase was crucial in helping the IE research team to develop understandings of historical background of the LTFT initiative from its inception to the point of our formal entry, in the second year the developing project, (mid-quarter of Spring 2014). This point of entry was on the last quarter of the two-year period of the development of Pilot Instruction Project. It also made visible her awareness of the need for both the intersegmental teams to cultivate working relationship in order to have the opportunities to engage in social and discursive interaction, through which we (co)construct ways of seeing, and talking, and participating as we collaboratively work together across the multiple phases of the research project.

Further, their ongoing and dialogic interactions, the teams developed their shared socioconstructivist perspective and developed a common knowledge of ethnography, ethnographic perspective, and ethnographic tools that supported the analysis of insider's knowledge, processes and practices, the goal of the PI of the LTFT team, in inviting an external ethnographic process. As was demonstrated in the analysis of a telling case of a chain of email conversations over a three-day span, the relationships that had been developed were made visible by the Lead Professor in his extended responses and reflections, which often made visible his anticipation of what the IE research team needed to know, understand, and undertake in order to gain a deeper understanding of the thought processes and actions that he and the Project Consultant undertook to (re)formulate the established Organizational Communication courses to integrate long term and future thinking and organizational communication frameworks. In turn, in this process of email conversations, he positioned himself in the role as the *cultural guide* to our team, given that we were not familiar with the discipline or long term and futures thinking, nor were we familiar with the scope of the LTFT project initiative or the institutional actors and contexts. His ethnographic disposition and knowledge was vital to our team's understanding of the concepts being interrelated, for what purpose, under what conditions leading to what outcome as well as for understanding the complex layers of actors supporting his work and framing the institutional needs and expectations of this work. Without this cultivation of collaborative working relationship, our IE research team would not have been able to gain the depth of insider's knowledge that was made present to us by the Lead Professor, and other members of the LTFT research team, including the Project Consultant and the Principal Investigator of the initiative.

Implications of Conducting Ethnographic Studies in Education

This ethnographic research project presented challenges across the research process that required (re)thinking or (re)visiting theories or conceptual framework, or methods and methodological process in data collection and analysis. The following sections offers my reflections based on the discussions of findings presented above and on the questions raised throughout the ethnographic research. The first reflection addresses the question of what counts as "sites" or the "fields" of study if the ethnographic research was conducted virtually. The second reflections presents the question on "gaining entry" into the site if our team was invited into the existing research project and that we did not physically enter into the geographical location of the research study.

(Re) defining "sites" or the "fields" of Study. In traditional research studies, the terms "site" and/or "fields" of study refer to the geographical location or physical setting, physical arrangements of a classroom or geographical features to indicate the relationship or interdependence of the environment and the phenomena under study or to describe the interactional spaces (Castanheira, 2001). As previously presented (Chapter II), some researchers consider the area of discipline or research topic as a "site of study" or the phenomena under study. For this particular ethnographic study, our team had multiple definition of what we counted as "site of study." First, we referred to the traditional definition of site, which was the geographical location of the study and its larger context. Another "site" or "field" that our team considered was the rich corpus of archived records, given that we did not collect the raw sources of records. As indicated previously, one of the challenges we encountered was locating an anchor source of records for data constructions and analysis. Throughout our conceptual discussions in constructing our logic of inquiry, we defined the phenomena under study, the "integration process of the courses embedded within the Pilot Instructional Project" as another site of study. Another site that has not been discussed in depth in previous research studies is the ongoing dialogic or/and interactional space between the researcher(s) and the participants or between the members of the research teams negotiated by the corresponding participants or researchers. For this particular ethnographic research study, our team relied on the use of computer-mediated-communication technology to create a virtual ongoing dialogic and interactional space. We held our first introductory meeting with the Lead Professor via Google Hangout. Additionally, our team conducted our initial interview-conversations with the Lead Professor and the Project Consultant. Both the IE research team and the LTFT team shared and exchanged written documents and/or information through Google Docs or Dropbox. Further, we held our meetings and collaborative working sessions as well as shared or exchanged written documents virtually.

Additionally, with the use of email, our team had ongoing conversations with the members of the LTFT team, particularly with the Lead Professor. In this way, my team and I were able to (re) enter into the "site"' or the "field" of study virtually, in order to gain emic perspective, in order to collect additional sources of records or seek further information. This research study, therefore, provides a way of (re)conceptualizing "site" or "field" of study for future studies.

(Re)defining Entry(ies) to the Sites of study. Another unique feature of this ethnographic research study is the nature of my team's initial entry to an ongoing ethnographic research study. Unlike many traditional research studies, in which the researcher(s) negotiate with multiple layers of actors to gain entry to a site, or the researcher(s) is/are contracted to conduct an evaluation study, my team and I were invited in to a collaborative partnership with an existing research team from another university to carry out an ongoing ethnographic research study embedded within the larger university project initiative. As the previously presented, our team had two phases of entries, bounded by the university regulations. Given that this is an “intersegmental research project” (defined in Chapter I), the official funding of the research project came after eight months of our initial invitation to the research project. In the process of inscribing the Final/Evaluation Report, our team identified our two phases of entries as Pre-fieldwork, unfunded phase and the funded phase. Furthermore, given that the geographical location of the site of study, which is more than 300 miles away, my team and I did not physically “enter” into the “site” of study (discussed in Chapter III), meaning that we did not go into their university or the classrooms where the courses were held. These conditions raised the questions,

- “What constitute entry(ies) into the field of study?”
- “What does it mean to “enter” into an ongoing site of study?”

For this particular study, I presented what the IE research team counted “entering” into the research project; rather than the formal bounded term of entry. I explained that I had multiple entries into the site of study. The point in time when I was considering the proposal to join the team marked my first entry to the research project. Further, I argued that each time I worked on any dimension of the ethnographic research project, I “entered” with different perspective based on the previous discussions, in which I participated with particular members of my local group and/or more expanded group. This led to my individual research work I undertook in relations to the larger ethnographic research project, or my individual analysis on particular source of records. Additionally, each time I sent clarifying or follow-up questions positioned me as entering into the “site” or “field” of study to gather more information. These types of "entries" or "entering" into the field of study provides a base to (re)visit what we mean by "gaining entry" into the site of study.

Projection for Potential Future Research Studies

The reflexive analysis of the two key cycles of analysis that my team and I had undertaken presented multiple questions that arose from the multiple levels of analyses that were beyond the scope of the present study. They provided a basis for generating questions for possible future research studies in the areas of literacy practices, curriculum development, project development, and research development.

The first potential future research study that one can investigate is to analyze the students' performance in a particular course or across the two-year period of the Pilot Instructional Project, an area that was beyond the scope of this dissertation study. Another research project might focus on how the students and the professor developed literacy practices across the course or across the program. In particular, a research study might want to ask the question, how and in what ways were the proposed opportunities for learning, the lesson designs, for a particular course, were "talked into being" by classroom participants (professor, project consultant and the students) through their both oral and written discourse as they engage with the texts and with each other and to negotiate their understanding of the demands, expectations, rights, & obligations for accomplishing the course requirement (Green, Dixon, Zaharlick, 2003). Another potential research study could be to investigate the discourse/language-in-use throughout the course, both oral and written, in face-to-face session or virtual, in order to (co)construct and (re)negotiate what counted as the *language of the classroom* (Lin, 1993) and *common language through which the common knowledge was constructed (*Edwards & Mercer, 1987).

The ethnographic research on the developing pilot instructional project embedded within the LTFT initiative, also raised the question of time; i.e., what is the appropriate time to integrate external disciplinary frameworks into established frameworks. In addition to the need for exploratory time to design interdisciplinary courses, one of the challenges that were raised by the team in designing the course was the appropriateness of kinds of materials with the course content as well as the appropriateness of assignments with the time constraints of a quarter academic systems. These findings suggest that one can explore how and in what ways actors within a developing project prioritize the disciplinary concepts central to the project and to examine which concepts are included for what purpose, under what conditions, leading to what outcomes. Findings of this research could inform the developers and policy makers about layers of work involved in and levels of collaborative work necessary to integrating interdisciplinary content in particular courses in higher education.

Another potential future studies, based on the analyses presented in this dissertation could focus on curriculum development in higher education. Unlike K-12 where curriculum are predefined by the school board, local school district, state or federal department of education, a professor, like the professor-of-record in this study, is considered an expert within their discipline in designing courses that have the academic integrity with the discipline as well as the norms and expectations of the department and institution. Potential future research studies might also investigate the often invisible layers of course design in higher education to demystify the process of course development and to make visible, as in this particular research project, the multiple sources and resources that were selected, and/or developed, to design a state-of the-art course while maintaining the academic integrity of the discipline and meeting the demands of the larger institutional contexts and the expectations of a project initiative funded by external grant.

Finally, challenges in developing a new institutional project initiative were made visible in the series of interviews by the Lead Professor, Project Consultant, and the Principal Investigator that were raised but were not fully explored in this study. For example, potential future research can be undertaken to identify and explore what are the layers of work involved in developing, designing, and implementing a new project initiative from multiple perspectives. Findings from this research would inform administrators from K-20 as well as policy makers about the layers of work, that are often taken for granted and ignored, when mandating and/or starting a new program initiative or reform process that involves new curriculum or programs that meet the often-changing standards for education.

Another unique feature of this ethnographic research process was that it was conducted primarily via virtually enabled by computer-mediated communication. A potential future research study might explore how technology acted as a support or constraint in throughout the research process. Findings of these potential future studies would inform future studies not only educators but administrators and policy makers alike about ways of engaging and collaborating with research teams or researcher(s) across national and global contexts as well as across discipline.

Reflections

This section presents a personal reflection on my goals and expectations for joining the ethnographic research with the IE research team, based on my multiple roles: i.e., as a doctoral student and a novice researcher, as an experienced educator and curriculum designer for local district in K-8 setting, and as aspiring professor. These expectations and goals, as indicated in Chapter I, are (re)presented in Table 6.1, My Goals and Expectations for Joining the IE Team to Conduct the Ethnographic Research Project. Through a reflexive analysis of my goals and expectations for joining the IE team to conduct the research project, I make visible how and in what ways these goals and expectations were fulfilled (or not), and how, and in what ways led to a particular set of outcomes.

Table 6.1

My Goals and Expectations for Joining the IE Team to Conduct the Ethnographic Research Project

1) As a doctoral student and a novice researcher, I considered my participation in this research endeavor as an opportunity to engage with peers as well as more informed and more-experienced others to interactionally and dialogically (co)construct the logic of inquiry guiding the logic-in-use for data analysis. 2) Further, as an experienced educator in the K-8 setting, who had been involved in designing curricular units for English Language Arts to meet the California Common Core State Standards, I was also interested to uncover the logic of reformulating established courses within a discipline to integrate novel concepts external to disciplinary framework, undertaken by a Lead Professor a discipline with an Project Consultant in higher education. 3) Finally, as an aspiring professor in higher education, I wanted to uncover the layers of work involved in designing a course of study for a particular discipline, so I could gain a deeper understanding of how to develop a course in the future, and *4) This rare opportunity to have a hands-on experience to collaboratively conduct an ethnographic study with an intergenerational team with different levels of expertise, was motivated by my goal to learn to think ethnographically and to experience and see what ethnographic study-in-action looks like and sound like in real time, particularly to an unfamiliar context and content of the phenomena under study.*

As indicated in the table, as a doctoral and novice researcher, my expectation in joining the IE team to conduct the ethnographic research project, was to have an *opportunity to engage with peers as well as more informed and more-experienced others to interactionally and dialogically (co)construct the logic of inquiry guiding the logic-in-use for data analysis (Sentence1).* As the study had shown, this expectation was achieved given that I had multiple opportunities to engage with my peers, the doctoral students in my team as well as more knowledgeable and experienced others—i.e., both the Principal Investigators of the intersegmental research project, the Program Managers for the LTFT research team, and the Lead Professor and the Project Consultant. What was not visible in this project was that through leading the data (re)analyses and collection of additional data for this research project, I also had opportunities to discuss a part of my analysis on a facet of the research project in a working discourse conference with my peers and professors from other universities, both nationally and globally. I also had the opportunity to present my analysis on a particular dimension of this research project in a structured poster session in American Education Research Association in April 2015. Along with my partner, the Senior GSR, we also co-authored a paper and a poster to present to our peers to fulfill a requirement for two graduate research courses. Recently, I co-authored a proposal titled, "Conducting Interview-Conversations with Computer Mediated Communication in Virtual Space: Gaining Emic Perspectives, with the Senior GSR and the Program Manager for Year 1 for the Pilot Instructional Project, and it was accepted for a roundtable session entitled: VISUALizing Qualitative Methods in AERA in Washington, D.C. in April 2016.

The multiple opportunities of engagement provided evidence and solidified that my decision to join this IE research team also provided rich opportunities to engage with my peers and more knowledgeable and more experienced others not just within my team but beyond the university setting. Through this hands-on experience, I gained experiences and developed understandings beyond those that I could have gained in reading research handbooks or learned from seminars and research methods courses. I am confident that this “hands-on” experience enriched my doctoral education and took my understandings of the research process to a new level and enhanced my preparation for my future professional research project. This revelation raised a question that I hope to explore in the future-How can a doctoral program provide a balance between academic work and hands-on research apprenticeship?

As an experienced educator and curriculum designer, my goal for joining the IE research team was my interest in uncovering the logic of reformulating external disciplinary framework and integrating new disciplinary knowledge into established contents of the undergraduate course in higher education. This goal was motivated by multiple challenges I encountered when designing curricular units for our 6th grade English Language Arts to align the Common Core State Standards two years ago, for all the 6th grade teachers in my school district to implement. As was demonstrated in my analysis and my reconstruction of the cycle of analysis, this goal was met when my team and I inscribed in the Final/Evaluation Reports, (page 133). The findings from the report are (re)presented in Table 6.2, Principles and Processes Identified Related to the Development of the PIP.

Table 6.2

Principles and Processes Identified Related to the Development of PIP

Principles and Processes Identified Related to the Development of the Project Initiative This process of integrating LTFT with Disciplinary requirements and Institutional Learning Outcomes:
Takes time (iterative, recursive and overtime development)
Requires a dialogic approach among participants
Needs multiple iterations to examine how students take up what is afforded as both LTFT and disciplinary content knowledge
Requires designing, and (re)designing, not just planning and implementation
Involves expanding the expertise of instructors to fully integrate both LTFT and discipline
Requires time for faculty exploration about what is appropriate or best to achieve in relationship to department, campus and project learning outcomes
Requires Insider views of resources and their relationships to the program goals
Requires time to explore external resources from national leaders, build or extend repertoires necessary to integrate resources as designed by futurists and others
Requires experienced faculty or institutional leaders, who can serve as cultural guides for exploring
Requires building inter-segmental collaborations as well as inter-institutional collaborations with those beyond the university context

By identifying these principles and processes involved in the development of this project initiative, I was able to explore and gain insights into what the language related to engagement will be needed as I work in my new position as an English Language Support Teacher in my district to support teachers, parents, students, and administrators in integrating interdisciplinary content with California English Language Development in their curriculum. Thus, the findings that my team and I uncovered in this research study enhanced my capability to support teachers and administrators to provide more access to learning opportunities for the English Language Learners in my school district.

As an aspiring professor, my goal was to uncover the layers of work involved in designing a course of study for a particular discipline, so I could gain a deeper understanding of how to develop a course in the future. Through the multiple levels of analysis, I uncovered that there were parallel challenges and decision-making necessary to develop a course in higher education. In particular, just as the teacher in K-8th setting is responsible to the student, the parents, the administrators, the school board and the state and national standards, the professor is also responsible for students, the department, the school of discipline, the institution, and the larger field. The only difference is the professor has the permission to craft a course of study within a particular discipline guided by institutional parameters; whereas, the teacher has predefined curriculum, and how and it what ways this curriculum made present to the student is dependent on the teacher's interpretation of the curriculum. I also learned that the professor sought multiple sources of support and multiple resources to design a particular course, challenging the notion that a professor is a "lone" curriculum designer of the course of study.

Finally, as a student of ethnography, I was *motivated by my goal to learn how to think ethnographically and to experience and see what ethnographic research study-in-action looks like and sounds like in real time, particularly to an unfamiliar context and content of the phenomena under study*, which aligns with the overarching question of this dissertation:

> How and in what ways a team of interactional ethnographer conducted a multifaceted technology-enabled ethnographic research study of a developing program from a regional public university over a two-year period?

Additionally, as indicated in the discussion of findings presented previously in this section, I am now able to offer principles that others seeking to develop ethnographic ways of thinking what to consider when conducting an ethnographic research study. These recommendations are grounded in ways that my team and I were involved in designing and undertaking a logic-of-inquiry in which theory-methodology-method relationships framed our research. These recommendations are grounded ones, not abstract recommendations, given that they are based in my findings about the processes that defined on how and in what ways my team and I conducted a multifaceted and technology-enabled ethnographic research study of a developing program in a regional public university over a two-year period. Finally, based on my "hands-on" experience and observation on what ethnography-in-action looked and sounded like in real time, I came to understand that this ethnographic research endeavor was an apprenticeship opportunity, one which is just the beginning of my new journey to think ethnographically. In accordance with Walford (2008), that this study was an " unforgettable transformative journey of doing ethnographic fieldwork, analyzing data and writing the full account require personal commitment of a very high order and vast amount of sheer hard work (pg. 83). What I uncovered is a renewed and deeper understanding of language and culture. I developed *a language* on how to think ethnographically. In Agar's view of culture, I gained a *culture, which is "*an awareness, a consciousness, and one that reveals the hidden self and open paths to other ways of being" (Agar, 1994, pg. 20), a path to understanding a way of knowing.

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Appendix

Appendix A: Principles of Operation Guiding the Actions of the Ethnographer (Green, Skukauskaite, &Baker, 2012)

Principles of Operation	Conceptual Issues	Actions Implicated
Ethnography as non-linear system Abductive logic guides identification of pieces of cultural knowledge which are made visible when the ethnographer identifies a frame clash which cannot be understood without further exploration.	To construct an explanation of cultural processes, practices, meanings and knowledge previously unknown, the ethnographer uses abductive logic, and recursive, and iterative processes.	Using abductive logic involves: • Examining differences in expectations and understandings (point of views) between the ethnographer (outsider) and member(s) of the group being studied (outsiders); • Following historical and future pathways (roots and routes) to uncover insider (emic) knowledge through iterative actions and recursive logic; • Constructing grounded connections among cultural processes, practices, and local knowledge among members to develop explanations of what was previously unknown to the ethnographer
Leaving ethnocentricism aside Fieldworkers (and analysts) should attempt to uphold the ideal of leaving aside ethnocentricism and maintaining open acceptance of the behaviors (actions) of all members of the group being studied. (Heath, 1982: 35).	To suspend belief, ethnographers strive to use emic or insider language and references, whenever possible by: • Identifying insider names (folk terms) for particular activities or phenomena (e.g, 'the Island History Project', continuous line, first year students') • Locating verbs (and their objects) to identify past/present/future actions and connected activities (e.g., take out your learning logs, 'we'll plan a fashion show, when we do public critique) • Tracing chains of interactional exchanges	Bracketing one's expectations about what is happening involves examining what members: • Propose, orient to, acknowledge and recognize as socially (academically, institutionally, personally) significant within and across times and events; • Jointly (discursively) construct and name as actions and events • Construct as norms and expectations, roles and relationships, and rights and obligations; • Draw on past events in a developing event; • Make visible to the

	(not individual behaviors) to explore what counts as local knowledge	ethnographer (for other members) in points of emic-etic (insider-outsider) tensions
Identifying boundaries of events When participation in or adequate description of, the full round of activities of the group is not possible, fieldworkers should make principled decisions to learn (from participants) and to describe as completely as possible what is happening in selected activities, setting, or groups of participants (Heath, 1982; pg. 35).	To make transparent the logic-in-use constructed in deciding boundaries of events, ethnographers make principled decisions about: • What and whom to observe, examine closely or trace across times and events, • How boundaries of the field for a particular observation are being proposed, recognized, and acknowledge; • How members of a developing event signal to each other (contextualize) what is said or done	Constructing records for analysis depends on: • How fieldnotes are written; • What is recorded on video/audio, from whose perspective, focusing on what objects, actors, or activity • What artifacts, documents or photographs are collected; • How event maps of activity are constructed to locate actors in time(s) and space(s) • What kinds of interviews are conducted of whom, under what conditions, and for what purposes; • How records from the field are archived to permit search and retrieval of interconnected texts, contexts, and events
Building connections Data obtained from study of pieces of the culture should be related to existing knowledge about other components of the whole of the culture or similar pieces studied in other cultures (Heath, 1982; 35)	Ethnographers construct evidence of connections among events to develop grounded claims and explanations of cultural phenomena and local knowledge. Ethnographers create an archiving system that permits search and retrieval of relevant records by including: • Cross-reference of records by date and place of collection • Event maps and transcripts of events, activity, and actors • Citations to particular bodies of literature informing the work	To analyze particular bits of cultural knowledge, discourse, or social life, ethnographers engage in contrastive analysis that includes tracing developing cultural knowledge, processes or practices across time(s), actors, and events. • Questions brought to and identified in situ • Types and amount of data collected • Analysis processes/approaches used for each question and data analyzed • Literature guiding each dimension of ethnographic work.

Appendix B1: Combine Field Notes taken by PI and the Senior GSR (Interview-Conversation with the Lead Professor in April 25, 2014)

PI Notes are in this font Senior GSR's Notes are in this font (added as a supplement to PI's notes) Lead Professor's Conversation 04/25/2014 Approx. start time: 2:51 and approx. end time:4:45 Conversation held virtually via Google Hangout

Lead Professor talking

Integrating LTFT think content, concepts in textbooks – reframing organizations, has theme of transformation of change – short term past and present... taking back to Norse 980 and then to future, novel on Creative Fire

- Becoming communication professionals as they engage with LTFT
- Pretend you are an organizational specials
- Relational communication in organizations
- Inherited this course not created it
- HR (human resources orientation) and interpersonal communication

Oriented == inherited from people with diff theoretical frame
Taught before as a social media class – accepted approach in Past Prior to 2013, as short term futures
Since 2013 had to insure the students get content in catalogue –
doing a fairly good job – teams of students read and discuss each week on the chapters

Frames
Communication media frames focus on how to create culture - how it is acquired
Structural Orgs structured in certain ways
Human resources frame – invest in talent of certain
People
Political frame
Symbolic frame
How to map the frames onto the content
Then add pace layers for time... pace layers are
Dynamic rates of change
Fashion layer (fashion)
Commerce layer
Infrastructure layer
Governance layer
Culture layer -
Critical Theory Frank Schubert
Ideological paradigms and Raymond Williams
Nature layer (slowest)
Cognitive - activity theory

- Comment [S1]: Steps utilized in the course to become communication professionals that can use ltft?
- Comment [S2]: How were Pace Layers used in throughout the course(s)? Has this use changed over time?

PI Suggest
double discourse as the Lead Professor using chapters from book to discuss organizational theories and engaging in practices/processes in LTFT Thinking]

Layers interact with each other and affect each other
Applied pace layers to the example...
POINT – how students could look at the deep past and deep future from an organizational perspective
Pace comes from long term literature by Stewart Brand. Created the long now foundation with Brian Ino, (musician), Stewart Brand business Network – they'll take academic literature and use it but not always acknowledge authors... filter through a futurist framework. Institute for the Future...

(roots and routes)—
Lead Professor comes from a critical studies background – didn't interrogate too much
Used as tool but not explore roots that resonated with critical studies background
Critical frame from the Frankfurt School – worked with Chandra Mukerji, Daniel Schiller, Daniel Horowitz, and one other—look at things through political economy, cultural (critical cultural—Frankfurt school, Herber & Daniel schiller school of interrogating ideological paradigms, how they construct culture), Raymond Moyens – media culture
Cognitive – activity theory and looking at Vygotsky
..
How media produced
Deployed in culture
How parsed in our minds, internalized, acquired
Ongoing dilemma – pressure to do Institutional framework forces binary
Students want to see becoming professional communicators
Media
Don't see talking about future 10000 is relevant
Institutional favors that [critical cultural studies and media production orientation of the department]
- meeting student needs and digging deeper into areas of critical culture
Never quite sure who audience is in terms of students that we are teaching
In some ways need help in
Writing
Articulation
Some part of dept need to support this and other part dig deeper into culture and others revising core curriculum...
Ongoing frameclash of student expectations - "what it supposed to be" and obligation of what students should know

- Comment [S3]: Define "deep past and deep future"
- Comment [S4]: What is Lead Professor's intersection with Institute for the Future?
- Comment [S5]: How has he framed the importance of thinking in the future to the Department and Institution? Ways that he sought "buy-in" from the Department and Institution ?

The text is called reframing organizations
How can change
How do you look at changing organizations
How do you become skillful
How dynamic
How use more than one frame to put on a dilemma
In regards to LTT, how things can change in deep past and present to give a deeper understanding of past and future

Reframing organizational lap
--Overlap with ltt –circle – how can change in time or reframe the
present??? Human problems and human nature – to address problem

What does it mean by frame—PI asked
Basically, the social science studies are organized by textbook based frames of x, y—structural and other frames cultural, symbolic, political
[students feel situated in these frames and resonate with them and then are "anchored" - What is being formulated and conventionalized? What knowlegde is being cosntructed]
Each come with a particular frame of orientation
Self assessment test –
He comes out with a political frame
And usually with a symbolic frame
INTELLECTUAL UNDERPINNINGS – HOW CAN HE GET THEM TO
EMBODY LTT AND ACT ON THIS – NORMS OF TRAGEDY AND COMEDY –
Shakespeare...
kinesthetic notion—why like doing simulation –
hybrid online course- meets once a week—extra credit post on simulation just did 17/40
but may have more... how much got into their roles –bringing back simulation – role of his naming this
– HOW HE FEEDSBACKS AND
NAMES ORG COMMUNICATION PUZZLE...
AUDIBLE link to chapter...
Themes of class
Collapse
Sustainability...etc
Based on Norse – why collapsed
Climate change
Hostile relationships with natives
Own people from Norway
With friendly neighbors
With commerce
Tie back to [pace layers] deforested land, depend
on religion, how choices made... climate change...
Howard Ringold—mind mapping – cluster of ideas...
create maps and take pictures and cluster of ideas
...
frames from book
pace layers
xx etc.
also created a worksheet that kind of has name the frame, describe the concept, how its applied in present, how applied to past, also in future – Norse and Creative Fire... what pace layer they are looking through which do they(students)view of significant... is there one that dominates or distributed across ripples through all of them – picking up their language...
students can take-up info/terminology
Videos as rich points
Lead Professor's course is reading "Creative Fire" novel - based on Eva Peron this quarter
References that the PI and the Lead Professor discussed:
-The World Inside
-Stranger in a Strange World
-Left Hand of Darkness - Ursula K. Le Guin

Influencing literature on Lonny's philosophies =
Henry Jenkins, he reads and uses for "how texts become real" on
trans media and media convergence
Harold Raingold - Using the mind mapping as a part of course
Immersive practice - where students have opportunities (grew up in
Shakespearean club, which required him to act out the words, which is similar process used in simulations).
Students act out event and then reflect on BlackBoard
Acting out is related to organizational communication (mentions
Princeton article on oligarchy) - how the Lead Professor is making links
between Disciplinary Knowledge and Organizational Communication

Which aspects does the Lead Professor make publicly accessible
(simulations, readings, etc)

For course this quarter, adapted some instructions and done some simulations
Simulations – Lead Professor acted as AI
Final project - asked students how they wanted to design a society
Reconstructing texts in course through Jared Diamond and Easter Island
study using elements of:
-Hostile relationships
-Climate Change
-Commerce
-Relationships with neighbors
-Pace layer

PI guides the Lead Professor through Kelly and Chen "Sound of Music" to show how
can (re)present everyday actions and how it can be
used as a basis for
analyses:
-P. 893 - Running Record
-P. 895 - Message and Sequence Units
-P.898 - Oral, written, performed discourse
-P.904 - Abstract to grounded
-P. 905 - Claims in paper

PI proposes an investigation of Pace Layers - which pace layers privileged:

Worksheet looking at name of frame, relationship to frame, which frame is present, and the future frame
PI suggests Lead Professor to look at when he grades and when he does not grade

Comment [S6]: What does Lonny make accessible via the course (online, in the course setting, etc.)?
Comment [S7]: Were simulations a consistent process and practice exercised throughout ALL quarters of research? What quarter did simulations begin and in what way or capacity?
Comment [S8]: Copy of worksheet and other course artifacts see what is being presented

PI also suggests submitting a joint proposal to AERA in July (2015 AERA is in Chicago)

Appendix B2: Fieldnotes Constructed by Junior GSR1 (Interview-Conversation with Project Consultant on May 7, 2014.

Notes from LTT Meeting on May 7, 2014 with the Project Consultant Interview-Conversations held Google Hangout Interview Begins: 11:00 End time: 12:00
J: Framing as ethnographic interview, ask questions as they relate. Goal is to build, analysis and interpretations send back and you can correct. Key is eventually look at this quarter's class A: starting with last quarter 11:21 J: when you edit and reformulate have to know where you are and then backward map, and reference, using language as the anchor 11:22 A: Deep dark history goes back before Lead Professor was involved, A got involved in project when CR, Program Developer contacted her about opportunity of doing LTFT with kids CR: knew to contact me because he talked to Paul Saffo, former colleague and well-known Technology Forecaster. They met at an event. CR cornered him – interested in doing X, at PRU around Futures and Innovation, whatever is what that CR said, have to talk to AS, Project Consultant. I had done stuff around LTT with middle school, when I was working at Institute for the Future, doing things there with adults how do you look 10-20 years ahead, why are doing that with just adults, not young people. Started developing pilot groups with younger kids. So Chris said Paul said to talk to me. WE had lunch and talked about bringing LTT into PRU J: Work you did with the 8thgraders? Still doing that? A: Not now, but coming up maybe 6thgraders. It was we riffed on this exercise in a recent class at PRU, digital storytelling to create personal story forecasts as a way to understand the future but they're interaction in a possible future and what that mean to them. I pulled a few kind of trend areas that we had been studying – two minute videos, driven around change, technology, health, identity, little videos from the future, and the students we watched and discussed, now you have to tell a story about yourself in that future. And you need to – we had prepped them about storytelling in the moment, what critical and decisive moments were now for them – and then imagine this in the future. How would it impact them in the future. Like a grass roots employment – what would that mean for them? Tell a personal story, effective because drew on real issues in their lives. Like one girl imagined she was 24 and her mom was coming back and asking for help, coming from a real moment in her life and then imagine possible future. Very fun. Digital stories...what's it like thinking about the futures. Talked about that time horizon thinking about possible futures and they would interact J: Where are you working now? A: have my own practice J: Linked to 6thgrade A; My daughter's school

11:30

J: Do you work at all with Linda Hall's Digital Storytelling

A: worked with Joe, this comes out of his Life on the Water

J: She had a center on digital storytelling at Berkeley
J: Where is it located.

A: They were on MLK and just moved to new location. In Berekely
J: Old Grove

A: The group, the 6thrade class, they do ancient civilization and then modern, they look back at a particular society, then present, then ahead. If we look ahead what would change of be issues? Extending continuum of time. I had talked to them last year, didn't work out, thinking about doing it next year.

J: We have something with one of the superintendents, Beth works with..Jon Puglisi..Smithsonian project, avant garde thinker, 3rdsuper....Beth and Jackie may be someone to talk to, Senate Bill, brought to California for minorities

J: The model you have, the frame, I did naïve historical, took them back in time, pretended we were in a plane that went backward, even the TV shows weren't there. But how do you use time spans and time frame to bring them back for world history, that's why project resonates...
Helps us see conceptual frame, sometimes gets lost
in the present, the background gets lost, the underlying logic and the conceptual frames you're working with, we need to have an understanding more of the philosophical orientation bringing to it as well as the practical

A: IFTF – Think Tank started in 68 spin off of Rand Organization, I worked there for about 20 years (until 7 years ago?), make people think about possible futures, having been there for 20 years, got exposed to a lot of ways of thinking about the future, and kinds of questions you might ask and ways of future, when I got there they weren't doing any qualitative research, were formal, short-hand interviews, not open semi-structured, ethnographic, exploratory at all. That was one of the things I started them doing, bringing in ethnographic interviewing, some of those techniques related to that, inter-section of technology and life in order to think about, futures methodology

A: Not publishable stuff I've written, ITF stuff, used to be into methodology and used
to be interested, original founders left not as much of a priority

11:40
J: Formal or informal you've done to help see what that kinds of interviewing looks like, I might be able to find some old instruments,

A: We worked with San Jose State Anthropology Dept. a lot in the earlier years, first
10, bringing that practice into the organization. We would talk to people about their use and technologies, future of work, future of information, office, whatever...and then integrate what we were collecting from data and putting it together to try and understand what are we learning about issues from ethnographic perspective and then imagine that for the future. In the class, we try to stress, there isn't one future, try to image what the future can and should be like, so we can think about the present. Constant between present and past. Why are doing this anyway if it's not now – that's a philosophical orientation, that informs my thinking from IFTF.

J: Underlying everything as dialogic Bahktinian frame, as linguists as back channel cues
J: helpful in larger context, brings past into present, which is a big issue. Most people start with observable moment and miss the layers of history that informs the moment. One of the people I talk about it, DNA mode l of our work as a model, we could build a model of the weaving of the strands,
what are the strands that converge into the moment and how do they contribute
back and forth. Historicity is central to Ethnography. Did you work in Anthro at Harvard?

A: Been so long. Hispanic Studies, combination of History and Literature and Cultural Anthropology and Language. Cal for my masters studied Latin American Studies, they encouraged and required you for Area Studies, had to take a methodology class, couldn't just study stuff about
a place. I did survey methodology, a little quantitative, some participant observation, but understanding those as a toolkit as a frame, brought that methodology with me.

J: Who did you work with at B, Sociology or Anthro?
11:47

A: Carol Silverman, she taught a great nuts and bolts around survey methodology, participant observation, practical for jobs, first work at ITF was doing surveys. We would measure 25 years ago around Health Care, Technology, Attitude and Practices, started using when I got there, brought in deeper qualitative stuff.

J: Is that deeper qualitative from your experience or formal?

A: a little bit, don't have Masters, just Doctorate, so from those two years. For my thesis, had surveys, but realized wrong measure, not going to work, instead, had a colleague Anthro, a few times go back and write down everything you've seen and heard, that became my set of data. Changed my methods, and did qualitative analysis of their hsare cropping and social networks as exchange. That was a big moment in my toolkit – when I got ITFT. I don't think they realized it, but I was using what I had learned from rural Mexico (social network analysis) to study technology, they didn't realize it (laughs), for economic purposes, when people just getting PCs, just starting to merge, those are the kinds of things they were looking at, families looking to buy a computer and get AOL
A: CompuServe

J: Yes, that's it. Disseration.. put his kids on CompuServ for an hour day and document it, ethnographic framework for documenting decision points, changed their view of writing, now had multiple sources (1988). All of this helps us see the logics you're working with and the framework, inter-sections how to look at a developing unknown, futures thinking what does it look and sound like, how do decisions get made, the evolving logic, so when next group comes in

11:54
Model, how would a group use it and take it up, transferrable not generalizable, underlying piece of transferability across sites, across groups, Felicia is looking at what topics came up in the first meeting, who oriented to whom, roles and relationships, norms and expectations that we're building

J: You talked about Social Network Theory and Educational Change (Daly)
J: now we have a picture of where you've been and the kinds of ways you approach things.
A: Yeah...little picture of it.

J: We'll need an intellectual biography

A: Too grandiose

J: The piece that's missing for students today, nothing was linear, it was problem solving and inquiry oriented, to look at future can't just look at rational, it's more fluid modernity (Zig....), I thought I would have one job for one life, have one life, but...

A: That's how I got to Chris. Then a lot of frustrating meetings at PRU with all different kinds of people, started out with Long Kids, white paper-ish proposal teaching kids about long term thinking, were going to propose it to Gates, CR, Program Developer was working with all these people. Became a moving target, my job turned more into helping them frame what they were going to do. We may have had a DRAFT of something (she'll share), the challenge at PRU was getting a professor finding the PI for the LTFT, Advancement can't write grants and launch projects. Professors can. So, what's my job here? Interested in helping
– I'd been helping kids to develop mindset and thinking longterm, for me, until I was writing my college apps, wasn't thinking about long term. Important for me the opportunity of thinking about the future that young people get that opportunity.

12:02
A: Trying to help them do that, same meetings over and over again, finally the PI of the LTFT came in (trying to go through Ed dept.) always who has students in classrooms, trying to think about the big thing, without the
Little things. Finally the PI appeared from CR, the Program Developer's relationship with her, and she got what we trying to do. We – CR and I were trying to form something. She knew this as a new ways of COMPETENCY - saw connections to CRITICAL THINKING AND THE RICHNESS OF IT
= Then CR found the Lead Professor, but I had worked with the Lead Professor already, he had brought his students down to talk with me IFTF, I had started to talk to the Lead Professor, but CR had found him and said there's this guy. The Lead Professor had been doing futures activity in his class,fell into place with that team major turning point, realizing – Chris realizing – this is going straight to K-12, NO
THERE THERE – figure it out first by doing it with university students. Get off the ground so we can learn, and The Lead Professor had been doing this so we had momentum. In all this time having meetings with

The Private Funder ...finally
got – have them to do scenarios, 5 pager, (THE PROJECT CONSULTANT WILL FIND IT)
SHIFTING FROM K-12 TO UNIVERSITY WAS A BIG THING

The money came in, class was started, needed to have a whole thing, stayed up for a week and a half and developed three courses. It was insane. We just had to try something. The Lead Professor has all of that, and I have it, and can give it to you. Walk through and see what the decisions we made

NEXT MEETING – THE LEAD PROFESSOR AND THE PROJECT CONSULTANT CAN WALK US THROUGH THAT

12:08
A: We had to make decisions, what are the time frames, one of the struggles and decision points, are we making forecasts or presenting them with forecasts so they can explore questions. Big difference. For me, do we want them to make a forecast or be able to ask long-term questions, can they be presented with a context, 50 years from now, and can they operate in that context and understand the possible. Both are long term thinking BUT DIFFERENT ACTIVITIES.

BIG QUESTION: IS THE GOAL FOR STUDENTS DO A FORECAST OR BE ABLE TO DO LONG TERM THINKING AND WHERE DO WE WAN TO BE IN THERE?

J: Great, that's helpful.

A: I made decisions myself before I knew if we'd even get paid. The Lead Professor and I would have discussions, we can do X then Y, but it means, if we do Forecast, they need to do research, they need to be able to understand the change, they would need to be scaffolded to prepare, set of resources, here's something you can look at so you can look at a trend, prepare the whole environment for them. The Lead professor and I went back and forth and what that meant and what we would have to do for them.

A: Can look back at her notes, and email. As I look at the document, around those are choices

J: Piece missing – uncovering layers of decision making, because long term thinking is such a huge thing. The Private Funder was talking – and still is – about being a degree, it's something – get a certificate or degree, can major in this. RAISES ISSUES HAVE TO GO THROUGH ACADEMIC SENATE. For me, is that the point of this, is it this, or to think long term.

RICH POINT – I DIDN'T WANT THE GOALS OF LONG TERM
THINKING TO GET LOST WITH BUILDING A MAJOR: BACK TOBASICS TO THINK
LONGTERM. DECISION:

IN Design Thinking, liberating for educators and students, people going through these programs, not becoming designers, but learning how to think like a designer, there's certain ways of thinking – empathy, user centered, ideation and brainstorming, collaborative and creative ways, converging ideas and modeling, other firms have their process, basic fundamentals, through which they think through these frames, for me it made sense, not majors, thousands of people who become designers, but they have design way of thinking, ways of approaching problems, fundamental concepts, if you understand them you are making questions, connections, conclusions, drawing certain, that's always I've always pushed on what is it that we're doing, That's how we came to PACE LAYERS – ONE OF THE BIG CONCEPTS IS TIME HORIZONS – Pace layer Framework, nice way of thinking about those questions, Big Chunk, Concept if students can learn this, one tool they have for thinking long term.

12:18
J: Talk to us about Pace Layers

A: I'd known about Stewart Brand, and Long Now, I don't know how...he got the concept from Architecture – Sheering Layers – he's a great thinker, and he applied it to civilizations and societies, and he did one of the SALT TALKS – he's talking about the future of cities. Not much out there in terms of visuals. IN earlier classes, had them to do a Salt Talk, had used it, and coming at me in several different ways, in prior stuff, already thinking about core concepts in long term thinking.
WHAT WOULD THEY BE. ALWAYS HAD TIMEFRAME AS ONE OF THEM.

Talked to Lead Professor and said we need to use THIS – easily understood, framework for one concept

A: Both, in the sense that Time Horizon is a core concept (Paul sSappho) forecast, question is what's your time horizon, really core, and then next what happens to the kinds of questions you ask, fundamental futures stuff, AROUND UNCERTAINTY – if you're going out in time, your certainty changes, g
row more or less certain of, demographics changes, pretty certain about numbers,technology and innovation can change really fast. Time horizon and pace layer – clear way to show and rates and pace of change in different layers of our society and civilization and those are happening at the same but all intersecting. Changing at different times, cross impact, fashion and markets changing fast, maybe later get in substantiated into culture, or other way around, way to talk about change and pace of time and impacts of

that change.

12:24 CROSS IMPACT AND WILDCARDS – CORE CONCEPTS PACELAYER – CORE SIMPLE FRAMEWORK TO APPROACH THESE CORE CONCEPTS AND IT'S EASY TO EXPLAIN THAT TO SOMEONE IN 11 WEEK CLASS

J: That's a piece – what can you cover in an 11 week class

A: Another huge issue, class starts in January and ends in March, didn't dawn on me, first quarter (otherthing) HUGE LEARNING - TOOK A WHOLE YEAR TO PARE DOWN 10 WEEKS OF WORK PLUS A FINAL REFLECTING PERIOD, WHAT CAN YOU DO? HUGE CONSTRAINT THAT SHAPED DECISIONS.

In talks to come, you'll see, we did a class of Ethnographic interviews, textual analysis of Salt Talks and integrating a Forecast activity, Huge stuff – early courses happened so fast, still getting our grounding, designing and preparing as class goes, no time to prepare. It just happened.

Now, as I look L and I did look back and iterate. Started planning ahead of time more, what is your process for each class, started even doing week by week, the syllabus planned, but what are the specific week by week class, work together at Arbor Café and what from curriculum, Organizational Frames, L developed a practice of process, - not just CONTENT BUT PROCESSFOR EACH CLASS – GOT INTO HABIT OF DOING THIS TOGETHER COULD ACTIVATE THAT

12:30
J: This is the model for designing for the unknown, for things people don't know they need, UNANTICIPATED OUTCOME – PROCESS OF CONSTRUCTING FOR HIGHER ED NEW AND UNKNOWN COURSE BUT PROCESSES FOR THINKING THROUGH AND MAKING VISIBLE THE STEPS AND PROCESS. That part is usually invisible. Usually done invisibly.

Appendix C: Textual Analysis of Bolman and Deal's Reframing Organizations:Artistry, Choice and Leadership by Junior GSR2

Bolman and Deal: Reframing Organizations: Artistry, Choice and Leadership

Given that this is a core reading for the Communication Theory element of the course that students were engaged with across the weekly readings of this course a detailed analysis of the textbook is presented here. This analysis was developed by examining the syllabus of the course and the textbook itself. This analysis, therefore, provided a context for the IE Team's interpretation of the inter-relationships across the frameworks. It also provided a basis for understanding Dr. LAB' work with students.

1. Regular organizational strategies fail (Chapter 1)
    - Regular strategy for improving organizations: improving management and leadership, and use of consultants, through government intervention (legislation, regulation and policy making)
    - Regular ways to diagnose problems in organizations: (p.34-36) people-blaming approach, to blame the bureaucracy, attribute to the thirst for power
2. What are organizations like? (p.25-27)
    - Complex
    - Surprising
    - Deceptive
    - Ambiguous
3. How to cope with ambiguity and complexity: (p.29-30)
    - -> What is really going on here? (Goffman, 1974)
    - -> Tell the individual both what is important and what can be safely ignored; group a great deal of different pieces of information into patterns or concepts
4. Theoretical stance of reframing: plurality of theory (Chapter 3-14)
    - The structure frame, drawing from sociology, emphasizing the importance of formal roles and relationships
    - The human resource frame, based on organizational social psychological ideas with the fundamental premise that organizations are inhabited by individuals, who have needs, feelings, and prejudices
    - The political frame, developed by political scientists, viewing organizations as arenas in which different interest groups compete for power and scarce resources
    - The symbolic frame, drawing on social and cultural anthropology, abandoning the rationality assumption

Process	**Structural**	**Human Resource**	**Political**	**Symbolic**
Strategic planning	Create strategic direction	Meeting to promote participation	Arena to air conflict	Ritual to reassure audiences
Decision-making	Rational process to get right answer	Open process to build commitment	Chance to gain or use power	Ritual to build values, bonding
Reorganizing	Improve structure/ environment fit	Balance needs and tasks	Reallocate power, form new coalitions	Image of accountability, responsiveness
Evaluating	Allocate rewards, control performance	Help people grow and develop	Chance to exercise power	Occasion to play roles in organizational drama
Approaching conflict	Authorities resolve conflict	Individuals confront conflict	Bargaining, forcing, manipulating	Develop shared values, meaning
Goal setting	Keep organization headed in right direction	Keep people involved and informed	Let people make their interests known	Develop symbols, shared values
Communication	Transmit facts, information	Exchange information, needs feelings	Influence or manipulate others	Tell stories
Meetings	Formal occasions to make decisions	Informal occasions to involve, share feelings	Competitive occasions to score points	Sacred occasions to celebrate, transform culture
Motivation	Economic incentives	Growth, self-actualization	Coercion, manipulation, seduction	Symbols, celebrations

5. Which frame to choose? (Chapter 15-17)

Question	If yes:	If no:
Are individual commitment and motivation essential?	Human resource, symbolic	Structural, political
Is technical quality of decision important?	Structural	Human resource, political, symbolic
Is there high level of ambiguity, uncertainty?	Political, symbolic	Structural, human resource
Are conflict and scarce resource a significant factor?	Political, symbolic	Structural, human resource
Are you working from the bottom up?	Political, symbolic	Structural, human resource

Due to the complexity, conflict and uncertainty of the world, managers need multiple frames to survive, understanding that any event or process can serve multiple purposes and that different participants are often operating in different frames. Important organizational variables that help to assess which frames are likely to be salient and effective in any given situation: commitment and motivation, technical quality, ambiguity and uncertainty, conflict and scarce resources, working from bottom up.

Each frame provides a distinguish framework for action, and each is likely to lead to different results, even when applied to the same situation. To figure out which frameworks best in a given situation, managers can use scenarios as guidelines for managing and leading organizations. How well a scenario will work depends on both the situation and the skill of the person who applied it.

6. External pressure for organization change (Chapter 18-19)

Globalization, information technology, deregulation and demographic change are major organizational change generates four kinds of issues:

- Having an effect on individuals' needs to feel effective, valued and in control;
- Requiring new kinds of structural alignment with the organizations;
- Causing conflict among those who will benefit and those who will not benefit from it;
- Resulting in loss of meaning for some members of the organizations.

7. Integrated leadership (Chapter 20-23)

Each frame captures significant possibilities for leadership, but each is incomplete. Leaders need to understand their own frame and its limits. Ideally, they will also learn to combine multiple frames into a more comprehensive and powerful style. At the same time, it is unrealistic to expect every manager to be a leader for all times and seasons. Wise leaders understand their own strengths, work to expand them, and build teams that together can provide leadership in all four modes – structural, political, human resource, and symbolic.

maps, charts, etc. Students may need to photocopy some items at less than 100% in order to fit them within the margins. Other oversize items may be folded to fit within the margins or may be put in special pockets in the back.]