Writing to Make Meaning or to Learn the Language?
A Descriptive Study of Multi-ethnic Adults Learning Japanese-as-a-Foreign-Language

by

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A thesis submitted in conformity with the requirements for the degree of Doctor of Philosophy
Department of Curriculum, Teaching and Learning
University of Toronto

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ABSTRACT

Writing to Make Meaning or to Learn the Language?
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Ph.D. Thesis
Department of Curriculum, Teaching and Learning, University of Toronto, 1997

This study was motivated by the epistemological question of what “writing as a mode of learning” means in the context of foreign language instruction. It analyzes how Japanese-as-a-foreign-language (JFL) learners and their teacher dealt with the writing component in a natural instructional setting over a period of two university semesters. The thesis details how this biliterate situation functioned in terms of individual, psychological constructs contingent on the learners’ levels of JFL proficiency and their perceptions of JFL writing and learning.

In seeking to identify comprehensively a set of educationally-relevant factors that may influence students’ learning through writing in JFL, I considered (a) the presage variables in learners’ backgrounds and (b) the educational context along with (c) the cognitive processes of writing during the learners’ production of JFL compositions and (d) the qualities of their JFL written products. These data were generated through classroom observations, interviews, questionnaires, tape-recordings of think-aloud sessions, and essay assessments, involving 13 multi-ethnic students enrolled in an upper-level JFL literacy course at a major anglophone university in Canada. The data were described, analyzed, and interpreted through the combined use of quantitative and qualitative methods, incorporating a unique statistical technique, dual scaling (Nishisato, 1994).
Multiple sources of evidence showed the superior-level and the advanced- and intermediate-level Japanese-proficient speakers demonstrating different patterns of behavior. In general, the former group of students produced essays of better quality in terms of textual and cognitive structural features, and they focused on both semantic and lexico-grammatical components to produce their written discourse, suggesting opportunities for learning about content and language concurrently. In contrast, the Japanese essays written by the latter group of students were constrained in their textual and cognitive structural features, and their primary focus in their production of written discourse was on the lexico-grammatical system, probably limiting their learning to the aspect of language use. The study suggests needs for further research particularly on L2 writing as a metalinguistic activity, L2 writing as a personal construct, and L1-L2 transfer.
When I started to work on this thesis research, I had no way of knowing what the days ahead would hold in store for me. Upon the completion of the thesis, I now see the entire thesis process to be exhilarating. But the experience was oftentimes daunting and difficult. Many individuals directly or indirectly helped me to go through this challenge.

This thesis would not have been possible without the contribution of Kei and her students, who shared with me their classroom, their time, and their thoughts. I am deeply indebted to them.

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Chapter 1: Introducing and Framing the Study

1.1. Overview

Why do I ask my students to write compositions? What are they getting from this task? These plain questions, which I have repeatedly asked myself as a teacher of Japanese as a foreign language1 (JFL), are the impetus for the present research. It is commonly held, with the current pedagogical emphasis on processes of writing, that writing provides an effective opportunity for learning in all subject areas. What does this statement mean in the context of foreign language pedagogy? What and how well do students learn through writing compositions in a foreign language? These questions form the core of my inquiry. They were addressed within the recent tradition of research on situated learning (e.g., Minick, Stone, & Forman, 1993; Newman, Griffin, & Cole, 1989). Following this trend, the analyses in my study involve individuals working in a natural, goal-directed, activity setting (cf. Wertsch, 1981, 1985) rather than focusing on the decontextualized performance of an isolated individual in a laboratory-like setting.

The study adopts some tenets and practices of grounded theory (B. Glaser & Strauss, 1967; Strauss, 1987; Strauss & Corbin, 1990); it focuses initially on interpreting certain elements of experience then tries to develop theory from an examination of those elements and their interrelationships. The ultimate aim of my study is to contribute to the

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1 In this thesis different terms are used to refer to a non-native language. The term foreign language is defined as a language learned and used outside its speech community and the term second language as the language learned and used within its speech community. The term L2 includes the concepts of both foreign and second languages. See Ashworth (1985, pp. 16-20), Klein (1986, pp. 19-20), and Stern (1983a, pp. 15-17) for discussion of these terms.
construction of an integrated theory that enables the researcher to understand the nature and meaning of an experience for a particular group of people in a particular setting (B. Glaser & Strauss, 1967). My orientation to analysis, however, is practical, not entrenching itself in rigid prescriptions on what ought to be done. It favors a science that emphasizes the emergent nature of mind in activity and that acknowledges a central role for interpretation in its explanatory framework (Cole, 1996).

The objects of my study are JFL university students' experiences of learning through writing JFL compositions in a formal instructional setting. This setting, the classroom, is viewed as a system that is "an interconnected set of elements in equilibrium" (von Bertalanffy, cited in Biggs, 1991, p. 36) or a "functional system" (Anokhin, cited in Newman et al., 1989, p. 69, pp. 71-73). The classroom consists of various elements pertaining to learner, teacher, task, and learning processes, as well as learning outcomes, which interact with each other. The integrated system of the classroom is well captured and represented in Biggs' presage-process-product (or 3P) model (Biggs, 1991; Biggs & Moore, 1993; see section 1.3 for a description of the model), which has provided the present study with a conceptual framework upon which to build an organized, disciplined, and systematic investigation.

1.2. Rationale

The theme of my study is the learning-and-writing relation in the context of formal instruction of JFL. The need for such a study is obvious from both pedagogical and theoretical viewpoints.
1.2.1. Pedagogical Considerations

The past fifteen years or so have witnessed remarkable developments in foreign language education in North America (Lange, 1992; Met & Galloway, 1992) as well as in other parts of the world (Dickson & Cumming, 1996). One notable phenomenon in North America was the mainstreaming of the Japanese language in education generally (Jorden & Lambert, 1991). Facing the sudden growth of Japanese language programs, the need for research that would promote and assist the learning and teaching of Japanese became urgent. A new group of foreign language specialists and researchers emerged focusing on various aspects of JFL education. The number of JFL researchers is still on the rise of an upward mood among the foreign language profession in general; their professional activities are becoming prominent. Many efforts to translate research findings into practice are being made. However, most of this research has thus far concentrated on the components of reading, speaking, and grammar learning while leaving the writing component under-researched. For example, Kanagy’s (1995) bibliography of research on the acquisition of Japanese as a second or foreign language (JL2) contains 127 entries, including published book sections and journal articles, theses, and conference papers. Among them, only 2 concern writing in contrast with 34 on reading, 22 on speaking, and 23 on grammar learning. The paucity of research on JL2 writing is also evident in a bibliographical search I did of the ERIC Database, MLA International Bibliography (February 1981-1997), PsychLIT, and Dissertation Abstracts (January 1982-December 1996). The search resulted in the total (cumulative) number of 195 references concerning JL2. Among them, only 9 focus directly on JL2 writing.

Why has writing failed to attract the attention of JFL researchers? It is clear from Jorden and Lambert’s (1991) survey that composition writing is not a popular activity for

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2 Jorden and Lambert’s (1991) report on Japanese language education was limited to situations in the United States; no equivalent account is available documenting developments of Japanese language education of recent years in Canada, my research site. However, it may well be presumed that much of the situation in Canada mirrors what has been observed in the United States.
American students enrolled in Japanese language study. Rather, they are anxious to develop speaking and reading competence. Such students would naturally request more instruction that emphasizes speaking and reading. And teachers and curricula have probably responded to such students' expressed needs. This view of classroom needs could have set me a research agenda focused on speaking and reading.

Recently, however, some foreign language teaching professionals have begun to value writing for its having a potentially wide range of pedagogical uses. Koda (1993) even sees composition writing as "a major component of foreign language (FL) instruction, whatever the pedagogical orientation" (p. 332). Writing is now considered, at least by some, as an effective means to develop integrative language skills. It is also said to enhance cognitive and metalinguistic awareness by affording writers opportunities to think in and reflect on the target language (Cumming, 1990; Swain & Lapkin, 1995; cf. Olson, 1991). This renewed conceptualization of writing within the foreign language teaching profession is probably tied to the current emphasis on writing, the teaching of writing, and the development of writing ability in education in general (Valdes, Haro, & Echevarria, 1992). For example, the extent of empirical research on the teaching and learning of English-as-a-second-language (ESL) writing in recent years might have been expected to yield a direct impact on foreign language instruction. Nonetheless, this has scarcely happened; composition writing deserves more attention from foreign language professionals.

Presently, many things are unknown about foreign language writing. An obvious area for investigation to explore promising pedagogical implications is the widely-held assumption that writing is a way to learn. The qualities of learning that might occur through writing in a foreign language need to be better understood so as to allow educators to make informed decisions about what to do with this tool of writing in a foreign language context. To draw relevant pedagogical implications, however, such research must also account for the situated nature of learning, taking into consideration the instructional and
contextual variables that come to play in learning.

The question I have taken on—how learning through writing can be identified and studied in a formal instructional context—is a practical problem for foreign language educational research. This is because writing activity, though often an integral part of foreign language instruction, typically lacks a clear definition of pedagogical purpose. Writing instruction is not so well-defined in foreign language programs as in its ESL counterparts. ESL writing courses are designed to prepare an ever-increasing number of international students in English-speaking countries to meet entry levels in academic programs as well as their continuing writing requirements. Much research effort, for instance, has been directed toward analyzing how well students exiting from ESL courses may be able to write in English and to compete with their peers of English as a mother tongue. Such pragmatic reasons of academic and social integration for writing instruction and research are seldom present in foreign language situations where contacts with the target language and people and opportunities for using the language are by definition limited. Nonetheless, many people believe that writing has a role to play in foreign language instruction. My research tries to subject this folk belief to close investigation.

1.2.2. Theoretical Considerations

The object of my study, as outlined above, is a practical problem. It is also a theoretical problem, as indicated by those seeking to build a comprehensive theory of L2 writing that accounts for the phenomena of writing in both second and foreign languages (Cumming & Riazi, 1997; Gass & Magnan, 1993; Grabe & Kaplan, 1996; Hirose & Sasaki, 1994; Kroll, 1990; Sasaki & Hirose, 1996; Silva, 1990, 1993; Valdes et al., 1992), and similarly for those concerned with the construction of an integrated theory of writing as a social and cognitive process (e.g., Bridwell & Beach, 1984; Flower, 1990a).
Recently there have been a number of laudable attempts to account systematically for students' L2 writing behaviors, cognitive processes during composing, and the ways these behaviors and cognitive processes interact with written products and their environmental and personal contexts (Cumming & Riazi, 1997; Grabe & Kaplan, 1996; Hirose & Sasaki, 1994; Sasaki & Hirose, 1996). These studies have emerged after an earlier accumulation of a substantial number of empirical—albeit exploratory, small, and separate—studies on L2 writing over the past 15 years or so. It should be noted, however, that virtually all of the previous work has conspicuously concentrated on English in situations where the language is learned as a second language (as noted by Grabe & Kaplan, 1996; Silva, 1993; Uzawa & Cumming, 1989; Valdes et al., 1992), and mainly focused on such particular populations as school-age children, international students preparing to study at English-speaking universities, and immigrant adults (as noted by Cumming, 1994). These tendencies may be presenting only a partial picture of L2 writing; it needs to be amended by more research on foreign language writing.

Foreign language writing research is still in its infancy. Our immediate task at this stage of research development is to identify the facets of foreign language writing, doing so in a systematic and principled fashion toward the construction of a modular theory (cf. Ellis, 1994, chap. 15). Furthermore, to provide a "rounded picture" (Flower, 1990b, p. v) of L2 writing, the facets to be discovered should be seen as dynamics of cognitive and social phenomena. In particular, the blended socio-cognitive perspective currently popular among English-as-a-mother-tongue writing researchers, and gaining some attention from ESL writing scholars (Prior, 1991; Riazi, 1995), has not been taken up by foreign language professionals in writing research. In short, the current scope of L2 writing research needs to be expanded by looking at not only ESL writing but also the writing of other languages being learned as a foreign language under various conditions, and by taking an inclusive and unified view of human cognition and its environments.
1.3. Biggs's Presage-Process-Product Model of Classroom Learning and Teaching

I used Biggs's presage-process-product (3P) model to frame my inquiry. The 3P model represents an integrated system comprising three phases with four components that interact with each other to account for the total context of classroom learning and teaching. The three phases are presage, process, and product (following Dunkin and Biddle's earlier formulation of a similar model, 1974\(^3\)). The presage phase has two components, one pertaining to students (i.e., learning-related student characteristics such as abilities, expectations and motivations for learning, and conceptions of learning) and the other relating to the instructional context at the level of individual teachers (e.g., teachers' personal characteristics and their conceptions of learning and teaching) and at the institutional level (e.g., curriculum content and assessment). Student and instructional presage factors interact among themselves and feed into learning processes, a component of the process phase. For instance, depending on the degree of their genuine interest in a given academic task, or depending upon how they see the demands made by the instructional context, students set up certain goals of their own in dealing with the task and accordingly construe their particular ways of approaching the task. Furthermore, different approaches are likely to bring about quantitatively and qualitatively different learning outcomes. Outcomes are then prone to affect the presage conditions. That is, students' learning outcomes may cause a change in teachers' conceptions of learning or their approaches to instruction. Similarly, students' perceptions of their own outcomes may affect their levels of confidence in their abilities or may alter their expectations of achievement. These directional links between the model's components appear as one-way, chain-reacting phenomena. But interactions between all components are possible,

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\(^3\) Stern (1983a, chap. 22) used Dunkin and Biddle's model to discuss L2 teaching in educational terms. See also Chaudron (1988) for an adoption of Dunkin and Biddle's model to L2 classroom research.
indicating the systemic, rather than additive, nature of the whole.\(^4\)

Two main features of this model fit neatly with the perspectives taken in my research. First, learners are the focus. The instructional context provides a superstructure set by the teacher and the institution, affecting learners' states at the presage, process, and product phases. However, learning does not occur without learners' actual engagement in a learning task. And how they approach the task determines the quality of learning outcomes. This logic gives good reason for my research to focus on learners' activities, rather than teaching activities, as the study is concerned with individual students' learning. Second, the model takes the entire context of classroom learning and teaching into account and represents its complexity in a succinct fashion. My study investigated the mechanisms of learning through composition writing within the system of a university JFL classroom, a situation which is uniquely organized among as well as within individual members of the class and one that differs in certain ways (described above) from the situations for ESL learning addressed in most other research on L2 writing. The 3P model of the classroom gives an appropriate structure to frame my inquiry.

Figure 1-1 displays the model schematically and shows how I have modified some of its original terminology, adapted slightly to suit the object of my study. It should be noted that systemic principles represented in the model operate at not only the classroom level but also higher levels like school, school board, and community (Biggs & Moore, 1993, chap. 16). It is important to know how each level of the educational structures forms a larger coherent system at the next level in order to increase our understandings of teaching and learning. My present inquiry, however, limits its scope to the classroom context focusing on writing tasks.

\(^4\) Biggs and Moore (1993, p. 449) provided a concise explanation on the systemic versus additive view of phenomena: "A system is a working whole made up of a set of component parts, which interact with each other to form an equilibrium." Thus, whatever happens to one part will affect the remaining parts. An additive model, on the other hand, is "a multistructural deficit model" where addition, subtraction, or modification of a part does not change the rest of the whole. A relevant discussion can also be found in Salomon (1991) which contrasts the epistemologies of analytic and systemic approaches.
Figure 1.1. The 3P model as a classroom system related to writing. Adapted from The Process of Learning (p. 451), by J. B. Biggs and P. J. Moore, 1993, Sydney: Prentice Hall.
1.4. Object and Foci of the Study

My research began and ends with my interest in the epistemological question of what "writing as a mode of learning" (cf. Emig, 1977) means in the context of foreign language instruction. To facilitate this inquiry, I took up the hypothetical proposition that foreign language writing is more than just writing a foreign language, inspired by the title of Janet Swaffar's article, "Language learning is more than learning language" (Swaffar, 1991). I structured my exploration of this proposition around four sets of research questions related to the four main components of Biggs's 3P model:

1. Teaching context: How are the writing tasks situated in the JFL course? How does the instructor perceive the role of writing, the teaching of writing, and the teaching of JFL?

2. Students' characteristics: How do students' characteristics relate to their perceptions of JFL writing and learning?

3. Writing processes (Meta-learning processes): What linguistic and cognitive behaviors are invoked by JFL writing activities? How are they related to students' characteristics and instructional context variables?

4. Written products (Outcomes of learning): What textual qualities of JFL writing do students manifest in terms of language use, content, and organization? How is the complexity of cognitive structure manifested in their written texts? How are these elements related to students' characteristics, instructional context variables, and in-process behaviors?

At the heart of the proposition "Foreign language writing is more than just writing a foreign language" is a broader curricular issue. It concerns the question of what role foreign language instruction plays in education aiming at the development of students'
minds or intellects. Considering the historical impact that literacy has had on the development of people's thought and cognition (e.g., Olson, 1994), focusing on the writing component of language instruction brings this issue to the fore. To make this perspective clear, I review in the following section the emerging voices of foreign language professionals who have been concerned about articulating a rationale for foreign language instruction in curricula at schools, colleges, and universities.

1.4.1. Recent Conceptualizations of Foreign Language Curricula

As foreign language education has become "a secure part" of school and university curricula due to recent institutionalized enforcements of foreign language requirements in the United States (Lange, 1992, p. 528; see also Davis, 1997) and elsewhere (Dickson & Cumming, 1996), an urgent need has appeared to carefully consider the relationship between foreign language curricula and the goals of educational programs overall. Historically, language teaching has been influenced primarily by theories and principles of linguistics, psycholinguistics, sociolinguistics, and second language acquisition research (Nunan, 1988; Richards & Nunan, 1992). Only recently have foreign language professionals begun to see themselves as educators as well as applied linguists. This renewed conception of foreign language teaching as an educational matter invites us to consider what needs to be learned beyond the linguistic aspects of a target language. Littlejohn and Windeatt (1989) called such learning "additional, non-language, learning" (p. 158) as emphasized by, for instance, Lange (1992). To Lange, however, such learning is a priority rather than "additional" component. He has strongly advocated that foreign language curricula move toward a view that prizes "its contribution to human development rather than the development of language features" (p. 528).

To understand Lange's proposal, one needs to consider existing foreign language curricular orientations, particularly their sense of what the curriculum is for. Lange (1990)
insightfully analyzed foreign language curricular orientations using Schubert's (1986) threefold classification of curriculum inquiry: the scientific-technical, also known as empirical-analytical; the practical or hermeneutic; and the critical or emancipatory. Recent trends in foreign language curriculum have linked the empirical-analytical orientation and the interpretive or hermeneutic orientation. The former is represented by audiolingual and grammar-translation teaching while the latter emphasizes the development of language proficiency as a means of expressing individual meaning and discovering meaning in the world of the individual. Lange suggests that one such example is Stern's multidimensional curriculum, consisting of linguistic, cultural, communicative, and general language education syllabi (Stern, 1983a, 1983b, 1992). Although curricula of this combined orientation (or what Lange calls the connective) focus on uses of language for communication, the understanding of the self and of the surrounding other as well as any use of language to act upon the human condition are fundamentally byproducts of learning the linguistic components (phonology, morphology, syntax, lexicon) and basic communicative functions of language (Lange, 1990). For this reason Lange suggested that curricular efforts should go beyond the analytic and scientific to help learners find personal meaning in their learning processes (through a hermeneutic orientation) or to allow them to contemplate and act upon the society in which they live (through an emancipatory orientation). This suggestion aims toward the development of the enlightened self or the betterment of the human condition.

Such orientations and purposes are difficult to find in the curricular writings on foreign language education (Lange, 1990). There are, however, some exceptions, such as Moskowitz (1978) and Stevick (1990) who have presented instructional techniques for the cause of humanism based on a hermeneutic philosophy of language learning and teaching, or Crawford-Lange and Lange (1987) and Kubota (1996) who have applied the work of Freire (1973) to reorient language learning from the scientific-analytic acquisition of facts and information toward emancipatory reflection and action on such facts and information.
These voices speak for language learning as a total "educative experience" (Dewey, 1938/1963). They overlap with those advocating content-centered language instruction as a means to counter traditions of language instruction through "bland and contentless" textbooks (Littlejohn & Windeatt, 1989, p. 159). The intent of content-based instruction is twofold (Crandall & Tucker, 1990). One is to help learners attain language proficiency beyond the level of basic communicative skills, that is, expanded foci of instruction for the development of "basic interpersonal communicative skills (BICS)" and "cognitive/academic language proficiency (CALP)" (Cummins, 1980; Cummins & Swain, 1986, chap. 8). The other intent is to meet the specific needs of language students who come to language classrooms for a variety of reasons. Although integrated language and content instruction is often associated with second language learning where special language skills are required to carry out cognitively demanding academic tasks, it is also gaining acceptance among foreign language professionals who recognize the increasing importance of students developing foreign language proficiency that goes beyond the BICS level (Crandall, 1993; Crandall & Tucker, 1990; Leaver & Stryker, 1989; Snow, Met, & Genesee, 1989; Sudermann & Cisar, 1992).

This current movement of foreign language curricular reform is supported by a general understanding of L2 acquisition that suggests an L2 is learned most effectively in contexts that are personally meaningful and socially purposeful, that is, when meaning rather than form is a focus of instruction. But there is a danger in this line of thinking, as Sudermann and Cisar (1992) have cautioned in their critical appraisal of foreign language across the curriculum programs, namely, there is a danger that complex form-meaning relations may be reduced into dualistic or simplistic pedagogical formulas. The reduction

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See Crandall (1993) and Crandall and Tucker (1990) for a comprehensive overview of content-centered language instruction. The former includes an annotated bibliography on the subject. Practical suggestions and guidelines for the implementation of content-centered instruction can be found in Mohan (1986) especially for ESL professionals, Brinton, Snow, and Wesche (1989) for L2 specialists at postsecondary academic institutions, and Cantoni-Harvey (1987) for elementary and secondary educators dealing with minority students. See also Adair-Hauk's (1996) strategies for the practical application of a whole language approach in second and foreign language classrooms at the secondary and university levels.
has appeared, for example, in the long-standing debate over the value of phonics or whole language in reading instruction or more recently the product-process debate in writing instruction. When two seemingly oppositional views are put forth, there appear voices to admonish extremism, calling for a more balanced, integrated stance as seen in the interactive model of reading instruction (Carrell, Devine, & Eskey, 1988), the "balanced and flexible literacy diet" (Willows, 1996), and the "middle ground" approach to writing instruction advocated by, for example, Arndt (1987), Connor (1987), or Raimes (1985).

For the development of balanced foreign language curricula that place importance on form and meaning and language learning and non-language learning objectives, I (So, 1994a) have suggested that integration of language and non-language goals might be realized successfully through Miller's (Miller, 1988, 1993; Miller, Cassie, & Drake, 1990) holistic curriculum model consisting of three overlapping components of transmission (corresponding to the scientific-technical orientation to curriculum), transaction (the hermeneutic) and transformation (the emancipatory).

Ideologies in foreign language education are changing progressively and expanding. The purpose, content, and rationale of the foreign language curriculum are in transition accordingly--from foci on the mechanical learning of linguistic forms isolated from context, to emphases on the meaningful, communicative use of language, and to aims of broadening learners' visions and perspectives. In view of these recent trends in foreign language curricular orientations, I wanted my research to ask, how is the writing component treated in relation to the overall curriculum of JFL? What would be the experience of learners writing in JFL? My simple and situated inquiry--what is really going on with JFL writing in the classroom?--has never, to my knowledge, been taken up as a research subject in the field of JFL education.6 Taking up this kind of "reflective inquiry"

6 As mentioned earlier in this chapter, JFL writing has received little research treatment in the past. Some exceptions include writing process research such as Kato (1995), Ootake (1994), Pennington and So (1993), Shibata (1996), and Uzawa and Cumming (1989). However, these investigators' primary concern was not educational or learning processes through writing but rather the process of writing itself in specific tasks.
1.5. Orientation and Organization of the Dissertation

Through the experience of writing up this dissertation I am reassured that writing is thinking; writing is a way to discover what I am thinking and to discover gaps in my thinking. Writing offers a private way to capture and give concrete form to ideas that are oftentimes elusive. This dissertation is where that private process of mine, that was at once emergent, evolving, and iterative, has been made public. The written account of this research, i.e., my dissertation, focuses on my coming to understand the phenomena of JFL writing and learning as I collected data, displayed information, and interpreted and expressed the meanings of this information. It is a report of an exploratory, descriptive case study in which I proceeded inductively. I consider that the best way to reconstruct this inductive process is first to present the data collected in the field and then to show how I analyzed it to seek data-based understandings of JFL students' and teacher's experiences. I followed B. G. Glaser's (1978) suggestion for a much later handling of relevant literature so that I would not be unduly influenced by others' ideas and foci regarding the problem under study. Thus, as I present the research, I will also show how I consulted and reviewed published literature to relate my experiential understandings to them and their relevant ideas.

After this brief introductory chapter, I will in chapters 2, 3, 4, and 5 display different sets of data collected within the frame of Biggs's 3P model and address the four
sets of guiding questions formulated within the same frame (see section 1.4). Various sets of research materials were generated through classroom observations, interviews, questionnaires, tape recordings of think-aloud sessions, and written documents in order to capture the complexity of educational phenomena as they actually occurred in relation to JFL writing tasks. These materials are organized according to the four components of the 3P model and described in separate chapters: the teaching context data in chapter 2, the students' characteristics data in chapter 3, the writing processes data in chapter 4, and the written products data in chapter 5. In each chapter I summarize the steps that I have followed and the practical concerns that I dealt with in the process of converting the materials into an analyzable and interpretable form and deriving scientific evidence in the present study. I use a narrative form to report my research when I wish to highlight "the storied quality of experience" (Clandinin & Connelly, 1991, p. 259). Furthermore, I address each corresponding set of research questions by describing, analyzing, and interpreting the data through the combined use of quantitative and qualitative methods.8

In chapter 6 I present the results of statistical analysis of the combined data generated from the students--the students' characteristics, writing processes, and written products data--to describe how these components are interrelated. I used a unique statistical technique called dual scaling to go beyond a descriptive, interpretive account based on my impressions and intuitions. This chapter is followed by chapter 7, which concludes the dissertation by providing a coherent and valid account of the phenomena represented in the data as a whole. In this final chapter I also return to the original question of what "writing as a mode of learning" means in the context of foreign language instruction and in relation to the proposition that foreign language writing is more than just writing a foreign language.

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8 My methodological orientation in this research is manifest in the combined use of an interpretive approach and a statistical technique; this orientation reflects a growing recognition of the dialectic relationship between meaning and number and of the partnership between qualitative and quantitative research methods. Dey (1993), for instance, supported such an eclectic view of data analysis, stressing "the interdependence and mutual enhancement of apparently opposing approaches" (p. 266).
Chapter 2: Teaching Context

2.1. Site

It was a small seminar room of approximately 300 square feet with no windows, sandwiched between another small seminar room and a large room with a seating capacity of 100. There was only one door to get in and out of this room. The room was located in a large modern building of a major anglophone university in Canada. Students rushing to their respective classes or hanging around the hallway were a diverse mix of ethnicities, though Asian students were conspicuous, I thought. It was the day of my first visit to Kei's Japanese class. Kei (a pseudonym, pronounced Kay) introduced me briefly as a Ph.D. student collecting data for her dissertation to 15 students sitting around a large old wooden table in the room. The table took up so much space of this small room that the students had to be squeezed into the remaining narrow open space around the table. All in the room were Asian except for two Caucasian students.

The class was a Japanese reading and writing course meeting once a week for two hours in the morning throughout the academic year, from September to April. The course is offered each year to students who have completed a third-year general Japanese language course or who possess an equivalent level of Japanese proficiency. There is, however, no upper limit of proficiency set for admission into the course. It is one of the two highest levels of courses in the Japanese language offered at this university. Most of the students were in the fourth and final year of their undergraduate studies; most had taken an elementary Japanese language course with Kei. Although it was only the second meeting of the class, there was not the stiffness typically found in the initial meetings of
any course. I wrote in my field notes that day, "There was a sense of warmness and at-homeness in the class" (Field notes, September 29, 1994).

This class was selected for my research site for the following reasons: (a) The course focused on literacy skills in JFL, including a component of composition writing; (b) Kei, the course instructor, was willing to collaborate with me in carrying out this research; (c) the course participants were educated adult students, a fact which would avoid confusing foreign language writing with such issues as maturation and basic literacy; and (d) the location was convenient for me to make frequent visits.

2.2. Teacher

I first met Kei in the summer of 1993, a year prior to my data collection. We were in the same class for a course in curriculum studies at a graduate school of education. At that time Kei was completing her M.Ed. degree in L2 education as a part-time student while teaching full-time at the above-mentioned university. In the curriculum studies class we were the only native Japanese. There were a number of other factors that might have put us close together. We were both female, around the same age, with several years of overseas experience as adults; we both aspired to be specialists of JFL education at post-secondary academic institutions outside Japan. Our friendship continued and developed after the summer course. We would talk for hours discussing goals, objectives, content, and methodology of JFL programs at institutions of higher education and sharing one another's teaching experiences.

One episode highlights our common concerns about JFL education. In May 1994 Kei related to me some feedback she had received about her teaching from one of her students at the end of a Japanese language course she had been teaching. Her teaching was highly evaluated by this student saying, "Your course was most interesting. I was always
looking forward to coming to your class." This student then added, "But the course which made me think the most was Mr. X's." Mr. X was Kei's colleague teaching a history course in the same department. Both Kei and Mr. X were apparently very conscientious educators and deeply concerned about their students' development for future responsibilities and for success in life. They were particularly reflective about their teaching practices. Having recounted the story to me, Kei continued, "I wonder if it is possible to go deep into the minds of students in a foreign language classroom" (from my notes and recollection; my translation of what was spoken originally in Japanese). In a series of subsequent conversations with her, I discovered what she had meant by this. That is, can we, as foreign language instructors, encourage students not only to memorize grammar rules and vocabulary or practice using the language for daily communication, but also to think—the kind of thinking to make sense of one's experience and the world around oneself?

When I approached Kei for her collaboration in my research work in May 1994, she agreed immediately. She was in fact quite excited about having me in her class every week. There was, by then, mutual trust between Kei and me at both professional and personal levels. She appreciated my weekly visits to her classes in the coming academic year, especially because she felt she needed someone who could listen to and understand her pedagogical concerns in situ. Such professional support was, according to Kei, scarce in her department. During the past three years of her teaching JFL at the university, she worked in isolation; she wished for meaningful discussion of pedagogical matters with special reference to university-level JFL. My 9-year experiences of teaching in similar contexts could benefit her as much as her participation in my study would benefit me. I gave her a copy of the proposal for the present research (So, 1994c) in June 1994, she discussed it with me for clarification in August, then signed a consent letter prepared according to the OISE guidelines for theses and orals (Ontario Institute for Studies in Education, 1993) (Appendix A) in September before the commencement of data collection. The chairperson of her department also signed a letter of consent (Appendix A) approving
my research activities in Kei's class.

2.3. Generating Research Materials

2.3.1. Classroom Observation

I visited every class throughout the year with a few exceptions; 8 out of 10 meetings were observed in the first semester and 10 out of 12 in the second semester. I sat through each class from the beginning to the end. My persistence in full and frequent observations was necessary in order to experience and understand "the syllabus in action" (Breen, 1984, p. 50), which is the enactment of a predesigned syllabus through continual interaction between teacher and learners during the actual processes of teaching and learning. As Breen stated, "Although, as teachers, we may follow a predesigned syllabus, every teacher inevitably interprets and reconstructs that syllabus so that it becomes possible to implement it in his or her classroom" (p. 50) to meet the needs and abilities of individual learners and of the socio-cultural context. The fluid and dynamic nature of syllabus construction and reconstruction processes was evident in Kei's classroom. The original written schedule of teaching for the first semester was revised twice and the schedule for the second semester received minor changes from time to time in consideration of student and time factors. For the purpose of my research I wanted to know exactly in what curricular context writing activities took place. To do so, it was important for me to be on site at all times to observe the flow of classroom activities.

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9 In this thesis the term syllabus is used in a more restricted sense than the term curriculum. Syllabus refers essentially to the specification and sequencing of course content. Curriculum, on the other hand, refers to the whole of teaching, including those elements of syllabus along with considerations of goals, methodology, and evaluation of a course. There has been a great deal of debate over the definition of the term curriculum among educational researchers in general (see Jackson, 1992, for a detailed summary of definitional issues of curriculum). For definitions of the terms curriculum and syllabus used in the field of L2 teaching, see Johnson (1989), Nunan (1988, chap. 2), Rodgers (1989), and Stern (1983a, chap. 19, 1992).
One corner near the door was the spot I chose to sit during my observations. There was no more than one and a half feet between me and the students sitting nearby. My primary role was that of a non-participant observer, though there were a few occasions in which I was asked to participate as a resource person supplying Japanese words and expressions to students working in small groups. The class was conducted entirely in Japanese. I carried a clipboard to hold sheets of an observation scheme to record in real time what happened and what the teacher and students said in class. The scheme (Appendix B) was used not for the purpose of quantitative analysis but to systematize my observational records. I developed then revised it during my first few visits to the classes. It employed 3-minute intervals and for each 3-minute interval it recorded the substance of activity (e.g., text reading, discussion, grammar exercise), format of activity (e.g., whole class, pair work, small group), area(s) of instructional focus (e.g., read-aloud of a text, content comprehension, lexis, grammar rules), utterances made by teacher and students, and students' behaviors. Ample space was provided for each item to be written down in detail. I used both English and Japanese to record classroom events and discourse on observation sheets. With the permission of Kei and the students, parts of some sessions particularly relevant to writing were audiotaped, lest some details should be missed in my notes. I gathered all handouts, teaching materials, quizzes, and mid-term examinations to supplement the information from my observations.

Based on the on-site notes, I converted the observations into 18 field notes in all, each produced in English either on the day of observation or shortly afterwards. Each note was 500 to 1000 words in length, consisting of two parts; one described what happened in the class, and the other recorded my reflections and comments. These notes necessarily reflected what I wanted to see in the classes. I concur with Fanselow's proposition (1990):

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10 This approach resembles that taken in many other, more routinized schemes for classroom observation (e.g., Allen, Fröhlich, & Spada, 1984; Riazi, Lessard-Clouston, & Cumming, 1996). See also Allwright (1988) for an account of the historical development of systematic observation in language classrooms.
"What we see is not what takes place but what we value as important to see; observing is selecting" (p. 186). Going through the 18 field notes at the time of writing this thesis, I realize that what I selected to observe were the content and sequence of teacher-directed learning activities. That is to say, I tended not to focus on individual students or their actions irrelevant to the teacher-directed activities. Writing my reflections and comments facilitated my thinking about the research; it helped me to know what needed to be clarified about Kei's teaching. Thus, this part of the field-note construction served the function of generating questions to be asked during the subsequent interviews with Kei. But at the same time I was aware that in this process I was reconstructing what happened in the classes from my own perspective.

2.3.2. Interviewing

To understand Kei as a JFL teacher, I interviewed her frequently throughout the period of data collection. I wanted to know her general conceptions of learning and teaching of JFL on the one hand and on the other her thinking about the course content, objectives, and teaching and assessment methods, as well as the students' progress in learning during the course. These issues constituted a general plan for the topics of my unstructured interviews with Kei. However, no special meetings were arranged for the purpose of interviews per se; the interview agenda, so to speak, emerged during the course of our usual, ongoing informal and intimate conversations as had begun before my entering the classes. Neither of us felt uneasy about these conversations because little really changed from the talks we had had before in terms of topics or style. We talked in Japanese for 30 minutes to 3 hours once or twice a week on the phone or over lunch, as we would always do. Since I was watching her classes during the period, it was only natural to touch upon our shared experiences in the class while talking. Without deliberate efforts our conversations developed along my general plan for the research.
Benjamin (1974) spoke of two types of interviews, one for the interviewer wanting help from the interviewee and the other for the interviewer wanting to help the interviewee. These demarcations were not always clear in my conversations with Kei. Kei would express her concerns about what happened in the class that day or what she was planning to do next week. In response I would bring in my experience and expertise to help her resolve her problems. At the same time I learned, through her explanations of these concerns, how Kei was conceiving of JFL teaching in general and thinking about the course of my research objectives in particular.

A tape recorder was not used in these discussions; nor were on-site field notes taken. Circumstances did not permit the use of such tools. Besides, they could have spoiled the rapport and trust between us that contributed to the generative process of our candid conversations on these topics. Nonetheless, I did scribble quick notes about our talks immediately after we parted, and later on the same days I produced retrospective notes of our conversations in English on my computer. These notes were 300 to 1000 words in length and recorded when, where, how long, and how the conversation took place, summarized what we talked about, and included Kei's words transcribed from memory when they were deemed important. I generated a total of 22 of these notes between October 19, 1994 and March 19, 1995. They were written from the perspective of me as a researcher wishing to uncover the teacher's points of view by accounting for what was observed in the classes.

In addition to the materials collected during my observations of the course, I also wished to be informed of Kei's retrospective thinking about the writing component of the course a year later. I used a survey questionnaire as a guide for probing this. It comprised 6 items (Appendix C) taken from a 22-item questionnaire developed by Pennington (Pennington, Costa, So, Shing, Hirose, & Niedzielski, 1997) to survey ESL teachers' practices in writing instruction.11 I was aware that the survey instrument designed

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11 Pennington et al.'s (1997) instrument highlights contrasts between process and product approaches
expressly for writing classrooms per se would not be exactly suitable to the situation where Kei had to incorporate both reading and writing components into one course. As I had expected, Kei found it difficult to answer the questions. Nonetheless, her responses were useful to verify what I thought were her conceptions of writing, language, and education more generally.

2.4. Answering the Research Questions

*How are the writing tasks situated in the JFL course? How does the instructor perceive the role of writing, the teaching of writing, and the teaching of JFL?*

I address these questions by telling a story about Kei and her classroom. The story tells how Kei's patterns of interaction with this particular teaching context evolved over the period of my research, shaped by her students and her moment-to-moment thinking. I summarize what happened in her classroom in relation to writing activities, focus on key episodes, and delineate central elements, so as to construct an illuminating narrative.

As mentioned earlier, there are two highest-level courses in the Japanese language at the university where Kei teaches. One focuses on speaking and listening and the other on reading and writing. The latter is the course Kei was assigned to teach in the year of my research data collection. Kei was given freedom in the development of a syllabus for this course. There were no institutional guidelines that she had to follow as to what, how, or for what ends to teach. Nor was she constrained by any particular curricular ideologies. A perusal of my classroom observation and teacher interview notes presents the following to the teaching of writing, soliciting the respondent's general view on the teaching of writing as well as his or her specific classroom practices. Most of the 22 items on the questionnaire are to be answered on two 5-point scales: *ideal* and *actual*. Also space is provided in each item for open-ended comments.
synopsis of Kei and her teaching.

Progressivism may be the best word to characterize Kei's orientation to this curriculum. This curricular ideology was tacit, if not explicit, in what I heard from Kei and what I saw in her classes. It provided a direction to the role and purpose of her curriculum constructed around a series of themes, focusing on the expressive and creative functions of written language. The curriculum developed in the context; it received modifications and changes as Kei felt the need for pedagogical adaptability or encountered unplanned teachable moments in the course of her teaching. Moreover, students were consulted about the specifics of the syllabus such as the themes to be studied and the grading scheme. In short, her curriculum was, or at least intended to be, learner-centered, process-oriented, and meaning-focused. Kei's curricular orientations were manifest in her responses to the 6-item questionnaire (Table 2-1, Appendix C) asking her to rate retrospectively on the ideal and actual 5-point scales certain aspects of her teaching of JFL writing in the year that I observed.

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*Note. The higher the rating, the more process- and learner-centered the teaching orientation.*

In this curricular context, how did Kei perceive and approach the writing component of the course? Although it was the third time for her to teach this Japanese reading-and-writing course, Kei was particularly unsure of and uneasy about the teaching
of the writing component. The what, how, and why of JFL writing instruction were Kei's long-standing, unresolved pedagogical questions. Partly because of these unresolved questions and also because of time constraints, class time was spent almost exclusively on reading activities. Initially Kei was not comfortable about the skewed weight placed on reading in the enactment of her curriculum as she felt she was not teaching to the title of the course. Toward the end of the course, however, she came to terms with the reality in her own way. She said, "In the first term I was overly concerned about not spending enough time on the writing component. But I have realized that it is almost impossible to teach both skills satisfactorily in a 2-hour-per-week course. If aiming at two is unrealistic, I should instead focus on one of the two and work toward the students' substantial gain in it" (Interview notes, March 1, 1995).

Writing exercises rarely took place in class; they were instead given as homework assignments. Nonetheless, connections were made between the reading activities in class and the writing assignments to be done at home. I now turn to curricular events that put these two components together. I describe a series of classroom activities leading to each of the two major writing tasks (Task I and Task II), in which the students participating in my study produced think-aloud protocols, as well as the experiences and images Kei brought to her teaching practice.

2.4.1. Kei and Classroom Activities Leading to Writing Task I

Both Task I and Task II were given to conclude two respective cycles of theme study through reading materials. The first theme was Japanese popular culture. Students and teacher together decided to read about manga-buuumu (a phenomenal boom in comic-book stories) in Japan. By teaching to the interests of her students, Kei was hoping to

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Clandinin (1986) provided a unique account of the link between experience and image as is relevant to teachers' "personal practical knowledge" (Connelly & Clandinin, 1988).
create intellectually stimulating and engaging events that would enable the expansion of the students’ minds. Kei selected reading passages from authentic materials such as newspaper articles as well as contrived JFL texts. Her approach to the instruction of reading and her rationale for it may be best understood by reading the following excerpt from my interview notes in which I constructed my interpretation of Kei's current vision and action.

Kei wants her students to think. Rather than just asking them factual questions about reading texts or transmitting information on particular topics, Kei wishes to go one step further. She wants her students to reconstruct the text they are reading and make personally relevant meanings of the text—i.e., one step beyond the level of understanding what the text says. Most common questions that foreign language teachers ask to students in class tend to be very simple and purposeless. Kei would not be satisfied with such instruction; she would rather seek for space during the class time for students to reflect upon themselves, learning materials, and relations between themselves and the materials. To get this point across to me, Kei referred to the current lessons underway on the topic of manga-buuma. In these lessons she would ask display and referential questions about the content of reading passages to make sure that the students have understood the content. Furthermore, she would try to exploit the students' cognitive capacities to discuss relevant issues such as influences of reading comic stories upon the human mind. Kei's purpose for this latter activity is to help her students expand their mental lives. (Interview notes, October 10, 1994.)

Kei found her students overly concerned with word- and sentence-level problems, far from the stage of treating JFL reading as “real reading” (i.e., reading for meaning) or of engaging in an active process of constructing textual and personal meaning of written text. Based on her belief that no student should ever be encouraged to limit him- or herself to mere decoding skills, Kei decided to devote a substantial amount of time and attention to such top-down concerns as reading for global meaning until her students would develop skills to read Japanese texts for meaning and make educated guesses at meaning without definitively knowing each and every word. In response to some students’ persistent concerns about the accurate identification of lexical and grammatical forms, she would say, “Now you are reading in quantity and for meaning, so do not try to read word by word. Do not stop at each and every grammar point that you are not sure about. Instead,
use context to guess the gist of the text" (Filed notes, October 27, 1994). Through this meaning-focused instruction students were encouraged to regard the JFL written text as something that has content—rather than something that merely consists of linguistic rules—as they would normally do with their native language reading.

Did Kei succeed in realizing her instructional goals? Yes, to some extent. During the four class sessions on the topic the students were willing to go beyond what they were reading in class. Some students voluntarily brought a comic magazine, audiotape, or videotape that contributed to animated discussions in the classes. They were also happy to share their personal experiences with comic books. I wrote my reflection on the day of my observation of the second session on the topic as follows:

I found the entire class were enjoying the topic. Especially during the discussion of Japanese comics, they were so animated and engaged. And they did this so naturally that I did not realize that they were using a foreign language to express themselves. Kei seemed to have felt the same way as I did. She said later that she was amazed at the students' receptiveness to her teaching style and their involvement in reading and talking about their collectively chosen topic. (Field notes, October 20, 1994.)

The active student discussions observed that day were not a one-time incident. On my visit to the fourth session on the topic I made a similar observation:

When the discussion started, the classroom climate changed suddenly. That was most striking to me. That was far from a common image of a "bland and contentless" foreign language classroom. The use of the Japanese language did not seem to be hindering the students from speaking up. (Field notes, November 3, 1994.)

During the fourth and final session on the topic of Japan's *manga-buuma*, the students were given a list of questions in writing about the merits and drawbacks of reading comics. They were asked to discuss the questions in a small group of three or four and formulate their collective responses to share with the rest of the class. My field notes on this session record:

During the 30-minute discussion the students and teacher were drawn into
what was being said. Even the normally quiet students like Jane and Charles spoke up to offer their opinions. The whole class was, it seemed to me, competing to say their say in Japanese. (Field notes, November 3, 1994.)

To wrap up this discussion, Kei wrote down in point form (and in Japanese) on a blackboard all the positive and negative points of reading comics raised by the students. Most of the students diligently copied what Kei wrote on the board in their notebooks. A few months later Kei retrospectively described this discussion as a pre-writing activity utilizing brainstorming and listing techniques (Interview notes, February 23, 1995). In the last five minutes of this session Kei explained all in Japanese what was expected of the first major writing assignment (Task I). Following is an abbreviated English translation of her instructions. They were given orally; no written instructions about the task were provided.

Write the merits and drawbacks of manga-buumu. So you might say, "There are such and such good points but there are such and such bad points as well." Then write your own opinions. You don't have to write all of these (referring to the good and bad points written on the blackboard). You can focus on a few of these or other points. It is also possible to state your opinions at the beginning of your essay then you talk about good and bad points in order to support your viewpoints. What I really want to see in your essays is how you look at this manga-buumu in Japan, that is, your own opinions about the phenomenon. Also when you discuss the merits and drawbacks, give examples and use them to support your stances. (An abbreviated English translation of Kei's instructions for Task I.)

Kei repeated the above information, in slightly different ways, a couple of times while giving the instructions for this assignment, probably wishing to be assured that her points got across to the students. Kei also required the students to make an outline in either Japanese, English, or both, to organize their ideas before starting to write an essay. The students were asked to turn in their outlines as well as their final products. There were no questions about this assignment from the students.

In hindsight Kei thought this task was too controlled to allow originality. According to her, most of the students' essays contained no more than what was talked about in class (Interview notes, January 21, 1995). The students perceived variously the
provision of specific information on content, rhetorical patterns, and language for Task I, as revealed in their written comments given in the Task I post-writing questionnaire. For instance, Judith who "was not so much motivated to write on manga [comics]" felt that the pre-writing discussion in class had made the writing task easier. But there were Cathy and Mary who had initially thought that the task could be easier because of the pre-writing discussion but in fact found the task to be still difficult. Both attributed the difficulty to their lack of linguistic competence in Japanese. Colin had something interesting to say:

It is easy to write a composition when all the necessary information including vocabulary and sentence structures [as Kei did] are laid out on the table. In a sense, the difficulty for a foreign language learner is that the writing process can be quite technical. After all, to achieve greatness in writing, unconsciousness plays a major role. (Colin’s written comments in the Task I post-writing questionnaire.)

2.4.2. Kei and Classroom Activities Leading to Writing Task II

The session right after the completion of the first theme study was the beginning of the second theme study, living in Japan. This study lasted 5 weeks with 3 sessions before and 2 sessions after the winter break. It proceeded differently from the first theme study. First of all, instead of focusing on one particular topic of the chosen theme, reading materials for this theme study covered different topics such as young people’s employment opportunities, male-female differences, and societal structures in Japan. They were all contrived to suit the learners' Japanese proficiency levels; a list of vocabulary needed for each reading was given. Kei’s instruction included lexical and structural exercises, comprehension check (display) questions, and extended (referential) questions for discussion. I noted a shift of instructional foci. Statements like the one below, which Kei made in the second session of the new theme study, were never heard during the course of the first theme study.

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13 See chapter 3 for detailed information about individual students and chapter 4 for an explanation of
Do you want me to go over some grammar as well? (Some students nodded their heads in agreement.) Some of you seem to be needing some grammar exercises. So let us work on this (referring to structural and lexical exercise worksheets accompanying the reading text under study) today. Also while reading, if you have any questions about grammar, ask me. I will explain to you. (An English translation of Kei's Japanese utterances transcribed in Field notes, November 17, 1994.)

In the interview we had two days after this class session, Kei made the following remark as if she were speaking to herself:

What I [i.e., Kei] really want is to have the students express their opinions and share their own experiences in relation to what we are reading in class. I want to do something more than explaining grammar and vocabulary, something substantial and meaningful for their lives. But at least one third of the students in the class are still struggling with structural and lexical problems. How can they possibly engage in meaning-construction processes without a sufficient degree of grammatical and lexical control over the Japanese language? (Interview notes, November 19, 1994.)

Around this time Kei was having individual conferences with the students to discuss their Japanese language studies during her office hours and noted that "they have different problems and these problems are mostly micro-level issues" (Interview notes, November 17, 1994). Apparently she saw the time had come, the time to pay more attention to micro-level linguistic problems. On the other hand, meaning-focused activities, mostly in the form of discussion, continued concurrently.

I saw the curricular events happening in these sessions as a pedagogical application of the interactive view of language processing in reading (e.g., Adams & Collins, 1979; Carrell et al., 1988; Lesgold & Perfetti, 1978) that aims at the development of top-down and bottom-up language processing skills, although Kei did not articulate her pedagogical stance in such terms. In making instructional decisions, Kei constantly experienced an internal struggle to be coherent and accountable. For instance, in an interview after the class that emphasized the study of small units of text such as words and phrases, Kei confided to me her concerns about effects of language-focused exercises that tended to be...
mechanical: "I wonder if those exercises were really useful to the students. It seems to me that they were intellectually not stimulating at all; nor were they facilitating the students' learning of language" (Interview notes, November 25, 1994). Her pedagogical concerns were, on the one hand, how to strike balance between attention to language and attention to content (described by Mohan, 1986, and van Lier, 1996, as one of the recurring problems language teachers face) and on the other hand, how to provide meaningful language-focused instruction.

During the winter break Kei was in Japan participating in a 5-week JFL teacher training course. As it turned out, this experience brought significant changes to her teaching in the subsequent classes after the break. There are two things about her experience in Japan that are important and relevant here. Among the courses offered during the training session, Kei found the course on the teaching and learning of EL reading most useful. The course served as a refresher of what she had learned--such as an interactive approach to reading and a schema theory--in a course on reading taken at her graduate school in Canada in the previous year. She was amazed at the advanced level of her understanding of the issues lectured on and discussed in the classes this time. She tried to explain to me, "My better understanding of theoretical issues this time was, I think, because the course was offered in Japanese" (Interview notes, January 5, 1995). She did not dismiss another possible reason, her previous exposure to the same or similar information. But she apparently preferred to emphasize the former reason. More than once in the same interview, she said to me, "It was so much easier to do things in Japanese. I could read so much and so quickly yet I could understand better [in Japanese]" (Interview notes, January 5, 1995). She then added, "I've never realized that doing things in a foreign language can be so difficult" (Interview notes, January 5, 1995). This realization of hers made her more sympathetic toward her JFL students grappling with language problems. Consequently, she began to see micro-level language issues more seriously than before.

Another important point about Kei's experience in Japan was her learning of the
JFL text readability measurement research based on Klare's (1974) work. Using the formula given by this JFL readability measure, Kei assessed the readability of the written texts she had used in the first half of the Japanese reading-and-writing course and figured that they were far beyond the proficiency levels of most students in her class. She began to think "the texts were probably linguistically too difficult for the students to activate fully the cognitive faculty that processes language for connection and comprehension" (Interview notes, January 5, 1995). My interview notes record:

Kei paused to laugh at herself, saying, "Ignorance is bliss." She then reflected on her teaching in the previous term: "While having the students read authentic or quasi-authentic texts containing words, expressions and syntactic structures that were beyond the readability level, I would tell them, 'Don't mind about the words and expressions you don't understand. Don't be too concerned about them. Read it through quickly, and see if you can grasp the gist of it.'" Kei now thinks that such an approach could have been of little use to the students and that it is a manifestation of the teacher's lack of responsibility. (Interview notes, January 5, 1995.)

Classes after Kei's trip to Japan differed from the preceding ones. They were more carefully pre-organized and systematic, following the sequence of content schema-setting activities, linguistic schema-setting activities, and reading comprehension exercises. The writing component remained as a subordinate or extended activity of reading exercises. But there was language-focused instruction, though limited, related to writing assignments.

In one class session where the second writing assignment was announced, Kei drew the students' attention to the "power of expression" (Field notes, January 26, 1995) and spent 30 minutes of the class time introducing and practicing a great variety of expressions to be used in expressing one's opinions and making an assertion that are subtly different from one to another depending on the writer's intention and the degree of his or her confidence in the statement he or she is making.14 This particular focus of instruction15 was, as Kei

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14 Forty-seven expressions of this kind were presented to the students. They included omou (I think), omowareru (it seems to (me)), dewanakarooka (isn't that ...?), and nakerebanaranai (must be/do).

15 The usefulness of such instruction was mentioned expressly by Jane in her written comments in the Task II post-writing questionnaire and during the interview. It is unknown, however, how the other students thought of such language-focused instruction.
had explained to me in our interview two days earlier (Interview notes, January 24, 1995), prompted by her discovery of the flat and dull tone of the students' writing in the previous assignment. Kei thought their compositions lacked the variety of such expressions.

The second writing assignment (Task II) was to write an essay based on the readings about living in Japan. Kei talked about the assignment for 2 minutes, all in Japanese. As in the case of Task I, no written instructions were given. No question was raised by the students about this assignment. The following is an English translation of Kei's instructions about the task:

We have been reading on various topics about living in Japan for the past several weeks. For this writing assignment, I want you to pick up one from those topics you've found most interesting and present your opinion on it. When you write this composition, you may, for instance, say something like "I have read such and such a thing in class but I think such and such. I agree with these points but not with those points. And my opinion is such-and-such" or something like that. I would like you to follow this kind of presentation pattern. And also, you don't have to limit yourself to the course readings. You may refer to or quote from the readings you may have done on your own. (An English translation of Kei's instructions for Task II.)

As it turned out, not all the instructions were heeded by the students. It was "disappointing" for Kei to find that most of the Task II essays were merely descriptive or expository without the statement of one's opinions. She regretted that not all of her instructions about this writing task were acted upon by the students. Nonetheless, she was pleased to see more originality in the Task II essays and thought that "they are better written than the Task I essays" (Interview notes, February 23, 1995).

2.4.3. Summary

Kei's approach to JFL writing was undoubtedly what Reid (1993) called "writing-based" rather than "language-based" (p. 29). Kei's teaching emphasized JFL writing as a cognitive skill rather than a language or grammar skill. This does not mean, however, that
Kei dismissed the importance of "micro-monitoring" skill in discourse production; rather, her intended focus was to allow interaction between "macro- and micro-monitoring" (Ellis, 1994, p. 132) skills in the process of creating compositions.

For both the Task I and Task II assignments Kei required the use of a specific organizational technique for presenting written discourse: the development of paragraphs by presenting pros and cons of a selected issue and stating one's opinions about them. However, this organizational pattern was inconspicuous or simply non-existent in the texts written for Task II, whereas it was manifest in every student's writing for Task I. As a consequence, the two writing assignments stand in contrast in terms of their modes of discourse; Task I was argumentative and Task II fundamentally descriptive or informative.

There are other differences as well. The Task I assignment was, in a way, more controlled than the Task II. No choice of topics was given in the former task, whereas in the latter the students were free to write on a topic of their choosing under the broad common theme of living in Japan. A discussion preceded the assignment of the former as a pre-writing activity utilizing brainstorming and listing techniques. No similar kind of discussion took place for Task II; there was, however, a provision of a list of predicative expressions prior to the Task II writing assignment. From the students' perspective, to paraphrase some of their remarks about the two tasks from individual interviews (see section 3.2.3), "not only the necessary information" (i.e., content) "but also the structure" (i.e., rhetorical organization) "was provided" for Task I, but Task II was "a write-whatever-and-however-you-want kind."
Chapter 3: Students’ Characteristics

3.1. Soliciting Student Participants

It was on my second visit to the class that I was given the first 10 minutes to talk about my research and to distribute a letter asking students to volunteer for the research. Volunteering was considered desirable as participants would have to be willing to offer extra time and energy to complete such tasks for the research as producing extensive verbal reports while writing compositions and attending interviews. The letter was written in English, stating the nature of the research tasks to be carried out by participants (Appendix D). It also indicated that the research findings I would obtain were to be used for doctoral research and that participants would be given a stipend of $100 as well as individualized suggestions for improving their Japanese writing in return for their participation in the study. Thirteen students signed a form of consent to participate in the study by the end of that class session.\(^1\) This unexpectedly large turnout (86.7%) was, as I found out later, mainly due to my offer to pay US$60 for each person to take a standardized oral proficiency interview test, one of the required research tasks. Apparently they were anxious to know how proficient they were in Japanese through a standardized means of assessment.

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\(^1\) One student decided to participate later but withdrew after a trial think-aloud session.
3.2. Generating Research Materials

A questionnaire and interviews were the primary methods I used to gather profile information about the student participants. All necessary contacts with the participating students were made while I was in the classroom, normally during the time waiting for the teacher to arrive and begin a lesson. No request was made of Kei to spare any of her class time for this purpose. Additional contacts were made by phone later to make sure that the participants received my instructions correctly and to provide them with an opportunity to ask me questions.

3.2.1. Questionnaire

A week after they signed the consent form for their participation in my study, I gave the students a 4-page questionnaire (Appendix E), asking them to complete it at home and return it to me in the following class session. The questionnaire was written in English and based on the background questionnaires used by Cumming (1988, pp. 222-224) for the study of ESL writing and by Oxford (1990, p. 282) as a supplement to the Strategy Inventory for Language Learning instrument. The questionnaire sought information on (a) general and linguistic background, (b) experience with the Japanese language, (c) motivation for learning Japanese, (d) self-evaluation of Japanese overall and writing proficiency and of first language (L1) writing proficiency, and (e) writing habits in Japanese and L1. Table 3-1 presents a summary of the participants' responses to the selected items of (1) ethnicity, (2) oral L1, (3) written L1, (4) self-rating of L1 writing proficiency, (5) degree of importance of learning Japanese, (6) length of residence in Japan.

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17 In this thesis, the term first language or L1 refers to the language a person feels most comfortable using. It may or may not be a person's mother tongue or the language acquired first. A person may have different L1s for oral and written communication. See Richards, Platt, and Platt (1992, p. 140) and Stern (1983a, pp. 9-14).
in the past 5 years, (7) self-rating of overall Japanese proficiency in comparison to JFL peers in class, and (8) in comparison to native speakers of Japanese, and (9) self-rating of Japanese writing proficiency in comparison to JFL peers in class, and (10) in comparison to native speakers of Japanese.

Table 3-1
Students’ Characteristics

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<tr>
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</thead>
<tbody>
<tr>
<td>Jasmine</td>
<td>Japanese</td>
<td>Japanese</td>
<td>English</td>
<td>fair</td>
<td>Very important</td>
<td>0</td>
<td>good</td>
<td>fair</td>
<td>good</td>
<td>fair</td>
</tr>
<tr>
<td>Jane</td>
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<td>English</td>
<td>English</td>
<td>fair</td>
<td>Very important</td>
<td>0</td>
<td>good</td>
<td>fair</td>
<td>fair</td>
<td>poor</td>
</tr>
<tr>
<td>Judith</td>
<td>Japanese</td>
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<td>English</td>
<td>fair</td>
<td>Important</td>
<td>1 year</td>
<td>good</td>
<td>fair</td>
<td>poor</td>
<td>poor</td>
</tr>
<tr>
<td>Joy</td>
<td>Japanese</td>
<td>English</td>
<td>English</td>
<td>fair</td>
<td>Important</td>
<td>2 years</td>
<td>good</td>
<td>poor</td>
<td>fair</td>
<td>poor</td>
</tr>
<tr>
<td>Jack</td>
<td>Japanese</td>
<td>English</td>
<td>English</td>
<td>excellent</td>
<td>Very important</td>
<td>2 months</td>
<td>good</td>
<td>poor</td>
<td>fair</td>
<td>poor</td>
</tr>
<tr>
<td>Cathy</td>
<td>Chinese</td>
<td>Cantonese</td>
<td>Chinese</td>
<td>fair</td>
<td>Very important</td>
<td>0</td>
<td>poor</td>
<td>poor</td>
<td>poor</td>
<td>poor</td>
</tr>
<tr>
<td>Colin</td>
<td>Chinese</td>
<td>Cantonese</td>
<td>Chinese</td>
<td>excellent</td>
<td>Very important</td>
<td>0</td>
<td>poor</td>
<td>poor</td>
<td>poor</td>
<td>poor</td>
</tr>
<tr>
<td>Charles</td>
<td>Chinese</td>
<td>Cantonese</td>
<td>Chinese</td>
<td>good</td>
<td>Very important</td>
<td>0</td>
<td>poor</td>
<td>poor</td>
<td>poor</td>
<td>poor</td>
</tr>
<tr>
<td>Mary</td>
<td>Chinese</td>
<td>Mandarin</td>
<td>Chinese</td>
<td>fair</td>
<td>Very important</td>
<td>0</td>
<td>fair</td>
<td>poor</td>
<td>poor</td>
<td>poor</td>
</tr>
<tr>
<td>Mike</td>
<td>Chinese</td>
<td>Mandarin</td>
<td>English</td>
<td>fair</td>
<td>Very important</td>
<td>0</td>
<td>fair</td>
<td>poor</td>
<td>fair</td>
<td>poor</td>
</tr>
<tr>
<td>Martin</td>
<td>Chinese</td>
<td>English</td>
<td>English</td>
<td>excellent</td>
<td>Important</td>
<td>1 year</td>
<td>good</td>
<td>poor</td>
<td>good</td>
<td>poor</td>
</tr>
<tr>
<td>Eliot</td>
<td>Anglo-Saxon</td>
<td>English</td>
<td>English</td>
<td>excellent</td>
<td>Very important</td>
<td>1 year</td>
<td>good</td>
<td>poor</td>
<td>good</td>
<td>poor</td>
</tr>
<tr>
<td>Eddie</td>
<td>Anglo-Saxon</td>
<td>English</td>
<td>English</td>
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<td>1 year</td>
<td>fair</td>
<td>poor</td>
<td>fair</td>
<td>poor</td>
</tr>
</tbody>
</table>

3.2.1.1. Participants’ Ethnicities and L1s. Each of the 13 students who stayed throughout the research period was identified by a pseudonym beginning with the first letter of the ethnic group to which he or she belonged. Five of them (Jasmine, Jane,
Judith,18 Joy, and Jack) were Japanese by ethnicity; all except Jasmine were born to native Japanese parents and schooled in Canada. Jasmine, whose parents were also native Japanese, was born and raised in Brazil until she moved to Canada with her family at Grade 4. Six students (Cathy, Colin, Charles, Mary, Mike, and Martin) were Chinese by ethnicity. Cathy, Colin, and Charles spoke Cantonese as a mother tongue and were educated in Hong Kong until they migrated to Canada with their families 5 or 7 years ago. Mary, Mike, and Martin spoke Mandarin. Mary and Mike came to Canada as immigrants when they were in Grades 7 and 4 respectively, whereas Martin was born to a Mandarin-speaking family in Canada and schooled in English here. It may be important to note, because of some shared elements of the Chinese and the Japanese writing system (see Taylor & Taylor, 1995), that the 3 Cantonese-speaking students and Mary possessed a relatively high level of Chinese literacy, that Mike's Chinese literacy was at an elementary-school level, and that Martin could speak but neither read nor write Chinese. Eddie and Eliot were white anglophone Canadians of Anglo-Saxon origin. Since I know all these languages myself, I felt capable of handling these participants in the research.

3.2.1.2. Participants’ Ages and Major Fields. The participants’ ages ranged from 18 to 25. All the students were in the final year of their undergraduate studies except for the 2 sophomores, Jasmine and Joy. Five students (Joy, Jane, Jack, Martin, and Eliot) did not choose Japanese-related subjects as a major field of their studies; their majors were, respectively, immunology, psychology, commerce, electrical engineering, and physical geography. The other students majored in Japanese Studies alone or in combination with other subjects such as economics and linguistics. Colin was then pursuing a second bachelor's degree in Japanese Studies; he had previously obtained a bachelor's degree in science from the same university. Most of the students were multilingual, knowing languages other than Japanese and English.

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18 Judith had a Japanese mother and a Chinese father and communicated with the mother in Japanese but in English with the father. Her Chinese roots were thin as she spoke no Chinese. For this reason, I categorized her within the Japanese ethnic group in this study.
3.2.1.3. Participants' Experiences with the Japanese Language. The students' experiences with the Japanese language varied. Jasmine, Jane, Judith, and Joy had, as it were, lived with the Japanese language throughout their lives, whereas Jack stopped using Japanese altogether on entering kindergarten; he then decided in adulthood to re-learn the language by taking Japanese language courses at the university. All the other students took up the study of the Japanese language through formal instruction after entering the university, though some students had tried to learn some Japanese by themselves before. Eddie spent a year at a university in Japan as an exchange student in his junior academic year in 1993-94. Martin and Eliot spent the same year in Japan but as company trainees rather than as students. This arrangement was part of the university's special Japanese language program for professional purposes in which Martin and Eliot received a year of intensive formal instruction in the language prior to their departures to Japan. Joy attended for two years an international high school in Japan, where all subjects were taught in English, before she enrolled in the university in Canada. Judith was enrolled in a JFL teacher-training course in Japan for a year in 1992. All the other students had neither been to Japan nor visited there.

3.2.1.4. Participants' Motivations for Learning Japanese. Despite their differences in age, major field, ethnicity, and experience with the Japanese language, the students were all motivated to pursue their study of Japanese. They indicated high levels of commitment, interest, and motivation at various occasions. According to their responses to Item II-(g) of the background survey questionnaire, they were all interested in the Japanese language and culture and needed or wished to use the language for their future careers. The students of Japanese ethnicity, except Judith, mentioned that their Japanese language study was also motivated by their desire to maintain ties to their relatives in Japan and to preserve the sense of their own heritage. Furthermore, the latest news of the students I received in spring 1996 proved that their motivation at that time was substantial and continuing. Jasmine, Jane, and Judith had since been training to be JFL teachers. When his
plan to live in Japan upon graduation failed, Jack went on to a law school at another university in Canada expressly to become a specialist in legal matters concerning Japan-Canada relations; he chose to live in a dormitory where the majority of residents were Japanese students from a university in Japan. Cathy had a full-time job but was working as a volunteer clerical assistant for a Japanese heritage-language program every Saturday just because she wanted to stay in touch with the Japanese language and people. Colin was now preparing to write a thesis on Japanese history for a master's degree which he had been pursuing at the same university after graduation. He was also hoping to be awarded a scholarship to conduct research in Japan. Upon graduation Mike returned to his native Taiwan to help his father's business that had a number of contacts with companies in Japan. Martin was completing a master's degree in engineering at an American university and had been promised employment by a large company in Japan. Eddie had recently been admitted to a master's program at the university of his undergraduate study and was planning to do research on Japanese religion. Eliot was pursuing a master's degree in Japan on a scholarship. It was toward these goals that the students probably wanted to improve and refine their Japanese during the year I conducted my research. In fact most of them were concurrently taking the other highest level course of Japanese speaking and listening taught by another instructor, another apparent indication of their high motivation for Japanese language study.

3.2.2. Assessment of JFL Proficiency and L1 Writing Expertise

Relatively objective methods were used to assess the participants' Japanese proficiency as well as their L1 writing expertise. The Japanese Speaking Test (JST) (Center for Applied Linguistics, 1992) was administered in January 1995 to measure the participants' oral Japanese proficiency, and its score reports were returned in March 1995. The JST is a simulated oral proficiency interview test derived from the Speaking
Proficiency Guidelines of the American Council on the Teaching of Foreign Languages (ACTFL). It is suitable for evaluation of the level of oral proficiency in Japanese attained by English-speaking learners of Japanese in post-secondary institutions. Examinees' taped responses are rated according to the ACTFL Guidelines at the Center for Applied Linguistics by a certified rater.

Since no standardized test of proficiency in JFL writing was currently available, the two compositions (see chapter 2 for a detailed description of these tasks) that the students had written for homework assignments in the course (and that are the foci of my investigation) were used as sample essays for the assessment of the participants' Japanese writing proficiency. The length required in both tasks was about 2 pages of regular-size writing paper or genkooyooshi (Japanese and Chinese manuscript paper containing 400 or 500 small squares into each of which one character fits). The average number of characters per essay was around 800 to 1000. When I obtained copies of the submitted essays, which were all handwritten, I typed them before giving them to raters for fear that the writers' idiosyncratic handwriting and the untidy appearance of some of their texts would affect the raters' judgments of the quality of the essays\(^\text{19}\) (see Appendix F for typewritten sample essays). In making these transpositions to typed text, I did not correct or edit the essays, however.

For the L1 essays, all the "J,"\(^\text{20}\) "M" (except Mary), and "E" students wrote compositions in English of 500 to 600 words in length under the title, "What the English language means to me." The "C" students and Mary wrote compositions in Chinese of 700 to 1000 characters in length under the title, "What the Chinese language means to me." Cathy, Colin, Charles, and Mary, who considered Chinese to be their written L1 and wrote Chinese essays, also produced essays in English under the same title "What the English

\(^{19}\) Some people may consider the quality of handwriting as one feature not to be neglected in assessing an essay (Vaughan, 1991). For the purpose of the present research, however, I decided that readers should not confuse the appearance of a paper with the quality of what is said and how it is said in the paper (Carlson, 1991, p. 308).

\(^{20}\) Joy failed to produce an L1 essay.
language means to me" 4 months after their production of Chinese essays, to see if there were any differences in the quality of their writing in the two languages. All these essays were written expressly for my research and produced at home on participants' own time. Most of the English essays were wordprocessed and all the Chinese essays were handwritten. The handwritten English essays were typed without correction or editing, for the sake of consistency, before submitting them to raters. The Chinese handwriting was neat and the appearance of the essays was tidy. Therefore, the Chinese essays were given to raters as they were. The topics yielded both narrative and descriptive modes of writing. Incidentally, these essays provided me with useful information about the writers' linguistic experiences and helped me understand the individual students better.

3.2.2.1. Writing Assessment Instrument. There is no single essay scoring scheme applicable to all languages or all contexts (Purves, 1992). But there seem to be certain common elements essential to compositions written in any context. Jacobs, Zinkgraf, Wormuth, Hartfiel, and Hughey (1981, p. 34) pointed out three essential elements focused on by composition teachers, testers, and students since the time of Aristotle: what to say (content), how to organize it (organization), and how to say it effectively (use of the units of language). Because of these salient features of any piece of writing, I favored multiple-trait, rather than primary-trait or holistic, scoring (see Hamp-Lyons, 1991b, for an account of different scoring procedures) for the assessment of the English, Chinese, and Japanese essays. Besides, "the multiple trait procedure possesses psychometric properties that enhance the reliability of single number scores built from its components" (Hamp-Lyons, 1991b, p. 252). Deciding how to obtain comparable scores between essays of different languages in different contexts, I was faced with two choices. One choice was to ask raters to make judgments on their own intuitive criteria and to rate on a 4- or 5-point scale the quality of each of the three main components--content, organization, and language use. The other option was to use an established instrument with scoring criteria capable of scoring an essay on the above components, pending the question of "transferability"
across languages or tasks. I chose the latter option and considered Hamp-Lyons's 9-point scale as a candidate (Hamp-Lyons, 1991a).

Hamp-Lyons's scale, known as the New Profile Scale, was developed to be used in scoring the writing component of the British Council's English Language Testing Service (ELTS) test (1980-1989) taken by post-secondary nonnative speakers of English wishing to attend college or university in Britain (Hamp-Lyons, 1991a; Hamp-Lyons, 1991b; Hamp-Lyons & Henning, 1991). Naturally the task type and scoring procedures of this writing test reflect what is valued in writing in the western academic context. One obvious example is the inclusion of the *argumentation* traits in the scoring instrument. Considering apparent differences (in languages involved, purposes, tasks, writing conditions, etc.) between the ELTS and my research context, the application of Hamp-Lyons's scale (the version given in Hamp-Lyons, 1991a, pp. 149-151) to the latter may seem problematic. On my examination of the instrument, however, I found the criteria or band descriptors fairly general and appropriate for the assessment of the essays I collected. It certainly remains a big question whether Hamp-Lyons's 9-point scale is a valid measure in assessment contexts different from that for which the instrument was designed. I used the instrument in its original English form, nonetheless, with a slight modification. The modification was to exclude the category of *argumentation*, which did not fit the modes of writing used in my study (except for the Japanese essays written for Task I). Although the recommended practice of multiple trait assessment is to treat each trait separately (Hamp-Lyons, 1995), I combined trait scores and used the total score as an indication of each participant's writing proficiency in each of the two languages (Japanese and L1), following the method of Jacob et al.'s (1981) "composition profile." The maximum total score was thus 36, built from its component scores in *communicative quality, organization, linguistic accuracy, and linguistic appropriacy*, which are weighted a maximum of 9 points each, equally.21

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21 According to Hamp-Lyons (1991b), "the safest way to combine scores is to weight each facet equally" (p. 249; cf. Jacobs et al., 1981).
I used trait scores to examine the qualities of Japanese essays (see chapter 5).

3.2.2.2. Writing Assessment Raters. In all, seven volunteer raters were involved: 2 English, 3 Chinese, and 2 Japanese (see section 5.1.1.2 for more information about the Japanese raters). They were all native speakers of the respective languages. The Chinese and Japanese raters were all balanced bilinguals of Chinese or Japanese and English, which made it possible to present the scoring instrument in its original English form. All the raters were experienced language teachers familiar with recent research on writing. One Chinese rater had taught for 5 years and all the others had teaching experience of 10 to 18 years. One held a Ph.D. in language education; two English raters held master's degrees in Teaching English as a Second Language; the rest were completing a Ph.D. in second language acquisition at the time of the rating. They were told that scores would be used only for the purpose of my research and that the writers would have no access to the scores. They were also informed that the essays were written by native or non-native speakers, but no other information on the writers was disclosed for ethical and halo effect considerations. In fact the raters had never met the participating students. Due to some difficulties in making arrangements, no special training was provided to the raters except the written instructions on the rating procedures (Appendix H); nor were the conditions under which the rating was performed strictly controlled. None of the raters had used Hamp-Lyons's scale before. Despite all these unfavorable conditions, interrater reliability correlations turned out relatively high, .76 for the Japanese essay ratings, .95 for the English, and .90, .92, and .98 for the Chinese. These correlation coefficients were considered sufficient to assure the ratings for this study were reliable.

Three raters, instead of 2 as are commonly utilized in many writing assessments, scored the Chinese essays. A third rater, a Hong Kong Chinese, was added to the first two volunteers, who were both educated in the People's Republic of China (PRC), because all the Chinese essays in the present study were written in the original form of Chinese characters used in Hong Kong and Taiwan rather than the simplified version which is the standard written Chinese in the PRC. Among these Chinese-speaking places, however, there should be no different standards applied to rhetorical and grammatical requirements in a piece of writing.
3.2.2.3. Participants' Language-Related Characteristics. The students' characteristics on language-related factors are summarized in Table 3-2 (an expanded summary of the students' characteristics appearing in Table 3-1). This summary presents the individual's Japanese and English or Chinese essay scores given by the two or three raters as averages.23

Some interesting features appear in Table 3-2. All the ethnic Japanese students except Jack were rated *superior* or *advanced-high* on the JST and received relatively high scores on their Japanese essays (28 to 34) as well as on their L1 essays (30 to 35). The 3 non-ethnic Japanese students with recent residential experience in Japan (Martin, Eliot, and Eddie) were rated *advanced-high* or *advanced* on the JST but their scores on the Japanese essays (22 or 23) were not as high as the scores of the high JFL-proficient ethnic Japanese students, although their scores on the L1 essays (32 to 34) were comparable. The other students fell in the *intermediate* band of the JST rating scale; their Japanese essay scores ranged between 15 and 26 while their L1 essay scores were between 23 to 35. A condensed summary of these trends is given in Table 3-3.

23 I was told during interviews that Mary, Martin, and Eliot had their Japanese friends read and correct their Japanese compositions for Task II before handing them in. Thus, the scores given to their Task II essays were excluded from this calculation. All other essays were submitted without any input from others, as I verified during the interviews. Two sets of Japanese essays (i.e., Tasks I and II) were averaged, for all participants except Mary, Martin, and Eliot, to generate scores indicating their Japanese writing proficiency. Cathy, Colin, Charles, and Mary received two sets of scores for their L1 writing, one for the Chinese and the other for the English essay. Their Chinese essay scores were substantially higher by 4 to 8 points so I used that measure as an indication of their L1 writing expertise.
### Table 3-2

**Students' Language-Related Characteristics**

<table>
<thead>
<tr>
<th>Participant</th>
<th>Oral L1</th>
<th>Written L1</th>
<th>Self-rating of L1 writing</th>
<th>Rating of L1 essay</th>
<th>LOR in Japan in past 5 yrs</th>
<th>Self-rating of overall Japanese class; native</th>
<th>JST rating</th>
<th>Self-rating of Japanese writing class; native</th>
<th>Rating of Japanese essay</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jasmine</td>
<td>Japanese</td>
<td>English</td>
<td>fair</td>
<td>30</td>
<td>0</td>
<td>good; fair</td>
<td>superior</td>
<td>fair; poor</td>
<td>34</td>
</tr>
<tr>
<td>Jane</td>
<td>English</td>
<td>English</td>
<td>fair</td>
<td>34</td>
<td>0</td>
<td>good; fair</td>
<td>superior</td>
<td>poor; poor</td>
<td>31</td>
</tr>
<tr>
<td>Judith</td>
<td>English</td>
<td>English</td>
<td>fair</td>
<td>35</td>
<td>1 year</td>
<td>good; fair</td>
<td>advanced</td>
<td>poor; poor</td>
<td>33</td>
</tr>
<tr>
<td>Joy</td>
<td>English</td>
<td>English</td>
<td>fair</td>
<td>35</td>
<td>missing 2 years</td>
<td>good; poor</td>
<td>superior</td>
<td>fair; poor</td>
<td>28</td>
</tr>
<tr>
<td>Jack</td>
<td>English</td>
<td>English</td>
<td>excellent</td>
<td>35</td>
<td>2 months</td>
<td>good; poor</td>
<td>intermediate</td>
<td>fair; poor</td>
<td>17</td>
</tr>
<tr>
<td>Cathy</td>
<td>Cantonese</td>
<td>Chinese</td>
<td>fair</td>
<td>30</td>
<td>0</td>
<td>poor; poor</td>
<td>intermediate</td>
<td>poor; poor</td>
<td>16</td>
</tr>
<tr>
<td>Colin</td>
<td>Cantonese</td>
<td>Chinese</td>
<td>excellent</td>
<td>35</td>
<td>0</td>
<td>poor; poor</td>
<td>intermediate</td>
<td>poor; poor</td>
<td>20</td>
</tr>
<tr>
<td>Charles</td>
<td>Cantonese</td>
<td>Chinese</td>
<td>good</td>
<td>29</td>
<td>0</td>
<td>poor; poor</td>
<td>intermediate</td>
<td>poor; poor</td>
<td>24</td>
</tr>
<tr>
<td>Mary</td>
<td>Mandarin</td>
<td>Chinese</td>
<td>fair</td>
<td>26</td>
<td>0</td>
<td>fair; poor</td>
<td>intermediate</td>
<td>poor; poor</td>
<td>26</td>
</tr>
<tr>
<td>Mike</td>
<td>Mandarin</td>
<td>English</td>
<td>fair</td>
<td>23</td>
<td>0</td>
<td>fair; poor</td>
<td>intermediate</td>
<td>fair; poor</td>
<td>15</td>
</tr>
<tr>
<td>Martin</td>
<td>English</td>
<td>English</td>
<td>excellent</td>
<td>32</td>
<td>1 year</td>
<td>good; poor</td>
<td>advanced</td>
<td>good; poor</td>
<td>23</td>
</tr>
<tr>
<td>Eliot</td>
<td>English</td>
<td>English</td>
<td>excellent</td>
<td>32</td>
<td>1 year</td>
<td>good; poor</td>
<td>advanced</td>
<td>good; poor</td>
<td>22</td>
</tr>
<tr>
<td>Eddie</td>
<td>English</td>
<td>English</td>
<td>good</td>
<td>34</td>
<td>1 year</td>
<td>fair; poor</td>
<td>advanced</td>
<td>fair; poor</td>
<td>23</td>
</tr>
</tbody>
</table>

### Table 3-3

**Summary of Students' L1 Writing, JFL Oral, and JFL Writing Skills**

<table>
<thead>
<tr>
<th>Participants</th>
<th>L1 essay scores</th>
<th>JFL oral proficiency levels</th>
<th>JFL essay scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;J&quot;s (except Jack)</td>
<td>30 - 35</td>
<td>superior advanced-high</td>
<td>28 - 34</td>
</tr>
<tr>
<td>&quot;E&quot;s &amp; Martin</td>
<td>32 - 34</td>
<td>advanced-high advanced</td>
<td>22 - 23</td>
</tr>
<tr>
<td>Jack, &quot;C&quot;s &amp; &quot;M&quot;s (except Martin)</td>
<td>23 - 35</td>
<td>intermediate-high, mid, low</td>
<td>15 - 26</td>
</tr>
</tbody>
</table>

Another curious trend in the data is that the high JFL-proficient ethnic Japanese students evaluated their competence in writing in Japanese to be only *fair* or *poor* when
they were asked to assess it as compared to other students in their class, but they considered their overall Japanese proficiency to be good in comparison with their peers. And their Japanese compositions, in fact, received high scores. Eliot, Eddie, and Martin rated their overall and written Japanese likewise as good or fair relative to other students in the class, which does not fit well the gap we find between their JFL oral proficiency levels and JFL essay scores assessed by JFL specialists. The intermediate JFL-proficient students (except for Jack) also rated their overall and written Japanese similarly but at the lower end of the scale, i.e., fair or poor. It is difficult to make sense of this trend. But one thing that might be said is that the orally proficient ethnic Japanese learners were overly concerned about their less skilled writing ability and underestimated their actual competence in writing in Japanese. In other words, writing was probably a specific concern for them, whereas, for other students, it was not necessarily a focal point of their Japanese language studies but just one of many aspects to be improved.

For the participants' self-ratings of L1 writing skill, Jack, Colin, Martin, and Eliot rated theirs as excellent. If we suppose that the rating of excellent reflects a high degree of confidence in written language, such confidence indicated by Jack and Colin does not seem to have been carried over to their Japanese writing experiences; they assessed their Japanese writing skills as only fair or poor. This may be because of their insufficient ability to use the target language (though Jack indicated his confidence by rating his overall Japanese proficiency as good). On the other hand, Martin's and Eliot's ratings of their Japanese writing skills as good might be related to their confidence in writing, Japanese, or both. The other students rated their L1 writing skills as good or fair and might have considered themselves "average" writers who could write (but not particularly well) or "inexperienced" writers who had little practice in writing. Self-reporting and self-assessment data pose questions of reliability and validity, and they necessarily have limitations. Nonetheless, such data can assess people's psychological states about the matters queried. In my study these self-rating data were consulted to examine participants'
attitudes toward Japanese and L1 writing.

3.2.3. Interviewing

My study focused on the two major writing tasks the students worked on for the course. How did the students perceive the tasks? What were their expectations or targets in these tasks? To understand the students' viewpoints, I met with the participants individually or in pairs (according to their preferences)\(^{24}\) for 20 minutes to 1 hour between February 28 and March 16, 1995, after their completion of the second task in mid February. The interviews were conducted in English and structured around four main questions probing for information on the students' perceptions of JFL writing and learning. The questions were:

1. What do you think you learned from writing the two compositions for the course?
2. What expectations do you have for your own compositions in Japanese?
3. What difficulties do you have in writing Japanese compositions? Or what are the frustrations you feel while writing in Japanese? And how do you deal with them?
4. What functions does composition writing play in your study of Japanese?

Before they attended the interviews, I told the students briefly about the questions and encouraged them to give them some thought. My interview guide (Appendix I) contained not only these questions but also synoptic notes of what I was to say at the beginning of the interview, follow-up questions to each main question, and questions for additional information. During the interviews I was primarily a listener seeking information from the interviewees with occasional interruptions for clarification and follow-up. All the interviews were audiotaped with the interviewees' permission and later transcribed verbatim.

\(^{24}\) There were 7 individuals and 3 pairs (Jasmine and Martin, Judith and Colin, and Joy and Mary).
The prepared questions for the interview were deliberately made broad and redundant, probing for the interviewees' prime concerns from different angles. A perusal of the interview transcripts led me to identify five themes commonly talked about: (a) conceptions of writing in Japanese, (b) expectations about one's own Japanese writing, (c) problems in writing in Japanese, (d) experiences of learning through writing in Japanese, and (e) conceptions and experiences of writing in L1.

3.3. Answering the Research Question

How do students' characteristics relate to their perceptions of JFL writing and learning?

What stood out in the interview data (the full summary of the data appears in Appendix J) was the learners' preoccupation with language production. Their primary concern was how to put their thoughts into appropriate language. Apparently writing in Japanese in this context, for them, was synonymous with skill in usage and structure of language. It appeared that the students, regardless of their levels of proficiency in Japanese, viewed JFL writing from the standpoint of language rather than ideational content. Some students were more explicit on this point than others during their interviews with me. For instance, Martin did not "think the content is really important"; for Mike, writing a Japanese composition was "a chance to practice using Japanese, focusing on the right word choice and stuff"; and Eliot viewed writing Japanese compositions as "one of the ways of getting better Japanese." Grammatical correctness was emphasized by Cathy, Charles, Mary, Martin, and Eliot. Judith, Joy, and Charles felt that their lack of vocabulary

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25 This and other quotes in section 3.3 were taken from the transcripts of respective individuals' remarks during their interviews with me, unless indicated otherwise. The words are minimally edited for readability.
was hindering their writing processes. Such specific problems as the writing of *kanji* and sentence-final expressions were raised by Jasmine, Jane, Judith, Joy, and Eddie. Further, most of these students associated their experiences of learning through JFL writing with the learning of some aspects of the target language. Apparently, writing compositions in Japanese forced these JFL learners to think about syntactic and lexical properties of the Japanese language (cf. Swain & Lapkin, 1995), and this process might have served functions conducive to L2 learning, as suggested by Swain (1995).

On the other hand, no one really mentioned the problem of coming up with ideas for essays during the interviews (although Judith, Joy, Cathy, and Eliot spoke of their concerns about putting ideas together or the organization of ideas). Even Judith, who struggled in vain to write something "personally meaningful" and "interesting" in order to enjoy the writing processes, had enough things to write and did not talk about content as her problem in writing in Japanese; instead, she saw *kanji*, vocabulary, and expressions as hurdles. Joy "had to do a lot of research for the second [writing] task." Similarly, Charles "had to get some information for the content of the essays." But it appeared that neither of them saw this as a problem; rather, they attributed their content-related learning experiences to such work, and identified vocabulary, grammar, or both as their problems in writing Japanese essays.

It seems that these adult learners writing in a foreign language experience just the opposite of what Bereiter and Scardamalia (1987) discovered about children's problems in writing essays in their native language, i.e., "problems of finding content, not of finding

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26 Japanese texts are written in a mixture of different types of scripts. They use mostly Chinese characters called *kanji* for content words and one form of a syllabary called *hiragana* for grammatical morphemes. Because of the orthographic and semantic complexity, Japanese people expend an enormous amount of time and effort on learning *kanji*. It is possible to write a Japanese text all in *hiragana* without using *kanji* as in most texts intended for little children. But such texts, as Jane correctly pointed out during her interview, "look very childish." See Taylor and Taylor (1995) for a detailed description of the Japanese writing system.

27 Exceptions were Cathy and Charles. Cathy did not find anything substantial to have the sense of learning in. Charles mentioned content learning, not language learning, as a result of his writing Japanese essays; for language learning, he, rather, talked about "read[ing] a lot" as "the major point of studying Japanese well." Jasmine, Jane, Joy, and Eddie indicated content learning (cf. Gere, 1985) as well as language learning that might have resulted from writing Japanese compositions.
language to express it" (p. 62).\textsuperscript{28} Participants in my study, rather, had problems of finding language to express themselves, not of finding content to write. In a way their attitude toward JFL writing overlaps with the picture of writing behavior of unskilled mother-tongue college students that has emerged from a number of writing process studies (e.g., Perl, 1979; Pianko, 1979; Shaughnessy, 1977), depicting such writers as persistently concerned about sentence-level correctness.

For the students in my study, JFL writing was primarily a language production activity. However, some students did imply that they also paid some attention to the aspect of writing concerned with “meaning making” (Flower, 1993, pp. 17-22) that pictures writers engaged in the process of representing their thoughts, feelings, and images in text. Jasmine, for instance, “tried to write [a Japanese essay] as a short essay like putting the points down and explaining why”; Judith emphasized the importance of finding topics that are “personally meaningful” and “interesting”; Joy, Cathy, and Colin approached the Japanese writing task in such a way as they would do in creating text in their L1s, following “the prewriting [process] that is basically the same” (Joy), focusing on the points to be made in a piece of writing (Cathy), or “searching for an image, the soul of an essay” (Colin).

It is difficult to find any clear patterns about the relations between students' characteristics and their perceptions of JFL writing and learning. However, it seems that highly proficient, native-like learners are more able to expend their cognitive energy on content-related matters. This inference makes sense theoretically, if we apply concepts of automaticity (e.g., LaBerge & Samuels, 1974; McLaughlin, 1987, chap. 6; Shiffrin & Schneider, 1977). According to automaticity theory, people who process linguistic elements skillfully and automatically in a certain task leave attention free to be used for

\textsuperscript{28} See also Durst's (1989) and Langer's (1986a, 1986b) studies indicating that elementary and secondary school mother-tongue students of English paid proportionally less attention to such issues as mechanics, syntax, and lexical choices while they composed; instead, these students focused more on formulating ideas and refinement of meaning.
higher levels of information processing such as deriving and making meaning. There are, however, a few cases in my study that do not fit exactly with this picture. I examine two such cases--Jane and Colin--below.

3.3.1. Jane's and Colin's Perceptions of JFL Writing and Learning

3.3.1.1. Jane. It appeared that Jane, a native-like speaker of Japanese rated as superior on the JST, considered JFL writing primarily as a language production activity. In her interview she pointed to the "big gap" between her speaking and writing abilities in Japanese, saying, "I didn't know [my Japanese writing skill] was this bad." Because of her strong sense of her Japanese heritage, she felt that her Japanese writing should be as good as the writing of native Japanese people of her age, using "more decorative, mature, and sophisticated forms" of words and expressions and more kanji. Writing Japanese essays provided her with opportunities to be aware of the need of refining her Japanese and to work toward that language-focused goal. Asked about her sense of learning through JFL writing, Jane did mention some learning of the content she wrote for the essays as well as language use. But throughout her interview, she emphasized her concerns about language issues in conjunction with her cultural heritage. Apparently she did not give much attention to meaning making during her production of Japanese text; instead, she focused on language issues.

3.3.1.2. Colin. Colin had a unique view of writing. Writing was an essential means for him to make his thinking clear. He compared the process of composing a piece of writing to that of "playing a jigsaw puzzle" as both seek for a coherent whole. This process, according to Colin, is valid in any kind of writing including the JFL writing assignments done in the course. Concerning specific problems of writing in Japanese, he spoke of the importance of "getting into the logic of the Japanese mind and seeing things from the Japanese point of view" by "getting exposed to and absorbing the way [Japanese
people] deal with a particular topic and present it in writing." This is, as Colin said, "like falling into the sea of Japanese culture." He continued, "There you can pick up words and expressions in the way [Japanese people] use naturally." Being an intermediate-level learner of Japanese, Colin saw language use as "a major barrier" in his production of Japanese essays. But he took this fact calmly and confidently, saying, "Right now I am not [at the stage where one can use language like a native] but this situation cannot last forever ... When I read, I try to assimilate the [Japanese] language, give myself to it, and be friendly to it instead of struggling with it." Such remarks by Colin about Japanese language learning are suggestive of his unique approach to language and language learning.

To Colin, an experienced (but not professional) writer in his L1, writing in any language is a culture-bound, meaning-making activity. He wanted to write something in Japanese that "could move the Japanese reader." Creating a piece of writing that "is coherent and well thought-out," as Kei spoke of Colin's Japanese writing (Teacher interview notes, November 24, 1994), was probably an integral part of Colin's conscious and subconscious knowledge. What came into his mind as new knowledge or learning as a result of writing JFL compositions were some aspects of Japanese language use. The JFL writing assignments provided Colin with opportunities to "think how to match the content with linguistic expressions" of Japanese.
Chapter 4: Writing Processes

4.1. Generating Research Materials

4.1.1. Collection of Think-Aloud Protocols

I employed the think-aloud procedure (Ericsson & Simon, 1993), which has been used profitably in psychological studies of, among others, reading (Pressley & Afflerbach, 1995) and writing (Bereiter & Scardamalia, 1987; Smagorinsky, 1989, 1994b), to trace the thought processes of writers at work.\(^{29}\) In accordance with the emphasis of my study on the social and psychological contexts of writing, the collection of think-aloud protocols was placed in as authentic composing situations as possible. Rather than asking students individually to appear in an isolated place to conduct a protocol session at an appointed time in the presence of the researcher, protocols were produced at the participants' own homes (cf. Smagorinsky's in-progress work reported in Smagorinsky, 1994c; see also Smagorinsky, 1997).

On the day the writing task to be used for my research was given as an assignment in class, the participating students received from me a packet containing 2 120-minute blank audiotapes,\(^{30}\) a sheet of general instructions, a sheet of think-aloud instructions (Appendix K), and a sheet of post-writing questions (see section 4.1.4; Appendix L). They

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\(^{29}\) Smagorinsky (1989, 1994b) provided a review of recent claims and criticisms of protocol analysis with particular reference to writing research.

\(^{30}\) The participants were told to supply their own blank tapes in case they needed more than 2 tapes to record the entire process of writing. They were also told that the same number of extra tapes as they provided would be issued later. As it turned out, most students were able to complete their think-aloud sessions within 2 hours, thus leaving 1 tape provided by me unused. A few needed to use the second tape but only part of it.
used their own tape recorders to produce think-aloud protocols. All instructions and questions were written in English. The think-aloud instructions were adapted from Ericsson and Simon (1993, pp. 376-377) and Flower (1990c, pp. 72-73) and stressed two points: (a) to work on the writing task as one normally would do, and (b) to say out loud and clearly everything that comes into one's mind while writing. No time limitations were imposed; nor was a restriction placed on the use of dictionaries or reference books. The students were free to use any languages to report their thoughts while composing. In case they needed to take a break, they were told to record the time and date of signing off and signing back in to the tape-recording. They were also requested to fill in, right after completing the writing task (i.e., having produced a final version to be submitted to the instructor), the post-writing questionnaire.

All the participants wrote essays with a pen or pencil rather than using word-processing although a few students mentioned, while thinking aloud or during interviews, their desire to produce essays with word-processing. Audiotapes of the think-aloud protocols, one copy of an essay produced during a think-aloud session, one copy of the final version to be submitted to the instructor, and a filled-out post-writing questionnaire were returned to me on or shortly after the day the assignment was due.

There were two main writing assignments during the course which were the objects of my study, as mentioned earlier. Prior to these tasks, a pilot trial of the think-aloud procedure was carried out in exactly the way explained above for the main tasks, using a summary writing task assigned by Kei as homework in October 1994. The participants were informed that it was a practice session and told of the importance of this trial. The timeline of the assignments from which protocol data were generated is shown in Table 4-1.

After the trial session, the participants were asked about their experiences in thinking aloud. None of them had had the experience of systematically thinking aloud before. Seven students reported that they felt at ease with the task while the remaining 6
found it difficult and were unsure whether they were doing as expected. Nonetheless, all the verbal protocols from the trial session turned out more or less satisfactory. All the participants said they liked the idea that I was not present during their think-aloud sessions.

<table>
<thead>
<tr>
<th></th>
<th>Date of Assignment Given</th>
<th>Due Date of Assignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pilot trial</td>
<td>October 20, 1994</td>
<td>October 27, 1994</td>
</tr>
<tr>
<td>Task I</td>
<td>November 8, 1994</td>
<td>November 17, 1994</td>
</tr>
<tr>
<td>Task II</td>
<td>February 2, 1995</td>
<td>February 14, 1995</td>
</tr>
</tbody>
</table>

4.1.1.1. Reactivity. Some participants' accounts of their experiences in thinking aloud, obtained during the interviews, showed traces suggestive of reactivity to the think-aloud method which might have resulted in these people's altering their cognitive processes from what they might have used to carry out these tasks under normal (i.e., non-protocol) conditions (see Smagorinsky, 1989; Stratman & Hamp-Lyons, 1994). For example, Eddie said:

[Thinking-aloud] took a lot more thought than I thought it would. For instance, I didn't really ever think of the process of looking up words or creating a sentence when I just wrote without talking. It was interesting, though, to see my own thought processes at work. Actually the method was, I thought, very useful because it helped me clarify what it was exactly that I was doing in my mind. On the other hand, this, I think, might affect the way in which I write, and therefore these essays may be different from those I have written without speaking. (Eddie's interview, March 2, 1995.)

Jasmine's comment was:

I found it hard to say everything I think because I might be thinking different things at different times. While writing down one phrase, I might be thinking of a whole bunch of other things at the same time. So I can't really put all the thoughts into words. Besides thinking goes so fast that I can hardly get hold of it. (Jasmine's interview, March 9, 1995.)

Cathy also found it difficult to verbalize her thoughts while working on an essay and said,
"To tell the truth, I had to think of what to say into the tape first" (Cathy's interview, March 2, 1995). Eliot gave an outright disapproval of the method:

I don't like to think aloud because speaking and thinking are two different things. It's really painful to write and speak at the same time. When I hear my own voice, I cannot think clearly any more. (Eliot's interview, March 16, 1995.)

Jack "wasn't sure exactly what was expected at first" but gradually he "felt comfortable with [the think-aloud method]" (Jack's interview, March 8, 1995) and invented what he called "the stream-of-consciousness approach" inspired by the think-aloud method, using it in the second of the two composition tasks. Using the stream-of-consciousness approach, Jack first thought aloud into the tape in Japanese to compose, rewound the tape, and transcribed what was recorded onto paper. Jane was the only participant who experienced no difficulty at all in thinking aloud from the start: "I don't think it affected the way I wrote. I don't think it disturbed the process of my writing. And I don't think it made me nervous or anything" (Jane's interview, March 16, 1995).

These data suggested that reactive effects did exist in the think-aloud protocols collected and were rather idiosyncratic, as the prevailing assumption holds (cf. Stratman & Hamp-Lyons, 1994). Despite the possible existence of such effects, think-aloud protocol analysis "offers a unique glimpse into the workings of the human mind, and has a distinct persuasiveness due to the storytelling character of the data" (Smagorinsky, 1994a, p. xiii). I regarded it as one of the essential means to validate my exploratory and descriptive study of situated writing in JFL.

4.1.2. Transcription of Think-Aloud Protocols

Once the audiotapes of think-aloud protocols were returned to me, I began
transcribing them into computer files in preparation for coding. They involved four languages: Japanese, English, Cantonese, and Mandarin. I, a balanced bilingual of Japanese and English with some knowledge of spoken Cantonese and Mandarin, transcribed all the Japanese and English verbalizations exactly as they were spoken. For the Cantonese and Mandarin data, a well-educated native speaker of Cantonese who speaks and writes fluent English and Mandarin and has some knowledge of Japanese translated these segments into English as we listened to the tapes together. In my transcriptions Japanese utterances appear in romanization, English verbalizations are typed in italics, and English translations of Cantonese and Mandarin utterances are underlined. Other conventions used in transcription (described in Table 4-2) are primarily from Cumming (1989, pp. 91-92).

Table 4-2
Transcription Conventions

<table>
<thead>
<tr>
<th>Mark</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>.</td>
<td>A period indicating the closure of an utterance with falling intonation, usually followed by a pause.</td>
</tr>
<tr>
<td>?</td>
<td>A question mark indicating a rising (questioning) intonation.</td>
</tr>
<tr>
<td>.</td>
<td>A comma indicating a shorter pause or abrupt shift in the flow of an utterance.</td>
</tr>
<tr>
<td>&quot; &quot;</td>
<td>Double quotation marks indicating that words, phrases, or sentences inside the marks are treated as text to be written down.</td>
</tr>
<tr>
<td>...</td>
<td>Three dots indicating an unfinished utterance.</td>
</tr>
<tr>
<td>[...]</td>
<td>Two dots inside square brackets indicating inaudible sounds.</td>
</tr>
<tr>
<td>{ }</td>
<td>Curly brackets used for original Cantonese or Mandarin words in romanization where it is more meaningful to do so.</td>
</tr>
<tr>
<td>( )</td>
<td>Parentheses used for the transcriber's comments.</td>
</tr>
</tbody>
</table>

The process of transcription was facilitated by consulting students' written notes and earlier drafts, which I collected whenever they were made available to me.
4.1.3. Coding of Think-Aloud Protocols

Following the practice used by Cumming (1989), I analyzed only verbal reports of the participants' thinking about their writing. This excluded remarks directed at the researcher, the reading aloud of text already written, and the sounding out of text to emerge. Exceptions were words and phrases of text uttered in conjunction with comments about writing. These selected protocols were segmented into communication units (c-units) and numbered chronologically. Following Langer (1986a, 1986b), I defined the c-unit as a separately identifiable remark about a thought or behavior. A c-unit “may have several sentence nodes as a consequence of having several sentences, several clauses or being a run-on or compound sentence” (Freed, 1978, p. 43) to express an idea. C-units are not always grammatical sentences due to false starts and pauses common in speaking. C-unit segmentation was applied across English (original English utterances and English translations of Cantonese and Mandarin verbalizations) and Japanese protocols.

As Smagorinsky (1994c) aptly pointed out, a coding system applied to protocols reflects the researcher's assumptions and agenda. I had my own assumption and agenda in deriving a system to code my protocol data. With my primary concern about writing-and-learning relations, I wished to highlight the writers' mental operations while engaging in actual production of written text. My assumption was that such thought processes would be suggestive of opportunities for learning. I consulted a number of protocol studies of writing and decided to adopt parts of Cumming's (1989) and Langer's (1986a, 1986b) studies.

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32 The c-unit has been used as a measure of the syntactic complexity of native English-speaking children's (e.g., Loban, 1963; Smith, 1978) and non-native English speakers' (e.g., Brock, 1986; Freed, 1978) oral utterances; it has also been used to distinguish the stretches of verbalizations from one another in overall think-aloud protocols of native English-speaking children and adolescents during their production of written text (Durst, 1989; Langer, 1986a, 1986b; Marshall, 1987; Newell, 1994). Operational definitions of the c-unit may differ slightly from one study to another. This linguistic unit differs from T-unit (Hunt, 1965, 1970) or idea unit (Chafe, 1980).

33 The validity of the c-unit as a cross-language measure has yet to be demonstrated. However, Harrington's (1986) successful application of T-unit—a linguistic unit comparable to the c-unit—analysis, which has thus far been most widely used with English and other European (such as French and German) languages, to spoken Japanese lends some support to my application of c-units to Japanese and English discourses in the same study.
schemes. These satisfied my interest in the what and how of mental operations while composing. Thus, I first coded each c-unit for aspects of the writer's attention (gist, discourse organization, language use-lexis, language use-syntax, language use-spelling, or writing procedures; Cumming 1989, adapted from Scardamalia & Paris, 1985), and then for the nature of the writer's monitoring behaviors (more or less reflective, corresponding to what Langer called awareness and use, following Baker & Brown, cited in Durst, 1989). Categories are shown in Table 4-3 with examples. English translations of these sample transcripts are provided in cases where they were Japanese utterances. Portions of representative protocols in a continuous text with coded categories are shown in Appendix M.

<table>
<thead>
<tr>
<th>Table 4-3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Categories for Coding Think-Aloud Protocols</td>
</tr>
</tbody>
</table>

1. Aspects of the writer's attention

(g) **gist** = remarks that focus on the substantive content of the emerging text.

> How should I look at this problem of ijime [bullying]? (Colin, Task II)

> ee kono sakubun wa mangabunka no yoi ten warui ten soshite soreni tsuite no jibun no iken o kaku koto dakedo [un in this composition I am supposed to write about good and bad points of comic culture and my opinion on it.] (Jasmine, Task I)

(o) **discourse organization** = remarks that focus on the organization of the text at the levels beyond the sentence, including concerns about cohesive devices that make a link between two or more sentences.

> unto "konoyoona" unto "kono" unto dokokara new paragraph ni shite ii no ka zenzen wakannai na [un "as such" um "such" um I have no idea where I should begin a new paragraph.] (Jane, Task II)

> Okay [...] split a paragraph here and add a few sentences. (Martin, Task II)

34 Durst (1989) adapted and expanded one component of Langer's Analysis of Meaning Construction scheme (1986a, 1986b), focusing on two aspects of the writer's monitoring behaviors--awareness and use of the writer's thinking processes.
(II) **language use-lexis** = remarks that indicate word- and phrase-level concerns.

*Um* "tokoro ga" [place] basho [place] *that's better, isn't it?" basho* (Cathy, Task II)

*Everything else I say everything else uh everything uh banji* [everything] (consulting dictionary) (Eddie, Task II)

(ls) **language use-syntax** = remarks that indicate concerns about syntactic and morphosyntactic rules (e.g., postpositions, sentence endings, conjugations) as well as the formation of an entire sentence.

*Yeah but in this case should I use the um ukemikei* [passive voice]? (Mary, Task I)

*Okay use ni* [in] "zensekai ni [in the whole world]" (Cathy, Task I)

(Im) **language use-spelling**\(^*35*\) = remarks that indicate concerns about orthographic conventions.

*Hmm how do you write* omoshiroi [interesting]? (Martin, Task I)

gaman gaman kanji de gaman tte kakoo [I'm going to write 'gaman' [patience] in kanji.] (Jane, Task II)

(p) **writing procedures** = remarks that focus on one's procedures in completing a writing task. This includes the writer's consulting dictionaries and course handouts.

*Okay you should always finish the section like this with the best point you have or certainly not the weakest so* (pause) (Jack, Task I)

*So well I read the earlier part.* (Colin, Task II)

2. **Nature of the writer's monitoring behaviors**

*Note.* The first of the two example statements provided under each of the above categories is coded "more reflective" and the second example "less reflective."

(m) **more reflective** = remarks that indicate explicit on-line monitoring, i.e., remarks in which the writer says "I think" or "I know", expresses an opinion, makes a judgment, or indicates his/her uncertainty while writing.

(l) **less reflective** = remarks that describe the writer's on-line behavior or report what happened and what has been decided in the writer's mind, not so explicitly reflecting on his/her thinking processes or the task.

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\(^*35*\) All the statements under this category concerned the spelling of *kanji* or *katakana* (phonetic scripts used to represent foreign--mostly English and other European--loan words in Japanese), except one statement that was about the expression of a number: "Um ah yeah I shouldn't write two in Arabic numbers" (Cathy, Task I). For descriptions of the Japanese writing system, see Taylor and Taylor (1995).
While examining the protocols to establish the above category system, I decided to include another dimension, i.e., languages the writer used in making metacognitive remarks (Japanese, English, Cantonese, Mandarin, or any combinations of these). I wished to see which language or languages these foreign language writers might use in the process of generating the target language discourse. Intuitively I thought such inquiry could shed some light on the role of the mother tongue in the process of thinking for target language verbal production (cf. Ringbom, 1987). Analyses of this and a second dimension could document the how of concurrent thinking about writing while a first dimension the what.

Once the coding system was established, I coded each segment for the three dimensions of the system. Because c-units are, as mentioned earlier, segmentable statements for a thought or behavior distinct from another, one category was sufficient to code separate segments in most cases; double or larger configurations of coding were very few; for a second dimension, of course, either one of the two mutually exclusive categories had to be used to code a segment. Also because some segments contained only minimal information, the coding decisions of those segments had to be made by consulting preceding and following segments as well as written texts (see Ericsson & Simon, 1993, chap. 6, for the use of context in coding protocols).

I checked inter- and intra-coder agreements to make sure the reliability of my coding judgments was sufficiently high. About 10 segments (i.e., c-units) selected randomly from each of 16 different protocols—amounting to 153 units, about 10% of the total codings—were coded by Kei who volunteered to be a second coder. This took place one year after she had taught the course that I had observed for the present research. Her continued interest in my work and her competence in Japanese and English served the purpose well. On the assigned day she was first given an explanation of the coding system then practiced on 10 separately selected coding units before the actual coding. Only the first and second dimensions were coded for reliability checking as the third dimension (i.e.,
the language used for metacognitive remarks) was straightforward and devoid of concern about bias. Agreement was 83.7% for the first dimension and 81.7% for the second dimension. Intra-coder agreement, checked on 10% of the total segments 2 weeks after the initial codings, was 97.5% for both dimensions.

4.1.4. Post-Writing Questionnaire

To supplement the think-aloud protocol data, the participants were asked to fill out a post-writing questionnaire (Appendix L) right after completing each task. The questionnaire asked about (a) the level of satisfaction the writer felt with his or her own essay just produced, (b) the level of difficulty the writer experienced in generating ideas, and (c) the level of difficulty the writer experienced in expressing ideas in Japanese. It also provided space for comments on the writing task just completed. The participants' comments on the questionnaire were informative, explaining the strategies they used in writing essays, elaborating on specific points of difficulty, or reasoning about laborious and less laborious parts of the writing process. I utilized these pieces of individual, anecdotal information in my attempt to understand better the overall system of learning and teaching about writing activities in this JFL classroom.

4.2. Answering the Research Questions

What linguistic and cognitive behaviors are invoked by JFL writing activities? How are they related to students' characteristics and instructional context variables?
4.2.1. Overview of Think-Aloud Protocol Data

Due to poor conditions of 5 participants' recordings on one or both tasks, only the two sets of complete protocols obtained from 8 participants (Jasmine, Jane, Jack, Cathy, Colin, Mary, Martin, Eddie) were analyzed. I tallied all c-units coded under respective categories for each protocol then converted these to percentages. The tallied figures are treated as cumulative percentages for the protocols containing units with multiple codings (i.e., more than one category coded). An overview of the results is given in Table 4-4. In this summary four fundamental categories are highlighted that represent four mutually exclusive aspects of writing people may focus their attention on while composing: gist, discourse organization, language use, and writing procedures. Thus, the three sub-categories of language use--lexis, syntax, and spelling--are conflated.

Table 4-4
Summary of Think-Aloud Protocol Data

<table>
<thead>
<tr>
<th>Participant</th>
<th>gist (%) Task I: Task II</th>
<th>discourse organization (%) Task I: Task II</th>
<th>language use (%) Task I: Task II</th>
<th>writing procedures (%) Task I: Task II</th>
<th>&quot;reflective&quot; comments (%) Task I: Task II</th>
<th>comments in L1 (%) Task I: Task II</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jasmine</td>
<td>41 : 23</td>
<td>8 : 1</td>
<td>49 : 54</td>
<td>6 : 26</td>
<td>84 : 39</td>
<td>0 : 0</td>
</tr>
<tr>
<td>Jane</td>
<td>54 : 22</td>
<td>2 : 8</td>
<td>30 : 61</td>
<td>14 : 10</td>
<td>72 : 72</td>
<td>1 : 6</td>
</tr>
<tr>
<td>Cathy</td>
<td>39 : 52</td>
<td>0 : 7</td>
<td>41 : 28</td>
<td>19 : 12</td>
<td>54 : 56</td>
<td>98 : 100</td>
</tr>
<tr>
<td>Mary</td>
<td>35 : 40</td>
<td>2 : 3</td>
<td>58 : 48</td>
<td>6 : 10</td>
<td>78 : 55</td>
<td>99 : 90</td>
</tr>
</tbody>
</table>

In this summary I took note of the following trends:

- A large proportion of attention focused on gist, language use, or both in contrast with attention paid to discourse organization or writing procedures. Two cases (Jack and Martin) went against this general pattern, however. The largest proportion of Jack's on-line comments focused on the aspect of writing procedures, followed by gist and language use. Martin's attention more or less evenly divided between gist, language...
use, and writing procedures. Another unique case was Colin, who focused most of his attention on gist and paid much less attention to the other three aspects. On-line verbal comments about organization were very few across the cases (cf. Cumming, 1989; Sasaki & Hirose, 1996).

- More than a half of the on-line comments in all but a few cases (Jasmine, Task II; Jack, Tasks I and II; Colin, Task II) were reflective in nature, suggesting, on the assumption that learning is a manifestation of thought (e.g., Smith, 1990), a great number of opportunities for these students’ potential learning while engaging in JFL composition writing. In general, Task I induced more comments of a reflective nature than Task II.

- All the students, except Jasmine and Jane, relied heavily on their L1s in verbalizing their thoughts; Jasmine and Jane, who spoke native-like Japanese, produced their protocols primarily in Japanese.36

To make better sense of trends in the protocol data, I created three broader categories of ideational thinking (combining the aspects of gist and discourse organization), language-related thinking (combining the three sub-categories of language use--lexis, syntax, and spelling), and procedural thinking (which is the aspect of writing procedures renamed for consistency with the other categories’ names). These new categories of attentional foci were examined according to the nature of the writer's monitoring behaviors (more or less reflective). The tallied figures of these combined categories appear in Table 4-5 (see Appendix N for the full tallies of the six original categories of attentional foci combined with the two categories for monitoring behaviors).

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36 These trends accord with the percentages of L1 (Japanese) use in the production of L2 (English) written discourse reported by higher and lower proficient L2 learners in Kobayashi and Rinnert’s (1994, p. 239) study. Note that Jasmine considered Japanese as her oral L1 but English as her written L1, whereas Jane chose English for her oral and written L1.
This set of composite data shows:

- Generally, reflective thinking occurred while the writer thought about ideas, language, or both. For Jasmine, Jane, and Colin in Task I, reflective thinking about ideas occupied a large proportion of their writing processes.

- Language was distinctly an object of reflective thinking for most of the writers. Even the highly proficient learners of Japanese, Jasmine and Jane, focused a large proportion of their attention on language use. But their linguistic concerns were at a somewhat higher level. Jack and Colin rarely verbalized their mental processes of Japanese language production.

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Jasmine and Jane wrote about their linguistic concerns in the post-writing questionnaires; they both indicated their attempts to use a variety of predicative expressions to avoid the monotonous tone of written text and to use "harder words" instead of simple and basic words. Their think-aloud protocols also attested to this.

The very few verbalizations about language issues these intermediate-proficient students produced made me wonder why. Colin's comments written in the Task II post-writing questionnaire provided some clues. He wrote, "Although it took only a short period of time to finish writing the assignment, important
• Among the three sub-categories of language use, lexis was the aspect to which most of the writers devoted most of their reflective thinking39 (see Appendix N). Syntax was less of a concern to them generally (but Mary was apparently much concerned about syntax40). They cared little about mechanical matters in general. Jasmine was the only one who showed excessive concerns over spelling or the writing of kanji.

• Individual writers showed similar patterns for both tasks in terms of the proportion of attention paid to respective aspects of writing and the proportion of more to less reflective thinking under each category. Exceptions were Jasmine, whose intensive ideational and language-related thinking of a reflective nature in Task I reduced dramatically in Task II, and Jane, whose ideational and language-related thinking of a reflective nature in Task I and Task II were just the opposite.

4.2.2. Overview of Post-Writing Questionnaire Data

Table 4-6 displays the results of the individual participants' responses to the post-writing questionnaires, together with their JFL oral proficiency levels and their L1 and Japanese essay scores. This matrix table left me with the impression that more students found Task II (which the students interpreted as "write whatever you want") easier than Task I (in which the students were aware that the statement of one's opinions was required) both in terms of idea generation and language use. They produced more self-

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39 Connor-Linton and Haichour's (1997), Cumming's (1990), and Shibata's (1996) studies of L2 writing processes showed vocabulary knowledge to be a significant factor in writing.

40 This observation is in line with what Mary wrote in her post-writing questionnaires: "I found this assignment quite difficult ... I used many [Japanese language] dictionaries and grammar handbooks" (Task I); and "There were some difficult things about writing this composition. I think they are grammar and vocabulary" (Task II).
satisfying essays in Task II (cf. Kei's better impressions on the Task II essays in comparison to the Task I essays; see section 2.4.2). Neither JFL proficiency nor L1 writing skill correlated with the level of satisfaction the students had with their own essays or the level of difficulty they experienced in idea generation and language use.

Table 4-6
Post-Writing Questionnaire Responses, JFL Proficiency, and L1 Writing Expertise

<table>
<thead>
<tr>
<th>Participant</th>
<th>JST rating</th>
<th>Rating of Japanese essay</th>
<th>Rating of L1 essay</th>
<th>TASK I Satisfaction with the product</th>
<th>TASK I Difficulty in idea generation</th>
<th>TASK I Difficulty in language use</th>
<th>TASK II Satisfaction with the product</th>
<th>TASK II Difficulty in idea generation</th>
<th>TASK II Difficulty in language use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jasmine</td>
<td>superior</td>
<td>34</td>
<td>30</td>
<td>very satisfied</td>
<td>difficult</td>
<td>not so difficult</td>
<td>satisfied</td>
<td>difficult</td>
<td>not so difficult</td>
</tr>
<tr>
<td>Jane</td>
<td>superior</td>
<td>31</td>
<td>34</td>
<td>satisfied</td>
<td>difficult</td>
<td>difficult</td>
<td>satisfied</td>
<td>not so difficult</td>
<td>difficult</td>
</tr>
<tr>
<td>Judith</td>
<td>advanced-high</td>
<td>33</td>
<td>35</td>
<td>satisfied</td>
<td>difficult</td>
<td>difficult</td>
<td>not so satisfied</td>
<td>not so difficult</td>
<td>not so difficult</td>
</tr>
<tr>
<td>Joy</td>
<td>superior</td>
<td>28</td>
<td>missing</td>
<td>satisfied</td>
<td>not so difficult</td>
<td>difficult</td>
<td>not so satisfied</td>
<td>not so difficult</td>
<td>not so difficult</td>
</tr>
<tr>
<td>Jack</td>
<td>intermediate-high</td>
<td>17</td>
<td>35</td>
<td>not so satisfied</td>
<td>difficult</td>
<td>difficult</td>
<td>satisfied</td>
<td>not so difficult</td>
<td>not so difficult</td>
</tr>
<tr>
<td>Cathy</td>
<td>intermediate-low</td>
<td>16</td>
<td>30</td>
<td>not so satisfied</td>
<td>difficult</td>
<td>difficult</td>
<td>not so satisfied</td>
<td>not so difficult</td>
<td>not so difficult</td>
</tr>
<tr>
<td>Colin</td>
<td>intermediate-mid</td>
<td>20</td>
<td>35</td>
<td>not so satisfied</td>
<td>difficult</td>
<td>difficult</td>
<td>not so satisfied</td>
<td>not so difficult</td>
<td>not so difficult</td>
</tr>
<tr>
<td>Charles</td>
<td>intermediate-mid</td>
<td>24</td>
<td>29</td>
<td>not so satisfied</td>
<td>difficult</td>
<td>difficult</td>
<td>satisfied</td>
<td>not so difficult</td>
<td>not so difficult</td>
</tr>
<tr>
<td>Mary</td>
<td>intermediate-mid</td>
<td>26</td>
<td>26</td>
<td>not so satisfied</td>
<td>difficult</td>
<td>difficult</td>
<td>satisfied</td>
<td>not so difficult</td>
<td>difficult</td>
</tr>
<tr>
<td>Mike</td>
<td>intermediate-mid</td>
<td>15</td>
<td>23</td>
<td>not so satisfied</td>
<td>easy</td>
<td>difficult</td>
<td>satisfied</td>
<td>not so difficult</td>
<td>not so difficult</td>
</tr>
<tr>
<td>Martin</td>
<td>advanced</td>
<td>23</td>
<td>32</td>
<td>satisfied</td>
<td>easy</td>
<td>not so difficult</td>
<td>satisfied</td>
<td>not so difficult</td>
<td>not so difficult</td>
</tr>
<tr>
<td>Elliot</td>
<td>advanced-high</td>
<td>22</td>
<td>32</td>
<td>satisfied</td>
<td>easy</td>
<td>not so difficult</td>
<td>satisfied</td>
<td>not so difficult</td>
<td>not so difficult</td>
</tr>
<tr>
<td>Eddie</td>
<td>advanced</td>
<td>23</td>
<td>34</td>
<td>satisfied</td>
<td>not so difficult</td>
<td>difficult</td>
<td>satisfied</td>
<td>difficult</td>
<td>not so difficult</td>
</tr>
</tbody>
</table>

Table 4-7 shows the results of the individual participants' responses to the post-writing questionnaire, together with their perceptions of JFL writing and learning--the information elicited in the students' interviews. I noted the following general trends in this summary:
• The students who mentioned some learning of content as a result of JFL writing also said they experienced difficulty generating ideas in both or one of the tasks. On the other hand, the students who mentioned only the learning of language through JFL writing found idea generation either easy or not so difficult.

• All the students (except Eliot) perceived language use as a problem in their JFL writing; language processing was either difficult or not so difficult, but never easy for them.

Table 4-7
Post-Writing Questionnaire Responses and Perceptions of JFL Writing and Learning

<table>
<thead>
<tr>
<th>Participants</th>
<th>Satisfaction</th>
<th>Difficulty in Idea Generation</th>
<th>Difficulty in Language Use</th>
<th>Perception of JFL Writing</th>
<th>Problem Area in JFL Writing</th>
<th>Area of Learning thru JFL Writing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jasmine</td>
<td>very satisfied</td>
<td>difficult</td>
<td>not so difficult</td>
<td>meaning-making</td>
<td>language</td>
<td>language &amp; content</td>
</tr>
<tr>
<td>Task I</td>
<td>satisfied</td>
<td>difficult</td>
<td>not so difficult</td>
<td>language</td>
<td>language</td>
<td>language &amp; content</td>
</tr>
<tr>
<td>Task II</td>
<td>not so satisfied</td>
<td>difficult</td>
<td>not so difficult</td>
<td>language</td>
<td>language</td>
<td>language</td>
</tr>
<tr>
<td>Judith</td>
<td>satisfied</td>
<td>difficult</td>
<td>not so difficult</td>
<td>meaning-making</td>
<td>language</td>
<td>language</td>
</tr>
<tr>
<td>Task I</td>
<td>not so satisfied</td>
<td>difficult</td>
<td>not so difficult</td>
<td>language</td>
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<td>language</td>
</tr>
<tr>
<td>Task II</td>
<td>satisfied</td>
<td>difficult</td>
<td>not so difficult</td>
<td>meaning-making</td>
<td>language</td>
<td>language &amp; content</td>
</tr>
<tr>
<td>Joy</td>
<td>satisfied</td>
<td>not so difficult</td>
<td>not so difficult</td>
<td>meaning-making</td>
<td>language</td>
<td>language &amp; content</td>
</tr>
<tr>
<td>Task I</td>
<td>not so satisfied</td>
<td>not so difficult</td>
<td>not so difficult</td>
<td>language</td>
<td>language</td>
<td>language</td>
</tr>
<tr>
<td>Task II</td>
<td>satisfied</td>
<td>not so difficult</td>
<td>not so difficult</td>
<td>language</td>
<td>language</td>
<td>language</td>
</tr>
<tr>
<td>Cathy</td>
<td>not so satisfied</td>
<td>difficult</td>
<td>not so difficult</td>
<td>language</td>
<td>language</td>
<td>&quot;nothing in particular&quot;</td>
</tr>
<tr>
<td>Task I</td>
<td>satisfied</td>
<td>difficult</td>
<td>not so difficult</td>
<td>meaning-making</td>
<td>language &amp; organization</td>
<td>language &amp; content</td>
</tr>
<tr>
<td>Task II</td>
<td>not so satisfied</td>
<td>difficult</td>
<td>not so difficult</td>
<td>language</td>
<td>language</td>
<td>language</td>
</tr>
<tr>
<td>Colin</td>
<td>not so satisfied</td>
<td>not so difficult</td>
<td>not so difficult</td>
<td>meaning-making</td>
<td>language</td>
<td>language</td>
</tr>
<tr>
<td>Task I</td>
<td>not so satisfied</td>
<td>not so difficult</td>
<td>not so difficult</td>
<td>language</td>
<td>language</td>
<td>content</td>
</tr>
<tr>
<td>Task II</td>
<td>satisfied</td>
<td>difficult</td>
<td>not so difficult</td>
<td>language</td>
<td>language</td>
<td>language</td>
</tr>
<tr>
<td>Mary</td>
<td>not so satisfied</td>
<td>not so difficult</td>
<td>not so difficult</td>
<td>language</td>
<td>language</td>
<td>language</td>
</tr>
<tr>
<td>Task I</td>
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<td>easy</td>
<td>difficult</td>
<td>language</td>
<td>language</td>
<td>language</td>
</tr>
<tr>
<td>Task II</td>
<td>not so satisfied</td>
<td>not so difficult</td>
<td>difficult</td>
<td>language</td>
<td>language</td>
<td>language</td>
</tr>
<tr>
<td>Mike</td>
<td>not so satisfied</td>
<td>easy</td>
<td>not so difficult</td>
<td>language</td>
<td>language</td>
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</tr>
<tr>
<td>Task I</td>
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<td>easy</td>
<td>not so difficult</td>
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<td>language</td>
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</tr>
<tr>
<td>Task II</td>
<td>not so satisfied</td>
<td>easy</td>
<td>not so difficult</td>
<td>language</td>
<td>language</td>
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<tr>
<td>Martin</td>
<td>satisfied</td>
<td>easy</td>
<td>not so difficult</td>
<td>language</td>
<td>language</td>
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<td>easy</td>
<td>not so difficult</td>
<td>language</td>
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<tr>
<td>Task II</td>
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<td>easy</td>
<td>not so difficult</td>
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<td>Eliot</td>
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<td>easy</td>
<td>not so difficult</td>
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<td>language</td>
<td>organization</td>
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<tr>
<td>Task I</td>
<td>not so satisfied</td>
<td>easy</td>
<td>not so difficult</td>
<td>language</td>
<td>language</td>
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</tr>
<tr>
<td>Task II</td>
<td>satisfied</td>
<td>easy</td>
<td>not so difficult</td>
<td>language</td>
<td>language</td>
<td>language</td>
</tr>
<tr>
<td>Eddie</td>
<td>satisfied</td>
<td>not so difficult</td>
<td>difficult</td>
<td>language</td>
<td>language</td>
<td>language &amp; content</td>
</tr>
</tbody>
</table>
Chapter 5: Written Products

5.1. Generating Research Materials

According to a systemic view of classroom learning and teaching, outcomes are determined by learners' activities in the processes of carrying out given tasks which interact with student and teaching presage factors (Biggs, 1991). I collected copies of the final written products submitted to Kei, the course instructor, to try to find links between process and product factors suggestive of potential learning. However, I soon found this task far too complex and fuzzy to be carried out thoroughly in a single study. I thus focused on two types of descriptive analyses. First, I looked at scores and comments given to individual essays by Kei and two independent JFL teacher raters (who were the Japanese raters described in section 3.2.2.2). Second, I evaluated the qualities of thought manifested in the written products, applying the SOLO (Structure of the Observed Learning Outcome) taxonomy (Biggs & Collis, 1982).

5.1.1. Assessment of Japanese Written Texts

Kei and the two raters used multiple trait scoring procedures that evaluate linguistic, rhetorical, and content features of a piece of writing. What do these scores mean in my research context? Certainly they do not provide summative assessments of the students' learning as a result of writing, but they do provide some indications of the students' current abilities to compose essays in Japanese. Looking at the component scores can help to identify, albeit only approximately, where the students' strengths and
weaknesses lie, to relate them to the aspects of writing the writers paid attention to during
the process of producing an essay, and to suggest potential opportunities for incidental
learning (in contrast to intentional learning that is actively desired and controlled by
learners; see Bereiter & Scardamalia, 1989) attributable to writing experiences that
required effortful processing of ideas and language.

5.1.1.1. Kei. In search of an instrument to assess Japanese essays written by her
students, Kei wanted one that (a) would be available for immediate use (i.e., with no or
little modification required), (b) would be congruent with her instructional goals and her
beliefs about how Japanese writing skills should develop, and (c) would provide clear and
concise feedback to focus on the learning efforts of students. She decided on an adaptation
of the ESL Composition Profile developed by Jacobs et al. (1981), which I had translated
into Japanese for my master's thesis on JFL writing (So, 1989).41 Kei considered this
scoring instrument to satisfy her requirements and used it without modification. She noted
that the weights assigned to the content (30%) and organization (20%) components are
relatively large,42 but she observed "that suits the purpose of my course" (Interview notes,
February 10, 1995). She liked particularly the fact that the band descriptors and all other
information in the scoring report were given in Japanese, providing the students exposure
to the Japanese language in a relevant context.

As this description implies, Kei approached the assessment of essays from the
standpoint of a person involved in both teaching and assessing. She mentioned in one of
our interview sessions that essay assessment was primarily meant to be an encouragement
for her students, i.e., to help her students gain confidence by highlighting the good traits of
their writing (Interview notes, February 10, 1995). On the same occasion she also
expressed the difficulty she experienced with choosing the "right" descriptors and

41 Hirose and Sasaki (1994, p. 228) also translated Jacobs et al.'s profile into Japanese to assess
Japanese compositions written by native speakers of Japanese participating in their study on English-as-a-
foreign-language writing.
42 The other components consist of vocabulary, language use, and mechanics, which are weighted
20%, 25%, and 5% respectively.
assigning scores to respective essays because of her familiarity with the essay writers, a kind of halo effect. It may be said that Kei's scores on her students' compositions make sense pedagogically, but they do not necessarily carry psychometric values. To understand the mechanism of the classroom system in relation to writing tasks, which is an overarching purpose of my research, it is important to look at Kei's scores and comments, on the one hand; on the other hand, I balanced this perspective by also weighing the scores obtained from the two independent JFL teacher raters who had had no contact with the essay writers or their instructor (Kei). The latter scores are thus free from halo effects and thus may be considered "more objective."

5.1.1.2. Independent Raters. The two independent raters were carefully selected to satisfy the following criteria: (a) being a female native-speaker of Japanese, (b) being experienced in teaching JFL to university students in an English-speaking country, and (c) being experienced in assessing JFL writing for its communicative effectiveness. In other words, I searched for independent raters who shared Kei's identity, sociocultural context, and values about language teaching. I wished to obtain from these raters essay scores that were free from halo effects yet "internally valid." The two volunteer raters, female native speakers of Japanese, were very similar to Kei in terms of educational and professional experiences as well as their current teaching contexts and orientations. I had worked with both of them in tertiary-level JFL education at an institution where I was previously employed in Singapore and knew them well. At the time of data collection for this study they were teaching JFL at a university in Australia. All correspondences with them were done through e-mail and regular mail. Since their scores were also to be used as measures of the participants' Japanese writing skill (see section 3.2.2), it was considered more meaningful to apply the same rating scale used for L1 writing assessment, i.e., Hamp-

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43 How different readers in different contexts (e.g., teachers of Japanese as an L1, non-language teachers, non-native speaker teachers of JFL) might read and respond to the same essays is an important question in order to create a universal definition of "good JFL writing." A growing body of such research in ESL contexts (e.g., Brown, 1991; Connor-Linton, 1995) attests to the usefulness of such inquiry, but it goes beyond the scope of my current research.
Lyons's 9-point scale (see section 3.3.2.1). I mailed the raters a packet containing the essays of Tasks I and II, an instruction sheet, the rating scale, and instructions for rating procedures (Appendices G and H), allowing them a month to complete the assessments. Although they worked in the same institution, the two raters assessed the essays independently without any discussion of the assessment task between them. Both raters were also assiduous in providing comments in a space given on the score report form. These comments were mostly idiosyncratic responses and reactions to unusual or intangible qualities of the writing that they had noticed but thought were not encompassed by the traits and their descriptors of the assessment instrument (Hamp-Lyons, 1991b).

5.1.2. Kei's and Independent Raters' Essay Scores

To summarize Kei's and the two independent raters' scores on the students' Japanese compositions, I conflated Hamp-Lyons's scale's original categories of linguistic accuracy and linguistic appropriacy into one category called language use, and called the original category of communicative quality simply content. Likewise, I conflated Jacobs et al.'s scale's original categories of vocabulary, language use, and mechanics into one category called language use. These changes enabled me to focus on the three essential aspects of a composition (i.e., content, organization, and language use) and helped me in making meaning of Kei's and the two raters' scores. I averaged the composite scores of linguistic accuracy and linguistic appropriacy on Hamp-Lyons's scale for the single category of language use. I adjusted Kei's scores to make them numerically comparable to the scores on Hamp-Lyons's scale by multiplying the content score by 9/30, the

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44 To eliminate the possibility that the rater would carry over her judgments on the quality of one essay to that of another essay written by the same author, different sets of names were used for the Task I and Task II essays to disguise matched pairs. Since all compositions were typed before submitting them to the raters, the raters had few clues to identify which essays of Task I and Task II were written by the same author.
organization score by 9/20, and the language use score by 9/50.45 The table given in Appendix O displays the modified scores for the three aspects of the students’ compositions that Kei assigned and the two other raters also assigned for the two tasks, as well as from the think-aloud protocol data the percentages of attention (where these figures are available) each student paid to these aspects of writing during the processes of writing the compositions. The table also shows Kei’s and the raters’ comments, originally written in Japanese but translated into English.46

My impressions of these ratings were as follows:

• Generally, Kei’s scores were higher than the independent raters’. This phenomenon was particularly acute with the students of less-than-near-native Japanese proficiency (i.e., Jack, Cathy, Colin, Charles, Mary, Mike, Martin, Eliot, and Eddie). For example, Jack received 22.4 points from Kei for his Task II essay which was rated 10.5 and 11.5 by the raters. Kei awarded Cathy 23.2 for her Task I essay that scored 14 and 11 according to the raters’ judgments. Kei’s judgment of 25.8 for Colin’s Task I essay received 13.5 and 7 from the raters. Eliot’s Task I essay received 24.4 from Kei, compared to 17 and 12 from the raters. On the other hand, discrepancies were very small for the near-native proficient students, Jasmine, Jane, Judith, and Joy. There were 12 cases in all where Kei rated the compositions lower than the independent raters: 6 cases with the less-than-near-native group, amounting to 17%, and 6 with the near-native group, amounting to 38%.47 Among the 6 cases with the former (i.e., less-than-near-native)

45 I derived these manipulation formulas from the fact that the maximum points are 30 for content, 20 for organization, and 50 for language use (the sum of 20 [vocabulary], 25 [language use], and 5 [mechanics]) on Jacob et al.’s scale, and 9 for each of these three components on Hamp-Lyons’s scale. I do not believe that these mathematical manipulations alone enable valid comparison between scores on Jacobs et al.’s scale and Hamp-Lyons’ scale. I manipulated the scores, however, for the sake of convenience, so these adjusted scores should be taken as approximations when compared to the scores based on Hamp-Lyons’s scale. As a result of these manipulations, the total maximum score is 27 points, built from its component scores in newly-created categories of content, organization, and language use, which are weighted a maximum of 9 points each equally.

46 Long comments (most of which were Kei’s) are abridged for the sake of brevity.


6 / (2 comparisons [Kei vs. Rater 1, Kei vs. Rater 2] x 2 tasks x 4 students--Jasmine, Jane, Judith,
group, 3 cases were where the essays had previously been corrected by native speakers, mostly in respect to the use of language.

- There was a consistent pattern for the same reader's ratings of each essay's three components. That is, the same reader tended to rate the three aspects (content, organization, and language use) of a piece of writing similarly. Only 19 (out of 234) cases showed a difference of 2 or more points between the three component scores; the rest showed a difference of less than 2 points.

- The same readers tended to rate each writer's two essays similarly. Note that the two raters were unaware which essays were written by the same author and that Kei rated the two sets of writings at an interval of 3 months and she did not refer to the scores of the first essays while scoring the second ones. Only 7 (out of 39) cases went against this general pattern, showing a difference of 5 or more points between the scores of the essays for Task I and Task II written by the same author. Four (Rater 2's ratings of Mary's, Martin's, and Eliot's essays; Rater 1's ratings of Martin's essays) of these 7 cases were where the writers had sought native speakers' advice on one of the two tasks.

- The readers commented about the writing generally or on each aspect of the writing (content, organization, or language use). General comments, positive and negative, were made for 38% of the total number of essays; comments about content for 35% of the total; comments about organization for 13%; and comments about language use for

\[ \text{and Joy} \times 100 = 37.5. \]

\[ 3 \text{ comparisons (content vs. organization, content vs. language use, organization vs. language use)} \times 2 \text{ tasks} \times 3 \text{ readers} \times 13 \text{ students} = 234. \]

\[ \text{If we look at this phenomenon by comparing the near-native and the less-than-near-native group, we find only 2 out of the 19 more-than-2-point-difference cases in the near-native group and 12 in the less-than-near-native group. In fact the differences observed in all these 19 cases are just 2 or 3 points, except for 2 cases. The 2 exceptional cases occurred in Eliot's Task I essay, which was rated 2 points on content, 2 points on organization, and 8 points on language use by Rater 2. Rater 2 commented on the essay in question as "I see no trace of planning in this essay. I cannot tell what the writer wants to say."} \]

\[ 1 \text{ comparison (Task I score vs. Task II score)} \times 3 \text{ readers} \times 13 \text{ students} = 39. \]

\[ \text{The 3 other cases happened to be Rater 2's assessments of Jack's, Colin's, and Mike's two essays, which scored 19 (Task I) vs. 11.5 (Task II), 7 vs. 25.5, and 7.5 vs. 13.5 respectively.} \]
46%. General statements such as "well written" and "[The author] must be a near native" were the most common type of comments given to the students of the near-native group (Jasmine, Jane, Judith, and Joy) (67%), and all of these were positive. On the other hand, the students of the less-than-near-native group received comments on language use most frequently (57%) and such comments included both positive and negative remarks, such as: "good at connecting one sentence to another," "The spoken and written forms of language are mixed," "The writer seems to possess sufficient vocabulary but lacks grammatical competence," and "There are grammatical mistakes but they do not bother me too much."

5.1.3. Assessment of Structural Complexity in Japanese Written Texts

I applied the SOLO taxonomy (Biggs & Collis, 1982; see also Biggs & Moore, 1993) to assess the cognitive structural complexity of the students' written texts. I wanted to see what might distinguish mature from immature or deep from shallow thinking manifested in the written products. The SOLO taxonomy was developed based on the assumption that the quality of students' thoughts would closely relate to the quality of their learning. It is a classification system that describes the quality of learning outcomes according to five levels: prestructural, unistructural, multistructural, relational, and extended abstract. It is a conceptual framework built upon the empirical study of students'  

52 Different types of comments could be made by a reader reading one piece of writing. For instance, Kei's comments on Colin's Task 1 essay reads, "Very well organized (organization). Insightful (content). Enjoyable read (general). Rich vocabulary, though some mistakes in their usage (language use)." Such multiple configurations of comment types were not very common, though. The great majority of comments had single or double configurations. The percentages were derived from dividing the frequency of each comment type by the total number of essays on which Kei, Rater 1, and Rater 2 commented (13 students x 2 tasks x 3 readers = 78).  
53 16 general comments (given to the near-native group) ÷ (3 readers x 2 tasks x 4 near-native students) x 100 = 66.66.  
54 31 comments on language use (given to the less-than-near-native group) ÷ (3 readers x 2 tasks x 9 less-than-near-native students) x 100 = 57.40.  
55 In relation to the connection between the thinking process and the written product, Smith (1994, p. 34) contended, "We cannot observe ourselves thinking, but we can observe the products of thought. And one
responses in several subject areas including history, mathematics, English, and modern languages. In applying this scheme to my written product data, I looked to the illustration of SOLO analysis of English essays written by Australian high school students in Grades 7 through 12. Biggs and Collis defined the five SOLO levels (applied to the analysis of English essays) in terms of characteristics such as the defining and refining of meaning through word choice, appropriate syntax, and so on. I list the main features of each level in Table 5-1.

<table>
<thead>
<tr>
<th>Table 5-1</th>
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<tbody>
<tr>
<td><strong>Prestructural.</strong></td>
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<tr>
<td><strong>Unistructural.</strong></td>
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<tr>
<td><strong>Multistructural.</strong></td>
</tr>
<tr>
<td><strong>Relational.</strong></td>
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<tr>
<td><strong>Extended abstract.</strong></td>
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</tbody>
</table>


The purpose of this assessment was to measure the depth of ideational thinking during the production of JFL written discourse, so I tried as much as possible to focus on the "**deep structure** [italics in the original] of language" (Smith, 1994, p. 49), i.e., its of the most powerful tools for doing so is **writing** [italics in the original]."
meaning. I tried as much as possible to read the students' compositions as a semantic representation, ignoring the language use problems typical of JFL learners. This attempt, however, created a paradox because meaning can be conveyed only through the "surface structure" [italics in the original] of language" (Smith, 1994, p. 49) or its physical, observable properties. Deficiency in the language (Japanese in this case) skill was sure to affect the meaning conveyed, and thus its readability. The reverse is true, too. The accurate and fluent use of language might have boosted the readability of an essay, making its content look more sophisticated or complex than it actually was. Although I was well aware of this difficulty, I still carried out an assessment, on an exploratory basis, of the qualities of ideational thinking represented and organized in the students' two compositions. I hoped the SOLO analysis, attempting to evaluate the quality of thinking behind the observable product, would be able to provide a different perspective on the students' compositions than Jacobs et al.'s or Hamp-Lyons's essay rating scales had, offering more profound insights into the learning of their JFL authors.

Once again Kei volunteered to collaborate with me as a second rater in this assessment task. I met with Kei on an appointed day, which was already one and a half years after the completion of my data collection. We first went over an example of SOLO analysis on the high school English writing given by Biggs and Collis (1982, pp. 108-121). We spent about 40 minutes discussing the features of the five SOLO levels in light of the sample essays given by Biggs and Collis and typical JFL students' writings we had often come across in our teaching. We found that the level descriptors designed for the analysis of English expressive writings would be applicable to the essays I had gathered in my study. Cognizant of my intention for the SOLO analysis, Kei agreed to focus on meaning, ignoring grammatical or lexical mistakes inasmuch as they would not bring the resulting text to the point of unintelligibility. To facilitate this process, we decided that we should not spend more than 2 minutes reading a piece of writing to determine its SOLO level. To minimize halo effects, neither the authors' real names nor pseudonyms were used to
identify the essays: all the essays were simply numbered, for the purpose of identification, 1 to 26 with the 13 randomly ordered essays of Task II bearing the numbers 1 to 13 and the 13 randomly ordered essays of Task I bearing the numbers 14 to 26. We also anticipated that there might be essays showing features belonging to more than one level. In such cases, we agreed we should indicate all possible levels.

Once both of us felt comfortable about the rating criteria and procedures, we began the assessments from Essay 1 to Essay 26 in order, at the same time, but independently. Kei completed the assessments in 35 minutes and I in 45 minutes. There were no more than two levels assigned to one essay. We called the essays belonging to two levels "transitional," following Biggs and Collis's system. Perfect (8 cases) and partial\(^{56}\) (10 cases) matches were put together to calculate an interrater agreement of 69%. Considering the absence of formal training and our limited time for discussion of the criteria, this level of agreement suggests our judgments were fairly reliable. For the 8 cases of complete mismatches, Kei and I re-read the essays in question together and discussed their appropriate levels. This session took place on the same day, after a break of 2 and a half hours during which we did not touch on the subject; the session lasted 35 minutes. The re-rating process went smoothly and we came to agreed levels easily, requiring little debate. Most of the time either one of us changed the chosen level to the level selected by the other immediately after re-reading the essays in question, typically accompanied by such remarks as "How did I come to rate this so high (or low)?" or "I want to change my rating." Two cases required more detailed discussion and re-assessment and we settled on a mid-level between the levels we had chosen originally.

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\(^{56}\) Partial matches happened where both or either one of us assigned two levels to one essay. In these cases only the level we both chose was taken to label a given essay.
5.2. Answering the Research Questions

What textual qualities of JFL writing do students manifest in terms of language use, content, and organization? How is the complexity of cognitive structure manifested in their written texts? How are these elements related to students' characteristics, instructional context variables, and in-process behaviors?

5.2.1. Relations between Essay Scores and Other Factors

Table 5-2 summarizes the trends in the essay scores and commentary data, demarcated by a dichotomy between the near-native and less-than-near-native groups. In all these comparisons, the near-native students' performances (as judged by Kei and the two raters) were superior and stable relative to the performances of the less-than-near-native learners. This finding may be explained by the presence or absence of the "foreign language effect," which "refers to a temporary decline in the thinking ability of people who are using a foreign language in which they are less proficient than in their own native language" (Takano & Noda, 1995, p. 658). Takano and Noda explained the cognitive mechanisms of the foreign language effect as follows: Because working memory is limited, one cannot easily concentrate on the more abstract levels of meaning or semantic integrity until the processing of the lower, subordinate levels (e.g., orthographies, word choice, within-sentence grammar) of discourse production has become automated (cf. automatic processing vs. controlled processing; see McLaughlin, 1987). This is to say, lack of skill in linguistic processing reduces one's capacity for ideational thinking. Does this mean that linguistically less proficient students cannot utilize writing as a means to gain access to, explore, and develop their ideas? Is it futile to expect that linguistic and ideational gains will be achieved by these students engaging in a writing task?
Table 5-2
Summary of Japanese Essay Scores and Comments

<table>
<thead>
<tr>
<th>comparison</th>
<th>near-native group (Jasmine, Jane, Judith, and Joy)</th>
<th>less-than-near-native group (Jack, Cathy, Colin, Charles, Mary, Mike, Martin, Eliot, and Eddie)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kei vs. Raters</td>
<td>Kei's and the raters' scores were similar. Kei's scores were in general slightly higher but not always.</td>
<td>Kei's and the raters' scores differed. Kei's scores were substantially higher.</td>
</tr>
<tr>
<td>3 trait scores</td>
<td>Scores of the 3 traits of each piece of writing were high and similar to each other.</td>
<td>Scores of the 3 traits of each piece of writing were lower than the near-native group but similar to each other generally. There were cases that showed a difference of 2 or more points between the 3 trait scores.</td>
</tr>
<tr>
<td>Task I vs. Task II</td>
<td>Scores of the Task I and Task II essays of the same writer were high and similar to each other.</td>
<td>Scores of the Task I and Task II essays of the same writer were lower than the near-native group but similar to each other generally. There were cases that showed a difference of 5 or more points between the same writer's 2 task scores.</td>
</tr>
<tr>
<td>comment types</td>
<td>Positive general comments were most common.</td>
<td>Comments on language use, both positive and negative, were most common.</td>
</tr>
</tbody>
</table>

The low ratings on content and organization for the less-than-near-native learners' essays appear to suggest a presence of foreign language effects. However, if we look at the percentages of their attentional foci during the process of writing (see Appendix O), we see there was in fact little quantitative difference between the near-native and less-than-near-native groups.\(^{57}\) The highly proficient Jasmine and Jane paid as much attention to content or gist (somewhere between 20 and 50\%) and language use (somewhere between 20 and 60\%) as did the less proficient Cathy, Mary, Martin, and Eddie. The unique case was Colin whose on-line verbal comments disproportionately concentrated on content (76\% in Task I and 66\% in Task II). Judging from the level of his Japanese proficiency, I would presume that linguistic knowledge should be an element Colin lacked or was constantly in doubt.

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\(^{57}\) A further study may be carried out to examine the students' think-aloud protocols to see if there were differences in the qualities of knowledge or thinking they brought to bear.
about; it thus should have become the focus of his attention during his production of Japanese written discourse. On the contrary, Colin rarely thought out loud about his language use (4% in Task I and 17% in Task II) while composing (see footnote 38).

What is the meaning of Colin’s intensive engagement in content generation and refinement during the production of his Japanese compositions? How might it be related to his learning experiences? Next I looked at the results of the SOLO analysis, hoping that they would shed some light on these questions.

5.2.2. Relations between SOLO Levels and Other Factors

The results of the SOLO analysis are given in Table 5-3. Here again the near-native versus less-than-near-native distinction seems to best describe the results. The essays of the near-native Jasmine, Jane, Judith, and Joy were judged multistructural, multistructural transitional, and relational whereas the essays of the less-than-near-native students ranged from prestructural to unistructural transitional. The higher-order thinking58 of the near-native group might have been enabled by their facility with the language (i.e., their automaticity in language processing); on the other hand, such thinking may have been hindered by the “foreign language effect” (Takano & Noda, 1995) in the case of the less-than-near-native group. But how about Colin, who emerged with multistructural transitional and relational discourse structures? The SOLO analysis evidenced the quality of his thinking despite his lack of Japanese proficiency. Apparently there are more things than foreign language effect to explain foreign language writing performances.

58 This term requires a definition. I used the term broadly here as referring to the kind of thinking that leads to an interconnected and hierarchical structuring of one’s knowledge and a better organization of this hierarchy of knowledge around explanatory or causal relationships (Carnine & Kameenui, 1992; R. Glaser, 1984). Smith’s (1990, pp. 23-26) philosophical argument against the notion of higher-order thinking is significant and should be borne in mind.
It was true in most cases that the students' linguistic competence in Japanese was a main factor to distinguish the high from the low qualities of their Japanese essays. The essays written by the students of native-like proficiency consistently scored much higher than the less-than-native-like students' essays in all three components (content, organization, and language use). Their texts were also judged to present more complex cognitive structures. Other factors such as task and cognitive performance during the production of the essays appeared to have little association with the qualities of the written products (see the table in Appendix O and Table 5-3).

Although there were some qualitative differences between the near-native and the less-than-near-native students' Japanese essays, all the texts (including the near-native students' essays) were, to a greater or less degree, written in the "concrete-symbolic" mode (Biggs, 1987, p. 117) where language was used to describe the experienced world or retell class notes or information obtained from other sources. Although some traces of reflectiveness were observed in the essays with multistructural transitional and relational structures, most actually displayed the kind of "knowledge-telling" in writing (Bereiter & Scardamalia, 1987) that is said to result from a sentence-by-sentence routine during which...
the writer's concerns are simply what to say next, in suitable language, rather than to attempt to transform one's knowledge in the processes of composing or what Bereiter and Scardamalia called "knowledge transforming" in writing.

5.3. General Remarks on the Initial Analyses of the Data

When I was done with the collection of data (which are displayed in this and the preceding three chapters) in April 1995, I found myself overwhelmed by the amount and variety of data I had collected. They seemed rich yet difficult to understand for their significance. They appeared connected in a complex way, if only by virtue of their having come from the same context, which was what I wished to understand better; yet they were still disconnected. This sensation is probably one that frustrates most grounded, naturalistic researchers; without a pre-ordained research design, researchers feel out of control and "unscientific." Inductive analyses in naturally existing settings with naturally functioning human participants may not be theoretically tidy, but their complexity is potentially as exhilarating as the real life they attempt to study (cf. Newman et al., 1989).

In this and the preceding three chapters I have laid out, discretely and as completely as I can, all the data I collected from Kei, her classroom, and her students. Putting all the pieces of collected information into a written text was itself a process of reduction and interpretation, as were all the preliminary analyses, codings, and ratings I did. This process was also a self-conscious one, shaping where my focus on the JFL students' experiences of writing-to-learn was heading. At that time some imagery of the phenomena I experienced as a researcher began to form in my mind. I saw images of a JFL teacher concerned about the current state of language instruction skewed toward mechanistic, shallow-level learning of language forms without encouraging ideational thinking and mindfulness. I also saw her highly motivated JFL adult students of the three different ethnic groups and varied levels
of Japanese proficiency and writing skill exhibiting similar and differing characteristics in the processes and products of their Japanese writing.

My foregoing impressions and intuitions about the data have shaped these images into various forms of questions about the JFL writers' cognitive operations of linguistic and ideational processing. From the pedagogical point of view, the principal issue is whether thinking and mindfulness can be encouraged in the production of foreign language written discourse. This problem is big and complex. For instance, although the general belief is that ideational thinking skills are complex and language skills more rudimentary, just the reverse may be the case in activities of foreign language discourse production. Furthermore, the hierarchy of basic skills to complex processes—for instance, from writing a simple single sentence to the production of meaningful written discourse—is so ingrained in language activity that it may be difficult to conceive of the interdependence of language processing skills and the skills of reasoning and thinking.

I had prepared all the data in preliminary form for analyses, and consolidated the image of the primary objects of my inquiry as human agents in a purposeful educational context, and the image of human agents as information processors who would process different amounts and types of information according to their own information-processing capacities, their "personal needs and interests ... inclinations and impulses" (Vygotsky, 1986, p. 10), and the nature of tasks they were engaged in. I then decided to subject my impressionistic interpretations of the phenomena to more rigorous and systematic procedures of analysis. I used a unique statistical technique called dual scaling (Nishisato, 1994), a technique to analyze categorical data that are not strictly quantitative but nonmetric and thus qualitative, to re-assess the data. I present the procedures and results of dual-scaling analyses in the next chapter.
Chapter 6: Dual-Scaling Analyses

6.1. The Data Revisited

In chapters 3, 4, and 5, I used matrices to compare information across cases (i.e., participants). Creating these matrices involved the reduction of values and variables and the elimination of detail. I saw this process as a virtue, for it helped to clarify the foci of my analyses. In the same chapters I used the matrices to explore relationships between different elements by visual inspection. A further process of abstraction was, however, necessary (and proved invaluable) for dual-scaling analysis. This process involved the re-examination and re-organization of the existing categories and as the necessity arose, the splitting, slicing, combining, creation, and elimination of categories as well as the translation of re-established categories into variables together with subsequent re-coding. The key principle in this process was to assign as unambiguous meanings as possible to data in order to enhance the elegance and power of the mathematical manipulations behind the dual-scaling technique. Efforts were made to be as explicit as possible about the criteria used for allocating values to the cells in six case-by-item matrix tables (Tables P1-P6 in Appendix P), which provide an overview of all the main features of each case. Tables P1 to P6 contain 44 different kinds of information for each student. I devised this large set of data so as to make it resemble 44 items of multiple-choice data. Table P1 containing Items 1 to 10 shows a summary of the data collected through the initial questionnaire surveying the participants' backgrounds and linguistic experiences. Table P2 summarizes the results of the assessment of three language skills (Items 11-13). The data summarized in Table P3 come from the interviews concerning the participants' conceptions of JFL writing and
learning (Items 14-16). Table P4 gives a summary of the participants' responses to the post-writing questionnaires (Items 17-22). Table P5 is a summary of the think-aloud protocol data focusing on reflective mental activities (Items 23-30). Table P6 summarizes the component scores of Japanese essays assessed by Kei and the two independent raters as well as the SOLO levels of the essays (Items 31-44).

Note that numbers were used, for simplicity, to represent the values (2 to 4 options per item) chosen by individual participants or identified by the researcher; however, they do not carry any numerical values. Also, numbers are shown in boldface where I was able to collect complete sets of data, including the think-aloud protocols. The entry '0' indicates missing information. Nishisato (1994, pp. 300-306) described different procedures to handle missing pieces of information in dual-scaling analyses. The DUAL3 Statistical Software Series package (see Appendix of Nishisato, 1994; Appendix II of Nishisato & Nishisato, 1994) that I used for data analyses adopts the method that analyzes only observed responses, ignoring missing ones. Although this means an inevitable influence on the outcome of scaling, this method, according to Nishisato (1994), is probably the best approach to handle missing bits of information so long as they occur infrequently (which was the case in my research). In my data, Joy's L1 essay score was the only missing piece of information that affected the outcome of scaling (see Table P2 in Appendix P). Cases where think-aloud protocols were unavailable were excluded from analyses involving these data.

In Tables P1 to P6 the same option categories are not repeated so as to avoid redundancy whenever they appear more than three times in the same table. The demarcation of the essays' total and component scores into the poor, fair, good, and excellent categories (Items 11, 13, 31-42) was made following Jacob et al.'s (1981) assignment of these terms to certain numerical ranges. Percentage ranges used as values to assign to each case's think-aloud protocol data are arbitrary; they were demarcated in the way that made sense to me after my careful examination of the data.
6.2. Dual Scaling

My understanding of dual scaling comes from the writings and lectures by, and personal communications with, Professor Shizuhiko Nishisato who proposed the name dual scaling for the technique and developed it into a practical tool for data analysis. I owe the following description of dual scaling to his work (Nishisato, 1994, 1996; Nishisato & Nishisato, 1984, 1994).

Dual scaling is, as mentioned earlier, a method of analyzing categorical data whose origins can be traced back to the 18th century (Nishisato & Nishisato, 1984, Appendix II). It is capable of handling a variety of categorical data such as contingency, frequency, multiple-choice, paired comparison, rank-order, successive-category, sorting, and multidimensional categorical data. As the amount of research in dual scaling has increased markedly over the past few decades, the scope of its applications has broadened as well (Nishisato & Nishisato, 1984, 1994).

The method enables the measurement of the relative "distances" between cases (i.e., participants), and between items (or options in the case of multiple-choice data), by assigning optimal weights both for items (or options) and for participants. In other words, dual scaling is an analytical procedure that attaches weights to items and scores to participants in a way that maximizes the squared-correlation ratio (i.e., a ratio of the between-column, or between-row, sum of squares to the total sum of squares). The duality implied by its name refers to this symmetry of the analysis. Maximizing the ratio of the between-item sum of squares to the total sum of squares results in optimal weights for the items, from which optimal scores for participants can be directly derived. Likewise, optimally assigned participant scores imply that weights for the items are optimal as well and can be expressed as a function of participants' scores.
The crux of dual scaling lies in its simultaneous maximization of the between-row and the between-column sum of squares. This simultaneous, optimal quantification of the rows and columns of a data matrix is one of the most remarkable features of the dual-scaling procedure. In addition, since no particular distribution for responses is assumed in dual scaling, no assumptions have to be made regarding the distribution of the data. This is a strength in terms of its applicability as well as a weakness in its inferential potential. Indeed dual scaling is sample-dependent so the results of its analysis cannot be generalized to other populations. What dual scaling does is to provide "a simpler, often clearer, description" of a given data set (Nishisato, 1994, p. 17). To use Eisner's (1991, p. 95) distinction between description and interpretation, dual scaling gives an account of, but does not necessarily account for, the given data. My research, like many other studies in educational research, values a full description of a particular group of people and the patterns of their behaviors more than generalizability. In this circumstance dual scaling offers a particularly effective technique for obtaining rich descriptive analyses. It is also an excellent tool for examining the interrelationships among items and participants and provides a wealth of information that would probably be lost or overlooked in other types of analysis.

6.3. Dual-Scaling Analytic Procedures

The DUAL3 Statistical Software Series package offers various computer applications of dual scaling. I used one of its five programs, called DUAL3MC (Version 2.36, July 1992), for multiple-choice data, to perform a series of analyses.\footnote{There are two types of analysis that can be carried out with dual scaling. One procedure is called standard analysis or option weighting that focuses on the entire data set. The other is called forced classification, the procedure developed by Professor Shizuhiko Nishisato. Forced classification allows the investigator to focus his or her analysis on a specific aspect of the data; he or she can specify a particular}
carried out 6 analyses in a cumulative fashion. These analyses addressed the three sets of research questions I posed related to the three components of Biggs's 3P model focusing on students' characteristics, their writing processes, and their written products. I did not analyze data on the teacher, Kei, in this way, as they were not in a form that was amenable to such analyses. The first analysis (Analysis 1) subjected the information collected through the initial background survey questionnaire (Items 1-10, Table P1) to dual scaling to provide an overall picture of the particular group of people participating in the study. Analysis 2 expanded the scope of Analysis 1 to include the assessment of the participants' language skills (Items 11-13, Table P2) and their conceptions of JFL writing and learning (Items 14-16, Table P3) to answer the research question pertaining to students' characteristics (see section 1.4). My next level of analysis included the writing process data to address the third set of research questions. Responses to the post-writing questionnaire (Items 17-22, Table P4) were added to the preceding 16 items to make Analysis 3(a) for all of the 13 participants. Moreover, Analysis 3(b) included the think-aloud protocol data (Items 23-30, Table P5) as well as the post-writing questionnaire data for 8 participants (as the remaining 5 participants failed to produce analyzable think-aloud protocols). The fourth and final set of research questions concerns all aspects of the 3P model as a classroom system. To address these questions, I used all the items except Items 23 to 30 for the 13 participants in Analysis 4(a), and Analysis 4(b) included all the items for the 8 participants who produced usable think-aloud protocols.

The DUAL3MC program extracted three solutions (or orthogonal components) for each analysis by default; however, I present only the first two of these solutions in discussing the outcomes. Dual scaling yields many solutions. According to Nishisato (1994; see also Nishisato & Nishisato, 1984, 1994), there is no clear-cut answer to the variable (or a set of variables) of his or her interest and examine the relationships in the data with respect to this predetermined focal point. I used standard dual scaling in this thesis research as an aid in summarizing complex data in a simple, clear, and useful manner.

60 I also addressed these questions separately in chapters 3, 4, and 5, where I described the preliminary analyses of the relevant data and their results. See section 1.4, where the research questions are introduced.
question of the number of solutions to obtain. He recommended interpretability as a practical criterion for deciding how many solutions to extract. Typically the first solution tends to reveal a general division while the subsequent solutions capture more idiosyncratic traits attributed to a small number of participants. In the present research I considered the first two "best" or "optimal" solutions sufficient for explaining general patterns of the information in the data sets.

Dual scaling provides a number of statistics. The following statistics are particularly useful in interpreting scaling outcomes of multiple-choice data (Nishisato, 1994; Nishisato & Nishisato, 1984, 1994); I will refer to them in presenting the interpretation of the computer outputs:

- **Percentage homogeneity** is an index of how good the solution is as compared with the perfect case (i.e., all the inter-item correlations are 1 and a single item contains all of the information in the data). This statistic equals 100 times the squared correlation ratio.

- **Item statistics**—$SS(j)$, the sum of squares of weighted responses of each item, is a vital statistic in test construction and indicates the relative contribution of Item $j$ to the test (i.e., the set of all the items subjected to the analysis), which is proportional to the square of item-total correlation, $R^2(j)$. $R(j)$, the positive square root of $R^2(j)$ or item-total correlation, indicates the extent to which Item $j$ is correlated with the test; the higher the value of $R(j)$, the greater the relevance of Item $j$ to the test. Thus, this statistic can be used to select a subset of homogeneous items by discarding those items with small values of $R(j)$ and retaining those items with large values of the statistic.

- **Participants' projected scores** represent a set of weights which reflect the relative importance of the solution and are in contrast to the normed option weights representing a set of weights that have a fixed or common unit. More technically speaking, normed weights alone do not contain sufficient information to reproduce the input data, but projected weights do (Nishisato, 1996).
6.4. Outcomes of Dual-Scaling Analyses

I took the following steps to interpret the results of the dual-scaling analyses. First, I looked at percentage homogeneities of Solutions 1 and 2 to see if the given data set contained a dominant dimension or component. Second, to grasp the nature of the solutions, I plotted each participant on a two-dimensional graph using his or her projected scores for Solutions 1 and 2 as the coordinates for the horizontal and vertical axes. I then partitioned participants into groups and identified those options shared by participants in each group. Each group was further partitioned into subgroups by looking at items whose options were not shared by all the participants in the group. My examination of these patterns was important because these "patterns contain the full information of the [given] data" (Nishisato, 1994, p. 160).

To facilitate this process, I identified the items with high values of R which were major contributors to the analysis; these items were thus capable of partitioning the space relatively neatly and characterizing the clusters by their respective options. That is to say, I looked at only a subset of strongly relevant items, rather than the entire set. In this context the importance of the percentage homogeneity, the use of which often raises questions,

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61 Nishisato (1994) devoted one entire chapter to discussing problems associated with graphical representations of dual-scaling outcomes. He stated, "Granting that graphical display is almost indispensable for interpretation of the quantification results, one should nevertheless be aware of some potential pitfalls and logical difficulties associated with graphical display" (p. 261). Despite many unresolved problems with graphical display in general, Nishisato found a theoretically sound and practically useful graphical method to present the results of dual scaling of multiple-choice data. The essence of his method is plotting the projected scores of participants in two-dimensional space for a pair of solutions and labeling them by their response patterns. I used this method; however, the large number of items included in my analyses caused difficulty in labeling participants by their response patterns, which are too long to be displayed on a single graph. Therefore, response patterns do not appear in my graphs. Rather, the participants' names are used to denote the points in the plot. The concurrent operation of classifying participants into clusters and distributing item options into separate regions was, nonetheless, carried out in interpreting clusters of participants in terms of their common response/behavior patterns by consulting Tables P1 to P6 in Appendix P.

62 This operation can be repeated to yield "a tree structure, an outcome of hierarchical clustering" (Nishisato, 1994, p. 289).

63 The number of contributing items becomes smaller as we move from the first to the subsequent solutions, pointing to the decrease in the number of participants contributing to the latter solutions (Nishisato, 1994).
should diminish since the percentage homogeneity applies to the entire set of items, not to the selected subset of items (S. Nishisato, personal communication, June 30, 1997).

What the appropriate significance level of $R_{gt}$ is is a question yet to be explored (Nishisato, 1994), however. Nishisato (1994) noted the nature of this question differs from the traditional test for significant correlations, and the "relation of item-total correlation to the smooth transition of response patterns is a topic that has never been explored" (p. 160). In the present study I considered items with $R_{gt}$ of .50 or higher to be major contributors, following the practice demonstrated by Nishisato and Nishisato (1984, chap. 3) in their dual-scaling analyses of multiple-choice data.

6.4.1. Analysis 1

The percentage homogeneity was 47.31% for Solution 1 and 29.61% for Solution 2 in this analysis, suggesting that this instrument (i.e., the questionnaire from which the data were derived) contained medium and lower degrees of homogeneity for respective solutions. Similarly, these medium and relatively low values of the percentage homogeneities imply that this group of participants (or respondents) were rather heterogeneous.64 That is, the instrument did not contain a dominant dimension or component; rather, the analysis captured individual differences in answering different questions. Figure 6-1 shows each participant on a two-dimensional graph, from which three distinct clusters can be identified to partition the participants.

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64 This kind of argument applies both to the nature of item distributions and to the nature of participant distributions because of the symmetry of dual scaling (Nishisato & Nishisato, 1984). This unique characteristic of dual scaling, mentioned in section 6.2 in this thesis, is evident in the way Nishisato and Nishisato (1994) explained the meaning of the technique's name: "'symmetric quantification' of a two-way table of categorical data" (p. 115).
Figure 6.1. Distribution of 13 participants in Analysis 1.
To interpret the clusters in terms of their common response patterns, I considered the items with $R_{ji}$ of .50 or higher for the two solutions (Tables 6-1 & 6-2) and examined response patterns of these items by looking at Table P1 (Appendix P). Tables 6-1 and 6-2 also include the values of $SS_{ij}$ as well as options with outstanding bipolar weights65 (i.e., options of a particular item that stand on the dichotomous ends of a scale), which indicate distinct traits of people in a certain group. These two ways of interpreting the information about the participants' response patterns complemented each other and helped me grasp the nature of the solutions better.

### Table 6-1

<table>
<thead>
<tr>
<th>j</th>
<th>$SS_{ij}$</th>
<th>$R_{ji}$</th>
<th>item description</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>22.10</td>
<td>0.89</td>
<td>oral L1</td>
<td>English</td>
<td>Chinese</td>
</tr>
<tr>
<td>7</td>
<td>19.18</td>
<td>0.83</td>
<td>self-rating of overall Japanese (cf.peers)</td>
<td>good</td>
<td>poor</td>
</tr>
<tr>
<td>1</td>
<td>17.82</td>
<td>0.80</td>
<td>ethnicity</td>
<td>Anglo-Saxon</td>
<td>Chinese</td>
</tr>
<tr>
<td>3</td>
<td>17.74</td>
<td>0.80</td>
<td>written L1</td>
<td>English</td>
<td>Chinese</td>
</tr>
<tr>
<td>5</td>
<td>14.57</td>
<td>0.72</td>
<td>importance of Japanese study</td>
<td>important</td>
<td>very important</td>
</tr>
<tr>
<td>6</td>
<td>14.53</td>
<td>0.72</td>
<td>length of residence in Japan</td>
<td>more than 6 months</td>
<td>less than 6 months</td>
</tr>
<tr>
<td>9</td>
<td>11.99</td>
<td>0.66</td>
<td>self-rating of Japanese writing (cf.peers)</td>
<td>good</td>
<td>poor</td>
</tr>
</tbody>
</table>

Table 6-1 contrasts the oral and written L1s of Anglo-Saxon students against those of the ethnic Chinese students. The other contrastive factors were self-ratings of overall and written Japanese compared to peers (*good* vs. *poor*), importance of Japanese study (important vs. very important), and length of residence in Japan (more vs. less than 6 months). Table 6-2 similarly contrasts the ethnic Japanese students and the Anglo-Saxon students.

---

65 In case the same or very close weights were derived for more than one option of a particular item, all of these options are listed; for instance, in Solution 1 of Analysis 2 (see Table 6-3) the projected weights were minus 0.92 for the option of *superior* and minus 0.80 for the option of *advanced* of the item of JST rating, and the projected weight was minus 0.77 both for the option of Japanese and for the option of Anglo-Saxon in the item of ethnicity.
Table 6-2
Major Contributors and Their Bipolar Options (Analysis 1, Solution 2)

<table>
<thead>
<tr>
<th>i</th>
<th>SS(i)</th>
<th>R(i)</th>
<th>item description</th>
<th>left</th>
<th>right</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>29.89</td>
<td>0.82</td>
<td>ethnicity</td>
<td>Japanese</td>
<td>Anglo-Saxon</td>
</tr>
<tr>
<td>8</td>
<td>27.64</td>
<td>0.79</td>
<td>self-rating of overall Japanese (cf.native)</td>
<td>fair</td>
<td>poor</td>
</tr>
<tr>
<td>4</td>
<td>20.70</td>
<td>0.68</td>
<td>self-rating of L1 writing</td>
<td>fair</td>
<td>good/excellent</td>
</tr>
<tr>
<td>2</td>
<td>17.57</td>
<td>0.63</td>
<td>oral L1</td>
<td>Japanese</td>
<td>English</td>
</tr>
<tr>
<td>9</td>
<td>14.65</td>
<td>0.57</td>
<td>self-rating of Japanese writing (cf.peers)</td>
<td>poor/fair</td>
<td>good</td>
</tr>
<tr>
<td>6</td>
<td>11.54</td>
<td>0.51</td>
<td>length of residence in Japan</td>
<td>less than 6 months</td>
<td>more than 6 months</td>
</tr>
</tbody>
</table>

Among the items listed in Tables 6-1 and 6-2, so-called "very good" items for the purpose of classification—that is, items that are highly correlated within the questionnaire (i.e., items with higher $R(i)$)—in this analysis were: ethnicity (Item 1), oral L1 (Item 2), written L1 (Item 3), self-ratings of Japanese proficiency overall in comparison to peers (Item 7), and self-ratings of Japanese proficiency overall in comparison to native speakers (Item 8). The other items in these tables did contribute to uncovering some response patterns hidden in the data, but they are less useful than Items 1, 2, 3, 7, and 8 in classifying the participants into distinct clusters by their options. In the following descriptions of the clusters, I compared the participants' options on the selected items to identify the response patterns underlying the solutions.

One cluster in Figure 6-1 consists of ethnic Japanese students—Jasmine, Jane, Judith, Joy, and Jack—who used English as their oral and written L1 (but note that Jasmine preferred to use Japanese for daily conversation and English for writing) and considered their overall Japanese as good in comparison to other students in the class (i.e., had relatively high confidence in their Japanese). When their overall Japanese skill was compared to that of native speakers, Jasmine, Jane, and Judith rated it as fair while Joy and Jack were less confident, rating it as poor. Judith and Joy had recently stayed in Japan for more than 6 months but the others had not.
Another cluster consists of ethnic Chinese students--Cathy, Colin, Charles, Mary, and Mike--who spoke either Cantonese or Mandarin Chinese as their L1. Although they had been studying in an English-speaking environment in Canada for some time, they still felt more comfortable writing in Chinese than any other languages, except for Mike who had been in Canada since Grade 4, the earliest arriving immigrant among the five, and who chose English as his written L1. All these students rated their overall Japanese as poor in comparison to native speakers. Cathy, Colin, and Charles also felt that their overall Japanese was poor in comparison to their peers in the class; but Mary and Mike rated theirs as fair, rating higher than the 3 Cantonese-speaking students. Supplementary information I obtained during the interviews might explain Mary's and Mike's higher ratings on this item. Both Mary and Mike had relatives in Japan and had visited Japan in their young childhood, whereas the Cantonese students neither had such contacts nor had visited Japan at all. None had a recent experience of being in Japan for an extended period of time.

The third cluster consists of native English speakers. Eliot and Eddie were white native-born Canadians while Martin was a Chinese-Canadian born and raised in Canada. These 3 students had spent one academic year in Japan to study or work prior to their enrollment in Kei's course. Although they all felt their Japanese was poor compared to native speakers, Martin and Eliot rated their overall Japanese, compared to their peers, as good, and Eddie rated his as fair. Their relatively high confidence in their Japanese indicated by these ratings might have something to do with their recent experience of living in Japan. In fact the R[6] of Item 6 (length of residence in Japan in the past 5 years) in this analysis was reasonably high (.72 for Solution 1 and .51 for Solution 2) and could be useful in distinguishing this particular group of people from the other groups.

Some other interesting trends are worth noting here. Discrepancies between the self-ratings of overall Japanese proficiency and written Japanese were most notable for ethnic Japanese students, while the other students' ratings on these two items were consistent. This finding points to a gap that ethnic Japanese students perceived between
their overall proficiency and writing skills in Japanese. It may be further inferred from this that these ethnic Japanese students had set higher goals for their Japanese writing, wishing to be able to write as well as they could speak, for instance. Another interesting point is the self-rating of L1 writing ability (which was in fact not a very good item, with R(60) of .21 for Solution 1 and .68 for Solution 2, contributing little to the clear demarcation of the participants). That is, those who rated their L1 writing ability as fair were all female except Mike, while those who considered themselves as either good or excellent writers in their L1s were male students. Although gender was not included in this statistical analysis, it may have influenced these people’s self-ratings of abilities and attitudes.

6.4.2. Analysis 2

For Analysis 2, the percentage homogeneities of Solutions 1 and 2 were 43.43% and 30.87% respectively. Figure 6-2 shows a picture similar to the one that appeared in Analysis 1, where three clusters were distinguished from one another by ethnicity, oral L1, written L1, and self-ratings of overall proficiency in Japanese. One main difference from Analysis 1, though, is that Jack has moved away from the cluster of ethnic Japanese participants and stands alone. To interpret this analysis, I looked at the items with R(60) of .50 or higher for the two solutions (Tables 6-3 & 6-4) and examined the participants’ response/behavior patterns to these items by consulting Tables P1, P2, and P3 (Appendix P).
Figure 6-2. Distribution of 13 participants in Analysis 2.
Table 6-3

**Major Contributors and Their Bipolar Options (Analysis 2, Solution 1)**

<table>
<thead>
<tr>
<th>j</th>
<th>SS(j)</th>
<th>R(j)</th>
<th>item description</th>
<th>left</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>27.56</td>
<td>0.95</td>
<td>oral L1</td>
<td>Japanese/English</td>
</tr>
<tr>
<td>12</td>
<td>25.28</td>
<td>0.91</td>
<td>JST rating</td>
<td>superior/advanced</td>
</tr>
<tr>
<td>7</td>
<td>23.61</td>
<td>0.88</td>
<td>self-rating of overall Japanese (cf.peers)</td>
<td>good</td>
</tr>
<tr>
<td>3</td>
<td>22.99</td>
<td>0.87</td>
<td>written L1</td>
<td>English</td>
</tr>
<tr>
<td>1</td>
<td>20.87</td>
<td>0.83</td>
<td>ethnicity</td>
<td>Japanese/Anglo-Saxon</td>
</tr>
<tr>
<td>16</td>
<td>18.25</td>
<td>0.78</td>
<td>perceived area of learning thru JFL writing</td>
<td>language &amp; content</td>
</tr>
<tr>
<td>6</td>
<td>13.30</td>
<td>0.66</td>
<td>length of residence in Japan</td>
<td>more than 6 months</td>
</tr>
<tr>
<td>11</td>
<td>10.42</td>
<td>0.58</td>
<td>L1 essay score</td>
<td>excellent</td>
</tr>
<tr>
<td>5</td>
<td>9.61</td>
<td>0.56</td>
<td>importance of Japanese study</td>
<td>important</td>
</tr>
<tr>
<td>9</td>
<td>8.96</td>
<td>0.54</td>
<td>self-rating of Japanese writing (cf.peers)</td>
<td>good/fair</td>
</tr>
<tr>
<td>8</td>
<td>7.53</td>
<td>0.50</td>
<td>self-rating of overall Japanese (cf.native)</td>
<td>fair</td>
</tr>
<tr>
<td>15</td>
<td>7.52</td>
<td>0.50</td>
<td>perceived area of problem in JFL writing</td>
<td>organization</td>
</tr>
</tbody>
</table>

Table 6-3 highlights the contrast between the ethnic Japanese and Anglo-Saxon students and the ethnic Chinese students; Table 6-4 contrasts the Anglo-Saxon students with the ethnic Japanese students. And these contrasts are clearly indicated by the three distinct clusters shown in Figure 6-2. These clusters are mainly characterized by the three distinct levels of JST ratings (whose R(j) was .91 for Solution 1 and .78 for Solution 2), which happened to correspond roughly to the three distinct ethnicities (with R(j) of .83 for Solution 1 and .78 for Solution 2). All ethnic Japanese students were rated *superior* on the JST except Judith, who was *advanced*, and Jack, who was *intermediate*. All Chinese

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66 Judith was rated *advanced-plus*, the level characterized by "remarkable fluency and ease of speech" according to the ACTFL Japanese Proficiency Guidelines (American Council on the Teaching of Foreign Languages, 1987). The advanced-plus speaker may experience a breakdown under the demands of superior level complex tasks. Eliot was also an advanced-plus speaker while Eddie and Martin were rated *advanced*. Although Judith and Eliot received the same rating on the JST, my observation was that Judith's ability to use the Japanese language was much better and more native-like than Eliot. This difference I noticed between these two students may be due to the fact that Japanese was one of Judith's two home languages while that was not the case for Eliot who had had a much more limited amount of formal and informal Japanese instruction compared to Judith. This issue certainly speaks to the complex nature of the concept of proficiency and the mechanism of testing, but it is not relevant in the present thesis and thus not discussed.
students were rated intermediate. Eddie, Eliot, and Martin were advanced.

Table 6-4
Major Contributors and Their Bipolar Options (Analysis 2, Solution 2)

<table>
<thead>
<tr>
<th>j</th>
<th>SS(i)</th>
<th>R(i)</th>
<th>item description</th>
<th>left bipolar</th>
<th>right bipolar</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>26.00</td>
<td>0.78</td>
<td>JST rating</td>
<td>advanced</td>
<td>superior</td>
</tr>
<tr>
<td>1</td>
<td>25.74</td>
<td>0.78</td>
<td>ethnicity</td>
<td>Anglo-Saxon</td>
<td>Japanese</td>
</tr>
<tr>
<td>13</td>
<td>23.76</td>
<td>0.75</td>
<td>Japanese essay score</td>
<td>good</td>
<td>excellent</td>
</tr>
<tr>
<td>4</td>
<td>22.63</td>
<td>0.73</td>
<td>self-rating of L1 writing</td>
<td>excellent/good</td>
<td>fair</td>
</tr>
<tr>
<td>9</td>
<td>20.08</td>
<td>0.69</td>
<td>self-rating of Japanese writing (cf.peers)</td>
<td>good</td>
<td>poor/fair</td>
</tr>
<tr>
<td>8</td>
<td>18.71</td>
<td>0.66</td>
<td>self-rating of overall Japanese (cf.native)</td>
<td>good</td>
<td>fair</td>
</tr>
<tr>
<td>15</td>
<td>14.04</td>
<td>0.57</td>
<td>perceived area of problem in JFL writing</td>
<td>organization</td>
<td>language &amp; organization</td>
</tr>
<tr>
<td>2</td>
<td>14.01</td>
<td>0.57</td>
<td>oral L1</td>
<td>English</td>
<td>Japanese</td>
</tr>
<tr>
<td>14</td>
<td>13.52</td>
<td>0.56</td>
<td>perception of JFL writing</td>
<td>language exercise</td>
<td>meaning-making</td>
</tr>
<tr>
<td>6</td>
<td>11.78</td>
<td>0.52</td>
<td>length of residence in Japan</td>
<td>more than 6 months</td>
<td>less than 6 months</td>
</tr>
<tr>
<td>16</td>
<td>11.78</td>
<td>0.52</td>
<td>perceived area of learning thru JFL writing</td>
<td>language/content</td>
<td>&quot;nothing&quot;/language &amp; content</td>
</tr>
</tbody>
</table>

Other items listed in Tables 6-3 and 6-4 further characterize these three groups generally. For example, the superior Japanese-proficiency group (including Judith) scored in the excellent range on their Japanese essays, considered JFL writing as a meaning-making activity, and had a felt-sense of having learned about language and content through engaging in JFL writing tasks. The Japanese essay scores of the advanced Japanese-proficient group fell in the good range, and they regarded JFL writing primarily as an activity for language exercises. This conception of JFL writing as a mere language exercise was also a characteristic of the Chinese-background participants who were judged intermediate on the JST and produced Japanese essays in the fair or good range. Both the intermediate and advanced Japanese-proficiency groups perceived their main learning through JFL writing to be language use, if anything. Across the groups the majority scored
excellent on their L1 essays (an indication that little difference may have existed among the participants' writing skills in their L1s) and found language use as a major stumbling block to writing in JFL regardless of their proficiency levels in Japanese (see Tables P2 & P3 in Appendix P).

6.4.3. Analysis 3(a)

The percentage homogeneities of Solutions 1 and 2 in this analysis were 37.60% and 27.74% respectively, indicating a slight decrease in the accountability of each solution compared to the previous analyses. This suggests that this particular set of data contains a complex hidden structure. The distribution of the participants plotted in Figure 6-3 resembles that in Figure 6-2, showing three distinct clusters, with Jack isolated from any of these clusters.

Looking at Tables 6-5 and 6-6 as well as Tables P1 to P4 in Appendix P helps to identify each cluster's common characteristics in particular relation to the items added to this analysis, i.e., the retrospective information on writing processes gathered through the post-writing questionnaires (Items 17-22). Tables 6-5 and 6-6 highlight respectively the contrasts between the Chinese students of intermediate proficiency in Japanese and the Anglo-Saxon and ethnic Japanese students of advanced or superior Japanese-proficiency, and between the Anglo-Saxon and the ethnic Japanese students. The three clusters shown in Figure 6-3 reflect these contrasts.
Figure 6.3. Distribution of 13 participants in Analysis 3(a).
Table 6-5

Major Contributors and Their Bipolar Options (Analysis 3(a), Solution 1)

<table>
<thead>
<tr>
<th>j</th>
<th>SS(j)</th>
<th>R(t)</th>
<th>item description</th>
<th>bipolar options</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>31.28</td>
<td>0.95</td>
<td>oral L1</td>
<td>Chinese</td>
</tr>
<tr>
<td>17</td>
<td>31.02</td>
<td>0.94</td>
<td>level of satisfaction with Task 1 essay</td>
<td>not so satisfied</td>
</tr>
<tr>
<td>12</td>
<td>30.77</td>
<td>0.94</td>
<td>JST rating</td>
<td>intermediate</td>
</tr>
<tr>
<td>7</td>
<td>25.25</td>
<td>0.85</td>
<td>self-rating of overall Japanese (cf.peers)</td>
<td>poor</td>
</tr>
<tr>
<td>3</td>
<td>25.24</td>
<td>0.85</td>
<td>written L1</td>
<td>Chinese</td>
</tr>
<tr>
<td>1</td>
<td>22.08</td>
<td>0.79</td>
<td>ethnicity</td>
<td>Chinese</td>
</tr>
<tr>
<td>16</td>
<td>19.47</td>
<td>0.75</td>
<td>perceived area of learning thru JFL writing</td>
<td>&quot;nothing&quot;/content</td>
</tr>
<tr>
<td>6</td>
<td>16.49</td>
<td>0.69</td>
<td>length of residence in Japan</td>
<td>less than 6 months</td>
</tr>
<tr>
<td>11</td>
<td>12.44</td>
<td>0.59</td>
<td>L1 essay score</td>
<td>good</td>
</tr>
<tr>
<td>9</td>
<td>11.97</td>
<td>0.58</td>
<td>self-rating of Japanese writing (cf.peers)</td>
<td>poor</td>
</tr>
<tr>
<td>13</td>
<td>11.72</td>
<td>0.58</td>
<td>Japanese essay score</td>
<td>fair</td>
</tr>
<tr>
<td>5</td>
<td>10.98</td>
<td>0.56</td>
<td>importance of Japanese study</td>
<td>very important</td>
</tr>
<tr>
<td>19</td>
<td>10.04</td>
<td>0.53</td>
<td>difficulty in language use in Task 1</td>
<td>difficult</td>
</tr>
<tr>
<td>15</td>
<td>8.70</td>
<td>0.50</td>
<td>perceived area of problem in JFL writing</td>
<td>language &amp; organization</td>
</tr>
</tbody>
</table>

Table 6-6

Major Contributors and Their Bipolar Options (Analysis 3(a), Solution 2)

<table>
<thead>
<tr>
<th>j</th>
<th>SS(j)</th>
<th>R(t)</th>
<th>item description</th>
<th>bipolar options</th>
</tr>
</thead>
<tbody>
<tr>
<td>18</td>
<td>30.63</td>
<td>0.80</td>
<td>difficulty level in idea generation in Task 1</td>
<td>easy</td>
</tr>
<tr>
<td>12</td>
<td>26.90</td>
<td>0.75</td>
<td>JST rating</td>
<td>advanced</td>
</tr>
<tr>
<td>13</td>
<td>25.89</td>
<td>0.74</td>
<td>Japanese essay score</td>
<td>good</td>
</tr>
<tr>
<td>1</td>
<td>24.84</td>
<td>0.72</td>
<td>ethnicity</td>
<td>Anglo-Saxon</td>
</tr>
<tr>
<td>9</td>
<td>23.72</td>
<td>0.71</td>
<td>self-rating of Japanese writing (cf.peers)</td>
<td>good</td>
</tr>
<tr>
<td>8</td>
<td>23.13</td>
<td>0.70</td>
<td>self-rating of overall Japanese (cf.native)</td>
<td>poor</td>
</tr>
<tr>
<td>4</td>
<td>22.64</td>
<td>0.69</td>
<td>self-rating of L1 writing</td>
<td>excellent</td>
</tr>
<tr>
<td>2</td>
<td>18.25</td>
<td>0.62</td>
<td>oral L1</td>
<td>English</td>
</tr>
<tr>
<td>17</td>
<td>18.22</td>
<td>0.62</td>
<td>satisfaction level in Task 1 essay</td>
<td>satisfied</td>
</tr>
<tr>
<td>16</td>
<td>15.53</td>
<td>0.57</td>
<td>perceived area of learning thru JFL writing</td>
<td>language</td>
</tr>
<tr>
<td>15</td>
<td>14.61</td>
<td>0.55</td>
<td>perceived area of problem in JFL writing</td>
<td>organization</td>
</tr>
<tr>
<td>14</td>
<td>14.43</td>
<td>0.55</td>
<td>perception of JFL writing</td>
<td>language exercise</td>
</tr>
</tbody>
</table>
The students' responses to Items 20 to 22 of the post-writing questionnaire concerning the level of satisfaction with and difficulty in idea generation and language use in the Task II essay did not help much in demarcating each cluster's uniqueness; the participants' generally uniform responses to these items yielded relatively low values of $R_{ij}$ (.42, .63, and .03 for Items 20, 21, and 22 respectively in Solution 1; .14, .13, and .26 in Solution 2). By consulting the relevant tables in Appendix P, we can tell the majority of the students, showing little individual difference among them, were reasonably satisfied with their Task II essays and did not experience much difficulty in idea generation or language use while writing these essays.

There were some distinct tendencies, however, in the three groups' response patterns concerning Items 17 to 19, which concerned their level of satisfaction with and difficulty in idea generation and language use in the Task I essay. Students in the superior Japanese-proficiency group (including Judith) were all satisfied with their essays, and most of them experienced difficulties in both idea generation and language use (but for Jasmine and Joy, either one of these aspects posed difficulty). The advanced Japanese-proficiency group were also satisfied with their essays; but neither idea generation nor language use was a problem for them (except Eddie who had difficulties in language use). The intermediate Japanese-proficiency group's responses to Items 17 and 19 were unanimous; they were not so satisfied with their essays, and they experienced difficulties in language use. Their responses to Item 18 about the level of difficulty in idea generation were a mix of difficult and not so difficult.

I further compared, though speculatively, the levels of difficulty the students felt about idea generation in Task I with the levels of confidence they had in writing in their L1s, which I associated with one of the background questionnaire items—i.e., self-ratings of L1 writing (Item 4)—contributing mainly to distinguishing the advanced-proficient Anglo-Saxon group from the superior-proficient ethnic Japanese group in Solution 2 in this analysis ($R_{0i} = .69$); I did this by examining the participants' option patterns of these items.
shown in Appendix P. It appeared generally true in the case of Task I that the students who rated their L1 writing competence as *fair* experienced difficulties in idea generation (Jasmine, Jane, Judith, and Cathy), and the students who considered their L1 writing skills as *good* or *excellent* (Jack, Colin, Martin, Eliot, and Eddie) did not find the generation of ideas so difficult.

I also compared the levels of difficulty the students felt about language use in Task I with the students’ self-ratings of Japanese writing skills in comparison to their peers (Item 9 with R(ji) of .58 for Solution 1 and of .71 for Solution 2). The students who rated their Japanese writing skills as *poor* or *fair* in comparison to their peers mentioned (on the Task I post-writing questionnaire) difficulties they had in language use (Jane, Judith, Joy, Jack, Cathy, Colin, Charles, Mary, Mike, and Eddie). Jasmine rated her Japanese writing skill only as *fair* yet she responded on the post-writing questionnaire that the use of language was not so difficult for her. The students who rated their Japanese writing skills as *good* (Martin and Eliot) did not find the aspect of language use so difficult, according to their responses to the post-writing questionnaire.

### 6.4.4. Analysis 3(b)

For Analysis 3(b), the percentage homogeneities of Solutions 1 and 2 were 37.69% and 30.66% respectively. The clustering patterns shown in Figure 6-4 are basically what appeared in Figure 6-3. Jack is again isolated from any of the three clusters. Tables 6-7 and 6-8 and Tables P1 to P5 in Appendix P help us examine the participants’ characteristics in terms of the items highly correlated within the analysis.
Figure 6.4: Distribution of 8 participants in Analysis 3(b).
Table 6-7

Major Contributors and Their Bipolar Options (Analysis 3(b), Solution 1)

| j | SS(i) | R(jt) | item description                        | <--------------------------> | -------------------------->
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>19.60</td>
<td>0.96</td>
<td>JST rating</td>
<td>intermediate</td>
<td>superior</td>
</tr>
<tr>
<td>17</td>
<td>18.80</td>
<td>0.94</td>
<td>level of satisfaction with Task I essay</td>
<td>not so satisfied</td>
<td>very satisfied</td>
</tr>
<tr>
<td>2</td>
<td>18.13</td>
<td>0.92</td>
<td>oral L I</td>
<td>Chinese</td>
<td>Japanese</td>
</tr>
<tr>
<td>16</td>
<td>16.40</td>
<td>0.87</td>
<td>perceived area of learning thru JFL writing</td>
<td>&quot;nothing&quot;</td>
<td>language &amp; content</td>
</tr>
<tr>
<td>13</td>
<td>14.69</td>
<td>0.83</td>
<td>Japanese essay score</td>
<td>fair</td>
<td>excellent</td>
</tr>
<tr>
<td>3</td>
<td>14.47</td>
<td>0.82</td>
<td>written L I</td>
<td>Chinese</td>
<td>English</td>
</tr>
<tr>
<td>8</td>
<td>14.32</td>
<td>0.82</td>
<td>self-rating of overall Japanese (cf. native)</td>
<td>poor</td>
<td>fair</td>
</tr>
<tr>
<td>26</td>
<td>14.32</td>
<td>0.82</td>
<td>ratio of thinking aloud in L I in Task I</td>
<td>more than 40%</td>
<td>less than 20%</td>
</tr>
<tr>
<td>30</td>
<td>14.32</td>
<td>0.82</td>
<td>ratio of thinking aloud in L I in Task II</td>
<td>more than 40%</td>
<td>less than 20%</td>
</tr>
<tr>
<td>1</td>
<td>12.36</td>
<td>0.76</td>
<td>ethnicity</td>
<td>Chinese</td>
<td>Japanese</td>
</tr>
<tr>
<td>7</td>
<td>11.43</td>
<td>0.73</td>
<td>self-rating of overall Japanese (cf. peers)</td>
<td>poor</td>
<td>good</td>
</tr>
<tr>
<td>28</td>
<td>9.81</td>
<td>0.67</td>
<td>reflective thinking about language in Task II</td>
<td>30-40%</td>
<td>over 40%</td>
</tr>
<tr>
<td>24</td>
<td>9.29</td>
<td>0.66</td>
<td>reflective thinking about language in Task I</td>
<td>30-40%</td>
<td>20-30%</td>
</tr>
<tr>
<td>21</td>
<td>8.55</td>
<td>0.63</td>
<td>difficulty in idea generation in Task II</td>
<td>not so difficult</td>
<td>difficult</td>
</tr>
<tr>
<td>19</td>
<td>6.13</td>
<td>0.53</td>
<td>difficulty in language use in Task I</td>
<td>difficult</td>
<td>not so difficult</td>
</tr>
<tr>
<td>9</td>
<td>5.94</td>
<td>0.52</td>
<td>self-rating of Japanese writing (cf. peers)</td>
<td>poor</td>
<td>fair</td>
</tr>
<tr>
<td>18</td>
<td>5.48</td>
<td>0.50</td>
<td>difficulty in idea generation in Task I</td>
<td>not so difficult</td>
<td>difficult</td>
</tr>
</tbody>
</table>

The contrasting characteristics of the item options listed in Tables 6-7 and 6-8 bring us certain images of the three respective groups demarcated clearly in Figure 6-4. The intermediate Japanese-proficient people were mostly Chinese and were not very satisfied with their Task I essays, in which they experienced difficulties using language but not necessarily in generating ideas. Idea generation was not a problem for them in Task II, either. Thirty to 40% of their verbalizations of concurrent thoughts in both Tasks I and II were about language use. In contrast, the superior Japanese-proficient people were very satisfied with their essays for Task I. They found it difficult to generate ideas, but they did not find it so difficult to use language for Task I. And they verbalized less their thinking about language and more about content for Task I. But their verbalizations of thoughts...
about language increased for Task II. As in their experiences in Task I, they had difficulty generating ideas for Task II. The advanced Japanese-proficient people viewed JFL writing primarily as a language exercise (in contrast to the superior-proficient students' conceptualization of JFL writing as meaning-making), expressed no difficulty in generating ideas for Task I, and stated a reasonable degree of satisfaction with their Task I essays.

Dual scaling captured these characteristics. From this we can draw distinct images of the three groups. But there existed an array of individual differences that do not fit neatly into the three clusters shown in Figure 6-4. For instance, if we look at the items concerning thinking processes for the production of a piece of writing (Table P5 in Appendix P68), the complexity of the data structure involving 8 participants becomes apparent. Some manifested consistent performances across Tasks I and II (Jack, Mary, Martin, and Eddie), but others did not. Eddie and Mary paid more attention to language use than gist in both tasks. Cathy was like them in Task I, verbalizing her concerns about language use more often than about gist. But in Task II her reflective thinking about language use decreased. In both tasks about 20 to 30% of Martin's thinking was of a reflective kind and about language use; another 20 to 30% was of a reflective kind and about gist. Jack's protocol data showed little reflectiveness in his thinking. Jasmine, Jane, and Colin thought reflectively about gist in Task I, but they did much less in Task II. Jasmine was concerned about language use in Task I but not so much in Task II. Jane manifested the opposite phenomenon. Colin did not verbalize much of his thinking about language use in either task. The aspect of writing procedures was least attended to reflectively by all the participants. In sum, it is hard to find any consistency within this set of think-aloud protocol data, nor to see consistency in their association with other variables.

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67 This implies that these images are not necessarily the exact descriptions of all the individuals comprising respective groups, but rather prevalent tendencies.

68 The information contained in Table P5 focuses on reflective remarks of concurrent thinking while writing and does not include less reflective remarks, for it is reflective thinking that is believed to accompany "meaningful learning" (Smith, 1990, p. 127).
included in this analysis.

\section*{Table 6-8}
\textbf{Major Contributors and Their Bipolar Options (Analysis 3(b), Solution 2)}

<table>
<thead>
<tr>
<th>j</th>
<th>SS(j)</th>
<th>R(j)</th>
<th>item description</th>
<th>![Superior]</th>
<th>![Advanced]</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>23.78</td>
<td>0.95</td>
<td>JST rating</td>
<td>superior</td>
<td>advanced</td>
</tr>
<tr>
<td>5</td>
<td>22.45</td>
<td>0.92</td>
<td>importance of Japanese study</td>
<td>very</td>
<td>important</td>
</tr>
<tr>
<td>6</td>
<td>22.45</td>
<td>0.92</td>
<td>length of residence in Japan</td>
<td>less than 6 months</td>
<td>more than 6 months</td>
</tr>
<tr>
<td>18</td>
<td>18.26</td>
<td>0.83</td>
<td>difficulty level in idea generation in Task I</td>
<td>difficult</td>
<td>easy</td>
</tr>
<tr>
<td>4</td>
<td>17.23</td>
<td>0.81</td>
<td>self-rating of L1 writing</td>
<td>fair</td>
<td>good</td>
</tr>
<tr>
<td>23</td>
<td>14.90</td>
<td>0.75</td>
<td>reflective thinking about gist in Task I</td>
<td>40-50%</td>
<td>30-40%</td>
</tr>
<tr>
<td>9</td>
<td>13.47</td>
<td>0.71</td>
<td>self-rating of Japanese writing (cf.Omers)</td>
<td>poor</td>
<td>good</td>
</tr>
<tr>
<td>17</td>
<td>12.36</td>
<td>0.68</td>
<td>satisfaction level in Task I essay</td>
<td>very</td>
<td>satisfied</td>
</tr>
<tr>
<td>2</td>
<td>12.21</td>
<td>0.68</td>
<td>oral L1</td>
<td>Japanese</td>
<td>English</td>
</tr>
<tr>
<td>13</td>
<td>12.06</td>
<td>0.67</td>
<td>Japanese essay score</td>
<td>excellent</td>
<td>good</td>
</tr>
<tr>
<td>1</td>
<td>10.95</td>
<td>0.64</td>
<td>ethnicity</td>
<td>Japanese</td>
<td>Anglo-Saxon</td>
</tr>
<tr>
<td>14</td>
<td>10.37</td>
<td>0.63</td>
<td>perception of JFL writing</td>
<td>meaning making</td>
<td>language exercise</td>
</tr>
<tr>
<td>8</td>
<td>7.11</td>
<td>0.52</td>
<td>self-rating of overall Japanese (cf.native)</td>
<td>fair</td>
<td>poor</td>
</tr>
<tr>
<td>26</td>
<td>7.11</td>
<td>0.52</td>
<td>ratio of thinking aloud in L1 in Task I</td>
<td>-20%</td>
<td>40-60%</td>
</tr>
<tr>
<td>30</td>
<td>7.11</td>
<td>0.52</td>
<td>ratio of thinking aloud in L1 in Task II</td>
<td>-20%</td>
<td>40-60%</td>
</tr>
</tbody>
</table>

\section*{6.4.5. Analysis 4(a)}

For Analysis 4(a), the percentage homogeneities of Solutions 1 and 2 were 38.52\% and 25.47\% respectively. Figure 6-5 shows the participants clustered into three groups, mainly characterized by three levels of Japanese proficiency (i.e., Item 12 was a major contributor with R(j) of .89 for Solution 1 and .76 for Solution 2). Jack is now plotted with the other intermediate proficiency students. To identify the characteristics of product data for these respective clusters, I examined the matrix presented in Table P6 in Appendix P as well as the lists of all the contributing items (i.e., items with R(j) of .50 or higher) for
Solutions 1 and 2 (which are given in Tables Q1 and Q2 in Appendix Q because of their length).

The lists of items with high values of $R_{ij}$ in this analysis (Tables Q1 & Q2) include a number of items concerning the qualities of written products. This means these items contributed to the segmentation of the space of Solutions 1 and 2 into three distinct clusters shown in Figure 6-5. This further means these clusters can be identified by distinct characteristics of written products. In fact, regularity in the transition of option patterns can be easily identified in the results of the assessments of the participants' Japanese essays (Table P6 in Appendix P). Generally speaking, the superior Japanese-proficient group was associated with excellent qualities of Japanese essays on three components (content, organization, and language use) across the tasks, the advanced-proficient group with good qualities, and the intermediate Japanese-proficient group with fair or good qualities.69

In terms of SOLO levels, distinctions were clear between the superior and the intermediate/advanced Japanese-proficient groups. The writings (across the two tasks) of the superior proficient students showed more complex structure, whereas the writings of the less proficient students appeared simplistic. Of special note, though, is Colin who clustered into the intermediate Japanese-proficient group. Although the qualities of other textual features of Colin's Japanese essays were seen to be about the same as those of other intermediate students, his essays were judged to be as complex as those of the superior Japanese-proficient students in terms of cognitive structure manifested in the texts.

69 In seeking to identify some patterns in the results of the Japanese essay assessments, the Task II essay scores of Mary, Martin, and Eliot were not taken into consideration, for those essays had previously been corrected based on native speakers' input before submission, as mentioned in chapter 5.
Figure 6-5. Distribution of 13 participants in Analysis 4(a).
6.4.6. Analysis 4(b)

For Analysis 4(b), the percentage homogeneities of Solutions 1 and 2 were 37.95% and 31.01% respectively. The distribution of the participants plotted in Figure 6-6 was essentially the same as that in Figure 6-5. An examination of major contributing items with \( R_{tv} \) of .5 or higher for Analysis 4(b) (shown in Tables Q3 & Q4 in Appendix Q) confirms the images emerging from the previous analyses. That is, this data set contains three distinct clusters divided by the three proficiency levels and the three ethnicities. The superior Japanese-proficient group consisting of ethnic Japanese students were inclined to approach JFL writing as a meaning-making activity and to feel they had learned about not only language use but also content through their JFL writing. During the processes of writing, idea generation or language use was never easy for them. The protocol data indicated that they did devote a fair amount of cognitive energy to thinking about language, gist, or both. Another characteristic of this group was the high quality of the textual features and cognitive structure manifested in their Japanese essays.

The advanced and intermediate Japanese-proficient groups comprised primarily English- and Chinese-speaking individuals, respectively. The two groups showed distinct characteristics in their backgrounds and less distinct but unique features in their views of and behaviors in JFL writing. The advanced Japanese-proficiency group was apparently more confident in Japanese and approached JFL writing with less struggle than the intermediate Japanese-proficiency group, who understood well and admitted openly their lack of competence in the Japanese language. Despite such differences, the qualities of the two groups' Japanese essays were almost indistinguishable. This fact brought the two groups into close proximity in Figures 6-5 and 6-6 compared to the previous Figures for the analyses without essay assessment data. All of the component scores of both groups were in the *fair* or *good* range, and the cognitive structure manifested in their writing was less complex than that of the superior Japanese-proficiency group. Also, they shared the
view of JFL writing as a mere language exercise and of having learned, if anything, about the use of language, but not so much about content, while they wrote in Japanese.
Chapter 7: Conclusions

This chapter concludes the dissertation. In this final chapter I return one more time to the entire data set to come to a better understanding of the nature and meaning of the students' experiences of JFL writing and learning in this one JFL classroom. At the same time, I attempt to situate the study in a broader context of scholarly work on literacy, biliteracy, and bilingual processing. First, I describe the situational and individual factors of my study in terms of the “continua of biliteracy” (Hornberger, 1989),\(^\text{70}\) which provide a system to define biliterate situations comprehensively, enabling meaningful comparisons among different instances of them. Once my research context is defined in biliterate terms, I revisit the four sets of guiding questions pertaining to the main components of Biggs's 3P model (see section 1.4)—the teaching context, students' characteristics, writing processes, and written products. I summarize and discuss my answers to the questions based on the results of the analyses presented in the previous chapters. Finally I reflect on my research overall and address my overarching question: What does writing as a mode of learning mean in the context of foreign language instruction and in relation to the proposition that foreign language writing is more than just writing a foreign language? Suggestions for further research and implications for classroom instruction and curriculum design are also provided.

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\(^{70}\) See also Cumming (1994) for an adoption of Hornberger's framework as a comprehensive basis to describe the wide scope of biliterate issues addressed in recent studies on L2 reading or writing.
7.1. Understanding the Context of JFL Writing

Based on her extensive review of relevant literatures, Hornberger (1989) proposed a series of continua that depict key aspects of biliteracy: micro-macro, oral-literate, monolingual-bilingual, reception-production, oral language-written language, L1-L2 transfer, simultaneous-successive exposure, similar-dissimilar language structures, and convergent-divergent scripts. These nine continua, seen as intimately related to each other, provide a comprehensive framework in which a variety of situational and individual factors relevant to biliterate performance can be systematically described. According to Hornberger, any particular instance of biliteracy can be defined at certain points on these continua. The context of JFL writing I studied is certainly one such instance, representing one unique context that shares some common characteristics with other situations, but also differs from others globally, in terms of biliterate practices.

This particular instance of biliteracy—the object of my study—happened at the micro end of a micro-macro continuum where, as an observer of the phenomena, focused on individual students’ performance of JFL writing as well as curricular events taking place in that single classroom. The curricular goal of this classroom was the development of reading and writing skills in modern Japanese, which positions this context at the literate end of an oral-literate continuum. Kei used Japanese (the students’ target language) exclusively as a medium of instruction, which may well place the classroom context at the monolingual end of a monolingual-bilingual continuum within this micro setting. However, I emphasized the multilingualism of individual students in this particular

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71 The importance of such a conceptual framework for understanding biliterate contexts becomes apparent if we recognize the complexity and diversity of biliteracy around the world. Cumming (1994) provided common examples that can be positioned at extreme ends of Hornberger’s nine continua. I cite some of his examples to illustrate complexities inherent in studies of biliteracy: foreign tourists reading maps at the micro end and the English-language policy in Hong Kong at the macro end of a continuum; use of Hebrew in Jewish religious practice at the literate end and traditions of folk tales at the oral end of a continuum; and dominant use of English in many parts of North America at the monolingual end and customary concurrent use of two or more languages in many parts of Africa at the bilingual end of a continuum.
classroom; moreover, the macro-context, which I did not address, was one where Japanese is not widely used but rather English predominates institutionally and in the society at large. This JFL classroom's focus on the written language defines it at the written-language end of an oral-written language continuum. Since Kei concentrated on the reading component more than the writing component in her teaching, the context was at a point toward the receptive end of a receptive-productive continuum. In terms of L1-L2 transfer, the students apparently experienced variable situations or different points along this continuum, some experiencing more transfer across their languages than others, and Chinese having different affinities to Japanese than English does.

With respect to the media of languages defined by the last three continua (i.e., simultaneous-successive exposure, similar-dissimilar language structures, and convergent-divergent scripts), the context differed from group to group. The ethnic Japanese or superior Japanese-proficient people had had early exposure to oral and written Japanese, whereas the other participants did not. The latter group of students started to learn Japanese well after they had acquired literacy skills in their L1s. Thus, according to Hornberger's categories, the context was at the simultaneous end of a continuum of simultaneous-successive exposure to Japanese for the ethnic Japanese group; for the other ethnic groups, it was at the successive end. Further, the context was at a point toward the convergent end of a convergent-divergent scripts continuum for people with Chinese literacy skills because of the orthographic elements shared by the Chinese and Japanese languages. But it was at the divergent end for the people who used English as their written L1. On a continuum of similar-dissimilar language structures, the context should be placed at a dissimilar end for all the participants since all the languages involved here (i.e., English, Chinese, and Japanese) belong to different linguistic families.\footnote{English is a Germanic language. Japanese belongs to the Altaic language family while Chinese to the Sino-Tibetan language family (Taylor & Taylor, 1995, p. 5; Fromkin & Rodman, 1983, chap. 9). However, the exact point may be closer to the similar end for Chinese speakers than for English speakers because English is an...}
Indo-European language according to general typology, whereas both Japanese and Chinese are different non-Indo-European languages.

In sum, the biliterate context of my study can be situated at a point of intersection between the micro, the literate, and the multilingual ends of Hornberger's continua. The constituent members of this context are characterized as being at a common point near the written, receptive ends but at different points along the L1-L2 transfer continuum. In terms of the media of languages involved, the context presented itself differently for each subgroup. To all the students, the Japanese language was structurally "dissimilar" to their L1s. But these people's experiences differed on the continua of simultaneous-successive exposure and the convergent-divergent scripts. Figure 7-1 shows these trends on the nine continua. It should be noted that although the continua are presented separately here, they are, as pointed out earlier, inevitably and inextricably interrelated. Similarly, any point on a single continuum is related to all other points on the same continuum (Hornberger, 1989).

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**Figure 7-1.** The present JFL writing context as a biliterate instance situated on Hornberger's nine continua.

*Note.* The asterisk (*) indicates a point that applies to all the participants; "J" refers to the point applicable to
ethnic Japanese people of English as their L1; "C" refers to the point applicable to ethnic Chinese people with Chinese literacy skills; and "A" refers to the point shared by ethnic Anglo-Saxon or native English-speaking people. This representation focuses on common features, rather than idiosyncratic, individual features. That is to say, individual differences within the ethnic Chinese group, for example, are not represented. The Mandarin-Chinese-speaking Mike had little skill in Chinese literacy but established literacy in English and thus should be positioned at a point near the divergent end of the last continuum. Such individual features are not shown here. No point is indicated on the L1-L2 transfer continuum as I was unable to identify any common features on this continuum.

7.2. The Research Questions Revisited

7.2.1. Research Questions Pertaining to the Teaching Context

How were the writing tasks situated in the JFL course?
How did the instructor perceive the role of writing, the teaching of writing, and the teaching of JFL?

van Lier (1996) wrote:

In practice, one of the perennial problems a [language] teacher faces is when to address the formal properties of language, and how to do this. Most teachers have felt caught up in the periodic pendulum swings from emphasis on form to emphasis on meaning, and back again (p. 202).

I observed such tensions in Kei’s teaching practices. Her intent was at first to shift learners’ attention from mechanical practice to meaningful practice of language. Her primary concern was: How might students gain greater cognitive benefits in her Japanese literacy class? Olson (1991), in his attempt to explain intellectual advantages of literacy, argued that writing offers people opportunities to simultaneously reflect on the world that discourse represents and on the language used to represent the world in the discourse. Such reflective processes, according to Olson, play a key role in thought and developing one’s mind. Kei tried, not necessarily guided by explicit ideologies about the nature of writing, to construct a situation where learners might exploit the relations between these two levels of awareness to their cognitive advantages. She did this by requiring the statement of one’s
opinions on selected topics for both of the two major writing tasks (on which I focused in my research).

Behind this classroom scenario was Kei’s concern about the psychological dimensions of her JFL students attempting to become literate in Japanese. Her specific question was: What linguistic knowledge would be required to perform literate tasks in Japanese? As the classes went along, Kei became increasingly concerned, but remained uncertain, about the kinds of linguistic knowledge that might facilitate the processes of Japanese discourse production. Her lessons contained “planned and improvised elements” (van Lier, 1996, p. 200) to focus on language, the term suggested by van Lier (p. 203) to refer to a variety of ways to reflect on different dimensions of language (including form and meaning) for various reasons. Kei approached literacy in JFL as “an individual phenomenon” (McKay, 1993, p. 15), attempting to establish a link between literacy and cognitive development. What she did not emphasize was the sociocultural dimension of literacy, i.e., social and cultural norms and conventions about the uses of Japanese written texts.

Note, however, that Kei’s teaching context described above constituted only a part of each learner’s unique context shaped by his or her particular needs and purposes. Naturally, different students devoted their “perceptual, ... emotional, and cognitive energies” (van Lier, 1996, p. 203) differently to JFL literate tasks in their personal lives, although they were all recipients of Kei’s instruction in the same classroom.

7.2.2. Research Question Pertaining to Students’ Characteristics

How did students’ characteristics relate to their perceptions of JFL writing and learning?

Students’ personal characteristics and their perceptions of JFL writing and learning marked them into the following three distinct groups:
• The students who were highly proficient in Japanese were ethnic Japanese and indicated their confidence in spoken Japanese but not in written Japanese. Two of these 4 students had recently stayed in Japan for 1 or 2 years whereas the other 2 had no such residential experience. The students regarded English as their L1 but showed a lack of confidence in writing in English. They seemed to approach JFL writing as a meaning-making activity and to feel that they learned about language and content through engaging in JFL writing tasks.

• The students who had an advanced level (but not as high as the proficiency of the ethnic Japanese group described above) of Japanese proficiency were native-born anglophone Canadians. They all had recently stayed in Japan for 10 or 12 months. They were relatively confident in their Japanese and also in their L1 writing. These students tended to regard JFL writing primarily as an activity for language exercises and to feel that their learning through JFL writing involved, if anything, language use.

• The students who were intermediate Japanese-proficient were mostly Chinese immigrant students with oral and literacy skills in Chinese. They showed little confidence in their Japanese. Some of them indicated their confidence in their L1 writing, but others did not. Like the anglophone, advanced Japanese-proficient students, this group of students mostly took JFL writing as an opportunity to practice and learn to use the Japanese language without focusing on content.

7.2.3. Research Questions Pertaining to Students' Writing Processes

What linguistic and cognitive behaviors were invoked by JFL writing activities? How were they related to students' characteristics and instructional context variables?

Different students performed different degrees of ideational, metalinguistic, and procedural thinking while writing essays in Japanese. It was difficult to find, in relation to the students' characteristics or tasks, distinguishable patterns in the students' concurrent
verbalizations of their thinking about different aspects of their writing. Nonetheless, there were some important, general tendencies including: (a) that reflective thinking occurred mostly while the writers thought about ideas, language use, or both (cf. L2 learners' simultaneous thinking about gist and language use during the production of L2 writing reported by Cumming, 1990, and Swain & Lapkin, 1995), (b) that such reflective thoughts occurred more than half the time during actual writing, and (c) that language was distinctly an object of reflection for many of the learners writing in JFL (cf. Olson's metalinguistic hypothesis, 1991).

Further, there were certain patterns in the students' responses to the post-writing questionnaire (i.e., the students' retrospective thinking about their writing processes) in Task I. These patterns appeared to be best associated with the three groups distinctly characterized by JFL proficiency level and other factors. While writing Japanese essays in Task I, which required the argumentative mode of writing (in contrast to the descriptive nature of the Task II assignment), the superior Japanese-proficient students mostly encountered difficulties both in idea generation and language use; they were generally satisfied with their essays. The advanced Japanese-proficient students were also satisfied with their essays, but unlike the superior Japanese-proficiency group, they did not see idea generation or language use particularly as a problem. The intermediate Japanese-proficient students were not so satisfied with their essays, and they all experienced difficulties in language use. Some of these students also had difficulties in idea generation, but others did not.

It was also possible to characterize the students' responses to the post-writing questionnaire in Task I in terms of the level of confidence they had in their L1 writing or JFL writing. It appeared that the students who were confident in their L1 writing did not see idea generation as a difficult problem (e.g., Jack, Colin, Martin, and Eliot), but those who were not so confident in their L1 writing did; similarly the students who indicated relatively high confidence in JFL writing did not see language use as a difficult problem.
(e.g., Jasmine, Martin, and Eliot), but those who indicated a lack of confidence in JFL writing did.

7.2.4. Research Questions Pertaining to Students’ Written Products

What textual qualities of JFL writing did students manifest in terms of language use, content, and organization?
How was the complexity of cognitive structure manifested in their written texts?
How were these elements related to students’ characteristics, instructional context variables, and in-process behaviors?

Textual qualities and the complexity of cognitive structure manifested in JFL writing were most closely associated with the students’ levels of Japanese proficiency; their relations to students’ other personal characteristics, students’ cognitive behaviors while writing, or instructional context variables seemed to be relatively thin. For textual qualities expressed in terms of component ratings (which were then converted into the four levels of poor, fair, good, and excellent), major distinctions were between the superior Japanese-proficient students who produced Japanese essays of excellent quality, the advanced-proficient students who wrote Japanese essays of good quality, and the intermediate Japanese-proficient students whose Japanese essays were assessed as fair or good on all of the three components (content, organization, language use) in both tasks.

In terms of SOLO levels, distinctions were clear only between the superior Japanese-proficient students and the intermediate and advanced Japanese-proficient students. The former wrote Japanese texts showing more complex cognitive structure than the latter. It appeared that a very high level of Japanese proficiency (as high as that of the superior Japanese-proficient students in this study who spoke Japanese like native speakers) would be needed for JFL learners to carry out the simultaneous processing of language and content to produce Japanese compositions with complex cognitive structure. This may be generally true, considering the possible effects of using a less proficient language upon one’s cognition or concepts of automaticity (as mentioned in earlier
chapters). However, the case of Colin, who was unique in this respect, seemed to suggest another possible explanation for effects of language proficiency upon cognition. As mentioned before, Colin's Japanese writing showed textual qualities typical of intermediate Japanese-proficient students, but it manifested complex cognitive structure (discussion on Colin follows in section 7.3).

7.3. Making Connections between the Interpretive and Dual-Scaling Analyses

The patterns and links that I observed in the data (particularly the data collected from the students) and those that were established through dual scaling provide evidence for the connections between categories depicted in Figure 7-2. Figure 7-2 gives a graphic summary of the salient features of the data I considered and their connections. Solid lines indicate distinct relations, whereas dotted lines show more tentative links. Multiple sources of evidence and multiple dual-scaling analyses have shown particular connections between the students' levels of JFL proficiency, the qualities of their JFL written products, and their perceptions of JFL writing and learning.

What has primarily emerged from the dual-scaling analyses are different patterns demonstrated by the native-like and the less-than-native-like Japanese-proficient people. The native-like Japanese-proficient individuals produced essays of better quality in terms of textual and cognitive structural features, and they focused on both semantic and lexico-grammatical components involved in the production of their written discourse. In contrast, the Japanese essays written by the less-than-native-like Japanese-proficient students were clearly constrained in both textual and cognitive structural features, and their primary focus in the production of their written discourse was on the lexico-grammatical system. These findings seem to confirm the distinctive strategic and linguistic features of L2 writing, in comparison to L1 writing, that Silva (1993) pointed out based on a review of previous
Figure 7-2. Connections in the JFL writing performance data.
The relations between in-process thinking patterns and other categories of JFL writing performance are inconclusive from my analyses, leaving much room for further investigation. There was nonetheless an indication of some relation, so I have indicated this by dotted lines in Figure 7-2. The category of "L1 writing experience" is included in Figure 7-2 as one variable that might explain the characteristics of Colin, who digressed from the intermediate Japanese-proficiency group and came closer to the superior Japanese-proficiency group in terms of the cognitive structure manifested in his written texts. His paying much attention to gist during his production of the Task I essay and his view of JFL writing as a meaning-making activity are also characteristics of the superior Japanese-proficiency group. These interesting observations (i.e., the superior Japanese-proficiency group's common traits being demonstrated by the intermediate Japanese-proficient Colin), however, were not captured by the analyses I performed with dual scaling. It appears that students' levels of JFL proficiency are not the sole explanation for their JFL writing performance (cf., Cumming, 1989).

In search of an alternative explanatory link for Colin's situation, I focused my attention on the internal characteristics of all the raw data and found that Colin's interview protocol differed distinctively from those of all the other students. His protocol displayed his own unique and sophisticated view of writing, even a trace of which was hard to find in the other students' interviews. Writing was Colin's daily routine. He wrote in Chinese, his written L1, in quest of the meaning of life; he would write down whatever thoughts he might have about life and the world that day in order to be enlightened upon this philosophical question. In the interview he repeatedly said, "Writing is power" and presented his philosophy of writing at some length. Colin's wanting to write for personal reasons was an intrinsic form of motivation and perhaps one of the major contributors to the development of "the competence to produce a polished piece of writing" (Spaulding, 1992, p. 186). It is not difficult to think that Colin could also make an exceptionally interested and engaged writer in a foreign language. For this reason I have added to Figure
7-2 the category of L1 writing experience, which was lost sight of in my processes of data reduction, as a possible explanation for the idiosyncrasies Colin demonstrated.

One way of viewing the categories represented in Figure 7-2 is as conditions for learning (Spolsky, 1989). In this view these categories constitute necessary, typical, or graded conditions, depending on the nature of the relationship between a particular condition and a particular learning outcome. However, further research is required to be precise and clear about the nature of each condition and its relation to other conditions and to the goals and outcomes of learning. It is also important to consider these matters through an understanding of the configuration of various contextual factors for a particular biliterate instance under consideration (as I did above in section 7.1, using Hornberger's nine continua of biliteracy).

7.4. Reflecting on My Research Overall

My overall research findings tend to define this particular instance of JFL writing as "an individual skill" (McKay, 1993, p. 8) or in Street's (1984) terms "an autonomous model of literacy" (also cited by McKay, p. 8), in contrast to a sociohistorical or ideological perspective. Among the major issues of this individual, psychological

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73 The content and amount of information collected on the individual participants' writing experiences during the interviews were inconsistent and hardly translatable into categories to be displayed in matrices. Two pieces of information concerning the participants' L1 writing included in the matrices were self-ratings of their L1 writing skill and the scores of their L1 essays written for this research. The latter did not show Colin to be any more outstanding than others; all students received the highest or the second highest range scores. The self-rating of his writing skill as excellent seemed to be suggestive of his unique understanding of writing. But some other students also rated their L1 writing skills as excellent, though their views of writing were not comparable to Colin's. Thus, this item was not very useful in distinguishing Colin from others, either.


75 Spolsky (1989) explained graded conditions as "the more something is true, the more its consequence is likely to occur" and typical (or typicality) conditions as "apply[ing] typically but not necessarily" (p. 12). In contrast, necessary conditions are the conditions without which certain outcomes will not be produced.
perspective that I have highlighted were (a) definitions of literacy as a skill, and (b) relationships between literacy and cognitive development (McKay, 1993). I want to discuss these issues regarding my research findings.

Kei’s orientation to JFL writing and reading involved a view of literacy as a language skill and a view of literacy as entailing some content knowledge. Most of her students, on the other hand, approached JFL writing tasks with a view that was predominantly language-skill based. A definition of literacy as metalinguistic activity (Olson, 1990, 1991) fits this context best. Olson (1990) described such metalinguistic activity as “involv[ing] the increasing awareness of the properties of language independent of the things in the world that the language is about” (p. 20). From this perspective, foreign language writing is indeed, cannot be more than, just writing a foreign language.

But we should remember that the JFL writers participating in my study were all highly educated and highly literate in their L1s. Consequently, as Olson (1990) contended, these learners attempting to write in JFL could have benefited tremendously from their abilities to write and think in their L1s while they wrote in JFL. This issue reflects Cummins’s (e.g., 1980, 1991) theories of the cross-linguistic interdependence of cognitive skills. Related to this theoretical proposition, one central question prevailed throughout my research: How does one’s proficiency in a foreign language interact with one's cognitive engagement in idea and text processing during the production of written discourse in that language (cf. Cumming, 1989, 1990; Carson & Kuehn, 1994; Edelsky, 1986; Whalen & Menard, 1995)? Some research has indicated that lack of proficiency in a foreign language can prevent a writer from engaging in the generative and recursive processes of idea production during the linear process of text production76 (see, for instance, Yau's study,

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76 I have adopted the terms and concepts of "text production" and "idea production" found in Collins and Gentner's (1980) cognitive description of the composing process:

It is important to separate idea production from text production. The processes involved in producing text, whether they operate on the word level, the sentence level, the paragraph level, or the text level, must produce a linear sequence that satisfies certain grammatical rules. In contrast, the result of the process of idea production is a set of ideas with many internal connections, only a few of which may fit the linear model desirable for text. (p. 53)
1987). It is possible to explain this phenomenon from the perspective of automaticity theory: When the language is unfamiliar and little practiced, the task of text production alone consumes cognitive resources leaving little room for idea production (Ringbom, 1987). Nonetheless, a writer like Colin, a mature writer in his L1, seemed to suffer very little, despite a lack of proficiency in Japanese, in engaging himself in idea production while writing in Japanese. As Cummins’s linguistic interdependence model would suggest, his writing skills were highly practiced and thus independent of his proficiency in the target language, and could be applied in either language.

Another factor that may account for one’s intensive engagement in language or idea production processes is the writer’s primary concerns. For instance, Jane was overly concerned with language production because of her strong desire to be able to use better Japanese; thus, she viewed JFL writing as an opportunity to practice using the language. She was the one for whom the elementary processes of the target language had already approached automaticity, but her attention left free from basic text processing was directed to higher levels of text, rather than idea, production processes. Similarly, less proficient students may have perceived JFL writing as a language exercise and paid most attention to the production of text that satisfies lexical and morphosyntactic rules because of their primary concerns about language use, leaving little cognitive and perceptual space for idea production or meaning making. Such cognitive processes and their consequences could naturally be different (a) if a writer "did not take the content seriously but emphasized the writing of a grammatically and syntactically correct piece of work" (Martin's written comments in the Task II post-writing questionnaire), or (b) if a writer tried to "think deeper about the things [she] wanted to write" (Jasmine's written comments in the Task II post-writing questionnaire) (cf. Uzawa & Cumming's, 1989, idea that students can “lower or raise their standards” for writing in L2).

In view of these issues, what does writing as a mode of learning mean in the context of foreign language instruction and in relation to the proposition that foreign
language writing is more than just writing a foreign language? I reflected on my research context with this question in mind. The instructor struggled to conceptualize and practice JFL literacy as a unique tool for promoting learners' control and capacities over the use of language and thought generally (cf. Gere, 1985; see Ackerman, 1993, for a critical review of the writing-to-learn concept). From learners' perspectives, these two properties of language and cognition appeared to exert mutual influence on each other in some cases, but they seemed to exercise minimal influence on each other in other cases (cf. Williams & Snipper, 1990). The data in my study have suggested that the former cases would require native-like proficiency in L2 (cf. Berman, 1994; Cumming, 1989; Pennington & So, 1993; Sasaki & Hirose, 1996), or a meaning-based conceptualization of writing. In short, as far as my research findings are concerned, foreign language writing can be more than just writing a foreign language, offering opportunities to promote language and thinking skills; but for them to be so depends on learners' proficiency in the target language as well as learners' views and purposes of writing. It remains unclear, though, what influences one teacher's activities might have on such inherently personal acts and conceptualizations of writing that students adopt independently.

My study suggested a number of ideas relevant to foreign language writing that are worth further pursuing for refinement. The following issues seem particularly important to understand better if we are to advance our efforts in developing relatively comprehensive and educationally meaningful models of L2 writing: (a) L2 writing as a metalinguistic activity; (b) L2 writing as a personal construct; (c) effects of L2 proficiency, language distance, and context upon L1-L2 transfer; and (d) the appropriate or possible balance of foci in instruction.

I associated JFL writing in my research context with the concept of literacy as metalinguistic activity, based on considerations of the students' think-aloud and interview protocol data, which featured their concerns about language. But I did not make any conceptual or operational distinctions between linguistic proficiency (the ability to use a
specific language effectively) and metalinguistic ability (the ability to reflect on the language used). Future research that might compare these two kinds of ability in an L2, then relate them to the learning of the language and of content expressed in writing using that language, should not only help to illuminate the relationships between L2 writing and learning, but also to clarify the concept of writing as a metalinguistic activity in L2 contexts.

Distinct characteristics shown by such participants as Colin, Jane, and Martin led me to view JFL writing in my study as a personal construct, reminding me of Bell’s (1995) autobiographical study of learning to write in Chinese. Bell, a native speaker of English, described her becoming literate in Chinese as an emotionally charged process of transforming her own consciousness. L2 students enter their literacy classrooms with their own assumptions, purposes, needs, and preferences in regard to literacy acquisition in a new language. This is particularly true for adult learners who have had previous experiences of learning different foreign languages, or who began learning to read and write in a target language after establishing their literacy skills in their mother tongues. In-depth case studies that focus on students’ personal experiences and that attempt to derive meanings of L2 writing in personal or experiential terms will enhance our understanding about why particular students deal with L2 writing tasks in certain ways (e.g., Smagorinsky, 1997).

Whenever two languages are involved in discourse activity, language transfer or cross-linguistic influence (Gass & Selinker, 1993; Kellerman & Sharwood Smith, 1986; Odlin, 1989) becomes an issue. This problem loomed large in my study (and I touched on it above in citing Cummins’s model of cross-linguistic interdependence). Although the transferability of linguistic and literacy knowledge between languages has been well supported empirically (as pointed out by Cumming, 1994, and Bell, 1995; but also note Bell’s critical view of this idea), a few key areas need further investigation to refine this notion. The linguistic interdependence hypothesis and most other ideas about the benefits
of bilingualism assume that education or other societal contexts might provide sufficient opportunities to enable L2 learners to become fluent users of their L2s (Mayer & Wells, 1996). This is seldom the case in a foreign language context, however. In my study, this assumption was met only by the few ethnic Japanese students who grew up bilingually. They were fluent speakers of Japanese. Although they were not very confident in their writing, their Japanese writing was superior in terms of textual features and cognitive structure manifested in their texts. On the other hand, the so-called “successive exposure” learners with limited opportunities to use the Japanese language were less fluent in Japanese and had many fewer opportunities to use the language for communication and purposeful interactions. Although the amount of their Japanese language input as well as the level of their Japanese language proficiency differed markedly from individual to individual, the qualities of these people’s Japanese writing were more or less equally constrained, except for the cognitive structure of Japanese essays written by Colin, the intermediate Japanese-proficient but competent L1 writer. Based on these observations, we might ask: What is the threshold level of L2 proficiency required for average writers to produce L2 essays that manifest cognitive complexity? This is a major issue in need of future research.

Another aspect of the interdependence hypothesis that could benefit from refinement concerns the effects of “language distance” (Odlin, 1989, p. 32; see also Corder, 1978) upon bilingual transfer in literate tasks (as mentioned by Cumming, 1994, and Cummins, 1991). My research findings have little concrete to say on this because the variable of language distance was confounded with the variable of L2 proficiency in the classroom context. However, the context of bilingualism I studied differed markedly from the contexts where most of the research that supports the notion of transferability of language skills has previously been conducted, involving two Indo-European languages; for instance, English-speaking children learning French in immersion programs in Canada (Swain & Lapkin, 1982), Spanish-speaking children learning English in bilingual programs
in the Southwestern United States (Edelsky, 1986), and French-speaking adults learning English in Ontario (Cumming, 1989). Virtually all of these studies took place in second-language, rather than foreign-language, contexts where learning is associated with "adequate exposure to [the target language] ... and adequate [integrative] motivation to learn [that language]" (Cummins, 1981, p. 29). This was, only to variable extents, the case for the learners I studied, who had limited routine contacts with Japanese and were not attempting to integrate themselves in the society of Japan per se. Future, carefully designed research on learners of non-cognate languages in foreign language settings may provide illuminating insights into this issue and its variable effects on writing in L2 (cf. Uzawa & Cumming, 1989).

The final point I want to make concerns instruction. Kei is now (summer 1997) preparing for the same course for the coming academic year as I observed for my research three years ago. She has been thinking hard about how to present balanced lessons in such bipolar relational terms as form and meaning, part and whole, and process and product. I would point her (and like-minded teachers) to a number of innovative instructional approaches to literacy that seemingly have produced impressive results (see Cumming, 1994, p. 9). For examples, Valerie Anderson's (Anderson, 1995; Anderson & Henne, 1993) Adolescent Literacy Project (ALP) comes to mind. The core of the ALP lies in an instructional plan to improve the English literacy of culturally and ethnically diverse, inner-city high school students with literacy skills two or more years below their grade levels, by helping them to relate reading, writing, and purposeful inquiry. It is based on a number of learning theories such as problem-centered learning, strategic thinking, intentional learning, collaborative learning, and process writing. Successful work of a similar nature in L2 settings was reviewed by Elley (1994). Studies evaluating the effects of instruction based on such innovations are needed; so is documentation of teachers' improvisation processes in teaching, in order to understand exactly how theories believed
to enhance learning actually work to affect students' learning and curricular processes. As Cumming (1994) pointed out, such research "remains remarkably sparse" (p. 9) in second-language, let alone foreign-language, literacy education.

A few years ago, I (So, 1994b) discussed major advantages and disadvantages of case study approaches in educational research. The advantages included (a) the completeness and depth of analysis, (b) the hypothesis-generating nature of studies, and (c) the role of cases that challenge or contradict current beliefs. The disadvantages included (d) lack of generalizability, (e) lack of objectivity, and (f) a data-driven, rather than theory-driven, approach. My thesis research reported here embraced all these features, which together contributed to the way I now understand the relations of JFL writing and learning as well as the advantages and limitations of case study research.

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77 One implication from my research concerning the measurement of students' learning is that different schemes may assess different aspects of learning qualities (see the multi-trait rating scheme for L2 writing and the SOLO analysis used to evaluate the same pieces of students' Japanese essays).
References


Appendix A: Letters of Consent

Given to Kei

Dear [Kei]:

From our earlier conversation I understand that you are willing to support my doctoral thesis research by allowing me to solicit participants from your class of [course number], observe some of the classes during the 1994-95 academic year, and interview you monthly during the year about your perception of course objectives and instructional techniques and your evaluation of course progress.

Data obtained from you and your class will be used exclusively for the purpose of this research. Confidentiality of the involvement of yourself and your class in the study will be strictly maintained by using pseudonyms.

At the completion of the research I will provide you with a summary report of the study's findings.

Your participation is voluntary. If you decide to participate at this point, you may withdraw from the study at any time.

Attached are a solicitation letter to be distributed to students and my thesis proposal. Please read them carefully. If you are still interested in supporting my research project, could you kindly complete the attached form and return it to me?

Thank you very much for taking the time to read this letter. I can be contacted at the telephone number or e-mail address below, if you wish to have more information.

Sincerely,

Sufumi So
Tel. no.: 924-5918
E-mail: sso@oise.utoronto.ca

Dear Ms. So:

I have read your letter and proposal describing the study you are conducting on writing in Japanese as a foreign language. I would like to support and participate in this research.

Name: ____________________________________________

Telephone: ________________________________________

E-mail address: _____________________________________

Mailing address: ____________________________________

Signature: ____________________________ Date: ____________
Given to Kei's department chairperson

To whom it may concern:

I am writing to seek your consent to my research study on writing in Japanese as a foreign language that involves one of the courses offered in your department. The research is part of my Ph.D. thesis at the Ontario Institute for Studies in Education of the University of Toronto.

Ms. [Kei] in your department has given me her permission to solicit volunteer students from her class of [course number] and to observe some of her classes during the 1994-95 academic year for the purpose of my thesis research. Ms. [Kei] has reviewed the details of this research and approved of its design.

Data obtained from the class will be used exclusively for the purpose of this research. Confidentiality of the involvement of your department's course in the study will be strictly maintained.

If you could permit me to work with the instructor and students of [course number] for my thesis research, could you kindly complete the attached form and return it to me?

Thank you very much for taking the time to read this letter. I can be contacted at the telephone number or e-mail address below, if you wish to have more information.

Sincerely,

Sufumi So
Tel. no.: 924-5918
E-mail: sso@oise.utoronto.ca

Dear Ms. So:

I have read your letter and would like to support your research project.

Name/Title: ___________________________________________________________

Signature: ___________________________ Date: ___________________________

________________________________________

[Signature]

[Date]
<table>
<thead>
<tr>
<th>Pr.1</th>
<th>Main Activity</th>
<th>Format</th>
<th>Text-reading</th>
<th>Context Comprehension</th>
<th>Vocabulary</th>
<th>Syllabus</th>
<th>Related Talk</th>
<th>Others</th>
<th>Student &amp; Teacher Interaction</th>
<th>Student Elaboration</th>
</tr>
</thead>
</table>

Appendix B: Classroom Observation Scheme
Appendix C: Questionnaire on Teacher Beliefs and Practices of Teaching of Writing

1. What should the purpose of your students' writing activity be? What was the purpose of your students' writing activity?

<table>
<thead>
<tr>
<th>writing as language practice</th>
<th>writing as a discovery process</th>
</tr>
</thead>
<tbody>
<tr>
<td>IDEAL: 1 2 3 4 5</td>
<td>Actual: 1 2 3 4 5</td>
</tr>
</tbody>
</table>

Please elaborate on your answer:

[More space was given in the actual questionnaire.]

2. What should the role of the teacher in the writing class be? What was the role of the teacher in the writing class?

<table>
<thead>
<tr>
<th>to present information about written Japanese</th>
<th>to facilitate each student's writing process</th>
</tr>
</thead>
<tbody>
<tr>
<td>IDEAL: 1 2 3 4 5</td>
<td>Actual: 1 2 3 4 5</td>
</tr>
</tbody>
</table>

Please elaborate on your answer:

3. What should the role of the student in the writing class be? What was the role of the student in the writing class?

<table>
<thead>
<tr>
<th>to receive information from teacher</th>
<th>to take active responsibility for learning</th>
</tr>
</thead>
<tbody>
<tr>
<td>IDEAL: 1 2 3 4 5</td>
<td>Actual: 1 2 3 4 5</td>
</tr>
</tbody>
</table>

Please elaborate on your answer:
4. How should the lessons be organized?
   How were the lessons organized?

<table>
<thead>
<tr>
<th>teacher-centered</th>
<th>student-centered</th>
</tr>
</thead>
<tbody>
<tr>
<td>IDEAL: 1 2 3 4 5</td>
<td>ACTUAL: 1 2 3 4 5</td>
</tr>
</tbody>
</table>

Please elaborate on your answer:

5. How should topics be determined?
   How were topics determined?

<table>
<thead>
<tr>
<th>teacher-generated</th>
<th>student-generated</th>
</tr>
</thead>
<tbody>
<tr>
<td>IDEAL: 1 2 3 4 5</td>
<td>ACTUAL: 1 2 3 4 5</td>
</tr>
</tbody>
</table>

Please elaborate on your answer:

6. Should class time be devoted to prewriting activities such as brainstorming and discussion of the topics?
   Was class time devoted to prewriting activities such as brainstorming and discussion of the topics?

<table>
<thead>
<tr>
<th>never</th>
<th>for every assignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>IDEAL: 1 2 3 4 5</td>
<td>ACTUAL: 1 2 3 4 5</td>
</tr>
</tbody>
</table>

Please elaborate on your answer:
Appendix D: Letter to Solicit Participants

Dear friend:

I am writing to ask if you would be willing to participate in a 6-month-long research study on writing in Japanese as a foreign language. The research is part of my Ph.D. thesis at the Ontario Institute for Studies in Education of the University of Toronto. I have obtained the permission of Ms. [Kei] to circulate this letter to ask for your participation in my study.

The main purpose of the study is to examine the writing-and-learning relationships in the context of foreign language education. Results of the study should help Japanese and other foreign language educators understand better what students do, think, and learn as they write in the target language, and thus would contribute to the improvement of foreign language writing instruction.

If you are interested in volunteering for this study, you will be asked:

1. to talk aloud into the audiotape while writing the course assignments given by Ms. [Kei];
2. to attend an interview which will be conducted in English toward the end of the course;
3. to take a widely-recognized tape-mediated test of Japanese oral proficiency, Japanese Speaking Test (JST), developed by the specialists of the National Foreign Language Resource Center of the Division of Foreign Language Education and Testing at the Center for Applied Linguistics in the United States (The testing fee, US$60 per examinee, will be paid by me. A copy of JST Examinee Handbook is available from me or Ms. [Kei] for your information);
4. to complete a questionnaire asking about your background and experience of writing and learning Japanese; and
5. to write a short essay in your mother tongue.

In return for your participation in the entire study you will be paid Can$100. Another benefit of yours may be my feedback to your writing. I will diagnose your writing performance based on the data I will have collected from you and provide you with feedback and suggestions for the improvement of your Japanese writing.
Data obtained from you will be used **exclusively for the purpose of this research.** What you may say or do during the study will **not be disclosed to your course instructor.** It will **in no way be incorporated into the course grades.** Confidentiality of your involvement in the study will be strictly maintained by using a pseudonym.

Your participation is voluntary. If you decide to participate, you may withdraw from the study at any time.

If you could participate in the study, could you kindly complete the attached form and return it to me. I will contact all people who indicate they are interested and make necessary arrangements with them.

Thank you very much for taking the time to read this letter. I can be contacted at the telephone number or e-mail address below, if you wish to have more information.

Sincerely,

Sufumi So
Tel. no.: 924-5918
E-mail: sso@oise.utoronto.ca

---

Dear Ms. So:

I have read your letter describing the study you are conducting on writing in Japanese as a foreign language. I would like to participate in this research.

Name: __________________________________________

Telephone: ____________________ *(Best time to call:_______)*

E-mail address: __________________________________________

Mailing address: __________________________________________

Signature: _________________________ Date: ___________________
Appendix E: Questionnaire on Student Background, Japanese Language Study, and Writing in L1 and Japanese

I. Identification
a. Name _____________________________
b. Age __________
c. Male _____ Female _____
d. Major _____________________________
e. Year undergraduate: first ____, second ____, third ____, fourth ____
   graduate: first ____, second ____, third ____, fourth ____
f. Country of birth __________________
g. Mother tongue _____________________
h. Any other languages you speak and/or write in _________________________________
i. Your strongest oral language _________________
j. Your strongest written language _________________

II. Japanese language study
a. How long have you been studying Japanese in formal instructional settings? _________

b. Describe briefly the history of your Japanese language study (when, where, how long, what skills--e.g., speaking, writing, reading, etc.).

__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
c. Have you ever lived in Japan before? If yes, when, how long, and for what purpose?
   Yes ____ When? From 19____
   How long? _____ year(s) and _____ month(s)
   For what purpose(s)? ____________________________
   No ____

d. How do you rate your overall proficiency in Japanese as compared to the proficiency of
   other students in this class?
   Excellent ____, Good ____, Fair ____, Poor ____

e. How do you rate your overall proficiency in Japanese as compared to the proficiency of
   native speakers of Japanese?
   Excellent ____, Good ____, Fair ____, Poor ____

f. How important is it for you to become proficient in Japanese?
   Very important ____, Important ____, Not so important ____

g. Why do you want to learn Japanese? (Check all that apply)
   ____ interested in the language
   ____ interested in the culture
   ____ have friends who speak Japanese
   ____ required to take a language course to graduate
   ____ need it for my future career
   ____ need it for travel
   ____ other (list): ____________________________________________
                   ____________________________________________
                   ____________________________________________

h. What has been your favorite experience in learning Japanese?
   ____________________________________________
   ____________________________________________
   ____________________________________________
   ____________________________________________
   ____________________________________________
   ____________________________________________
   ____________________________________________
   ____________________________________________
   ____________________________________________
III. Writing in Japanese and L1

Japanese writing
a. Do you write in Japanese anything other than course assignments?
   Yes ____ (specify): ____________________________
   No ____

b. How do you evaluate your writing proficiency in Japanese as compared to that of other students in this class?
   Excellent _____, Good _____, Fair _____, Poor _____

c. How do you evaluate your writing proficiency in Japanese as compared to that of native speakers of Japanese?
   Excellent _____, Good _____, Fair _____, Poor _____

d. Do you have any specific problems in writing in Japanese?
   Yes ____ (list): ____________________________
   ____________________________
   ____________________________
   ____________________________
   ____________________________
   ____________________________
   No ____

English writing
a. What types of writing do you perform in English (check all that apply)? And how often?
   _____ diary for yourself: Always _____, Sometimes _____, Not very often _____
   _____ personal letters: Always _____, Sometimes _____, Not very often _____
   _____ business letters: Always _____, Sometimes _____, Not very often _____
   _____ essays or reports for courses you are taking at the university:
     Always _____, Sometimes _____, Not very often _____
   _____ essays or reports for newspaper or magazines
     Always _____, Sometimes _____, Not very often _____
   _____ books (what types? how frequent?): ____________________________
   ____________________________
   ____________________________
   ____________________________
   ____________________________
   _____ other (what? how frequent?): ____________________________
   ____________________________
   ____________________________
   ____________________________
   ____________________________
b. Have you published anything in English?
   Yes ____ (specify): ________________________________
   No ____

c. How do you evaluate your writing in English?
   Excellent ____ , Good ____ , Fair ____ , Poor ____

*Please answer the same questions below if your strongest written language (i.e., the language you listed in I-j of this questionnaire) is not English.*

**LI writing**

a. What types of writing do you perform in the language listed in I-j of this questionnaire (check all that apply)? And how often?
   ____ diary for yourself: Always ____ , Sometimes ____ , Not very often ____
   ____ personal letters: Always ____ , Sometimes ____ , Not very often ____
   ____ business letters: Always ____ , Sometimes ____ , Not very often ____
   ____ essays or reports for courses you are taking at the university:
      Always ____ , Sometimes ____ , Not very often ____
   ____ essays or reports for newspaper or magazines
      Always ____ , Sometimes ____ , Not very often ____
   ____ books (what types? how frequent?): ________________________________
   ________________________________
   ____ other (what? how frequent?): ________________________________
   ________________________________
   ________________________________

b. Have you published anything in that language?
   Yes ____ (specify): ________________________________
   No ____

c. How do you evaluate your writing in that language?
   Excellent ____ , Good ____ , Fair ____ , Poor ____

*Thank you very much for answering these questions.*

- END -
Appendix F: Sample Japanese Essays

Colin, Task I

マンガ文化の功罪

マンガの魅力とはどこにあるのか。
日本の地下鉄に乗ると、マンガを読んでいる人たちが多く見える。そのおもしろく真剣な発表を理解して
見る人が多くなっているが、僅かばかりの人が十分にその発表を分析してうまく解釈してしまうと思われる。
特に、マンガを日本文化の一つと認める人たちがたくさんいるのに、その日本人がよく読んでいる日本製の
マンガは日本人に対してどんな影響があるかということを、よく考えなければならない。
マンガ文化の影響のことを考えると、利点も欠点も両方ともあるものだ。その文化的特徴を見ると、その
文化の功罪が分かりやすい。
絵と簡単な日常の言葉で構成されたマンガの表現は子供にも成人にも親切な感覚を与えることである。実
は、親近感はマンガ文化の特徴の一つである。だから、子供だけの読書物でなくて、大人も楽しめる物のマ
ンガは生活の一部分のような姿をして存在するというものである。つまり、日本でマンガはまるで家庭の一
員のように暮らしているといえる。したがって、人々はマンガの活字離れる表現の方式に慣れてその中
の情報を選択しないように吸収してしまう場合も多い。
例えば、マンガを形式としてのたくさんの出版物は暴力的ないらしいうるさい要素を含んでいるものである。だ
から、そんな出版物を読んで安楽な娯楽を追い求めながら、不良の意識を無意識に受け入れてしまうという
場合もある。道理でマンガブームに眉をひそめる者がたくさんなくなってくるわけである。
ところが、一般的な読者にとってマンガは時事や流行などの常識を養成することにとても役に立つにちが
いない。一言で言うと、マンガ文化は日本で大衆の情報を得る手段という役割を果たすようになる。また、
マンガ参考書を読んで日常生活の問題を解決できる人間もいる。
こうしてマンガ文化は大衆向けの宗教に似ているとも思っている。両方とも日常生活に関する問題に簡
単な解答を提供することに主な特徴がある。たとえば、結婚式やお葬式などの礼儀のことでも教えてくれるマンガ
がある。眼がない人々にそんなマンガは確かに大きな助けになるものである。
一体マンガ文化の功罪はどういうことであるのか。忙しい現代人にマンガは大衆宗教のように複雑な日常
生活に対応させてくれることである。一方、マンガで夢中になったら、日常生活に対応できるかも知れないで
ある。マンガの世界に迷わないことは、マンガ文化の魅力はきっと続けていくと思っている。
まんがの功罪

日本で、道の駅で見えると、非常に多くのまんが本が見られる。駅から取られた選択肢を読んでみ、いろいろな種類があるようだ。愉快な子供用まんが本があるし、暴力的な大人用まんが本もあるし、日常的なまんが本もある。どんな好みがあっても適当なまんが本があるようだ。実際に、日本でどこに行ってもまんがブームの影響が反映されている。電車内の広告やテレビでいつもまんがのあるような事がある。やはり日本でまんが文化という事の影響が深いい。

どうして日本でまんががそんなに人気があるかという質問がよく聞かれる。簡単な答えがないけれども、たぶんまんがブームとテレビ文化との関係がある。まんがを読む事とテレビを見る事のプロセスは大体一緒だ。両方で贈礼的な案内を一目で分かった、集団情報は易しい。その上、まんがとテレビ番組の土壌は同じだ。現実逃避という事はまんがとテレビの目的だそうだ。想像上の世界に浸らせてくれるために娯楽な事を楽しむ。だから日常生活を逃れるために日本人がまんがを読む。

最近参考書やマニュアルとしてのまんががどんどん増えてきた。こんな事は功罪がある。一般的にまんがで単純な事を説明すれどいい手段である。たとえばビデオやラジカセの使い方を説明する時、指図を分かりようにまんがですれば良い。それから子供を楽しむなら持ってやるマシンにまんがを使えば良い。けれども複雑な事を説明するとまんがが役に立たない。たとえば、まんがで哲学的な事や心理的な事を説明する事が考えられない。やはりまんがは主に娯楽な事だ。

それに、まんがは思考力や集中力のようなものをいい訓練する事かという疑問がある。もし読物は全部一目で分かる集合情報なら、基層意識が深かくならない。まんがは楽しみだけでも内容は主に難解ではない。だからまんがは現実逃避をするためにいいけれども複雑な事を分かるために本を読んだ方がいい。
女性の地位について

世界各地、それぞれの国によって、女性の地位というものは異なっている。もちろん時代によっても女性の地位は大きく変動して来ているが、しかし今、現在でも国の習慣、宗教等によって女性の地位には大きな違いが見られる。例えば、ユーラシアを信す者の証、特に中近東の諸国では、はっきりと男尊女卑の考え方は定められている。だが同じイスラム教でも度合いは人によって違いがあり、私の友達はイスラムだがそのような事は彼女の家族では見られない。

不思議な事に、古代では、女性というものは神聖なものとみなされていた。例として一番に思いつくのが日本でヒミコである。神に仕える巫女として絶対的な力を持っていたと言われている。それがなぜいつのまにか日本では男性は男性の下に置かれるようになってしまったのか。ある説では、儒教が大陸より来て来てから、女性の地位はそれまでとは一変してしまったと言われている。そしてその信念が、何百年もたった今でも影響を及ぼしていると言われている。

実際に、アジアでは、例えばヨーロッパと比較すると、まだまだ女性は男性よりも下って歩かねばならない風習があり、三歩下って、などはまだまだ健全である。とても残念な事だ。日本では就職する時でも差別され、女性はいまだに弱い立場にある。また、親ほどにも、子供の面倒を見てくれる扶養がとろのようで、何事も不全な立場である。一概には言えないかも知れないが日本の男性は女性は結婚するまでは働いても良いが、その後は家庭に入り、そして子供の世話をするのが当たり前、と物事を考えていく気がする。また、それが当分のない、と女性の方も思っている場合がある。仕事をさせても、女性は男性におとる、と見られている。そのような考え方は、これから変わらなくては、日本は世界から取り残されてゆくと私は思う。もちろん日本ばかりが悪いと言っているのではない。カナダでも同じ様な問題は見られる。

日本だけを責めているのではない。しかし、日本はまあ虫にも固定観念にとっては過ぎ去っている、女性は家事、男性は仕事のみ、と分け過ぎていると思う。もっと仲良く分担し合って行ければ、全然違うのではないかと思われる。私は今大学で勉強しているのは、良い仕事、そして好きな仕事につく為であり、特にクラスメートの男の子達よりおとっているとは思わない。個人差はあるし、個の良い人、悪い人はいる。だがそれと、男の人のところから出来て、女の人がであるからだめなのだ、とは思わない。

いつだったか、何かの本で読んだ文章が頭に残っている。「男性と女性は同じではないけれども、平等で同等な立場にある。」これは本当だと思う。女性が仕事をしないで家庭に入る、というのは全く悪い事ではない。日本人がそうしたいので、それは古いと思う。だが、そうしたくもないのに、社会が無理矢理そうさせるのはいけないと思う。正しい生き方というのは幾通りもあるの、一つだけが絶対正しいのではない。女性の地位は今までも変わって来ているし、特に過去百年ではものすごく急変した。これから百年の間にどれくらい変るか、私は見てみたい気がする。
制服世界

六月で、日本の街路でちょうど今卒業したの大学と短大の生徒たちが込み合ってなっています。卒業生たちはみんな、だいたい同じような青くて堅いスーツとワイシャツが着て、だいたい同じようなファイルも持って、仕事を探しています。
なぜそんないつゆるリクルートスーツと言う物が仕事を探す時の公式のスーツことになっているか分からねけど、日本人はいつもそんなリクルートスーツが見てそれを分かっています。今は大学生と短大生が学校の制服は着させられないけど、そんな制服の変わりにリクルートスーツが登場しました。その上、今の日本のデパートは全部、着物部門の中にリクルートコンサと言う場所があります。
そのリクルートスーツの誕生はどう言うことであるか。その原因はたぶん昔から残った日本人の生活様式に関することと思っています。日本人の制服が着せられる生活様式は明治時代に始まりました。その時、ある東京帝国大学と言う全国一番有名な大学がありました。始めに男性の生徒は制服が採用したことはあの帝国大学である。そのあと、そんな生徒の制服は全国的に流行してなりました。男性の方はこう言うことであったけど、女性の方はどうでしたか。女性の生徒の制服が、大正時代の末から現われました。そのあと、日本全国の生徒たちは、いつでも学校の制服が着せられています。だから、制服が着せられる習性がそんな状態に育てられています。たとえ仕事を探す時だとしても制服の着ることが欲しいだと思っていま。今のリクルートスーツの洪水はちょっとしてその生活様式に原因するかもしれないでないである。
私は日本の男性と女性、両方の学校制服もとても好きだと思います。特に男性生徒の制服はいつも立派な感じをもらっています。学生時代に制服を着させられることが適当だと思ったけど、仕事を探す時にリクルートスーツの着ことはぜんぜん必要ではないので。今はリクルートスーツの着ることが流行したら、将来はたぶん全日本の国民はみんなも同じような服が着て進化させるかもしれないで。そんなうんざりするような生活がみんなも嫌いでしょう。しかし、そんな生活様式が好きな人もあるかもしれないで。
## Appendix G: Essay Rating Scale


<table>
<thead>
<tr>
<th>communicative quality</th>
<th>organization</th>
<th>linguistic accuracy</th>
<th>linguistic appropriacy</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>The writing displays an ability to communicate in a way which gives the reader full satisfaction.</td>
<td>The reader sees no errors of vocabulary, spelling, punctuation or grammar.</td>
<td>There is an ability to manipulate the linguistic systems with complete appropriacy.</td>
</tr>
<tr>
<td>8</td>
<td>The writing displays an ability to communicate without causing the reader any difficulties.</td>
<td>The reader sees no significant errors of vocabulary, spelling, punctuation or grammar.</td>
<td>There is an ability to manipulate the linguistic systems appropriately.</td>
</tr>
<tr>
<td>7</td>
<td>The writing displays an ability to communicate with few difficulties for the reader.</td>
<td>The reader is aware of but not troubled by occasional minor errors of vocabulary, spelling, punctuation or grammar.</td>
<td>There are minor limitations to the ability to manipulate the linguistic systems appropriately which do not intrude on the reader.</td>
</tr>
<tr>
<td>6</td>
<td>The writing displays an ability to communicate although there is occasional strain for the reader.</td>
<td>The reader is aware of errors of vocabulary, spelling, punctuation or grammar, but these intrude only occasionally.</td>
<td>There is limited ability to manipulate the linguistic systems appropriately, but this intrudes only occasionally.</td>
</tr>
<tr>
<td>5</td>
<td>The writing displays an ability to communicate although there is often strain for the reader.</td>
<td>The reader is aware of errors of vocabulary, spelling, punctuation or grammar which intrude frequently.</td>
<td>There is limited ability to manipulate the linguistic systems appropriately which intrudes frequently.</td>
</tr>
<tr>
<td>4</td>
<td>The writing displays a limited ability to communicate which puts strain on the reader throughout.</td>
<td>The reader finds the control of vocabulary, spelling, punctuation and grammar inadequate.</td>
<td>There is inability to manipulate the linguistic systems appropriately, which causes severe strain for the reader.</td>
</tr>
<tr>
<td>3</td>
<td>The writing does not display an ability to communicate although meaning comes through spasmodically.</td>
<td>The reader is primarily aware of gross inadequacies of vocabulary, spelling, punctuation and grammar.</td>
<td>There is little or no sense of linguistic appropriacy, although there is evidence of sentence structure.</td>
</tr>
<tr>
<td>2</td>
<td>The writing displays no ability to communicate.</td>
<td>The reader sees no evidence of control of vocabulary, spelling, punctuation or grammar.</td>
<td>There is no sense of linguistic appropriacy.</td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td></td>
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<td></td>
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</table>
Appendix H: Instructions for Essay Rating Procedures

Dear Rater:

Before you read and rate the essays, please examine the rating scale adapted from the Hamp-Lyons scale carefully. You may rate the essays in any order.

Suggested rating procedures:

1. Read an essay quickly for an overall first impression. Based on the first impression, identify appropriate descriptors in COMMUNICATIVE QUALITY and ORGANIZATION, and then record numerical ratings in the provided rating report.

2. Quickly re-read the essay. Identify appropriate descriptors for LINGUISTIC ACCURACY and LINGUISTIC APPROPRIACY and record ratings.
Appendix I: Student Interview Guide

0. -Thank the students for their participation.
-Explain the content and purpose of the study.
-Make the purpose of the interview clear.
-Ask if they have given some thoughts to the interview questions. (If not, give 5 minutes for them to think.)
-Obtain their permission to audiotape the interview.

1. What do you think you learned from writing the two sakubun [compositions] for the course?
   -from your experience of writing on manga [comics]
   -from your experience of writing on nihon no seikatsu [living in Japan]
   -in terms of content, language use, and other aspects

2. What expectations do you have for your own sakubun in Japanese?
   -Do you consider what expectations Ms. [Kei] might have on your sakubun? If yes, what do you think are Ms. [Kei]'s expectations?
   -What aspects of writing do you pay conscious attention to while writing Japanese sakubun?

3. What difficulties do you have in writing Japanese sakubun? Or what are the frustrations you feel while writing in Japanese? And how do you deal with them?
   -Can you compare your experience of writing in Japanese with that of writing in your first language. What are the common problems you have across these two experiences? What problems are specific to your Japanese writing experience?

4. What functions does sakubun-writing play in your study of Japanese?
   -How do you use writing for your study of Japanese?
   -How does writing help you learn the Japanese language or anything else?
   -How do you feel after you have written sakubun in Japanese?

5. Do you like reading and writing in general? Do you often read and write in Japanese and your first language? What types of reading and writing?
   -Can you tell me your experience of learning to write in your first language?
   -Can you tell me your experience of learning to write in Japanese?

6. Do you have anything else you would like to say about the writing assignments, think-aloud task, etc.?
### Appendix J: Full Summary of Student Interview Responses

<table>
<thead>
<tr>
<th>Comments</th>
<th>Challenge</th>
<th>Strategy</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Japanese text is too long.</td>
<td>Improve reading skills.</td>
<td>Read slowly and carefully.</td>
<td>Improved reading comprehension.</td>
</tr>
<tr>
<td>Japanese text is culturally unfamiliar.</td>
<td>Learn about Japanese culture.</td>
<td>Read cultural context and background.</td>
<td>Improved understanding of cultural references.</td>
</tr>
<tr>
<td>Japanese text is not engaging.</td>
<td>Change text format.</td>
<td>Use more visual elements and interactive content.</td>
<td>Increased reader engagement.</td>
</tr>
<tr>
<td>Japanese text is not relevant.</td>
<td>Adapt content.</td>
<td>Tailor content to student interests.</td>
<td>Improved student engagement.</td>
</tr>
<tr>
<td>Japanese text is not accessible.</td>
<td>Use screen readers.</td>
<td>Ensure text is accessible to visually impaired readers.</td>
<td>Improved accessibility for all readers.</td>
</tr>
</tbody>
</table>

*Note: This table continues on the next page.*
<table>
<thead>
<tr>
<th>Name</th>
<th>Opinion</th>
<th>Strategy</th>
<th>Problems</th>
<th>Language Experience</th>
<th>Writing Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Charles</td>
<td>I think writing in Japanese is easier compared to writing in English.</td>
<td>I try to write as close as possible to the native Japanese people's writing</td>
<td>Most problems are vocabulary and grammar.</td>
<td>I learned because I had to get some information for the content of the essays.</td>
<td>Writing Chinese, my native language, I can write it very fluently. Writing in English is the most difficult because nobody would understand my English.</td>
</tr>
<tr>
<td>Mary</td>
<td>It is an opportunity to make you think about how to express yourself in Japanese.</td>
<td>My essays should be understandable and use correct grammar.</td>
<td>Grammar is a bit difficult.</td>
<td>Having my Japanese friend correct my grammar was my learning experience.</td>
<td>In Taiwan I was taught how to write Chinese compositions, step by step procedures, grammar points, and vocabulary. The major point of studying Japanese well is to read a lot.</td>
</tr>
<tr>
<td>Mike</td>
<td>It gives me a chance to practice using Japanese, focusing on the right word choice and stuff.</td>
<td>I just want to be able to express what I want to say, get it more understandable</td>
<td>I have trouble expressing what I want to say, so the result of my Japanese essay is really sort of diluted or simplified.</td>
<td>I learned how much I don’t know about Japanese for composing an essay, which is very different from simply writing down sentences.</td>
<td>I do not like writing. I tend to jump around a lot in my writing, starting a paragraph with one idea and sort of switch or jump to another. Writing Japanese essays is totally a brand new thing for me. Reading helps our language learning, but just up to a certain point. Beyond that you have to pick up from the class or teacher.</td>
</tr>
<tr>
<td>Martin</td>
<td>I don’t think the content is really important because this is not a research paper.</td>
<td>I just want to get a good mark. I think fundamentally it’s more important to get things correct, I want to make sure all the grammar is correct.</td>
<td>The most difficult thing is to actually put my thoughts into Japanese.</td>
<td>I don’t think I learned that much about the content. Probably, if I had anything, it would be mostly the way to say things in Japanese. And it is good for kanji.</td>
<td>English was never a problem. I think I’m really good at technical writing, just getting grammar correct and being able to express things simply and clearly. For me writing is not that important. Reading, speaking and listening are more important than writing because there are few opportunities to get to write in Japanese.</td>
</tr>
<tr>
<td>Ethel</td>
<td>Writing is one of the ways of getting better Japanese.</td>
<td>I wanted to write so that it was first of all understandable and second of all just good quality. I pay particular attention to grammatical structure and proper word usage.</td>
<td>The main problem is length. There’s too much to say. It’s not a problem to write an essay but to make a coherent essay with introduction, body, and conclusion.</td>
<td>I learned a lot of new words just by writing essays. I learned how to use the word in a proper context by having someone check over my writing.</td>
<td>I’ve come from a science background so I’m not used to writing many papers and I don’t like writing in English. But I guess my writing skill in English is good but not excellent. Writing reinforces speaking. I enjoy studying Japanese, that’s why I put so much time into it.</td>
</tr>
<tr>
<td>Ellie</td>
<td>Less emphasis on research and content, more on style. For English essays, what you say is the most important thing.</td>
<td>What I want to think of a proper phrases for sentence-final expressions.</td>
<td>It takes so long to look up a word or kanji. I’m already thinking ahead what I want to write afterwards but I’m still trying to figure out the one word or kanji.</td>
<td>I learned a lot especially vocabulary and kanji for various words, and also sentence-final expressions in conversational style. It also helped to deliberate what I was thinking by writing it down.</td>
<td>I always did well and enjoyed it. I wish we had done more essay writing. It’s a lot richer in terms of the things to do, compared to such writing exercises like summary writing.</td>
</tr>
</tbody>
</table>

Note: Protocols are minimally edited to make them readable.
Appendix K: Instructions for Think-Aloud Procedures

In the process of writing, people think and say many things to themselves that are quickly forgotten. Yet these thoughts are interesting and important parts of the writer's problem-solving process.

I am interested in the thoughts that go through your head as you work on the writing task.

Work on the writing task as you normally would do. This means that you can use dictionaries and reference books as you normally would do.

But for this writing session, please \textit{SAY OUT LOUD AND CLEARLY everything} that you have in your head while writing. You may use \textit{any} languages you are currently thinking in. You may switch between languages according to your trains of thought. Avoid being silent for any length of time. Remind yourself constantly to keep talking aloud.

If you wish to take a break, you may do so. But remember to record the time and date before you stop the tape, and record the time and date again when you resume working on the assignment.
Appendix L: Post-Writing Questionnaire

Name: __________________________________________

About the writing assignment:

Q.1 Are you satisfied with this *sakubun* [composition]?
   Very satisfied ( ) Satisfied ( ) Not so satisfied ( ) Not satisfied at all ( )

Q.2. Was it difficult to generate ideas for this *sakubun*?
   Difficult ( ) Not so difficult ( ) Easy ( )

Q.3. Was it difficult to express your ideas in Japanese?
   Difficult ( ) Not so difficult ( ) Easy ( )

Please comment on the writing assignment (e.g., How did you feel about the nature of this assignment? What strategies did you use to write this *sakubun*? What were the relatively difficult and easy things about writing this *sakubun*?). Your comments will be kept confidential. They will not be disclosed to Ms. [Kei]. So please feel free to make any comments.

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Appendix M: Sample Protocols with Coded Categories

Note. English translations of Japanese utterances are given in square brackets. Japanese words that remain in these translations are written in italics.

Jasmine, Task I

011 anoo saikin katsujibanare shiteiru kodomo ga fuiteiru te yuu guai dakara sore wa totemo yoi koto aa [Well, because it's been said that children who are getting away from printed words are increasing in number, that (referring to what she said earlier) is very good, um] gist: reflective: Japanese

012 "katsujibanare" banare hanareru tte doo yuu ji ["katsujibanare" what is the kanji for banare, hanareru?] (consulting Japanese dictionary) language use (spelling): reflective: Japanese

013 kakijun ga wakannai "katsujibanare" [I don't know what is the stroke order, "katsujibanare"] language use (spelling): reflective: Japanese

014 sorekara watashi nanka ni totte wa manga o yomu koto ni yotte yappari nihongo o zuibun oboeta to omou kara ano nihongo gakashuu tte yuu to oogesani naru keredo, maa nihongo no vocabulary [And also, to a person like me, because I think I learned quite a bit of Japanese by reading comic books, well, if I said Japanese language study, it might sound too big a thing, but anyway Japanese vocabulary] gist: reflective: Japanese

015 vocab te nan dattakke [What is vocab?] (consulting English-Japanese dictionary) language use (lexis): reflective: Japanese

016 "nihongo no nihongo o oboeru" de ii ya ["Japanese, to learn Japanese" would do.] language use (lexis): Japanese

017 soshite kono "kaigai deno nihon bunka rikai ni yakudatsu" tte yuu no wa sono manga nimo yoru keredo, tatoeba sazae-san toka dattara ma futsuu no [...] o oboeru tte koto wa dekiru kedo, manga no daibubun wa hon mitaini koo iwayuru naiyoo ga fikushon dakara kanarazushimo yakudatsu towa omonai kara, sore wa botsu. [And then, concerning this statement that "(Comic books) promote foreigners' understanding of Japan," it depends on the type of comics but, for instance, comics like sazae-san can be a source for learning ordinary [...] , but most comics are, like books, what you call fiction, so I don't think they can really help, so this is no good.] gist: reflective: Japanese
Colin, Task I

049 If it is, then its, it influences, it is because, why is it so influential? gist: reflective: Cantonese

050 Because it itself is information fulfillment of the purpose of information gist: reflective: Cantonese/English

051 uh tegaruni [easily] this riten riten riten [advantage advantage advantage] but because of this tokuchoo [characteristics] the problem of nichijoosei [ordinariness] riten [advantage] is ah riten ah riten [advantage um advantage] is this this this very easy tegaru tegaruni joohoo o eru [easy to obtain information] very easy to obtain information. gist: reflective: Cantonese/Japanese

052 That's riten [advantage] joohoo [information] [...] the problem will be easy to solve. gist: non-reflective: Cantonese/Japanese

053 Also this our final problem of riten [advantage] is in paragraph six which talks about the nature of tokuchoo nichijoosei [characteristics ordinariness] discourse organization/gist: non-reflective: Cantonese/English

054 What they reflect han’ei nichijoosei mangabunka no nichijoo mangabunka wa [to reflect, ordinariness, routine of comic culture, comic culture is] is the same as shuukyoo [religion] the same shuukyoo shuukyoo ni niteiru shuukyoo ni niteiru [religion, resembles religion, resembles religion] gist: reflective: Cantonese/Japanese

055 So this problem is why this comic culture, although this comic culture is like popular culture popular culture you can compare to popular culture. gist: reflective: Cantonese/English

056 The nature of this popular culture mangabunka [comic culture] is is the popularity. gist: reflective: English

057 It its influence affect its influence is so broad it reaches every levels of society in a way that a popular religion could do. gist: reflective: English

058 So they share the same characteristic which is which could can be good or can be bad. gist: reflective: English

059 The bad thing of course is sometimes you cannot select sometimes you cannot select your information. gist: reflective: English

060 You are forced to be you are forced to accept some of the informations information. gist: reflective: English

061 But in a way it also solves the daily problem. gist: reflective: English
Martin, Task II

126 I think I've got to give an example. writing procedures: reflective: English
127 Um okay what should I say after this? hum let's see uh hum gist: reflective: English
128 [...] yes sasou sasowanakatta sasowanaide sono bu sasowanaide [to invite, did not invite, without inviting, that department, without inviting] language use (syntax): reflective: English
129 And here is a note here. writing procedures: non-reflective: English
130 uh okay "kekkon [marriage]" This is in brackets. writing procedures: non-reflective: English
131 Um okay what else can I say? gist: reflective: English
132 I have one more page to write. writing procedures: non-reflective: English
133 Ah, karaoke um yeah eeto [well] let me think okay gist: reflective: English
134 Uh hum hum let me see if it's coherent, are they? discourse organization: reflective: English
135 [...] something else. gist: non-reflective: English
136 Hmn let me go [...] but also karaoke um idea uh "tsureteikimashita [took (us there)]" [...] sort of kind of divided uh hum discourse organization: reflective: English
137 And uh "sono baa e iku tabini [every time we went to that bar]" ano "nankyoku kyouku kyouku [how many songs, pieces of songs, pieces]" is that a counter for like song? language use (lexis): reflective: English
139 "imamade [until now]" huh "karaoke baa de [in the karaoke bar]" I think it's good "karaoke baa de futsuu futsuumi [in the karaoke bar, usually, usually]" ah "futsuumi futsuumi [usually usually]" language use (syntax): reflective: English
140 ah quiet quiet person quiet uh quiet person q-u-i (consulting electronic Japanese-English dictionary) shizuka [quiet]? quiet person maybe shizuka yasashii [quiet kind]? language use (lexis): reflective: English
142 kind of [...] can't even remember how to write natsu [summer] language use (spelling): reflective: English
143 I'm just writing these [...] things that come to my head. writing procedures: non-reflective: English
**Eddie, Task II**

050  *Um how to say everyday life* um mainichi seikatsu [everyday life]? **language use (lexis): reflective: English**

051  *Gee, what's the word, very good word? everyday life I can* **language use (lexis): reflective: English**

052  *How about that? uhm uhm alright* (reading the sentence just written) "bangumi o minagara atama ni kangae ga ukanda [it occurred to me while watching the program]" **language use (syntax): reflective: English**

053  *Maybe instead of dentooteki [traditionally] usually futsuu [usually] fudanni fudanni tabun fudanni no hoo ga [ordinarily, ordinarily maybe ordinarily is better] language use (lexis): reflective: English/Japanese**

054  fudan um fudan [ordinarily] here we go okay fudan (consulting Japanese-English dictionary) **language use (lexis): non-reflective: English**

055  "keredomo" uhm "nihonshakaishi o miruto" ["however" uhm "if one looked at the history of Japanese society"] **history of Japanese society uh Japanese society just" nihon shakai o miruto" [if one looked at Japanese society] language use (lexis): reflective: English**

056  *How come isn't there a word danjoyakuwari [men and women's roles]? language use (lexis): reflective: English**

057  *too much" to no ijoo ga takusan takusan ga oo ooi" ah 'ooi' no hoo ga ii ["abnormalities are many many many ple plenty" ah plenty is better] language use (lexis): reflective: English**

058  *un* danjo [men and women] isn't there another, is there a synonym for yakuwari [assignment of roles]? **language use (lexis): reflective: English**

059  *Maybe I look up 'role 'in an English one. writing procedures: reflective: English**


061  yakuwari yakuwari [assignment of roles assignment of roles] uh where would it be? (consulting Japanese-English dictionary) **writing procedures: non-reflective: English**

062  yaku [role] *that's the post, position. language use (lexis): non-reflective: English**

063  yakuwari [assignment of roles] um no no, assimilate a few equivalent words . **language use (lexis): reflective: English**

064  "danjoyakuwari wa aimai [Men and women's roles are ambiguous]" *that's a nice word" aimaina koto [an ambiguous thing]" language use (lexis): reflective: English
<table>
<thead>
<tr>
<th>Participant</th>
<th>Task (no. of communication units)</th>
<th>Gist (%)</th>
<th>Discourse organization (%)</th>
<th>Language use-lexis (%)</th>
<th>Language use-syntax (%)</th>
<th>Language use-mechanics (%)</th>
<th>Writing procedures (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>more ref: less ref</td>
<td>more ref: less ref</td>
<td>more ref: less ref</td>
<td>more ref: less ref</td>
<td>more ref: less ref</td>
<td>more ref: less ref</td>
</tr>
<tr>
<td>Jasmine</td>
<td>Task I (172)</td>
<td>34.3 : 7.0</td>
<td>6.4 : 1.2</td>
<td>13.4 : 0</td>
<td>7.6 : 0</td>
<td>21.5 : 2.9</td>
<td>1.7 : 0</td>
</tr>
<tr>
<td></td>
<td>Task II (77)</td>
<td>9.1 : 14.3</td>
<td>0 : 1.3</td>
<td>5.2 : 3.3</td>
<td>6.3 : 3.9</td>
<td>14.3 : 20.8</td>
<td>3.9 : 22.1</td>
</tr>
<tr>
<td>Jane</td>
<td>Task I (87)</td>
<td>43.7 : 10.3</td>
<td>1.1 : 1.1</td>
<td>11.5 : 3.4</td>
<td>9.2 : 0</td>
<td>46.1 : 11.5</td>
<td>3.5 : 7.5</td>
</tr>
<tr>
<td></td>
<td>Task II (120)</td>
<td>15.8 : 5.8</td>
<td>5.8 : 1.7</td>
<td>22.5 : 0.8</td>
<td>17.3 : 0</td>
<td>6.7 : 12.5</td>
<td>3.5 : 7.5</td>
</tr>
<tr>
<td>Jack</td>
<td>Task I (146)</td>
<td>14.4 : 18.5</td>
<td>1.4 : 1.4</td>
<td>11.6 : 4.1</td>
<td>7.7 : 2.1</td>
<td>1.4 : 0.7</td>
<td>13.7 : 30.1</td>
</tr>
<tr>
<td></td>
<td>Task II (129)</td>
<td>9.3 : 21.7</td>
<td>1.6 : 5.4</td>
<td>0 : 0</td>
<td>9.1 : 7.8</td>
<td>0 : 0</td>
<td>10.1 : 34.9</td>
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<tr>
<td>Cathy</td>
<td>Task I (96)</td>
<td>17.7 : 21.9</td>
<td>0 : 0</td>
<td>7.3 : 2.1</td>
<td>4.3 : 2.1</td>
<td>10.4 : 4.2</td>
<td>4.2 : 16.7</td>
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<tr>
<td></td>
<td>Task II (179)</td>
<td>20.8 : 25.1</td>
<td>2.8 : 4.5</td>
<td>16.2 : 3.9</td>
<td>7.3 : 0</td>
<td>11.1 : 0.7</td>
<td>17 : 10.6</td>
</tr>
<tr>
<td>Colin</td>
<td>Task I (130)</td>
<td>61.0 : 15.4</td>
<td>4.4 : 9.6</td>
<td>1.5 : 1.5</td>
<td>0.7 : 0</td>
<td>0.7 : 0</td>
<td>2.0 : 12.2</td>
</tr>
<tr>
<td></td>
<td>Task II (147)</td>
<td>25.2 : 41.5</td>
<td>1.4 : 4.1</td>
<td>4.1 : 2.2</td>
<td>2.7 : 0.7</td>
<td>0 : 0</td>
<td>1.0 : 5.0</td>
</tr>
<tr>
<td>Mary</td>
<td>Task I (202)</td>
<td>25.7 : 8.9</td>
<td>2.0 : 0</td>
<td>22.3 : 4.8</td>
<td>26.7 : 4.5</td>
<td>0.6 : 0.6</td>
<td>0.6 : 9.0</td>
</tr>
<tr>
<td></td>
<td>Task II (160)</td>
<td>19.3 : 20.5</td>
<td>1.2 : 1.8</td>
<td>12.7 : 7.2</td>
<td>20.5 : 6.0</td>
<td>0.4 : 2.4</td>
<td>13.3 : 13.3</td>
</tr>
<tr>
<td>Martin</td>
<td>Task I (166)</td>
<td>25.9 : 7.2</td>
<td>5.4 : 0.6</td>
<td>16.9 : 3.0</td>
<td>6.6 : 0.6</td>
<td>4.3 : 2.5</td>
<td>11.1 : 20.4</td>
</tr>
<tr>
<td></td>
<td>Task II (162)</td>
<td>18.5 : 13.0</td>
<td>1.9 : 1.0</td>
<td>12.3 : 4.3</td>
<td>7.4 : 0.7</td>
<td>5.8 : 2.3</td>
<td>3.3 : 9.2</td>
</tr>
<tr>
<td>Eddie</td>
<td>Task I (134)</td>
<td>19.1 : 3.5</td>
<td>0 : 0</td>
<td>34.7 : 2.3</td>
<td>16.8 : 3.5</td>
<td>5.8 : 2.3</td>
<td>2.1 : 5.2</td>
</tr>
<tr>
<td></td>
<td>Task II (173)</td>
<td>14.9 : 9.0</td>
<td>0.7 : 5.2</td>
<td>33.2 : 2.7</td>
<td>6.0 : 0</td>
<td>2.1 : 5.2</td>
<td>3.0 : 6.7</td>
</tr>
</tbody>
</table>

* ref = reflective
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<th></th>
<th></th>
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<th></th>
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<tr>
<td>Jasmine</td>
<td>26.5</td>
<td>26.3</td>
<td>27</td>
<td>24</td>
<td>27</td>
<td>25</td>
<td>41</td>
<td>23</td>
<td>8</td>
<td>9</td>
<td>9</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>8.7</td>
<td>8.7</td>
<td>9</td>
<td>8</td>
<td>9</td>
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<td>8</td>
<td>8</td>
<td>9</td>
<td>9</td>
<td>9</td>
<td>9</td>
</tr>
</tbody>
</table>

**Total**

- Jasmine: 83%
- Jack: 83%
- Joy: 83%
- Judith: 83%
- Jake: 83%

**Comments**

- Jasmine: Very well written. Is this author really a learner? Excellent. Isn't she a native speaker?
- Jack: Good vocabulary. Concise: Some problems with the choice of vocabulary, but others are all fine.
- Joy: Well written. The 3rd paragraph is supposed to be talking about negative points, but it in fact discusses positive points. Easy to read.
- Judith: The 3rd paragraph is supposed to be talking about negative points, but it in fact discusses positive points. Easy to read.
- Jake: Must be a Japanese who was schooled in Japan up to high school level.

**Conclusion**

- Jasmine: Good vocabulary. Concise: Some problems with the choice of vocabulary, but others are all fine.
- Jack: Good at connecting one sentence to another. Easy to read with the well-organized beginning and ending.
- Joy: Very well written. Concise: There are some problems with the choice of vocabulary, but others are all fine.
- Judith: Must be a native speaker.
- Jake: Must be a native speaker.
<table>
<thead>
<tr>
<th>Student</th>
<th>Total (27)</th>
<th>Content (9)</th>
<th>Organization (9)</th>
<th>Language Use (9)</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cathy</td>
<td>22.2</td>
<td>8.1</td>
<td>8.1</td>
<td>8.1</td>
<td>Well organized essay. An attempt to use a variety of vocabulary laudable. Grammatical mistakes are conspicuous. But good sentence-sentence connection.</td>
</tr>
<tr>
<td></td>
<td>19.5</td>
<td>6.6</td>
<td>6.8</td>
<td>6.1</td>
<td>Interesting topic, but the author's own opinion missing. Some parts unintelligible.</td>
</tr>
<tr>
<td></td>
<td>14</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>This student must be a Chinese speaker. She tries to get away by using the &quot;Chinese word + dea&quot; expression.</td>
</tr>
<tr>
<td></td>
<td>13.5</td>
<td>5</td>
<td>4</td>
<td>4.5</td>
<td>The writer seems to possess sufficient vocabulary, but lacks grammatical competence.</td>
</tr>
<tr>
<td></td>
<td>11</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>Because of the many kung used in the essay, I can make meaning with effort. But syntactic and other errors are disturbing.</td>
</tr>
<tr>
<td></td>
<td>14</td>
<td>3</td>
<td>5</td>
<td>2</td>
<td>Greatly influenced by the writer's mother tongue. It needs effort to understand. But readable.</td>
</tr>
<tr>
<td></td>
<td>22</td>
<td>6.8</td>
<td>6.3</td>
<td>6.8</td>
<td>Message clearly communicated. Good choice of vocabulary but used inappropriately sometimes.</td>
</tr>
<tr>
<td></td>
<td>13.5</td>
<td>5</td>
<td>4</td>
<td>4.5</td>
<td>The positive and negative points are not clearly explained. Cryptic.</td>
</tr>
<tr>
<td></td>
<td>16</td>
<td>5</td>
<td>6</td>
<td>5</td>
<td>The essay could be a lot better if the last paragraph were further developed.</td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>5</td>
<td>6</td>
<td>7.5</td>
<td>Grammar is alright up to the Clause level. But beyond that level there are too many mistakes that obscure the writer's intended meaning.</td>
</tr>
<tr>
<td></td>
<td>25.5</td>
<td>9</td>
<td>7</td>
<td>14.5</td>
<td>Very powerful, persuasive.</td>
</tr>
<tr>
<td></td>
<td>21</td>
<td>7</td>
<td>8</td>
<td>14</td>
<td>Easy to read through. But the content is very simple and childish.</td>
</tr>
<tr>
<td>Charles</td>
<td>22.4</td>
<td>8.4</td>
<td>7.2</td>
<td>6.8</td>
<td>Introduction not clear. Rich vocabulary, though some mistakes in their usage. Meanings of some parts not clear because of grammatical mistakes.</td>
</tr>
<tr>
<td></td>
<td>19</td>
<td>6</td>
<td>6.3</td>
<td>6.7</td>
<td>The author's own opinion missing.</td>
</tr>
<tr>
<td></td>
<td>16.5</td>
<td>6</td>
<td>5</td>
<td>5.5</td>
<td>Must be a Chinese speaker. I cannot help but laugh at such a phrase like 'shikajokeki' ['erotic in Japanese']. Each paragraph is too short.</td>
</tr>
<tr>
<td></td>
<td>14</td>
<td>6</td>
<td>4</td>
<td>6</td>
<td>Doesn't the writer have his own opinion? Probably because of the lack of grammatical competence, the description of Japanese people's life has become very flat and one-sided.</td>
</tr>
<tr>
<td></td>
<td>21</td>
<td>7</td>
<td>8</td>
<td>6</td>
<td>In spite of many mistakes in language use, the essay is easy to read. He must be a good writer in L1 as well.</td>
</tr>
<tr>
<td></td>
<td>21</td>
<td>8</td>
<td>7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mary</td>
<td>23.8</td>
<td>8.1</td>
<td>8.1</td>
<td>7.6</td>
<td>Well written as a whole, though there are some intra-sentential mistakes. Use of a greater variety of sentence-ending expressions encouraged.</td>
</tr>
<tr>
<td></td>
<td>22.5</td>
<td>6.6</td>
<td>8.1</td>
<td>6.8</td>
<td>Well written but the author's own opinion missing.</td>
</tr>
<tr>
<td></td>
<td>18.5</td>
<td>7</td>
<td>5</td>
<td>6.5</td>
<td>I was troubled by the lack of coherence, rather than grammatical problems.</td>
</tr>
<tr>
<td></td>
<td>19</td>
<td>7</td>
<td>5</td>
<td>7</td>
<td>It looks like an unfinished piece.</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>5</td>
<td>4</td>
<td>5.5</td>
<td>The first half looks like an essay written by a native speaker. But the latter half seems to be a JFL learner's writing.</td>
</tr>
<tr>
<td></td>
<td>20</td>
<td>8</td>
<td>9</td>
<td>2</td>
<td>Must be a near native.</td>
</tr>
<tr>
<td></td>
<td>26</td>
<td>9</td>
<td>7</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Mike</td>
<td>21.7</td>
<td>7.5</td>
<td>7.7</td>
<td>6.5</td>
<td>Interesting. Message understandable. An attempt to use a variety of vocabulary laudable. Grammatical mistakes conspicuous. Lacking in accuracy.</td>
</tr>
<tr>
<td></td>
<td>19.3</td>
<td>6.6</td>
<td>6.8</td>
<td>4.5</td>
<td>Sudden change of the subject matter. Some parts unintelligible.</td>
</tr>
<tr>
<td></td>
<td>12.5</td>
<td>3</td>
<td>5</td>
<td>4.5</td>
<td>There is &quot;1&quot;, but are there II and III? I was troubled by the &quot;doro&quot; and &quot;dor&quot; forms being mixed in the same essay.</td>
</tr>
<tr>
<td></td>
<td>13.5</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>What is said in the essay does not match the title.</td>
</tr>
<tr>
<td></td>
<td>7.5</td>
<td>5</td>
<td>4</td>
<td>4.5</td>
<td>It needs much effort to understand what the writer is trying to say.</td>
</tr>
<tr>
<td></td>
<td>13.5</td>
<td>3</td>
<td>2</td>
<td>2.5</td>
<td>Must be a Chinese speaker. The content does not match the title.</td>
</tr>
</tbody>
</table>

(table continues)
<table>
<thead>
<tr>
<th>Martin</th>
<th>total (17)</th>
<th>content (5)</th>
<th>organization (2)</th>
<th>language use (9)</th>
<th>comments (writing problem for the &quot;spoken&quot; column)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>21.8</td>
<td>8.1</td>
<td>7.6</td>
<td></td>
<td>Very well written. But sounds a little too colloquial.</td>
</tr>
<tr>
<td></td>
<td>22.6</td>
<td>6.9</td>
<td>7.2</td>
<td>8.5</td>
<td>Well written but a conclusion missing. Little evidence of utilizing the expressions taught in class.</td>
</tr>
<tr>
<td></td>
<td>17</td>
<td>6</td>
<td>5</td>
<td>8</td>
<td>Funny title. Stating that he known about the topic well is very English. Using the colloquial expression of &quot;n-deg&quot;.</td>
</tr>
<tr>
<td></td>
<td>22</td>
<td>8</td>
<td>8</td>
<td></td>
<td>The essay lacks a conclusion.</td>
</tr>
<tr>
<td></td>
<td>27.5</td>
<td>6</td>
<td>7</td>
<td>4.5</td>
<td>The spoken and the written form of language are mixed. There is an influence of the mother tongue on the use of the Japanese language. But the message is understandable.</td>
</tr>
<tr>
<td></td>
<td>25.5</td>
<td>9</td>
<td>8</td>
<td>8.5</td>
<td>It's a pity that the ending is not quite complete. Although the spoken language is used, it is a good piece of writing. Good linguistic competence at the discourse level.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Elliot</th>
<th>total (17)</th>
<th>content (5)</th>
<th>organization (2)</th>
<th>language use (9)</th>
<th>comments (writing problem for the &quot;spoken&quot; column)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>22.0</td>
<td>6.9</td>
<td>8.1</td>
<td>7.9</td>
<td>Use of different forms of sentence-ending expression is encouraged. Little evidence of utilizing the expressions taught in class.</td>
</tr>
<tr>
<td></td>
<td>17</td>
<td>7</td>
<td>4</td>
<td>6</td>
<td>The &quot;de arame&quot; form is used too often and that bore the me. The writer has discourse-level, rather than grammatical, problems.</td>
</tr>
<tr>
<td></td>
<td>19</td>
<td>7</td>
<td>3</td>
<td>5</td>
<td>It looks like an unfinished piece.</td>
</tr>
<tr>
<td></td>
<td>12</td>
<td>2</td>
<td>2</td>
<td>8</td>
<td>I see no trace of planning in this essay. I cannot tell what the writer wants to say. He must be a poor writer in L as well.</td>
</tr>
<tr>
<td></td>
<td>25.5</td>
<td>9</td>
<td>8</td>
<td>8.5</td>
<td>May be a Chinese speaker of high JFL proficiency.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Eddie</th>
<th>total (17)</th>
<th>content (5)</th>
<th>organization (2)</th>
<th>language use (9)</th>
<th>comments (writing problem for the &quot;spoken&quot; column)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>25.1</td>
<td>8.4</td>
<td>8.6</td>
<td>8.1</td>
<td>Very well organized and well expressed using a variety of vocabulary. Some intra-sentential grammatical mistakes.</td>
</tr>
<tr>
<td></td>
<td>20.2</td>
<td>7.2</td>
<td>6.3</td>
<td>6.7</td>
<td>Lack of coherence. Points not so clear. Rich vocabulary but incorrect or inappropriate use. 3 points awarded in recognition of the author's effort to incorporate what was taught in class.</td>
</tr>
<tr>
<td></td>
<td>16</td>
<td>5</td>
<td>6</td>
<td>5</td>
<td>The writer has his own view.</td>
</tr>
<tr>
<td></td>
<td>12</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>The title is somewhat misleading. It's not clear to the end that the writer is not referring to Japanese society in general but the theatrical world in Japan.</td>
</tr>
<tr>
<td></td>
<td>20.5</td>
<td>7</td>
<td>7</td>
<td>6.5</td>
<td>The content is somewhat shallow. But because of the writer's high level of linguistic competence, it's easy to read his essay.</td>
</tr>
<tr>
<td></td>
<td>22</td>
<td>8</td>
<td>8</td>
<td></td>
<td>Well written from his own perspective. Grammatical mistakes do not bother me too much.</td>
</tr>
</tbody>
</table>

*Note: Figures in italics are for the essays read and corrected by a native speaker of Japanese before submission. Asterisks (*) indicate that the data are not available.*
## Appendix P: Forty-four Items of Student Data

### Table P1

*Background Questionnaire Data (Items 1-10)*

<table>
<thead>
<tr>
<th>Item &amp; Options</th>
<th>Jane</th>
<th>Jane</th>
<th>Judy</th>
<th>Joy</th>
<th>Jack</th>
<th>Cathy</th>
<th>Colin</th>
<th>Charlie</th>
<th>Mary</th>
<th>Mike</th>
<th>Martin</th>
<th>Elliot</th>
<th>Eddie</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Ethnicity</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>(1) Japanese</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(2) Chinese</td>
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<td></td>
<td></td>
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<tr>
<td>(3) Anglo-Saxon</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Oral L1</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>3</td>
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*Note.* Options for Items 7-9 are the same as the ones for Item 4.
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*Post-Writing Questionnaire Data (Items 17-22)*

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Think-Aloud Protocol Data (Items 23-30)

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Note: Options for Items 24 - 30 are the same as the ones for Item 23.
Table P6
Japanese Essay Assessment Data (Items 31-44)

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<th>Cath y</th>
<th>Coll n</th>
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<th>Mike</th>
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*Note.* Options for Items 32 - 42 are the same as the ones for Item 31.
Appendix Q: Results of Dual Scaling (Analysis 4(a) and Analysis 4(b))

Table Q1
Major Contributors and Their Bipolar Options (Analysis 4(a), Solution 1)

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<th>bipolar options</th>
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<td>prestructural/unstructural</td>
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<td>20.56</td>
<td>0.78</td>
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<td>ethnicity</td>
<td>Chinese</td>
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<td>0.76</td>
<td>self-rating of overall Japanese (cf.peers)</td>
<td>poor</td>
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Note: The table provides a summary of the major contributors and their bipolar options based on the results of Dual Scaling Analysis 4(a) and Analysis 4(b).
Table Q2
Major Contributors and Their Bipolar Options (Analysis 4(a), Solution 2)

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<th>←----------</th>
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<td>fair/excellent</td>
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<td>over 6 months</td>
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<td>intermediate/supenor</td>
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<td>poor</td>
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<td>fair/excellent</td>
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<td>Chinese/Japanese</td>
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<td>not so/very satisfied</td>
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Table Q3
Major Contributors and Their Bipolar Options (Analysis 4(b), Solution 1)

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<td>Japanese essay score</td>
<td>fair</td>
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<td>20.46</td>
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<td>very satisfied</td>
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<td>relational</td>
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<td>23</td>
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Table Q4
Major Contributors and Their Bipolar Options (Analysis 4(b), Solution 2)

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IMAGE EVALUATION
TEST TARGET (QA-3)

150mm
6"

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