

# **Application of Self-Determination Theory to a Second Language Writing Class**

Stan KIRK

## **Astract**

*This paper deals with the application of Self-Determination Theory (SDT) to second language writing education. Following a brief description of SDT, it describes a small-scale action research project conducted in an advanced level academic writing class at a Japanese university and discusses the results from the perspective of SDT. Specifically, it explores whether and to what degree the results support some basic concepts in SDT and also whether the motivation of the students was enhanced or hindered by the way the various components of the course were conducted. The results of the study indicate that the course components enhanced the students' motivation in most cases, and provide reasons why this occurred. In addition, although the results are not completely consistent with SDT, they generally fit into the SDT conceptual framework. Likewise, the cause and effect relations that appeared both in the cases of enhanced and hindered IM are seen to generally be in line with the predictions of SDT. However, there was some data that could not be adequately accounted for by SDT, indicating its limitations as a theoretical construct for L2 education research. It is concluded that, in spite of its limitations, the SDT motivation construct can be usefully applied to motivation research in L2 writing education.*

## **Introduction**

Self-Determination Theory (hereafter referred to as SDT) is a theory of human motivation that has become quite prominent in general education. It is based on the assumption that humans have an innate propensity to seek new challenges and discoveries in order to become more effective in interacting with their environments. This propensity is complemented by an innate *integrative tendency* which seeks to integrate various aspects of one's experience, knowledge and personality into an increasingly integrated sense of self, and also to integrate one's self with other human beings. It also postulates three basic human needs which must be met for such psychological growth to occur, namely the needs for

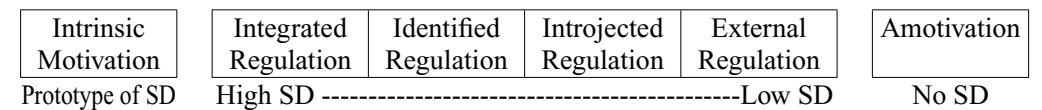
autonomy (perceiving oneself as the origin and regulator of one's own behavior), competence (feeling successful at interacting with one's environment) and relatedness (having a sense of belongingness to others).

SDT gives central prominence to *intrinsic motivation* (hereafter referred to as IM), which involves engaging in activities for the inherent pleasures that those activities engender, and the environmental factors which influence it. IM, as conceptualized by SDT, is divided into three types: IM to know (engaging in activities due to the pleasure and satisfaction of learning new things), IM to accomplish (engaging in activities due to the pleasure that results from surpassing oneself and accomplishing something), and IM to experience stimulation (engaging in activities for the sake of the natural feelings of stimulation that those activities produce) (Vallerand, 2002, 42). According to SDT, educational environments will enhance intrinsic motivation to the extent that they meet the three basic human needs.

SDT also provides an elaborate description of *extrinsic motivation* (hereafter referred to as EM), which refers to acting for reasons which are not inherent in the actions themselves but are instrumental to some extrinsic goals. In daily life, people do perform many activities that are externally prompted, encouraged and regulated in some way by another person or a group in one's social environment. Furthermore, such activities seem to become more internalized and self-regulated over time. This is because people naturally tend to integrate to their selves the values, behaviors and skills of important others in order to relate more successfully to them (Rigby et al. 1992, 169). To the degree that this integration process occurs, people become more self-determined or autonomous in their performance of the behaviors (Deci and Ryan 2002, 15).

SDT's taxonomy of extrinsic motivation consists of a continuum of four categories whose positions on the continuum are based on the degree to which they are more or less self-determined. This continuum is also used to explain how a person becomes increasingly integrated and self-determining, as well as the factors that enhance this process (Deci and Ryan 2002, 14-16 ). The taxonomy is as follows:

#### Extrinsic Motivation Self-Determination Continuum



(Adapted from Ryan and Deci, 2000: 16)

*Amotivation* is the complete absence of motivation. *External Regulation* is the least self-determined form of extrinsic motivation. It involves performing an action to obtain a reward or avoid punishment. (Deci and Ryan 2002, 17). *Introjected Regulation* involves a degree of internalization of the regulation, but not integration of the regulation into the self, and therefore it is still very controlling, even though the control is largely from within. It includes acting in order to avoid feelings of guilt and shame, or to enhance one's ego or one's sense of acceptance and valuation by others (Rigby et al. 1992, 175). *Identified Regulation* involves consciously valuing a goal or regulation, accepting it as personally important, and hence consciously endorsing it. Therefore, it "represents an important aspect of the process of transforming external regulation into true self-regulation" (Deci and Ryan 2002, 17). *Integrated Regulation* is the most self-determined kind of extrinsic motivation and hence the closest to IM. It involves regulations that have been integrated with values and goals that are already part of the integrated self.

As extrinsically motivated actions are not inherently interesting, at first people are only moved to perform them instrumentally, that is, in order to achieve desired outcomes that are external to the activities themselves. Such outcomes are most often based on the need for relatedness. For example, for the sake of good relations with others, a person will be moved to perform an initially uninteresting action in response to another valued person's request, offer of reward, or inspiring example. (Deci and Ryan 2002, 19). A feeling of competence is also essential for this process. For example, even if people feel moved to perform certain actions for the sake of relatedness, they will not perform them if they feel that they will not be able to do so successfully. However, relatedness and competence are not sufficient to bring about full integration, which can only occur when one feels a genuine sense of autonomy; in other words, freedom to endorse and choose an action apart from any sense of being controlled or pressured to do so by others. (Deci and Ryan 2002, 20).

SDT's conceptualizations of IM and EM have important implications for motivation in education. First, IM implies that learning is naturally motivated by

students' innate curiosity to explore their environment, their desire to effectively interact with it, and the pleasure in doing so. This is fostered by creating an educational environment that nurtures the basic needs for autonomy, competence and relatedness. (Rygby et al. 1992, 166).

The taxonomy of EM and the integrative process imply that, under the right conditions, students naturally internalize and integrate to their selves the rules and practices of important others in their social environment. Thus, educational environments that nurture the three basic needs will foster the natural process of integrating educational rules and behaviors that are not initially enjoyable and self-determined. Since this process is usually initiated and encouraged by a valued person or group, the roles of teachers, parents and classmates in education will also be extremely important (Ryan and Deci 2000, 64). (For a more comprehensive description of SDT in education, see Kirk, 2010.)

STD claims that many traditional methods for increasing motivation to learn actually hinder it. For example, common external controls such as offering rewards, emphasizing exams and grades, encouraging individual competition, making threats, imposing rules, and giving negative feedback may improve student effort and grades in the short term, but these immediate gains are outweighed by longer term affective costs such as increased anxiety and loss of self-confidence and self-esteem, which in turn decrease intrinsic motivation and hinder the natural integrative process. On the cognitive level, while they promote short term rote learning they tend to decrease deeper conceptual learning, problem solving and interest in the material itself (Deci and Ryan 1985:258; Vansteenkiste et al., 2006:22; Deci 1996: 71f, Deci et al., 1991:331-2). On the other hand, IM and the integrative process can be enhanced by an interpersonal teaching style and environment that fosters feelings of relatedness and competence, and is autonomy-supportive (non-controlling). Some tactics to this end are as follows:

1. Provide cooperative activities that enhance students' relationships with each other. Likewise show your willingness to enter into relationships with students by letting them know you enjoy being with them and that you trust and respect them. (Reeve, 2005: 186f).
2. Provide optimal challenges (just slightly above students' present competency level) as these will increase their sense of success and achievement (i.e. competence)(Deci et al.,1996: 177).
3. Give feedback in an "informational, non-controlling" way as this will provide students with information about how to increase their competency in an

autonomous manner. Likewise, avoid using orders or other controlling language to get students to behave in a certain way (Deci et al., 1996: 177).

4. Take your students' perspective. Show them that you empathize with their feelings about activities they do not naturally enjoy, show interest in their wishes, and provide rationales for necessary activities that they do not naturally enjoy (Reeve, 2005: 186f, Ryan and Deci 2000: 64).

5. Allow for as much choice as possible about what tasks to do and how to do them, thereby allowing students to become increasingly self-directed (Deci and Ryan 1985: 252) (For a more detailed description of these tactics and others, see Kirk 2010: 49f).

In spite of its prominence in general education, SDT has made only limited inroads into second language education. The remainder of this paper presents an action research project which attempts to apply SDT to a second language advanced writing class. First, the project, its goals and methods will be described. Then the results will be discussed in regard to their compatibility with SDT, and in regard to improving future writing courses.

## **THE ACTION RESEARCH PROJECT**

### **The class**

The research was conducted on four students who completed an advanced writing class in a Japanese university. In the main components of this class, I consciously endeavored to promote intrinsic motivation and the integrative process by fostering the three basic needs of relatedness, sense of competence, and sense of autonomy. These components are as follows:

#### 1. Talking about writing

This was strongly emphasized in all the in-class activities. At all stages of the writing process the students orally presented essay topic ideas and content to each other, discussed grammar points and possible corrections, and gave oral reports to partners about how their essays were progressing.

In addition to the cognitive benefits of talking about and discussing the writing process, a major purpose of this emphasis was to foster the three basic psychological needs. For example as students talked, they would come to understand and trust each other more (relatedness). As well, it would hopefully encourage informational feedback from peers, and consequently, lower proficiency

students would be inspired, stimulated and encouraged by their exchanges with higher proficiency students, and also learn some skills and values from them (integrative process).

### 2. Timed Writing

In this activity students were usually assigned a topic and given a time limit to write as much about it as they could. Then they presented their timed writing orally to a partner or group. To foster relatedness I emphasized that it is not merely a “speed-writing” exercise but that they were writing something that they were going to share with their classmates.

At first the students seemed very nervous about being able to do this activity successfully (weak sense of competence), so I tried to empathize by acknowledging that timed writing is indeed initially stressful but that many past students had come to really enjoy it. I also gave a rationale, namely the importance of learning to write fluently under time pressure for improving their academic competence. To further lower anxiety, I assured them that this activity was only for self-improvement and would not be graded. I encouraged them to keep their timed writings so they could tangibly observe their increasing competence. I tried to increase choice by sometimes giving two or three possible topics or telling students that they could choose their own topic.

### 3. Peer checking

Many Japanese students initially dislike peer checks and tend to do them in a rather superficial manner. I tried to overcome this by preparing a clear step by step check sheet. I also continuously emphasized the learning benefits of discussing the peer check results with each other and cooperating in a spirit of improving each other’s essays (providing a rationale, promoting relatedness).

Over time the students appeared to become more comfortable with this activity. Often they would not just explain the peer check results to each other, but also share how their writing process was going. Therefore, I believed the peer checks were functioning as a non-threatening source of informational feedback and were fostering feelings of relatedness, competence, and autonomy.

### 4. Common Errors Correction Worksheet

For this activity, I would put erroneous sentences from students’ essays together on a page. The students would first work individually on finding and correcting the

errors. Then they would compare their corrections with a partner, and then work as a group (“grammar committee”). Finally I would go through the sentences with the whole class, eliciting corrections and adding my own if necessary.

Students appeared to approach this activity rather gingerly at first, but soon most seemed to enjoy it and sometimes got into quite extended discussions. Perhaps one reason was that one student showed leadership and was a good role model for this activity (relatedness and the integrative process). Also, some students seemed to gain confidence when they noticed that their classmates and teacher agreed with some of their corrections (increased sense of competence). Thus I felt that this activity was fostering the three basic needs.

### **The Research Goals**

The general goals of the research were as follows:

- 1) To investigate whether, why, and to what degree the four main components of this writing class enhanced or hindered intrinsic motivation as conceptualized in SDT.
- 2) To investigate whether and to what degree core SDT concepts such as IM, the three needs, the EM continuum and the integrative process get support from the data collected in this study.

### **The Research Methods and Tools**

While self-report questionnaires have traditionally been the main method for gathering data in motivation research, there is an increasing emphasis on the importance of triangulation, for example, complementing questionnaires with interviews. It is often pointed out that the amount and depth of information generated by questionnaires is limited by the time and effort that people are willing to spend filling them out, whereas interviews allow for a deeper exploration of the complexity of the issues involved (Dornyei 2003b, 128-131). Therefore, to obtain the data for the study, I used a questionnaire (Appendix 1) followed by a semi-structured interview.

### Questionnaire (see Appendix)

The questionnaire primarily aimed to elicit the students’ comments about how they felt during the course generally and how they felt specifically during four main components. The first part of each section of the questionnaire consisted of eight questions using a Likert scale. These questions attempted to target well-known

variables commonly associated with intrinsic motivation such as enjoyment, achievement, frustration, anxiety, boredom, sense of improvement and difficulty level. There was also a question about changes in feelings over time. Due to the small sample size and the qualitative nature of the study, the main purpose of the Likert scale questions was not to gather quantifiable data but rather to stimulate the students' thinking about these feelings and thus enable them to better fill in the comment sections. The questionnaire had five main sections, one of which dealt with the class generally while the remaining four each corresponded to one of the main course components.

#### Semi-structured Interview

The semi-structured interviews were conducted in Japanese by a Japanese colleague and recorded. A *retrospective* approach was employed, according to which the students were referred by the interviewer to their questionnaire responses and, through probing questions, asked to provide additional comments including reasons for those responses (Dornyei 2003b, 130). Later I listened to the recorded interviews, translated the relevant comments into English, and added them to the students' written comments (questionnaire).

### **RESULTS OF THE RESEARCH**

The comments section of the questionnaire, together with the comments given during the follow-up interview, yielded quite a lot of relevant data. This section will summarize the relevant comments of each student about each of the course components.

#### **1. Talking About Writing**

##### Student A: Quite strongly enhanced IM

She felt enjoyment in the speaking activities very often due mainly to a sense of relatedness. Specifically, the speaking activities helped her make good friends and develop mutual understanding with her partners. Getting reactions to her ideas from her partners was interesting. In the questionnaire she reported feeling achievement only a few times but this is contradicted by her positive comments that, through the speaking activities, she learned to express herself more clearly. She also linked her sense of achievement to her classmates' feedback. Specifically, their feedback contributed to improvement in her writing skills by showing her things she had not noticed herself, expanding her way of thinking, and causing her

to think of ideas she would not have thought of by herself (informational feedback from classmates contributed to IM Knowledge). The difficulty level felt just right (optimal challenge) She never felt frustration, anxiety or boredom in the speaking activities. She felt no change over time as she always found these activities fun.

##### Student B: Strongly enhanced IM

In spite of feeling less competent than her classmates, she felt enjoyment very often during the speaking activities, mainly due to relatedness and feedback from her classmates leading to IM Knowledge. Her classmates spoke to her in English that she could understand, and this helped her to view these activities as good opportunities to learn from them (integrative process promoted by relatedness). She felt achievement very often, due largely to relatedness with her classmates and feedback from them that raised her sense of competence and IM Knowledge:

I gradually felt more success in communicating my ideas because I felt the other students were willing to listen to me and they seemed to understand at least some of what I was trying to say. So I kept trying to speak and felt more and more success at making others understand me. I realized the importance of trying to communicate even though I did not feel good at it.

Similarly, she felt that the speaking activities directly led to improvement in her own writing as it was influenced by her partners' opinions, ideas and expressions. She reported that she never felt anxiety or boredom, and that the difficulty level was just right (optimal challenge). She felt frustration a few times at not being able to say what she wanted to say, but this was mitigated by her partners' efforts to listen and understand (relatedness promoting integrative process).

##### Student C: Greatly diminished IM

His comments indicate mostly negative feelings about the speaking activities, although he enjoyed them a few times. He felt achievement a few times when he sensed his partner was able to understand his ideas, but this was rare. This low sense of achievement was due to his perception that the conversations were shallow and did not challenge him to go stretch his English ability (lack of optimal challenge leading to lack of IM Achievement), did not require much research (lack of IM Knowledge), and did not lead to improvement in his writing (lack of IM

Knowledge and IM Achievement).

Student D: Strongly enhanced IM, especially later in the course

She enjoyed the speaking activities very often due to relatedness with her classmates, which in turn fostered good informational feedback: “I felt like I was not just working hard by myself, but with my classmates. We could exchange opinions and give advice to each other, and this made it fun.” She felt achievement very often and that the speaking activities improved both her writing and speaking skill by making her think more deeply about her ideas and express them more quickly (Relatedness leading to IM Achievement, IM Knowledge, and increased sense of competence). She reported feeling frustration, anxiety and boredom a few times, but these feelings were more prevalent at the beginning of the course and gradually decreased as her sense of competence increased:

At first, speaking and orally summarizing was very difficult as I lacked confidence, so I felt frustration...My feelings especially changed during second term as I gained confidence in speaking and writing, and the class became more fun.

## 2. Timed Writing

Student A: Some hindrance of IM in the first semester, but enhanced IM in the second semester

Although she reported feeling enjoyment very often, several of her comments expressed initial frustration with this exercise. At first the time limit was only 10 minutes, and she felt frustrated that she could not finish writing what she wanted in such a short time (suggests non-optimal challenge). She was also somewhat frustrated that the teacher did not give direct feedback on the timed writings, and this lowered her enthusiasm (lowered motivation due to lack of informational feedback).

However, when the time limit became longer and the topics became more similar to those on her Step Test, her frustration changed mostly to enjoyment. In addition to improving her ability for the Step Test (IM Achievement), the topics raised her awareness of social issues (IM Knowledge) and she felt improvement at forming her own opinions (IM Achievement, increased sense of competence). The topics also became more in line with what she wanted to write about (implies

increasing sense of choice). She also felt achievement due to feeling increased competence in some writing skills that are important for her activities beyond this class. The timed writings made her more aware of weaknesses such as spelling mistakes (informational feedback from the activity itself).

Student B: Strongly enhanced IM, especially in the second semester

She felt enjoyment very often, directly linked to a growing sense of achievement:

I felt I was not good at it at the beginning, but I could enjoy it as I joined this class week by week since I could recognize my improvement. It was also refreshing because I didn't need to think too deeply about what I was writing. It became more and more fun, especially in the second semester.

She felt achievement very often and directly relates this to the fact that she could “see the amount I could write in 10 minutes increase before my eyes during the course.” In addition, she felt that timed writings helped improve her writing a lot by increasing her vocabulary and ability at self-expression and that she especially noticed this improvement over the course (IM Achievement, IM Knowledge). She felt frustration a few times due to her felt lack of competence at expressing more than simple ideas, but this frustration decreased over time as her sense of success and competence increased. She also felt initial anxiety about presenting her timed writing topic orally, but this was mitigated by the procedure of first presenting to a partner before presenting to the whole class (optimal challenge leading to sense of increased competence).

Student C: Strong hindrance of IM

He felt enjoyment only a few times, when he heard classmates' opinions or when he could write about one of his favorite topics (choice). He never felt achievement, one reason being that timed writings did not stretch his vocabulary or grammar beyond his previous knowledge (minus IM Knowledge, lack of optimal challenge). He felt frustration a few times as the time limit was too short to prepare and write what he wanted to write, and this also resulted in numerous grammar errors (implied non-optimal challenge). This frustration seems to have been increased by a perception of decreasing choice (lack of autonomy) in regard to the topics:

At first we had lots of choices in topics, but later the topics gradually became more difficult with less choice. I lacked knowledge and vocabulary about some of these topics, so it was too hard to write about them, especially at short notice and in a short time.

Student D: At first diminished IM, but later enhanced IM

Initially she did not enjoy the timed writings at all, apparently due to frustration and anxiety from perceived lack of competence. She answered on the questionnaire that she felt enjoyment often, but commented that she only enjoyed it sometimes and that at first she really “dreaded” timed writing and presenting it orally because thinking and writing about unfamiliar topics in such a short time made her feel pressured and frustrated (minus IM due to non-optimal challenge leading to frustration/anxiety). However, this changed to feelings of achievement and enjoyment as she got used to it and sensed that both her ability to do timed writings and present them orally was improving, and this made her really feel achievement despite her initial dislike. Specifically, she felt gradual improvement at writing long difficult sentences and organizing more complex ideas quickly, and this gradually caused timed writing to become enjoyable (increased IM due to increasing sense of competence).

### 3. Peer Checking

Student A: Strongly enhanced IM

She felt enjoyment very often, and commented that she enjoyed getting to know her partners (enjoyment due to relatedness). She rated achievement lower on the questionnaire (‘a few times’), but commented about it more favorably:

I wanted to receive evaluation from others. I could find out where my expressions were strange. If I was told by my partner that my expression seemed strange, I could check it. I could also learn new expressions from my partners. It was useful for improving my writing because it helped me notice problems in my writing I did not notice before, and also caused me to find more simple and clear ways of expressing ideas when a partner could not understand some of my expressions clearly (IM Knowledge and

IM Achievement related to increased sense of competence due to good informational feedback from classmates).

She, reported that she never felt frustration and found the difficulty level just right (optimal challenge).

Student B: Strongly enhanced IM

She felt enjoyment very often and achievement often, and linked them to each other and to relatedness. It was enjoyable because her partners pointed out mistakes she had not noticed herself, and they could exchange advice. She could also learn from how her partners expressed their ideas and what kinds of topics they chose (enjoyment directly related to IM Knowledge leading to increased sense of competence, implies importance of relatedness for this process). She felt low anxiety due to relatedness with her partners: “I did not feel particularly anxious because my partner was also Japanese, so we could easily understand each other’s feelings and relax.” The difficulty level was just right for her (optimal challenge). She never felt frustration, anxiety or boredom, and her feelings about peer checks did not change.

Student C: Somewhat hindered IM

He felt little enjoyment or achievement, mainly due to his perception of inadequate informational feedback from his partners:

It was not so useful because my partner was not a native speaker. My Japanese partners were about the same level in English as me, so we could only give each other very limited advice, and I didn’t get much stimulation or new knowledge that I didn’t know already ... Often my partner’s corrections of my mistakes were incorrect, so I doubted the effectiveness of this activity. A non-native speaker cannot give deep advice about nuances, usage, etc., which was what I really wanted to learn.

He added that this activity did not increase his knowledge (lack of IM Knowledge due to felt lack of adequate feedback). In addition, he felt frustrated because peer checking felt very difficult for him, and due to limited grammar knowledge, “neither partner had much confidence to check each other” (lack of felt

competence and non-optimal challenge).

Student D: Strongly enhanced IM

She enjoyed peer checking very often, due mainly to relatedness, as well as to the low pressure and trusting environment that this relatedness fostered:

I loved peer checking. It was very fun and interesting. It was a low pressure situation, so I could easily talk with my classmates and say my answers or ideas...I really enjoyed reading friends' essays. It built good communication, feelings of trust and friendship between me and my classmates. We enjoyed giving and receiving advice from each other.

Interestingly, she often uses the term “friends” where other students used the word “partners”, further suggesting the extent of her relatedness with her classmates. She felt achievement very often and especially thought that her grammar improved a lot: “I felt my grammar ability improve through reading and talking about each other’s essays, and pointing out each other’s errors” (IM Knowledge and IM Achievement, implied connection to relatedness which fostered good informational feedback from classmates). She found the difficulty level just right (optimal challenge), and never felt frustration, anxiety or boredom.

#### **4. Error Correction Worksheets**

Student A: Strongly enhanced IM

She felt enjoyment very often and related it to feedback from her classmates. She also implied its connection to an increased sense of competence at finding and correcting her own errors:

Sometimes I cannot recognize my own simple mistakes, so I felt very happy when they were pointed out. Previous teachers corrected our writing for us, but this teacher got us to find and correct our own mistakes. This activity was very fun.

She seemed to especially enjoy, like a game, the process of hunting for and discovering the mistakes in the sentences, trying to correct them, comparing

her corrections with a partner, and then presenting the results to the class. In this regard she even enjoyed the dictionary work in this activity. She also felt achievement very often, particularly when she discovered mistakes and used the dictionary successfully, and this made her feel more independent: “I realized that by using a dictionary well, I didn’t always need to rely on a native speaker—I could find and correct more of my mistakes by myself” (sense of autonomy and increasing competence). The difficulty level felt just right and she never felt frustration, anxiety or boredom (optimal challenge).

Student B: Strongly enhanced IM

She felt enjoyment and achievement very often as it improved her writing a lot:

It helped me understand typical Japanese student errors more clearly, and why they were incorrect. Previously I could sense that something was strange about the sentences, but this activity helped me understand better why they were incorrect (informational feedback from classmates, IM Achievement and IM Knowledge).

She also reported low anxiety because she didn’t feel pressured. She implied that she experienced optimal challenge and effective informational feedback in this activity, as well as low anxiety due to a low pressure environment: “I didn’t feel anxious because I didn’t feel pressure. Checking in pairs rather than just by myself felt more effective.” The difficulty level was just right (optimal challenge) and she never felt frustration, anxiety or boredom. Her feelings did not change.

Student C: Strongly hindered IM

He disliked the error correction worksheet activity for almost the same reasons as the peer check activity. He felt enjoyment only a few times, particularly when successfully finding an error. He wrote that he felt achievement often, but this was contradicted by his comments. Although he felt some improvement in finding his careless mistakes, his sense of achievement was very limited. In spite of knowing the rationale for the activity, he felt frustration very often due to finding it much too difficult (non-optimal challenge) and not being able to do it well based on his perception that he lacked sufficient grammar knowledge (low sense of competence). He also felt boredom very often, and anxiety a few times. His feelings did not change during the semester.



### Student D: Strongly enhanced IM

She really liked the error correction worksheet activity for the same reasons as she loved peer checking. She experienced enjoyment very often and she attributes this to relatedness with classmates and a low pressure environment: “As in peer checking, I can easily answer the questions in front of my classmates without worrying about whether it is correct or not” (relatedness with classmates, low pressure environment). She felt achievement very often in various areas:

Students, including me, often make important mistakes, so error correction activity is really needed, I think. My grammar ability improved, and I learned new interesting vocabulary and expressions from my classmates, and types of errors to be careful about (IM knowledge, IM Achievement due to effective informational feedback from classmates).

She felt the difficulty level was just right, and never felt frustration, anxiety, or boredom (optimal challenge). Her feelings never changed as she enjoyed the activity from the beginning.

### **Summary of the results**

From the above reported feelings of the students, it appears that the effects of the activities on their IM can be classified generally into four main categories: Strongly Enhanced IM, Initially Hindered but Later Enhanced IM, Somewhat Hindered IM, and Strongly Hindered IM. In Talking About Writing, one student (A) experienced strongly enhanced IM, two students (B and D) experienced initially hindered but later enhanced IM, and one student (C) experienced strongly hindered IM. In Timed Writings, One student (B) experienced strongly enhanced IM, two students (A and D) experienced initially hindered by later enhanced IM, and one student (C) experienced strongly hindered IM. In Peer Checks, three students (A, B, D) experienced strongly enhanced IM, and one student (C) experienced somewhat hindered IM. In Error Correction Worksheets, three students (A, B, D) experienced strongly enhanced IM, and one student (C) experienced strongly hindered IM.

Thus, it appears that overall, the IM of three of the students was enhanced by the nature of the course components, while that of one student was diminished. To investigate the reasons for these results, the next chapter will discuss them within

the framework of SDT.

## **DISCUSSION**

### **DISCUSSION OF THE RESULTS**

This chapter will first discuss the results according to how they correspond to each of the research questions. Then it will briefly deal with some implications for the research itself as well as some possible directions this line of research could take in the future.

#### **For Research Question 1: Did the main course components enhance or hinder intrinsic motivation? If so, why and to what degree did this occur?**

The very small size of the sample group precludes detailed quantification of the relative ‘IM enhancement values’ of the four main course components. However, the Likert Scale answers (Appendix 3) and the comments (Appendix 2) indicate that all four components were quite or very successful at enhancing the IM of three of the four students. If we simply rank the IM enhancement value of each activity by how often the students reported feeling enjoyment, then the highest IM enhancement seems to have been experienced in Peer Checking, followed closely by Error Correction Worksheets, then Talking About Writing, with Timed Writings in the lowest position. However, it is also noteworthy that, in the cases of Talking About Writing and Timed Writings, Student D initially experienced Hindered IM but later Strongly Enhanced IM, suggesting that, while initially IM-hindering, these two activities did the most to enhance her IM over time. This leads to the question—how and why did the various components enhance or hinder IM?

Fortunately, the results are quite informative about why the students experienced the components as IM-hindering or IM-enhancing. Similar reasons were repeatedly given for all four components. Over and over again, enhancement of IM occurred when the students felt relatedness, achievement, competence, new knowledge, optimal challenge, effective informational feedback, and autonomy (e.g. increased choice). In contrast, they experienced hindered IM when they felt anxiety, boredom or frustration due to a perceived lack of competence, non-optimal challenge, lack of achievement, lack of autonomy, lack of effective informational feedback, and lack of new knowledge. This is what we would expect based on SDT.

It is also apparent from the students’ comments that some IM enhancing factors were more prominent than others. Relatedness was by far the single most

important factor cited. Specifically, students linked their IM more to feelings of relatedness with classmates than to any other factor. Furthermore, relatedness usually promoted the other factors. Next to relatedness, the two most important factors were achievement and new knowledge, which were closely connected both to relatedness and to each other. In fact, these three factors seem to have a synergetic relationship, primarily with each other, but also with the other positive factors mentioned above, resulting in a virtuous cycle of IM enhancement.

**For Research Question 2: To what degree can SDT concepts such as 1) SDT's intrinsic motivation taxonomy, 2) the three basic needs, and 3) the extrinsic motivation continuum and the integrative process be validated or at least supported by the data collected in this study?**

Taxonomy of IM (IM Achievement, IM Knowledge, IM Stimulation)

Vallerand's IM taxonomy receives partial support from the data of this study. Of the three categories, IM Achievement was the most frequently referred to, strongly supporting its status in the taxonomy. Admittedly, its prominence was perhaps partly because it was directly addressed by two of the questions (2 and 6), but students also often referred to it outside of these questions. IM Knowledge, in spite of not being directly addressed by any of the questions, also appeared quite frequently as students related their IM to being able to learn new things.

On the other hand there was no clear reference to IM Stimulation (aesthetic or sensory enjoyment). This is partly because IM Stimulation was not directly addressed by any of the questions, but if it were as prominent an aspect of IM as Vallerand's taxonomy indicates, it should still have appeared in the comments. One explanation might be that feelings of aesthetic and sensory stimulation are less involved in academic essay writing than in activities such as sports, art or music, for instance. Within the field of writing, perhaps such sensations are more likely to be experienced in more creative types of writing such fiction and poetry than in academic essay writing.

Thus, although some elements of Vallerand's IM taxonomy are supported by the data, it does not appear to apply fully to the four students in this small sample group. In fact, since relatedness played such an important role in these students' enjoyment and also had such a synergetic interaction with IM Achievement and IM Knowledge, it is tempting to remove IM Stimulation from the taxonomy and replace it with a category titled IM Relatedness. The revised taxonomy for the IM of these students would thus become as follows:

IM = Enjoyment, due mainly to synergetic relations between feelings of:

1. Relatedness
2. Achievement
3. New Knowledge

The Three Basic Needs (relatedness, competence, autonomy)

This basic SDT conceptualization seems to be generally supported by the data, though relatedness figured more prominently than the other two, being mentioned far more frequently and emphatically than any other factor in the students' enjoyment. Thus it plays a far greater role in the enhancement of the IM of these students than it should according to SDT, which places it in a subservient role to competence and autonomy in regards to IM. This is even more surprising since one would naturally think that, especially for university-aged students in an advanced level academic writing class, feelings of competence and autonomy would be more important motivational factors than relatedness. Part of the explanation could be cultural—that is, that Japanese of all ages tend relatively to value the group and relationships within the group more than individuality, hence the high value of relatedness among these students. To what degree this explanation is relevant would have to be explored by comparing this data with similar motivation research done in Japan and other countries. Another explanation could be the very small class size; namely, that, with the exception of Student C, they formed a very close bond through the frequency of their participating together in the activities. Finally, it could also be the case that three of these students just happened to have individual personalities that naturally melded with each other. Unfortunately, while these three students' answers show that they highly value relatedness and that it plays a predominant role in their motivation, they do not provide information as to whether it reflects a cultural trend or just their individual personalities as members of this particular small group. Although this issue in itself would make for a fascinating line of study from a socio-cultural or from an individual differences perspective, it is beyond the scope of this study.

Although not as prominent as relatedness, competence also figured very strongly in the data, particularly in students' frequent references to their sense of improvement and achievement. This sense of achievement also increased as they felt increasing competence in their writing and speaking, and as they realized that the feedback from their classmates and teacher contributed to their improved writing skill and new knowledge, again indicating the synergetic nature of these

various factors. These references to a sense of increasing competence contributing to enhanced IM are also in line with the predictions of SDT.

On the other hand, there were fewer direct references to feelings of autonomy than expected, perhaps due in part to autonomy not being directly targeted by any of the questions. Yet, autonomy or allusions to autonomy did appear several times. For example, Student A commented that her enjoyment increased as she felt she was being given increasing choice in the selection of topics. Negatively, Student C felt increasing frustration due to his perception that his choice of topics was becoming more restricted. Some comments about feeling low pressure could also be interpreted as allusions to feeling free from being motivated by external pressure, that is, control, from the teacher. Perhaps the most direct reference to motivation being enhanced by a sense of autonomy was Student D's comment regarding the class generally:

Sometimes I felt frustration and anxiety because the work was hard and tiring. But I think it is no problem. Your whole class is comfortable because you are not too strict, and this made me want to do my best even more. Some hard work is natural because this is a writing class.

SDT claims that the inevitably unpleasant and hence non-intrinsically motivating aspects of education can be mitigated if the teacher adopts a non-controlling interpersonal style that supports the students' sense of autonomy. This student's comment above indicates that while she at times felt a lack of IM due to the difficulty she experienced in some activities, she also sensed that she was in a non-controlling environment, and this enhanced her sense of autonomy and hence her motivation to continue to try hard in the face of adversity. This exemplifies the behavioral outcome predicted by SDT when students are in an educational environment that is characterized a non-controlling interpersonal atmosphere.

In short, although the three basic needs received unequal emphasis in the data, they are all present in varying degrees. Thus we can conclude that the SDT postulate of the three basic needs is generally supported, although not in as balanced a manner as expected.

#### The Extrinsic Motivation Continuum and the Integrative Process

Although the main focus of this study was the relation between the activities

and IM, it was expected that a significant amount of data supporting the concepts of the EM continuum and the integrative process would emerge in the students' comments. Surprisingly, there was less such data than was hoped. As we saw above, students did comment often about changes of feeling, but almost all of these corresponded to enhanced IM, not to progress along the EM continuum from externally regulated behavior towards more self-determined behavior. Perhaps this lack of data regarding EM can be attributed to the already relatively high level of IM towards learning English generally that all four of the students appeared to have from the beginning. It is clear from their comments that they enjoy studying English generally, and they are all relatively good at it. Also, this was an elective advanced level course that they freely chose to enroll in. This in itself would suggest that the primary issue for them was the enhancement or hindrance of their already existing intrinsic motivation, and that issues related to extrinsic motivation and the integrative process would be less relevant to them.

Some limited data regarding promotion of the integrative process did emerge from Student D's comments about timed writings. Initially she actually "dreaded" the timed writings and speaking about them due to her sense of low competence, so her initial motivation to do them seems to have been mainly external regulation—the expectation of the teacher and her classmates, or introjected regulation—her internal sense that she *ought* to do them. However, as her sense of competence increased, her attitude towards doing the timed writings became more positive, demonstrating the role that an increasing sense of competence plays in promoting the integrative process. This is an isolated but heartening example of data that supports the SDT concepts of EM and the integrative process.

Student C also provides a very brief and vague allusion to the integrative process when he mentions in his comments about the course generally (Appendix 2) that his main reason for taking the course initially was to get academic credit and that this feeling changed to wanting to attend the classes in order to participate in discussions with his classmates. However, he repeats in most of the categories that his negative feelings about the course components did not change for the better, so he is mainly an example of the integrative process not occurring.

The situation of Student C raises another problem regarding the applicability of SDT to the data. Like the other three students, he seemed to have a strong IM orientation towards English study from the beginning; yet, unlike them, he experienced the course components mainly as IM hindering. As noted above, his comments indicate that this was because he felt a lack of autonomy in the choice

of topics, non-optimal levels of challenge, and a lack of effective informational feedback, and in these regards his motivational outcomes are in line with the predictions of SDT. However, there remains another important question—why did he experience such strong hindrance of his IM in the same activities which the other students experienced as strongly IM enhancing? If we look at his data from outside the SDT perspective, another important reason emerges. Specifically, in his comments, he stated several times his belief that it was not possible to get accurate and effective feedback from his classmates in the peer checks because they are not native speakers. Likewise, he believes that his lack of knowledge about English grammar made it impossible for him to benefit much from trying to correct the sentences on the common error correction worksheets. Instead, he believed he could learn much more effectively by approaching native speakers such as the teacher or international students. In short, a very important factor behind his hindered IM was his own beliefs about how language learning occurs.

However, such a cognitive factor as one's beliefs about language learning does not have a basis in the central core of SDT theoretical concepts, which are much more concerned with affective factors. This seems to expose an important fundamental theoretical weakness in SDT, namely, that its emphasis on the role of the three basic psychological needs and its ensuing emphasis on the affective aspects of motivation are too reductionist, and cannot in themselves provide an adequate conceptualization of such a complex topic as motivation. While the core theoretical concepts of SDT do not explicitly preclude learners' beliefs from playing a role in motivation, they do not offer a clear theoretical basis for expecting that they would play a significant role. Specifically, in the case of Student C, SDT at its core does not provide a theoretical basis that adequately predicts or explains the role of his beliefs about learning in his motivation. This is an important theoretical shortcoming in a theory that claims comprehensiveness.

To sum up so far, most of the core theoretical concepts in SDT, with the exception of IM Stimulation, EM and the integrative process, receive significant if varying degrees of support from the data of this study. Furthermore, in the cases of those important SDT concepts where it was noted that supporting data is lacking, it should also be pointed out that there was no data indicating that they are not applicable to second language writing education. Therefore the data generally reaffirms, though not as thoroughly and conclusively as hoped, that SDT is a valid construct for researching motivation in second language education. However, the data of one student exposes a significant short-coming of SDT, namely its failure

to provide an adequate theoretical basis for predicting and explaining the role of motivational factors that lie outside the purview of the three basic psychological needs. Therefore it must be concluded that, while SDT provides a valid theoretical construct for researching motivation in L2 learning and contributes to our understanding of many of the factors involved in L2 motivation, it is not as comprehensive a theoretical construct as is claimed, and therefore needs to be used in conjunction with other theories of motivation.

## DISCUSSION OF IMPLICATIONS FOR RESEARCH

### Limitations of the Study

Two especially significant limitations in this research project have become apparent.

The first relates to its latitudinal nature. The questionnaire was conducted only once, near the end of the semester, and the follow-up interviews shortly after. In both, students were asked to recall and report how they felt during the whole year-long course. Obviously, it is difficult to accurately report one's feelings and to recall feelings that occurred months previous. In addition, feelings, including those related to motivation, fluctuate and change over time (Dornyei 2001, 41-42). While the students seemed to recall quite vividly how they felt and gave some useful data, it must be recognized that this data is a very partial representation of their reality. A more longitudinal approach would have resulted in more detailed and complete data about changes in motivation and their causes. Specifically, it would have been easier to gauge changes in feelings by conducting the same questionnaire at least twice, perhaps at the end of both semesters. Additional longitudinal data showing change over time could have been gained from periodically getting students to write journals recording how they felt about the various aspects of the course. This information could have been further supplemented by the teacher keeping notes of relevant oral comments from students.

The second major limitation is the small sample size. Gathering the data only at the end of the term resulted in an exclusive focus on the four students who completed the course. Therefore the feelings of the students who dropped out of the course for various reasons could not be studied. If the teacher had successfully tracked and gathered data from these students, it would have given a wider source of information about how the course activities affected students' motivation-

related feelings.

However, despite these limitations, this small-scale qualitative research project did yield results that provide useful insights into how and why the main components of the writing class affected IM. It also provided a small window on the applicability of SDT as a theoretical construct for researching motivation in second language writing. Furthermore, it produced information that will be useful for better enhancing IM in future writing courses. And finally, as will be explained in the next section, it gives a basis for further research on motivation in academic writing classes.

### **Directions for Future Research**

The results of this research project also suggest some interesting ideas for future SDT action research projects, including the following:

1. A similar but more longitudinal research project with a larger sample group using more instruments for gathering data. This would rectify the above described deficiencies by gathering data from a broader range of students through periodic questionnaires, journaling activities and notes from individual teacher-student meetings. Due to the more open-ended nature of journaling and teacher-student meetings, it could also provide important data that lies outside the boundaries of the more targeted nature of questionnaires and interviewing.
2. A similar type of study, but focusing on a beginner or intermediate writing class. As mentioned earlier, one surprise of this study was the dearth of data about whether students were experiencing the integrative process. It was speculated above that the students who completed this advanced course had a relatively high level of IM from the beginning, so they had less need of the integrative process. However, one would expect that in a lower level course, especially one that is mandatory, there would generally be a lower level of IM, requiring more emphasis on strategies that promote the integrative process.
3. An action research project that compares key theoretical concepts of SDT with those of motivation constructs already established in the SLA field, with a view to exploring how they reinforce and elaborate each other on both the theoretical and practical levels. For example, this research project yielded significant data on the role of relatedness in enhancing IM. As mentioned in the literature review, SDT strongly endorses cooperative learning based on the theoretical concept of the need for relatedness. This naturally invites comparison with the emphasis in L2 learning motivation literature on cooperative learning in second language classrooms (e.g.

Crandal 1999; Dornyei and Malderez 1999; Dornyei and Murphy 2003).

### **Conclusion**

This paper set out to apply Self-Determination Theory to the field of second language writing education. To this end it presented a small-scale action research project that aimed primarily to investigate the impact of the components of a second language academic writing class on the students' intrinsic motivation, and secondarily to see if the study provides support for several key concepts of SDT such as its IM taxonomy, the three basic needs, the extrinsic motivation continuum and the integrative process.

From the results it became clear that the main components of the course did indeed have a positive impact on the IM of most of the students, mainly because they fostered the students' feelings of relatedness, achievement, new knowledge, increasing competence and other factors that, according to SDT, enhance IM. Furthermore, these various factors were seen to have a very synergetic relationship with each other. On the other hand, it was seen that when IM was hindered, it was due to feelings of non-optimal challenge, lack of achievement, lack of competence, and lack of new knowledge. These negative results are also in line with what is predicted by SDT. From this we can conclude that the SDT conceptualization of IM is useful for describing the cause and effect relationship between various aspects of the learning environment and the enhancement or hindrance of IM.

However, some surprises were also noticed, such as the relative prominence of relatedness in enhancing IM together with the relative lack of references to autonomy, the complete lack of references to IM stimulation, and the small number of references to extrinsic motivation and the integrative tendency, which, although not directly addressed by the questions, were expected, due to their fundamental role in SDT, to get much more reference in the data than they did. Furthermore, some data emerged showing the importance of student beliefs as an important factor in student motivation, and it was noticed that, while the core theoretical concepts of SDT emphasize the affective aspects of motivation, they do not adequately account for student beliefs and other cognitive factors. Thus it can be concluded that the results of this particular study support most of the key theoretical concepts of SDT, but in a less than balanced or comprehensive manner.

Therefore it can be concluded that SDT is a limited but useful theoretical construct for researching motivation in second language education. It is hoped that more research exploring both its limitations and usefulness will be conducted by

language teachers in the future.

Note: I would like to thank my colleague, Ms Kayo Yoshida, for her valuable assistance in this research project, especially for conducting the student interviews in Japanese.

### Bibliography

- Brown, H.D. (2001) *Teaching By Principles*. 2<sup>nd</sup> ed. New York: Longman.
- Brown, H.D. (2000) *Principles of Language Learning and Teaching*. 4<sup>th</sup> ed., New York: Longman.
- DeCharms, R., (1968) *Personal Causation: The internal affective determinants of behavior*. New York: Academic Press.
- Deci, E.L., and Moller A.C. (2005) "The Concept of Competence: A Starting Place for Understanding Intrinsic Motivation and Self-Determined Extrinsic Motivation" in Elliot and Dweck, 579-597.
- Deci E.L., and Ryan R.M. (1985) *Intrinsic Motivation and Self-Determination in Human Behavior*. New York: Plenum Press.
- Deci E.L., and Ryan R.M., eds., (2002) *Handbook of Self-Determination*. New York: The University of Rochester Press.
- Deci E.L., and Ryan R.M. (1996) 'Need satisfaction and the self-regulation of learning'. *Learning and Individual Differences*. Vol. 8, No. 3, 165-183).
- Deci, E.L., Vallerand, R.J., Pelletier, L. G., Ryan, R. M. (1991) 'Motivation and Education: the Self-Determination perspective'. *Educational Psychologist*, 26 (3 and 4), 325-346.
- Dornyei, Z. (2005) *The Psychology of the Language Learner: Individual Differences in Second Language Acquisition*. New Jersey: Lawrence Erlbaum Associates Inc.
- Dornyei, Z. ed. (2003a) *Attitudes, Orientations, and Motivations in Language Learning*. Malden: Blackwell Publishing.
- Dornyei, Z. (2003b) *Questionnaires in Second Language Research: Construction, Administration, and Processing*. London: Laurence Erlbaum Associates.
- Dornyei, Z. (2001) *Teaching and Researching Motivation*. Essex: Pearson Education Limited.
- Dornyei, Z. and Murphy T. (2003) *Group Dynamics in the Second Language Classroom*. Cambridge: Cambridge University Press.

- Dornyei, Z. and Malderez, A. 'The Role of Group Dynamics in Foreign Language Learning and Teaching' in Arnold (1999), 155-169.
- Elliot, A.J., and Dweck, C.S., eds. (2005) *The Handbook of Competence and Motivation*. New York: Guilford Press.
- Guay, F., Ratelle, C.F., Chanal, J. (2008) 'Optimal learning in optimal contexts: the role of self-determination in education'. *Canadian Psychology*, Vol. 49, No. 3, 233-240.
- Kirk, S. (2010) 'Self-Determination Theory and Education: An Overview.' *Gengo to Bunka: The Journal of the Institute of Language and Culture*, No. 14, 35-58.
- Noels, K.A., Pelletier, L. G., Clement, R., Vallerand, R. J. (2003) 'Why Are You Learning a Second Language? Motivational Orientations and Self-Determination Theory' in Dornyei (2003), 33-63.
- Noels, K.A. (2003) 'Learning Spanish as a Second Language: Learners Orientations and Perceptions of their Teachers' Communication Style' in Dornyei (2003), 97-136.
- Reeve, J. (2005) *Understanding Motivation and Emotion*. New Jersey: Wiley and Sons.
- Rigby, C. S., Deci, E. L., Patrick, B. C., Ryan, R. M. (1992) 'Beyond the intrinsic-extrinsic dichotomy: self-determination in motivation and learning'. *Motivation and Emotion*, Vol. 16, No. 3.
- Ryan, R. M., & Weinstein, N. (2009) 'Undermining quality teaching and learning: A self-determination theory perspective on high-stakes testing'. *Theory and Research in Education*, 7, 224-233.
- Ryan, R. M., and Deci, E. L. (2002) 'An Overview of Self-Determination Theory: An organismic-dialectical perspective' in Deci and Ryan (2002.), 3-33.
- Ryan, R. M., and Deci, E. L. (2000) 'Intrinsic and extrinsic motivations: Classic definitions and new directions'. *Contemporary Educational Psychology* 25, 54-67.
- Ryan, R. M. and Powelson, C.L. (1991) 'Autonomy and relatedness as fundamental to motivation and education'. *The Journal of Experimental Education*, Vol. 60, No. 1. 49-66.
- Ryan, M. R., and Connell, J. P. (1989) 'Perceived Locus of Causality and Internalization: Examining Reasons for Acting in Two Domains'. *Journal of Personality and Social Psychology*, 57, 749-61.
- Vallerand, R. J., Blais, M. R., Briere, N. M., & Pelletier, L. G. (1989) 'Construction

and validation of the motivation toward education scale'. *Canadian Journal of Behavioural Science Revue Canadienne Des Sciences Du Comportement*, 21, 323-349.

Vallerand, R. J., and Ratelle, C. F. (2002) 'Intrinsic and extrinsic motivation, a hierarchical model' in Deci and Ryan (2002), 37-63.

Vansteenkiste, M., Lens, W., and Deci E. (2006) 'Intrinsic versus extrinsic goal contents in self-determination theory; another look at the quality of academic motivation'. *Educational Psychologist*, 41 (1) 19-31.

White, R. W. (1959) 'Motivation reconsidered: the concept of competence'. *Psychological Review*, 66, 297-333.

Williams, M., and Burden, R. L. (2007) *Psychology for Language Teachers*. Cambridge: Cambridge University Press

## APPENDIX:

### FEELINGS QUESTIONNAIRE FOR ADVANCED WRITING COURSE

**Instructions:** The purpose of this questionnaire is to find out how the main activities of our writing class made you feel. Please notice that there is also a space for you to add comments and examples that give additional information about your answers. Your answers will be kept confidential, so please answer honestly and clearly. Please write in JAPANESE. Thank you for your cooperation.

#### A. THE WRITING COURSE GENERALLY

- 1) I felt enjoyment  
1. never   2. a few times   3. often   4. very often
- 2) I felt achievement  
1. never   2. a few times   3. often   4. very often
- 3) I felt frustration  
1. never   2. a few times   3. often   4. very often
- 4) I felt anxiety  
1. never   2. a few times   3. often   4. very often
- 5) I felt boredom  
1. never   2. a few times   3. often   4. very often
- 6) I felt that my writing skill improved in this course  
1. not at all   2. a little   3. somewhat   4. a lot
- 7) The course felt  
1. very easy   2. somewhat easy   3. just right   4. somewhat difficult  
5. very difficult.
- 8) My feelings about this course changed during the course  
1. not at all   2. a little   3. somewhat   4. a lot

Comments

#### B. THE MAIN ACTIVITIES IN THE WRITING COURSE

**1. Talking with classmates about our writing** (Oral presentation/discussion of writing topics and of essay progress, discussion of error corrections, etc.)

- 1) I felt enjoyment  
1. never   2. a few times   3. often   4. very often

- 2) I felt achievement  
1. never 2. a few times 3. often 4. very often
- 3) I felt frustration  
1. never 2. a few times 3. often 4. very often
- 4) I felt anxiety  
1. never 2. a few times 3. often 4. very often
- 5) I felt boredom  
1. never 2. a few times 3. often 4. very often
- 6) I felt that talking with classmates about our writing improved my writing skill  
1. not at all 2. a little 3. somewhat 4. a lot
- 7) Talking with classmates about writing felt  
1. very easy 2. somewhat easy 3. just right 4. somewhat difficult  
5. very difficult.
- 8) My feelings about talking with classmates about writing changed during the course  
1. not at all 2. a little 3. somewhat 4. a lot

Comments:

## 2. Timed writing (speed writing)

- 1) I felt enjoyment  
1. never 2. a few times 3. often 4. very often
- 2) I felt achievement  
1. never 2. a few times 3. often 4. very often
- 3) I felt frustration  
1. never 2. a few times 3. often 4. very often
- 4) I felt anxiety  
1. never 2. a few times 3. often 4. very often
- 5) I felt boredom  
1. never 2. a few times 3. often 4. very often
- 6) I felt that the timed writings improved my writing skill  
1. Not at all 2. a little 3. somewhat 4. a lot
- 7) The timed writings felt  
1. very easy 2. somewhat easy 3. just right 4. somewhat difficult  
5. very difficult.
- 8) My feelings about the timed writings changed during the course  
1. not at all 2. a little 3. somewhat 4. a lot

Comments:

## 3. Peer Checking each other's drafts

- 1) I felt enjoyment  
1. never 2. a few times 3. often 4. very often
- 2) I felt achievement  
1. never 2. a few times 3. often 4. very often
- 3) I felt frustration  
1. never 2. a few times 3. often 4. very often
- 4) I felt anxiety  
1. never 2. a few times 3. often 4. very often
- 5) I felt boredom  
1. never 2. a few times 3. often 4. very often
- 6) I felt that peer checking helped improve my writing skill  
1. not at all 2. a little 3. somewhat 4. a lot
- 7) Peer checking felt  
1. very easy 2. somewhat easy 3. just right 4. somewhat difficult  
5. very difficult.
- 8) My feelings about peer checking changed during the course  
1. not at all 2. a little 3. somewhat 4. a lot

Comments:

## 4. Working on common error correction worksheets (first individually, then as group)

- 1) I felt enjoyment  
1. never 2. a few times 3. often 4. very often
- 2) I felt achievement  
1. never 2. a few times 3. often 4. very often
- 3) I felt frustration  
1. never 2. a few times 3. often 4. very often
- 4) I felt anxiety  
1. never 2. a few times 3. often 4. very often
- 5) I felt boredom  
1. never 2. a few times 3. often 4. very often
- 6) I felt that working on the common error-correction worksheets helped improve my writing skill  
1. not at all 2. a little 3. somewhat 4. a lot
- 7) Working on common error-correction worksheets felt  
1. very easy 2. somewhat easy 3. just right 4. somewhat difficult



5. very difficult

8) My feelings about common error-correction worksheets changed during the course

1. not at all   2. a little   3. somewhat   4. a lot

Comments: