

## Toward the Systematic Integration of Naturalistic Inquiry in LSP Research

Steven J. Sacco  
*Sacco Global Consulting*

Follow this and additional works at: <https://gbl.digital.library.gwu.edu/>

---

### Recommended Citation

Sacco, S.J. (2023). Toward the Systematic Integration of Naturalistic Inquiry in LSP Research. *Global Business Languages*, 23, 74-91.

Available at (DOI): <https://doi.org/10.4079/gbl.v23.6>

Copyright © 2023 Steven J. Sacco. *Global Business Languages* is produced by The George Washington University.

This is an Open Access journal. This means that it uses a funding model that does not charge readers or their institutions for access. Readers may freely read, download, copy, distribute, print, search, or link to the full texts of articles. This journal is covered under the [CC BY-NC-ND license](https://creativecommons.org/licenses/by-nc-nd/4.0/).  
<https://creativecommons.org/licenses/by-nc-nd/4.0/>

## **Toward the Systematic Integration of Naturalistic Inquiry in LSP Research**

**Abstract:** In this paper, the author presents a case for the systematic integration of naturalistic inquiry in language for specific purposes (LSP) research. Naturalistic inquiry (NI), in the context of LSP, is an empirical approach to better understand human behavior in natural settings such as classrooms, workplaces, healthcare facilities, criminal justice, community service, and other venues for the purpose of designing courses, training, and instructional materials on behalf of LSP students. NI, which includes the use of diary studies, single-researcher ethnography, team ethnography, and mixed methods, is one approach answering to Doyle's call (2012) for the teaching of LSP based on empirical research. To make the case, the author illustrates the impact of several NI studies on LSP curriculum development and then proposes a five-step program to educate, train, fund, and mentor future NI researchers. The paper concludes with an overview of challenges to conducting NI, coupled with a description of a key funding source to support NI training and research in LSP.

*Keywords:* backward design, domain analysis, ethnography, faculty training, global business, language for specific purposes (LSP), grant support, grounded theory, naturalistic inquiry (NI), team ethnography

### **Introduction**

Language for specific purposes (LSP), a sub-field of second language acquisition (SLA), has witnessed explosive growth over the last few decades. LSP has attracted thousands of students who are eager to study languages within a professional context to complement their study of language, literature, and culture. LSP has united a host of world language professionals emanating from diverse fields such as literature, translation, phonology, philology, applied linguistics, etc. LSP professionals, representing all these eminent fields, have innovatively contributed to the design and development of curricula, as well as service learning, internships, and study abroad programs. There remains, however, one aspect of LSP that warrants improvement and expansion—in his seminal article, Michael Scott Doyle has called for the teaching of LSP to be anchored upon the use of empirical research (Doyle, 2012). Doyle espouses the expanded use of empirical research, in its quantitative and qualitative dimensions, as a valuable tool to better understand learning as it takes place in classrooms and workplace settings representing business, healthcare, law enforcement, and service learning.

Currently, however, many LSP professionals are not formally trained to conduct empirical research, especially using naturalistic inquiry (NI). Even some applied linguists may not have been trained in NI, especially if they were trained during decades in which only quantitative research methods were taught. The goal of NI, in the context of LSP curriculum development, is to discover more accurate learning conditions for LSP students, conditions that reflect the realities of different workplaces. Industrial safety instruction is an example of one workplace reality that the author points out later in this article. Consequently, the goal of this

paper is to motivate LSP practitioners to adopt NI to better understand human behavior in natural settings such as classrooms, workplaces, healthcare facilities, criminal justice, community service, and other venues.

As the author of this current essay, my areas of LSP expertise are in global business and engineering, both in higher education and industry. Through these two lenses, this essay offers insight from first-hand experiences into the incorporation of languages and cultures in global workplaces.

### **The Use of Naturalistic Inquiry**

“Naturalistic inquiry (NI) is an approach to understanding the social world in which the researcher observes, describes, and interprets the experiences and actions of specific people and groups in societal and cultural context” (Armstrong, 2010, p. 880). NI, originally developed in the social sciences, encompasses diverse qualitative research methods from diary studies to team ethnography. Before the use of NI in second-language acquisition (SLA) research, sociologists and anthropologists were conducting studies using NI in a multitude of field settings instead of laboratories, such as homes, churches, hospitals, communities, public agencies, homeless shelters, businesses, and more. Through NI approaches, sociologists and anthropologists collect and analyze data from these settings through the use observations, interviews, and descriptive data such as written records to provide rich descriptions and interpretations of complex social phenomena. Well-known anthropologist Clifford Geertz (1973) referred to this rich data as “thick description”—the detailed explanation of behavioral phenomena. Conducting NI research requires that “the researcher is the research instrument” who “engag[es] in daily activities and conversations with group members to understand their experiences and points of view” (Armstrong, 2010, p. 880).

From start to finish, qualitative researchers immerse themselves in a field setting using the following steps (adapted from Lincoln & Guba, 1985; Fetterman, 1989; Sacco, 1995; and Armstrong, 2010):

1. Gain access and enter the field site.
2. Build trust with all stakeholders.
3. Gather data (observations, interviews, collection of records).
4. Ensure accuracy and trustworthiness (verification and cross-checking of findings).
5. Analyze data (from day 1 to the end of the study).
6. Formulate interpretations (also an ongoing process).
7. Gather additional data.
8. Document findings (field notes, write-ups).
9. Member checking (sharing conclusions and conferring with participants).
10. Departure from the field site.

In addition, NI researchers in all academic disciplines employ all of a combination of the following three key data gathering tools: interviews, participant observations, and written record gathering (official records, exams, quizzes, compositions, etc.). This tridimensional toolbox enables researchers to hear directly from study participants, to witness the participants doing routine activities, and to analyze documentation relating to the participants or the setting. Three dimensions of data gathering—of acquiring knowledge, interviews, observations, and record

collection—are also necessary to document *triangulation*, in which the researcher needs to evaluate congruence among multiple sources of information (Armstrong, 2010).

The interview is a powerful tool to gain first-hand information from workers or students or anyone else under study. The *ethnographic interview* involves intently listening to and documenting stories from communities of people. Within the author's own work, the following communities were interviewed: French West African griots, women beekeepers in northern Ivory Coast, United States Navy SEAL operators, undergraduate students pursuing engineering majors enrolled in a French 101 course, Spanish-speaking rice mill workers, multinational corporations, and African women employed in the male-dominated field of global supply chain management. The information that these participants reveal in interviews is often previously unknown to instructors, administrators, or managers.

*Participant observation*, the NI researcher's second powerful tool, entails the "systematic description of events, behaviors, and artifacts in the social setting chosen for study" (Marshall & Rossman, 1989, p. 79). Some examples of observations include unstructured observations as seen in the description of workers' behavior in a rice mill, and highly structured, moment-by-moment observations of a team. The ability to observe students in the classroom or workers in an industrial setting provides the researcher with insights that support, or in some cases, contradict interview data.

*Written record gathering*, depending on the setting, may assume several forms. In a classroom setting, record gathering may include assessments and assignments, such as L2 exams, quizzes, compositions, and so forth. In a global business setting, record gathering may include memos, reports, safety regulations, human resources records, etc.

### **Rationale for Integrating Naturalistic Inquiry in LSP Research**

Naturalistic inquiry is in its infancy in LSP research despite an established track record of this type of research, mostly in English for Specific Purposes (ESP) (see e.g., Janssens & Steyaert, 2014; Kankaanranta & Louhiala-Salminen, 2013; Neeley, 2012). Doyle (2012) calls for a foundation for the teaching of LSP based on empirical research. In other words, are the "specific purposes" in our current production of LSP courses and materials valid or are we teaching what Long et al. (2019) identify as "language for nebulous purposes" (p. 501)? How effective are LSP instructors at preparing global-ready students? Have we extended our research beyond the classroom to corporate workplace settings or other venues where our former students work? Have we investigated what linguistic and intercultural tasks they use in those workplace settings? Have we conducted domain analyses and developed courses via backward design? Empirical research, especially NI, will address these questions. Naturalistic inquiry provides many advantages for LSP research, including:

1. Naturalistic inquiry lends itself to explore participants' natural settings (Frey, 2018): in the case of studies of global business and engineering within both academic, industrial and military settings, they include classrooms, military bases, agricultural mills, United Nations workplaces, and multiple corporate settings. For other LSP researchers, natural settings include healthcare (Ruggiero, 2022), community service (Abbott & Lear, 2010), and criminal justice venues (Crank & Sacco, 2001).

2. LSP academic and workplace settings naturally lend themselves to data collection such as participant observation, subject interviews, and the analysis of student work—or in a corporate setting—employee and manager documents.
3. Naturalistic inquiry invites “thick description” (Geertz, 1973) to provide a deep understanding of our students, clients, and other stakeholders as well as to make meaning of their complex behavior and actions.
4. The use of naturalistic inquiry is a teaching tool to mentor future researchers among our students in studies involving team ethnographies (Sacco, 1991, 1992, 1995).
5. Naturalistic inquiry is best suited for conducting domain analyses and promoting backward design, pertinent research topics as discussed by Lear & Guerra (2021).

In the following sections, the author will discuss four specific NI methods, including the diary study, single-researcher ethnography, team ethnography, and the use of mixed methods.

### The Diary Study

Bailey & Ochsner (1983) define the *diary study* in second language learning or teaching as “an account of a second-language experience as recorded in a first-person journal” (p. 189). The diary study is perhaps the logical first step in introducing LSP researchers and students to NI. It is the least complicated of any naturalistic research tool; it is the easiest study to conduct, and rewarding in yielding rich information and insights into learners’ reflections on their language acquisition. The diary study is flexible in that LSP researchers and/or their students can use it to document the learning encounters they face. The diary study can help to release “hidden voices” (Nunan, 1996, p. 41) that is, “voices from the classroom” (Bailey & Nunan, 1996, p. 1). The diary study is a safe space for students to reveal learning anxiety or other learning factors. It is also a way for language faculty, for example, to describe their re-entry into language learning (Bailey, 1996, p. 15) in order to recapture what it is like to be a student again.

Complementing Bailey and Nunan’s “Voices from the Classroom” (1996) an archive of NI-driven ESP researchers over the last few decades, have focused on discovering “voices from the workplace.” Selected research topics include:

- The effects of language and culture on multilingual workplaces (Janssens & Steyaert, 2014; Lecompte et al., 2023;) and on multinational teams (Saulière, 2013; Shapiro et al., 2005).
- The impact of limited English proficiency on multilingual workplaces within United States agribusinesses (Doughrate, 2014; Sacco, 2017).
- The impact of “Englishnization” on multilingual workforces (Kankaanranta & Louhiala-Salminen, 2013; Neeley, 2012).

These workplace perspectives provide insights in global workplaces that LSP students may soon enter. Understanding these varied experiences helps to accurately shape LSP/ESP curricula in order to prepare students for the professional contexts in which they will work.

Like any quantitative and qualitative research tools, the diary study has strengths and weaknesses. The diary study offers a holistic investigation of classroom language learning, professional experiences, such as LSP-oriented internships, or, after graduation, professional

work experiences set in a global environment. Conversely, experimental studies are inherently not holistic investigations as most researchers limit the number of variables within a study. Like all research methods within NI, the results of the diary study can take a heuristic (exploratory) approach and be creative in discovering new variables that play important roles in classroom-oriented language learning or in generating new hypotheses concerning SLA (Matsumoto, 1987).

Matsumoto (1987) recommends that, whenever possible, the researcher should investigate the language learning process of multiple subjects rather than just depending on one diary study participant. This strategy is designed to make the findings in diary studies more generalizable. Bidlake (2010) in a doctoral thesis, for example, researched 70 students who studied a language using computerized self-instruction. Student diaries were her major data collection tool to determine the effective of computer-assisted language learning (CALL). Bidlake researched two CALL programs offering the students a choice of six languages. Students logged 96 learning sessions totaling 75 hours of study. Bidlake found that students overwhelmingly expressed dissatisfaction with their CALL language course, several of whom dropped out of the course. In examining student diaries, Bidlake identified several factors that caused student dissatisfaction: lack of self-discipline, difficulty with technical problems, and the lack of teacher assistance. Students questioned the CALL program's ability to teach effectively as compared to traditional teacher-led language course offerings. The study concluded that, for many students, CALL instruction may not be an effective replacement for teacher-led courses.

Below are some sample LSP research scenarios where diary studies research could be conducted:

- An internship in a healthcare facility by medical Spanish students.
- An online intercultural exchange in an LSP course between United States and French students.
- A content-oriented study abroad experience in a business or engineering school in Germany.
- Teaching in a K–8 dual-language immersion program.

### **Single-researcher Ethnography**

When we think of ethnography, our thoughts usually revert to well-known anthropologists Margaret Meade or Jared Diamond who conducted studies alone or what Douglas (1976) called “lone wolf” or “lone ranger” ethnography. Both individual and team ethnography, adhere to phenomenology, grounded theory, prolonged engagement, highly disciplined data collection, and the use of triangulation to validate studies. Denzin's (1970) definition of methodological triangulation “promotes the use of several data collection methods such as interviews and observations” (p. 301). Prolonged engagement refers to the process of spending a significant period of time in a natural setting to study and document a phenomenon of interest like in any ethnography (Cohen & Crabtree, 2006). During a prolonged engagement, a researcher or researchers observe key aspects of a setting, interview a wide range of people, develop relationships, and build rapport with members of the culture.

Discussed below is an example of a current single ethnography study (Sacco, 2017) that focuses on a US multinational agribusiness where Spanish and English may be viewed as competing within the workplace. The study's findings have direct implications for current Spanish for Special Purposes (SSP) programs in the United States and constitutes an example of

how NI researchers seek to better understand work-related contexts to make our LSP classes more reflective of global business realities.

In 2015, GlobalAgInc (GAI) (a pseudonym to ensure anonymity), a major US agribusiness leader hired the author to design an instructional program to enhance the English-language skills of L2 English-speaking employees worldwide. GAI employs over 30,000 workers operating in more than 250 plants and 400 crop procurement facilities in over 150 countries. GAI’s domestic operations, spread across 30 states, include grain elevators, ports, and shipping terminals used to store both raw materials and finished products. GAI’s workforce consists mostly of Spanish-speaking immigrant workers either through full-time employment or part-time employment provided by an employment agency.

GAI offered the researcher one week to investigate a typical mill where, in this case, Spanish-speaking workers were not adhering to the corporation’s English-only workplace language policy. A one-week ethnographic study of a rice mill in northern California is not a prolonged engagement in terms of time onsite, but the week did provide ample time to study plant activities and workers’ behaviors to serve as the underpinnings of an online instructional program in English for safety purposes or “safety English.” GAI provided unprecedented access to 1) observe all plant activities; 2) interview all employees, foremen, and managers; 3) examine the mill’s safety documentation; and 4) attend a 60-minute global safety videoconference. Table 1 lists the data types for the study and domain analysis for the backward design of the online safety English instructional program.

**Table 1**  
*Stakeholders and Data Sources for the Ethnographic Study at a Northern California Rice Mill*

<b>Stakeholders</b>	<b>Data Source</b>
Spanish-speaking rice mill workers	Interviews, English language learning (ELL) assessment, and observations of all 10 work stations.
Mill foremen	Interviews, observations, and attendance at pre/post-shift worker meetings.
Department managers	Interviews and data collection (e.g., measurement of decibel levels, forklift speed restrictions, etc.).
HR executive	Interviews and worker employment data.
Safety manager	Required safety test (English, Spanish), discussion of 83 safety hazards, personal protective equipment distribution and explanation, and discussion and study of OSHA safety resources.
Plant manager	Interviews, demonstration of a controlled explosion, attendance at a global safety videoconference, and daily debriefings.
World headquarters officials	Overview of ethnographic study, presentation of the safety English program, question and answer session, and feedback from senior officials.

Interviews with all stakeholders was the primary tool of the ethnography. Employee interviews, 30 to 45 minutes in length, were designed to test English proficiency levels and learn about their job tasks. The plant manager requested a 30-minute interview with the researcher at the outset of each workday and at the end of the day. The safety manager provided several interviews during the week to prepare the researcher for mill observations, to illustrate the dangers of safety hazards, and to discuss how GAI safety data is collected and analyzed. Interviews with mill foremen provided operational insights but more importantly, they often served to confirm or deny claims made by employees or managers.

Observations within the rice mill took place all five days of the study. The researcher observed the activities at all 10 work stations, but the most pertinent information emanated from observing pre-and post-shift meetings. The pre-shift meetings, which took place in English, served to orient workers to possible problems during their work day. The post-shift meetings summarized major work activities for the day and served to confirm or reject data the researcher collected that day. During both daily meetings, the researcher sat beside the workers to see who was following the shift speaker's English presentation and which workers needed translation from a neighboring worker. Despite an eight-year track record of no major injuries, language issues (miscommunication, comprehensibility issues) are potentially as dangerous as the 83 safety hazards listed by GAI.

Safety, as a major industrial theme, was uncovered as a result of NI. Sacco's (2017) findings support the case for the systematic integration of NI in LSP research. The results of the GAI study are significant because striving to provide more accurate learning conditions for LSP students should be the primary goal of LSP faculty.<sup>1</sup> Many LSP graduates, especially engineering and business majors, work in industrial settings worldwide. Furthermore, the graduates of our SSP programs may need to regularly discuss safety issues with workers in Spanish despite working for a US company or corporation, where use of English is often, though not always, expected or required. Despite this reality check, is industrial safety being taught in-depth in SSP programs? As of this writing, the author has only found one SSP program which teaches industrial safety: Indiana University of Pennsylvania's Certificate in Spanish in Safety Sciences. Safety is not only important in industrial settings, but also in other settings such as healthcare and law enforcement.

### **Team Ethnography**

*Team ethnography* adheres to the same principles and practices of single-researcher ethnography. The only difference is the inclusion of faculty and/or student researchers as part of the study. According to Clerke & Hopwood (2014) "ethnographic teams comprise individual members who contribute vastly different knowledge, experiences and skills to the collaborative research enterprise" (p.1). In the study to follow, the use of trained undergraduate students as researchers offers an experiential learning opportunity for students to engage in team ethnography.

Team ethnography is generally used in a large study where several researchers are needed to provide multisite coverage. Team ethnography's other advantage is the inclusion of new researchers (e.g., students or interns) to collect and analyze data as well as to gain experience in ethnographic research. One such example is Loughrin-Sacco et al. (1992) who report on a group of research interns studying a year-long elementary French course designed for engineering majors. As more world language programs are adding undergraduate and graduate LSP

---

<sup>1</sup> To see how NI has influenced the teaching of business English, see Kankaanranta (2015).



specializations, the University of Alabama at Birmingham for example, team ethnography can serve as the training ground for future LSP researchers.

I employed team ethnography with a group of engineering students enrolled in elementary French classes during the 1986–1987 academic year at Michigan Technological University (MTU). The goal of the project was to gain insights into how engineering students learn French in a classroom setting. The tools to conduct the study consisted of the classic triad of ethnographic data-collection measures to ensure triangulation: daily classroom observations (150 total), interviews with course participants (315 hours total), and the collection of all student work, teacher course records, and other relevant documentation comprising around 3,000 pages.

Team ethnography strengthens data-analysis because it adds researcher triangulation to data-source triangulation. Team ethnography responds to the criticism that “researchers are lone rangers, cowboys, individualists. Analysis is private, field notes are rarely available for secondary analysis, and much ethnographic writing is accepted on faith” (Fine, 1993, p. 269). In the elementary French study, the research team strove to agree on hypotheses and conclusions. The inherent difficulty in finding concurrence among researchers pushed team members to locate ample evidence to support their positions. The research team reduced the danger of researcher bias by inserting two researchers on a rotational basis in the class for observation and including an auditor to referee data analysis.

The author’s research team followed a precedent for including student researchers. In prior team ethnographies of a 10-week first year English composition class and an art appreciation class (George, 1990; George & Young, 1991), MTU humanities professors discovered that undergraduate researchers were dedicated and capable data collectors and critical analysts. They also proved to be tenacious and successful debaters in defense of their arguments. Most importantly, the faculty researchers found that the undergraduate researchers developed an unusually strong rapport with their student informants. Conversely, faculty researchers alone would not have had the same success soliciting honest and frank information from students in the study.

The dynamics of team ethnography in the elementary French study are worthy of note. There was no evidence of rank-based bias among the group of two faculty researchers and the five students. The student researchers enjoyed parity with the faculty researchers to eliminate any chance of intimidation in data analysis. Whenever a stalemate occurred in data analysis, the student auditor intervened, listened to competing arguments and made a ruling. As a result, the debate over hypotheses was often fierce at meetings held every Wednesday evening.<sup>2</sup>

In classroom observations, two sets of student researchers rotated in and out of the class, which allowed for multiple sources of data collection and analysis. They sat in the back corners of the classroom where they analyzed student and instructor behavior. During classroom observations, for example, the student researchers documented where students sat, what they whispered when the instructor was out of earshot, when they whispered complaints, which students answered questions and which students kept silent, on whom the instructor called and on whom he did not. In addition to observations and interviews, the student researchers examined and analyzed the syllabus, the textbook, the textbook-sponsored exams, student compositions (writing intensive class), as well as the mistakes on student exams. All observations were written by hand, noting classroom behavior in five-minute segments. Table 2 provides an example of student observational notes.

---

<sup>2</sup> For a description of the training program that student researchers completed, see Loughrin-Sacco (1995).

**Table 2**

*Sample of a Student Researcher's Observation Notes (Loughrin-Sacco, 1995, p. 431)*

9:05	<p>Teacher tells class to break up into groups of three.          Russ, Mary, and John place their desks facing each other.          Russ asks group in English what they're supposed to do.          Mary answers in English; ask interview questions on p. 45.          Mary asks other two from text: "Qui la vaisselle chez vous?"          John laughs, says: "Pas moi!"          Russ says haltingly: "Moi, je faire la vaisselle."          T, facing group, corrects Russ: "Je <i>fais</i> la vaisselle." "Don't forget to conjugate the verb."</p>
------	---

Classroom observations served as the point of departure in participant interviews. Interviews served to clarify hypotheses generated through classroom observations and they served to provide student informants with an opportunity to express their feelings. Student researchers, using both structured and unstructured interviews, were skilled at developing rapport with their 11 student informants, which led to an outpouring of information and feelings, both positive and negative.

The course instructor, though possessing good classroom rapport with most of his students, was shocked at the specificity of comments and the intensity of emotions while reading the interview transcripts after the end of the academic year. For example, Eric, a pseudonym, criticized the busywork involved in completing the textbook's "communicative" workbook exercises and claimed that it took away from his letter writing to friends in French; several students disputed the instructor's communication-based course goals, claiming that grammatical accuracy and spelling precision were the keys to getting a superior grade; most of the 11 informants said the textbook "sucked" despite its popularity among teachers nationwide; one informant suggested that textbook publishers should include more students and fewer professors in the textbook development process. Interviews were structured and/or open-ended. Table 3 provides a sample of a structured interview.

**Table 3**

*Sample of a Structured Interview (Loughrin-Sacco, 1995, p. 433)*

- |    |   |
|----|---|
| 1. | Your French professor has told you that in your French class four different skills are covered: speaking, listening, reading, and writing. Of these, which do you consider to be your strengths? Your weaknesses? Rank order them for me. |
| 2. | Can you describe for me the writing assignments you do for French? What does the teacher expect on these assignments?   |
| 3. | What kind of responses do you get on these writing assignments? How do you feel about the responses? When you get a writing assignment back, what do you do with it? How do you usually do on the assignments?                            |
| 4. | When you have a writing assignment, exactly how do you go about doing it?   |
| 5. | What role do these assignments play in the French course? What do you think the teacher intends for you to get from them? What (if anything) do you actually get?   |

The MTU study (Loughrin-Sacco et al., 1992) revealed that there was an plethora of factors that inhibited classroom language learning: many of these factors (institutional, social, and professional constraints) had yet attained mainstream status in SLA research at the time of

the study.<sup>3</sup> The team's most powerful finding argued that institutional, social, and professional variables impacted learning far more than did variables involving teaching methodology. The research team in the MTU study concluded that the French program should focus more on designing the "ideal" language-learning context than the "ideal" teaching method.<sup>4</sup>

Again, as in the single-researcher ethnography (Sacco, 2017) where safety emerged as a major industrial theme, the use of NI revealed a rich first-hand description of factors that impeded learning in the elementary French class. Institutional, social, and professional variables impacted learning far more than variables involving teaching methodology back in the 1986 study. The same is probably true in 2023.

### Mixed Methods Research

Mixed methods research, a subset of NI, involves the use of both quantitative and qualitative research to address a research question. When conducted in an authentic setting, mixed methods assist the researcher in gaining a more complete picture of LSP-oriented phenomena, as its use combines the benefits of both methods (George, 2022). A researcher benefits from the "thick description" and insights from the qualitative dimension as well as the generalizable and "externally valid insights of quantitative data." For an example from the author's use of mixed methods (Sacco, 2018), he distributed a four-question survey (quantitative) to determine whether engineers work in French or English for the 20 multinational corporations operating within French West Africa. He then conducted follow-up interviews via LinkedIn (qualitative) with several of the 66 respondents to better understand the conditions when the engineers work in French vs. English. Sacco and Ohin-Traoré (2022) and Sacco and De Koffi (2022), both using mixed methods, served as follow-up studies of engineers in Francophone Africa.

Below are three examples of questions inviting a mixed-methods approach that George (2022) shares with readers:

- To what extent does the frequency of traffic accidents (quantitative) reflect cyclist perceptions of road safety (qualitative) in Amsterdam?
- How do average hospital salary measurements over time (quantitative) help to explain nurse testimonials about job satisfaction (qualitative)?
- How do student perceptions of their school environment (quantitative) relate to differences in test scores?

In yet another example of NI, Reisinger (2022) conducted a mixed methods study to better understand the impact of her course "Online Intercultural Exchanges in French for the Professions." The course was taught online at a time when in-person study abroad was not

---

<sup>3</sup> The use of team ethnography in the 1986-1987 study led to the publication of the study in the *Canadian Modern Language Review* (Loughrin-Sacco et al., 1992). The article was nominated for the ACTFL/MLJ Paul Pimsleur Award for Research in Foreign Language Education. In addition, the author presented his findings on using student researchers at the 1995 Georgetown University Round Table on Languages and Linguistics.

<sup>4</sup> It is interesting to note that Henshaw & Hawkins's (2022) *Common Ground: Second Language Acquisition Theory goes to the Classroom* barely mentions institutional and social constraints. The findings of the Michigan Tech study have been used by Krashen (1991, 1994, 1995, 1998, 2002), Swaffar (1989), Dupuy & Krashen (1998), Tse (2000), and others to call attention to the power of institutional, social, and professional constraints in collegiate language learning. Instructors using Henshaw and Hawkins's impressive collection of classroom activities may encounter the same problems as instructors in the Michigan Tech study if these constraints continue to exist.

feasible during the COVID-19 epidemic. Reisinger posited whether the online nature of her course might negatively impact class community and student achievement. A colleague in France, a Business English professor agreed to participate in the semester-long exchange. The Aix-en-Provence-based professor noted that her students were also following lockdown measures, echoing Reisinger's concerns about the potential toll of this isolation on students' mental health.

To overcome these unique pedagogical challenges, Reisinger and her colleague in France decided to incorporate an online intercultural exchange (OIE) within Duke's advanced-level "Working in French" course and an analogous course in France. Fourteen students each from Duke and the École supérieure des sciences commerciales d'Angers School (ESSCA) of Management participated in the online exchange. After an initial 75-minute exchange, students participated in four 30-minute sessions. The instructors asked students to speak French for half of each exchange and half in English.

The students met every other week where they discussed topics such as the job search, workers' rights, advertising laws, and international diplomacy. Following each discussion, Reisinger's students completed a short (250 word minimum) structured reflection in English. At the end of the semester, her students were administered a survey combining qualitative and quantitative questions related to their experiences in the exchanges. Reisinger's survey questions (quantitative) asked students to select which topic generated the most discussion, elicited the most differences of opinions, challenged students the most, and changed their opinion or perspective.

Reisinger also used a five-point Likert scale to ask participants how much they agreed or disagreed with statements that addressed:

- perceived gains in language competencies.
- comfort interacting with native speakers.
- the degree the topics challenged their personal perspectives.
- adjustment of their personal interactions with persons of another culture.

In addition to the copious amounts of quantitative data Reisinger collected, student written feedback (qualitative) richly complemented survey findings. One student revealed that in classroom conversations, she "always froze on the spot when talking . . . my brain just always blocked itself for some reason" (Reisinger, 2022, p. 9). However, constant discussions with ESSCA students got her "past this psychological barrier. I think it's because I finally saw speaking French as a way to just communicate with equal peers, as opposed to doing well in a class" (p. 9).

When describing the relationship between Duke and ESSCA students, three quotes summed up students' feelings:

- One of my main takeaways from this exchange is that there are more similarities between French and American culture than I realized. Because we are often focused on the differences between the two countries, it is easy to forget that there are also many similarities. (p. 10)
- Across all of our meetings with the ESSCA students I found that there are a lot of cultural differences between the US and France across a broad range of topics from professional life and working culture, to governmental practices. Yet, I also

felt that the [French] students and [US] students in our group agreed on more topics of discussion than we disagreed. There are some similarities that might be based on being a similar age. I feel more equipped to work and interact cross-culturally after having this exchange and I really appreciate the social interaction with different students. (p. 10)

—I'm glad we exchanged Instagrams, because through her page I was able to be exposed to current French and African human rights issues with which I was unfamiliar. (p. 10)

In the final analysis, the mixed methods study findings suggest that Reisinger's Duke students benefitted considerably from the OIE course; they self-reported gains in business content, cultural knowledge, and language proficiency. Reisinger's findings demonstrate that OIE projects can also increase learner engagement and motivation for further study despite the pandemic. Online learning, in this context, has highlighted a new and way of developing cultural knowledge and cementing global business content. For LSP researchers interested in a quantitative study focusing on these questions, see Milevica Bojović's "ESP for Biotechnology Purposes in Serbian Higher Education: the Skills Required and Blended Learning Environment."

### **Challenges to Conducting Ethnographic Research within Classrooms and Workplaces**

Today's NI researchers face challenges in most studies they conduct, regardless of the setting. Gaining entry into classrooms and corporate settings may be the biggest challenge. University administrators may worry that a time-consuming qualitative study may disrupt classroom learning. In corporate settings, companies may be busy, secretive, and wary of possible industrial espionage, and thus companies may impose limitations on data gathering. In the single-researcher ethnography involving GAI, this author's data gathering was limited to a week. For Saulière (2013), while researching language use in a French company, the company limited him to observing three employee meetings. During the pandemic, gaining access to classrooms and corporate work venues has been virtually impossible. Under these constraints, NI researchers can still conduct studies using online surveys, interviews, and in the author's case, language performance data from survey participants.

Such limitations were faced in the GAI study described above, due to time constraints. Given more than a week, it may have been possible to interview workers and families at their homes to record their thoughts, perspectives, and concerns away from the rice mill. Interviews with spouses, for example, would have elicited input about safety concerns, the proposed mandated use of English, and its effects on their safety. With additional time, it may have been possible to videotape the typical exchanges between workers using their compact code of communication in Spanish.

An unexpected challenge the researcher faced was GAI's final decision about the proposed online course designed for GAI workers nationwide. The team had previously presented the skeleton of the proposed online safety English program to senior officials at GAI's headquarters in a midwestern state. GAI senior officials enthusiastically approved the proposal in December 2015, but due to unanticipated disappointing financial earnings reported in mid-January 2016, they put the project on hold. GAI promised to revisit the project in early 2017. After the 2016 election, the corporation's concerns pivoted toward the potential negative impact of the President's new immigration policy. Despite the author's disappointment over losing the

large contract, the single-researcher ethnography process was a unique and rewarding experience.<sup>5</sup>

The team speculated on GAI's change of mind, but they had no ethnographic data to reveal the reasons for GAI's decision. Were the GAI senior administrators forthright in their explanation or were they displeased with the author's recommendation to allow Spanish-speaking mill workers to use Spanish while working on the mill floor? Did GAI have more pressing financial concerns? Were illegal immigration issues a concern? These questions remain unanswered.

### **Implementing Naturalistic Inquiry in LSP Research**

The following five-step process is proposed here to increase the use of NI in LSP research:

1. The development of an online two-week-long summer institute on the use of NI research for interested LSP faculty and students.
2. The development of online stand-alone sessions for faculty and students unable to attend the online summer institute.
3. The creation of an online LSP NI research forum to discuss research issues, ask questions, and report findings and upcoming studies.
4. The creation of a sponsored research prize each year for the best NI research study and the best LSP dissertation using NI.
5. The authoring of a grant proposal to fund activities one through four, sponsored by the US Department of Education's International Research and Studies (IRS).

For current LSP faculty (and interested graduate students) who would like to pursue formal NI instruction, the online week-long summer institute may be the preferred one between the first two options. For LSP faculty and graduate students who cannot invest their time in a two-week institute, a series of online stand-alone sessions will be available. The institute and stand-alone seminars will focus on the theoretical and practical aspects of conducting the different methods in NI from diary studies to mixed methods. The online LSP research forum (number 3), could be based, in part, on Mary Risner's Language Learning for Business and the Professions via LinkedIn and Facebook. Course activities for the institute and the stand-alone sessions would include the following:

1. Reading excerpts of the works of naturalist and ethnographic experts including Charles Darwin, Margaret Mead, John Dewey, Egon Guba, Yvonne Lincoln, Shirley Brice Heath, James Spradley, Michael Patton, Kathleen Bailey, Catherine Marshall, Gretchen Rossman, and others.<sup>6</sup>

---

<sup>5</sup> A Spanish-language LSP professional and the author are currently designing a self-paced, mastery-based safety Spanish and a safety English course for workers and managers employed in manufacturing from Alaska to Argentina. The course will also be available to interested engineering and business students enrolled in Spanish for Specific Purposes courses.

<sup>6</sup> Such works could include Lincoln & Guba's *Naturalistic inquiry*, Marshall & Rossman's *Designing qualitative research*, Patton's *Qualitative evaluation and research methods*, etc.

2. Comparing and contrasting quantitative versus qualitative research.
3. Reading and critiquing published ethnographic studies in ESP, LSP, and SLA.
4. Discussing the strengths and weaknesses of NI in an ESP/LSP setting.
5. Discussing and practicing all steps based on NI methodologies from gaining access to the field site to publishing research.
6. Discussing domain analysis and backward design using the ethnographic information and techniques.
7. Practicing conducting observations and interviews.
8. Brainstorming to generate new ideas for future research projects.

In the last step of implementing naturalistic inquiry in LSP research, the author recommends creating an annual research prize for the best ethnographic study: one award for a faculty member and a second award for a doctoral candidate researcher.

To fund LSP training and future research, the IRS is ideally suited to assist faculty, graduate students, and institutions. The IRS program “supports surveys, studies, and development of instructional materials to improve and strengthen instruction in modern foreign languages, area studies, and other international fields” (United States Department of Education, 2023). The “surveys and studies” may be the activities LSP researchers promote in the proposed workshops and they could include actual empirical research that emanates from them. The inclusion of domain analyses and reverse design of language courses would strengthen a proposal from an institutional applicant. Teacher training is not included among the fundable activities, but actual research studies are fundable. The list of fundable IRS projects found on the IRS website will serve to stimulate future research projects.

### **Conclusion**

The goal of this essay is to make the case for the empirical NI research in support of LSP. Although both quantitative and qualitative research are important approaches to the study of LSP data, the author would argue that NI is the preferred research tool toward that end. Naturalistic inquiry lends itself to explore participants’ natural settings and to better understand human behavior (Frey, 2018). Unlike quantitative research, NI facilitates “thick description” (Geertz, 1973) to provide a deep understanding of our students, clients, and other stakeholders as well as to make meaning of their complex behavior and actions. Four modes of data collection—diary studies, single-researcher ethnography, team ethnography, and mixed methods—may be considered to conduct NI research in classrooms, healthcare, criminal justice, and community service facilities, as well as corporate workplaces, to discover and implement more accurate learning conditions for LSP students. Federal funding will strengthen faculty and students’ knowledge of NI’s principles and practices, incentivize, and support new LSP studies, reward outstanding research, and defray the costs of dissemination of the results at national research forums. When steps similar to the five guidelines for implementation of naturalistic inquiry are executed, LSP will see a valuable increase of grounded, contextualized empirical research studies to strengthen the field.

*Acknowledgements:* I would like to dedicate this essay to my mentor Dr. Carol Hosenfeld whose research motivated me to study voices from the classroom and then later voices from the workplace.

### References

- Abbott, A., & Lear, D. (2010). Marketing business languages: Teaching students to value and promote their coursework. *Global Business Languages, 15*, <https://docs.lib.purdue.edu/gbl/vol15/iss1/2>.
- Armstrong, J. (2010). Naturalistic inquiry. In N.J. Salk (Ed.), *Encyclopedia of research design* (pp. 880–885). Sage.
- Bailey, K. M. (1980). An introspective analysis of an individual's language learning experience. In R. C. Scarcella & S. D. Krashen (Eds.), *Research in second language acquisition: Selected papers of the Los Angeles Second Language Acquisition Research Forum* (pp. 58–65). Newbury House.
- Bailey, K. M. (1983). Competitiveness and anxiety in adult second language learning: Looking at and through the diary studies. In H. W. Seliger & M. H. Long (Eds.), *Classroom oriented research in second language acquisition* (pp. 67–102). Rowley, MA: Newbury House.
- Bailey, K. M., & Ochsner, R. (1983). A methodological review of the diary studies: Windmill tilting or social science? In K. M. Bailey, M. H. Long, & S. Peck (Eds.), *Second language acquisition studies* (pp.188–198). Newbury House.
- Bidlake, E. (2010) Going solo: Case-studies of learners grappling with self-instructed CALL. E-thesis, Newcastle University.
- Bojović, M. (2022). ESP for biotechnology purposes in Serbian higher education. In S. J. Sacco & D. Ruggiero (Eds.), *WLSP: World languages for specific purposes: The future is blended. Global Advances in Business Communication*, special issue.
- Clerke, T., & Hopwood, N. (2014). *Doing ethnography in teams*. SpringerBriefs in Education. Springer, Cham. [https://doi.org/10.1007/978-3-319-05618-0\\_1](https://doi.org/10.1007/978-3-319-05618-0_1)
- Crank, J. P. & Sacco, S. (2001). Foreign languages across the curriculum: A model for the delivery of professional language training *Journal of Criminal Justice Education, 12*(1), 193–211. DOI: [10.1080/10511250100085121](https://doi.org/10.1080/10511250100085121)
- Cohen, D., & Crabtree, B. (2006). Qualitative research guidelines project. <http://www.qualres.org/HomeProl-3690.html>.
- Denzin, N. K. (1970). *The research act: A theoretical introduction to sociological methods*. Transaction Publishers.
- Doyle, M. S. (2012). Business language studies in the United States: On nomenclature, context, theory, and method. *The Modern Language Journal, 96*, 104–120. DOI: 10.1111/j.1540-4781.2012.01276
- Douglas, J. D. (1976) *Investigative social research: Individual and team field research*. SAGE.
- Douphrate, D. I. (2014). Worker health and safety on US dairy farms. *The 24<sup>th</sup> Annual Midwest Stream Farmworker Health Forum*, Nov 20–22.
- Dressen-Hammouda, D. (2012). Ethnographic approaches in ESP. In Brian Paltridge and Sue Starfield (Eds.), *The Handbook of English for Specific Purposes* (pp. 501–518). Wiley.
- Dupuy, B., & Krashen, S. (1998). From lower-division to upper-division foreign language classes obstacles to reaching the promised land. *International Journal of Applied Linguistics, 119/120*, 1-7 <https://doi.org/10.1075/itl.119-120.01dup>
- Fetterman, D. M. (1989). *Ethnography: Step by step*. Applied Social Research Methods Series, Volume 17. Sage.



- Fine, G. A. (1993). Ten lies of ethnography: Moral dilemmas of field research. *Journal of contemporary ethnography*, 22(3), 267–294.
- Frey, B. B. (2018). Naturalistic inquiry. The SAGE Encyclopedia of Educational Research, Measurement, and Evaluation <https://methods.sagepub.com/reference/the-sage-encyclopedia-of-educational-research-measurement-and-evaluation/i14402.xml>
- Geertz, C. (1973). *Thick description: Toward an interpretive theory of culture. The Interpretation of cultures: Selected essays* (pp. 3–30). Basic Books.
- George, D. (1990). The struggle with empowerment: Hearing the voices of dissent. In D. Daiker & M. Morenberg (Eds.), *Theory and practice in teaching writing* (pp. 212–219). Boynton-Cook.
- George, D., & Young, A. P. (1991). Voices of participation: Three case studies of engineering students in an art appreciation class. In P. Elbow, P. Belanof, & S. Fountain (Eds.), *Nothing begins with N: New investigations of free writing* (pp. 111–135). Boynton-Cook.
- George, T. (2022, October 10). *Mixed methods research: Definition, guide & examples*. Scribbr. <https://www.scribbr.com/methodology/mixed-methods-research/>
- Henshaw, F. G., & Hawkins, M. D. (2022). *Common ground: Second language acquisition theory goes to the classroom*. Hackett.
- Hosenfeld, C. (1977). A preliminary investigation of the reading strategies of successful and non-successful second language learners. *System*, 5, 110–127. [https://doi.org/10.1016/0346-251X\(77\)90087-2](https://doi.org/10.1016/0346-251X(77)90087-2)
- Kankaanranta, A., et al. (2015). English in multinational companies: Implications for teaching ‘English’ at an international business school. *Journal of English as a Lingua Franca*, 4(1), 125–148. <https://doi.org/10.1515/jelf-2015-0010>
- Krashen, S. (1991). The input hypothesis: An update. In J. E. Alatis (Ed.) *Linguistics and language pedagogy: The state of the art*. Georgetown University Round Table on Languages and Linguistics (pp. 409–431). Georgetown University Press.
- Krashen, S. (1994). The pleasure hypothesis. In J. E. Alatis (Ed.) *Educational linguistics, crosscultural communication, and global Interdependence*. Georgetown University Round Table on Languages and Linguistics (pp. 299–322). Georgetown University Press.
- Krashen, S. (1995). The cause-effect fallacy and the time fallacy. In J. E. Alatis (Ed.), *Linguistics and the education of language teachers: Ethnolinguistic, psycholinguistic, and sociolinguistic aspects*. Georgetown University Round Table on Languages and Linguistics (pp. 346–360). Georgetown University Press.
- Krashen, S. (1998). Comprehensible output. *System*, 26, 175–182.
- Krashen, S. (2002). The comprehension hypothesis and its rivals. *Selected Papers from the 11<sup>th</sup> International Symposium on English Language Teaching/4<sup>th</sup> Pan-Asian Conference*.
- Krashen, S. (2005). Second language “stands for success”: Out of touch with second language research. *The International Journal of Foreign Language Teaching*, 1(2), 12–16.
- Lafford, B. A., & Long, M. K. (2022). Conducting LSP Research: Practical tips for data-driven innovation. *Global Literacy and World Languages for Specific Purposes*. Southern Methodist University.
- Lear, D. W., & Guerra, V. M. (2021). Backward design for LSP: Domain analysis as a consistent research framework for a necessarily decentralized field. *Global Business Languages*, 21, 71–91. Available at (DOI): <https://doi.org/10.4079/gbl.v21.5>
- Lecomte, P., Vigier, M., Gaibrois, C., & Beeler, B. (Eds.). (2023). *Understanding the dynamics of language and multilingualism in professional contexts: Advances in language-sensitive*

- management research*. Edward Elgar Publishing.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Sage.
- Long, M. H., Lee, J., & Hillman, K. K. (2019). Task-based language learning. In J. Schwieter & A. Benati (Eds.), *The Cambridge Handbook of Language Learning* (pp. 500–526). Cambridge University Press.
- Loughrin-Sacco, S. J. (1990). Inside the black box revisited: Toward the integration of naturalistic inquiry in classroom research on foreign language learning. *Polylingua*, 1, 22–26.
- Loughrin-Sacco, S. J. (1991). Of apples and oranges: The effects of integrating beginners and false beginners in elementary French classes. In S. S. Magnan (Ed.), *Challenges in the 1990s for college foreign language programs* (pp. 100–23). Heinle & Heinle.
- Loughrin-Sacco, S. J., Beck, A., Bommarito, E., Erickson, M., McCormick, J., Sweet, W., Miner, J., & Wirth, K. (1992). More than meets the eye: An ethnography of an elementary French class. *The Canadian Modern Language Review*, 49, 80–101.
- Loughrin-Sacco, S. J. (1995). Research internships: Involving undergraduate foreign-language secondary-education teachers in ethnographic research. In J. Alatis (Ed.) *Georgetown University Round Table on Languages and Linguistics* (pp. 428–439). Georgetown University Press.
- Marshall, C., & Rossman, G. B. (1989). *Designing qualitative research*. Sage.
- Matsumoto, K. (1987). Diary studies of second language acquisition: A critical overview. *JALT Journal*, 9, 17–34.
- Nunan, D. (1996). Hidden voices: Insiders' perspectives on classroom interaction. In K.M. Bailey & D. Nunan *Voices from the language classroom* (pp. 41–56). Cambridge University Press.
- Patton, M. Q. (2001). *Qualitative evaluation and research methods* (2nd Edition). Sage.
- Reisinger, D. S. (2022). Online Intercultural Exchanges in a French for the Professions Course. In Steven J. Sacco & D. Ruggiero. *WLSP World languages for specific purposes: The future is blended*. Special issue in *Global Advances in Business Communication*.
- Sacco, S. J. (2017). Challenging the myth of English as a lingua franca in international business. *Global Advances in Business Communication*, 6(1), Article 3.  
<https://commons.emich.edu/gabc/vol6/iss1/3>
- Sacco, S. J. (2018). Multilingual franca: Workplace language use within multinational corporations in French West Africa. *Global Advances in Business Communication*, 7(1), Article 5. <https://commons.emich.edu/gabc/vol7/iss1/5>
- Sacco, S. J., & De Koffi, S. (2022) A case study of workplace language use within micro, small, midsize, and large companies: Insights from language school students in Abidjan, Ivory Coast. *Global Advances in Business and Communications*, 9, Article 3.  
Available at: <https://commons.emich.edu/gabc/vol9/iss1/3>
- Sacco, S. J., & Ohin-Traore, C. (2022). Englishnization in Francophone Africa? Insights into workplace language use. *Global Business Languages*, 22, 23–37.  
<https://doi.org/10.4079/gbl.v22.3>
- Saulière, J. (2013). When English does not take: A work team's response to imposed Anglicization. Presentation at 8th Organization Studies Workshop, Mykonos, Greece.
- Swaffar, J. K. (1989). Competing paradigms in adult language acquisition. *The Modern Language Journal*, 73(3), 301–314.
- Tse, L. (2000). Student perceptions of foreign language study. A qualitative analysis of foreign

language autobiographies. *The Modern Language Journal*, 84(1), 69–84.  
United States Department of Education International Research and Studies Program. (2023).  
<https://www2.ed.gov/programs/iegpsirs/index.html>.