

Using Linguistic and non-Linguistic forms to facilitate communication practice in English Communication classes

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Abstract

This paper reports on a study related to linear and non-linear communication activities in first year English communication classes at Nagasaki University.

Previously collected 1st year English communication student feedback reflects low interest and motivation to write narratives in both English and Japanese.

Students report that combining English narrative writing with Mind Mapping and Visual Mapping is more interesting, more useful and challenging. Data also reflects that the perception of imagination varies depending on the faculty. Visual mapping is an effective method to exercise imagination.

Non-linear activities promote learner motivation to improve the quality of linear and non-linear communication.

Keywords: linguistic, meaningful learning, narrative, non-linguistic, process

1. Introduction

The aim of this study is to trial visual tools for constructing representations of knowledge that can be integrated with linguistic (linear or written) representations of knowledge. It is estimated that visual tools¹ would support learners to take personal information and examples which would be otherwise static and transform their ideas into active maps of knowledge. Buzan, Hyerle and Margulies offer up the following ways in which maps would offer many benefits:

- Constructing meaning;

- Remembering meaning;
- Communicating meaning;
- Negotiating meaning;
- Assessing and reforming meaning;
- Connecting meaning to familiar and hitherto unfamiliar ideas;

IN ADDITION TO:

- Rediscovering information;
- Rediscovering experiences;
- Rediscovering ideas;
- Re-connecting to new and old ways of understanding.

Mapping in particular is estimated to be the exercise in which our communication students can gain mental fluency to transform information into meaningful and relevant knowledge. Instructors can then scaffold the map activity with interactive and interpersonal speaking, active listening and reading. The famous cartologist, James H. Wandersee, states that cartography links perception, interpretation, cognitive transformations, and creativity². Furthermore, mapping serves four basic purposes which can be related to students in our communication classes working solo, in pairs or in discussion groups:

1. To challenge one's assumptions;
2. To recognize new patterns;
3. To make new connections; and
4. To visualize the unknown.

The following is a list of common dichotomies that (English communication class) instructors face:

Content or Process?

Factual Information or Conceptual Knowledge?

Linear or Holistic thinking?

Analytical or Creative?

Recall or Understanding?

The Basics or Higher-Order Thinking?

Classes of diverse learners require differentiated instruction and benefit greatly from instruction that supports developing habits of mind and high-order thinking according to learning specialists and current brain research.³ Therefore, more activities that exercise the right side of the above dichotomies should be incorporated into (English communication) class design.⁴

Another reason to incorporate more non-linear/non-linguistic, visual representations of knowledge is that they are likely more easily accessible to more learners than linear/linguistic representations. Researchers believe that the human brain receives 70% of information from our environment through our eyes and that humans make and store images and pictures of this information in our brains. Furthermore, the majority of our students, though not all, are predominantly visual learners (followed by aural and kinesthetic learner types).⁵ Media and technology has been steadily increasing the use of keywords that are associated with images, feelings, smells, and sounds. Similarly, such keywords and associations might be used in activities which integrate “the basics” with high-order processes and promote better retention, faster understanding, awareness of connections to personal experiences, professional goals and global themes. For instructors teaching large classes, visual representations would therefore be more accessible to a variety of learner’s with diverse experiences, varying levels of motivation and learner skills and diverse personal cultures and personal interests.

English Communication class sizes at Nagasaki University vary between thirty-five and forty-five students with students of higher and lower skill sets and motivation being mixed together. The researcher wanted to try a writing activity that would 1) Challenge English communication students to write longer and what could be considered more meaningful - intelligent, emotional and innovative- essays. 2) Exercise a wider range of communication through invention, and 3) Integrate speaking, (active) listening and reading activities in interactive ways in the learning laboratory.

The researcher’s first hypothesis is two-fold: that writing activities would be more successful if 1) There were a focus on writing about something they were familiar with in their lives, and 2) The risk of failure were low. The hypothesis was that a non-fail narrative essay related to the students’ general experiences in the present time would ensure high participation.

A second hypothesis was that if the writing practice depended solely on the students’ personal experiences, plagiarism and cheating, which is quite common among 1st year students according to data collected and presented by CALL language instructors in our center at recent FD workshops, would be reduced.

Students were asked to write two essays. The students were given nine quotes from Albert Einstein or were allowed to select their own quote as a theme for each essay. The reason for choosing Einstein’s quotes was that virtually all students were familiar

with him. Before the assignment, there were discussions in class, which centered on the meaning of the quotes and on the duality that each of the quotes represented. These quotes were chosen to encourage the students to not only think and reason more critically, but also to exercise empathy and increase attention to the particulars of their experience rather than on generalizations. Student writers were also encouraged to choose a stance or point of view towards the quote: agree or disagree. Student writers were challenged to present an example that supports the opposite view and then present personal experiences and specific personal details to defend their point of views. These stipulations would serve to increase the complexity of the messages conveyed and enable discussions with student writers who had similar points of views or opposite points of views.⁵ When these stipulations were not implemented, the researcher noticed how student writers generally tended to present simplistic and rhetorical points of views.

The essays were required to be written in six paragraph narrative style. Paragraph one introduced the meaning of the quote, the duality of the quote and the writer's stance or point of view; paragraph two related the quote to at least one of the students' personal experiences; paragraph three related the quote to a required previously read text; paragraph four related the quote to their major area of study; paragraph five related the quote to their hobby or passion; and paragraph six was the conclusion.

The third hypothesis was that the activity would place greater emphasis on the process of writing than on the final product. The researcher estimated that the writing process would benefit from non-linear, also called non-linguistic, forms of communication practice. Indirectly, these alternate forms would give students more varied opportunities to invent, review, reflect, re-interpret and re-use their personal experiences, personal details and ideas, impacting positively on the quality of meaning and on high order thinking skills. In order to promote this effect, mapping activity was further supported during class time by scaffolding narrative essay writing with associated speaking, (active) listening, reading activities and other non-linear forms such as Mind Maps. In other words, learners spent more class time interacting with other students about their narrative essay quote and paragraphs, adding details and ideas to their maps and notes to their rough essay drafts in English and Japanese. Paragraphs were typed in English outside of class time for homework before the essay interactive reading and peer evaluation day. Essays were collected at the end of the essay interactive reading and peer evaluation day by the instructor. Any late essays were automatically graded 55%, ensuring that no student could fail this activity nor

pass easily without some genuine effort.

Mind Maps and metaphorical visual maps were used to support in class authentic speaking and active listening activities. Associated speaking with symbolic representations of the essay message in the form of Mind Maps and Visual Maps is less predictable, and requires more interpretative and spontaneous engagement by the speaker and active listener/viewer. This activity promotes authentic speaking and active listening among English learners with high skill and high motivation. English learners with low skill and low motivation also benefit because they are more quickly able to see and understand the symbolic representations than written text.

The Mind Map according to Buzan is a key word, picture and symbol representation of something. The five rules that govern Mind Maps are: 1. A main theme in the middle; 2. Main points are on thick lines drawn around the main theme; 3. Keywords and pictures associated with each main point are on lines that go from thicker to thinner; 4. Printing goes from larger near the center to smaller on the outside; and 5. New keywords, pictures and symbols can be added to any main point easily.⁶ Metaphorical visual maps are not defined by organizational rules as in Mind Maps.⁷ Main themes are suggested by pictures and symbols primarily and keywords secondly. The pictures are representations of the key message and often have associations that increase the potency of meaning. The layout and design of metaphorical visual maps is highly individual although generally the main themes are found in the middle of the paper.

The metaphorical visual map activity involved choosing the keywords of the essay theme and paragraphs and then choosing a concrete object to represent the outline and pictures to represent keywords and ideas. Initially a house and a bicycle were used as generic examples to introduce the metaphoric representation of narrative essay paragraph messages. As learners became familiar with the metaphorical representations the researcher challenged the learners in each faculty to choose objects that could be related to their major.

The researcher used a hand drawn picture of a Mt. bike as an example. It was divided into parts and each part was labeled with a part of the essay: The handlebars of the bike = the meaning and paradox of the essay theme; the front tire = the English graded reader; the back tire = the major area of study; the chain = experience; the brakes = interest/passion and the light is the conclusion. Smaller pictures related to each part of the essay are placed in and around the metaphor.

The illustration is the essay cover page. A fourth hypothesis is that these metaphoric

visual maps will provide the writers with the opportunity to interpret their ideas in different ways and give increased context to the readers as they see the writer's thought processes. The researcher predicted that there would be interest in the metaphor representations of their essays when attention was directed towards the use of metaphor in songs (both Japanese and English). Weather metaphors and metaphors for love were exemplified during class time using YouTube and a search engine to listen to live performances and read lyrics. These types of ground breaking activities ensured that more students were acquainted with how figurative language, in particular metaphor, operated in subtle and pervasive ways to communicate emotions in non-linear, non-linguistic ways.

2. Methods

2.1 Study Site and Participants

This study was conducted at Nagasaki University in November 2010. Two hundred and eighteen first year, first semester students in six different faculties participated in this study.

2.2 Procedure

This study used convenience sampling in the six different English Communication classes. Data was collected by anonymous self-reported questionnaires with closed-ended questions. Questions were written in English and orally translated into Japanese by the researcher and by class members.

2.3 Content of Questionnaire

The questionnaire contained questions about demographic characteristics such as age and gender. Descriptive data was collected about the narrative essay writing and metaphorical visual map activity. Three questions were asked: 1) Was your essay writing experience useful? 2) Did you feel that the metaphorical visual map technique was interesting? 3) Were you satisfied with your metaphorical visual map?

Answers were scaled using a five-point Likert-type scale. Each of the three questions uses the same scale with different categories.

The categories for question 1 were your essay writing experience useful were: Very Useful = 5; Useful = 4; Ok = 3; Not Useful = 2; Absolutely Not Useful = 1.

The categories for question 2 were: Very Interesting = 5; Interesting = 4; Ok = 3; Not Interesting = 2; Absolutely Not Interesting = 1.

The categories for question 3 were: Very Satisfactory = 5; Satisfactory = 4; OK = 3; Not Satisfactory = 2; Absolutely Not Satisfactory = 1.

Question number four asked about the importance of imagination: Is imagination important? The fourth question used a simple yes or no answer.

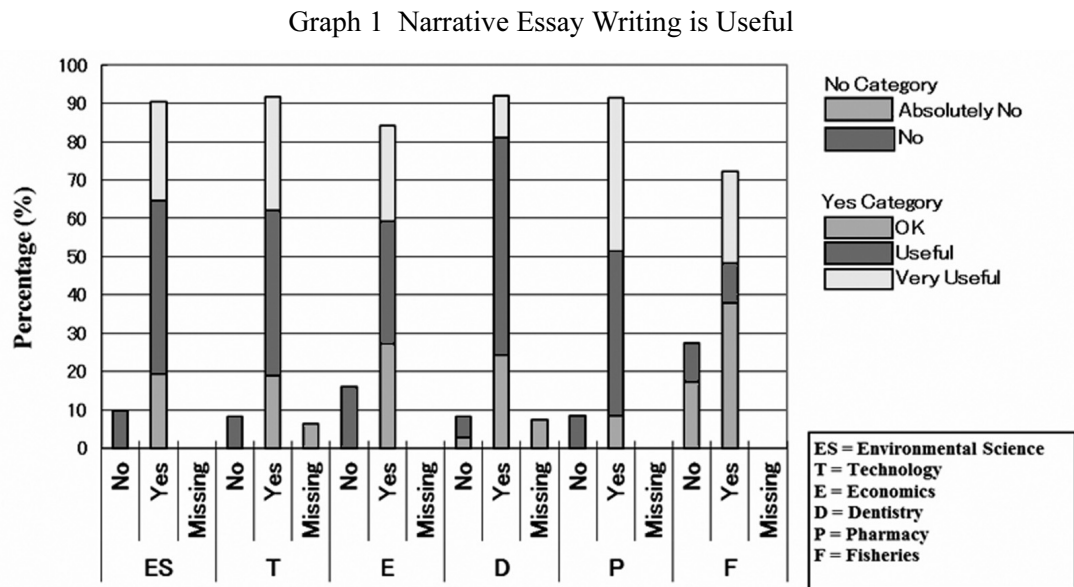
2.4 Analysis

Descriptive data is shown by percentage.

3. Results

75 females and 141 males completed questionnaires for the study.

Graph 1 (ES = Environmental Science; T = Technology; E = Economics; D = Dentistry; P = Pharmacy; F = Fisheries) shows the usefulness of the narrative essay writing by faculty. All students rated the usefulness at over 80%, with the exception of Fisheries (F) which rated it at about 70%.

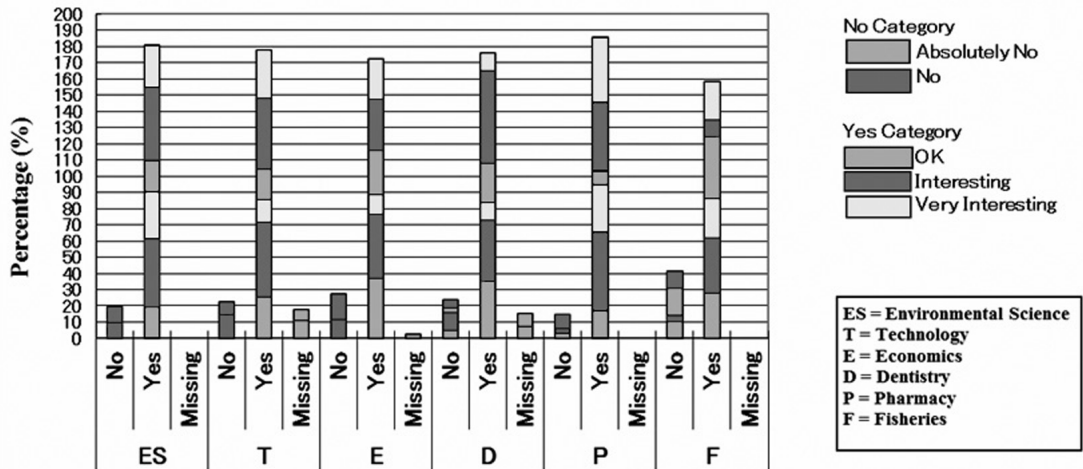


Graph 2 shows the interest in the metaphoric visual map technique. Over 80% of all students in all faculties showed an interest in the metaphoric visual map technique.

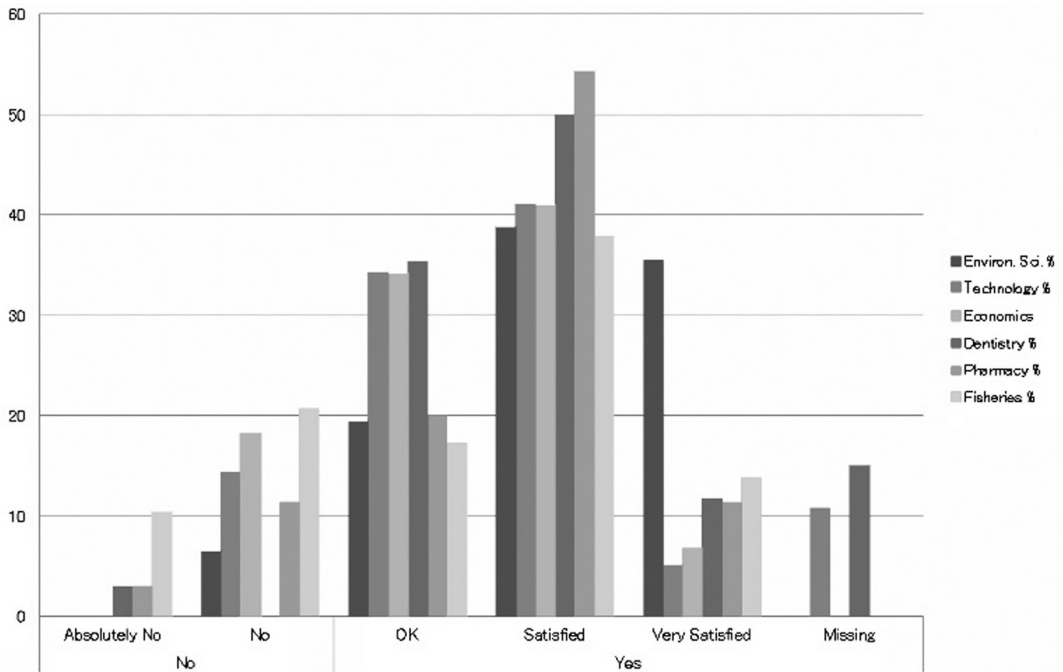
Graph 3 shows the comparison of essay cover page satisfaction. High levels of satisfaction were reported by students in the faculties of Environmental Science (ES) (93.6%), Technology (T) (80.4%), Economics (E) (81.1%), Dentistry (D) (97.1%), and Pharmacy (P) (85.7%).

The Faculty of Fisheries (F) shows a lesser degree of cover page satisfaction (68.9%).

Graph 2 Narrative Essay Writing is Interesting



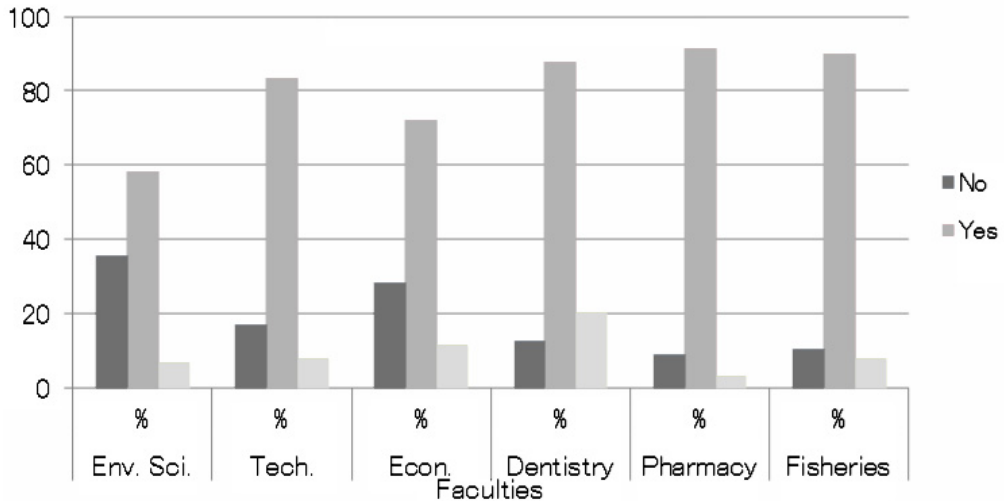
Graph 3 Visual Map Cover Page Satisfaction



Graph 4 shows the comparison of answers to the question, “Is imagination important?” The highest levels of affirmative responses were reported by the Faculty of Pharmacy (91.2%), and students in the Faculty of Fisheries (89.7%). 87.5% of students in the Faculty of Dentistry answered the question affirmative. Students in the

Faculty of Technology (Tech.) answered 83.3% affirmative. Students in the Faculty of Economics (Econ.) (71.8%) and Environmental Science (Env. Sci.) (58.1%) report that the imagination is important to a lesser degree.

Graph 4 Is Imagination Important?



Eight students in the Faculty of Dentistry did not answer the question; Five students in the Faculty of Economics (Econ.) did not answer the question; three students in the Faculty of Technology (Tech.) and in the Faculty of Fisheries did not answer the question; two students in the Faculty of Environmental Science (Env. Schi.) did not answer the question and one student in the Faculty of Pharmacy did not answer the question.

Students were from a variety of faculties, including Technology and Fisheries which are considered hard sciences. Among the 218 students sampled, 75 were female and 141 were male. With respect to the first question regarding the perceived usefulness of the essay writing activity, 139 students reported that it was useful or very useful and 48 reported that it was OK. (See Graph 1) With respect to the second question regarding the level of interest in the essay metaphor, 128 students reported feeling that it was interesting or very interesting and 58 reported that it was OK. (See Graph 2) With respect to the third question regarding the level of satisfaction with their cover page, 122 students reported being satisfied or very satisfied and 94 reported that it was OK. With respect to the last question regarding the importance of imagination, 162 students reported Yes, and 38 students reported No, and 18 students

did not answer the question.

This data is an indication that narrative essay writing with metaphorical visual maps was an activity that almost all students reported on positively. (See Graphs 1 & 2) In particular levels of satisfaction with essay visual map cover pages was higher than expected. This data is important to consider because class design was focused on including activities that increased student autonomy and student interaction in order to develop complexity through meaningful learning activity. Therefore, high levels of personal satisfaction reported by students are considered to be generally positive indications of success.

Students in Fisheries reported that the activity was least useful and least interesting. One reason for this might be that these students in this faculty generally tend to be lower skilled students that have a lower intrinsic motivation to learn English. Csikszentmihalyi⁸ discusses similar findings in other studies of hard science students in which their focus tends to be on the product of learning rather than the process of learning and therefore, resulting in feeling less enjoyment of the activity.

Students in the faculty of Fisheries reported the lowest levels of interest and satisfaction yet a higher number of students reported that imagination was important. The lack of enjoyment is reflected in the data from the faculty of Fisheries in which students reported that the essay metaphor activity was interesting, but also that they felt a low level of satisfaction with their essay cover pages. In fact, 10 of the 29 visual map cover pages for the first essay designed by the Fisheries students revealed a lack of originality (these cover pages used the same metaphor as the instructor). However, only 1 of 29 was not original for the second essay. This data indicates that students in the faculty of Fisheries probably feel less confident about writing activities and activities that feature their creativity.

Metaphorical visual map cover pages from the faculty of Environmental Sciences were also investigated in order to find out how many students designed an original metaphor and how many simply copied the examples introduced by the instructor. Students in the faculty of Environmental Science reported the highest levels of interest and satisfaction overall, yet also reported that imagination was not important. However, only 1 essay had no metaphorical visual map cover page. All first essays except for 4 had original visual map cover pages and for the second essays, this increased to 5 visual map cover pages that used the same metaphor as the instructor and therefore could be described as lacking in imagination. The increased lack of imagination in metaphorical visual map cover pages for the second essay is an

indication that ongoing idea development, support and encouragement needs to be provided for students (who feel imagination is not important).

Data from the faculty of Dentistry revealed that 8 students did not report on if imagination was important or not. This finding was surprising because of the high level of essay cover page satisfaction reported and the wide age range of students in the class. Further inquiry into essay cover pages designed by students in this faculty found only 4 visual map cover pages for the first essay to lack imagination and 1 essay did not have a visual map cover page at all. While students reported that imagination was not important, the majority of students did find imaginative metaphors for their essay visual map cover pages and students in this faculty reported the highest level of satisfaction with their essay visual map cover pages.

While data indicates that the majority of students, well over half, reported that imagination is important, slightly more students in the faculties of Environmental Sciences and Economics reported that imagination is not important. Furthermore, 8, in the faculty of Dentistry did not answer the question, and 5 in the faculty of Economics did not answer the question. In total, one quarter of the students report that imagination is not important while 18 students did not answer the question.

4. Discussion

This study revealed that although 1st year university students reported low motivation to write in 1st and 2nd languages, almost all students wrote and typed two essays in English, each with six paragraphs and each paragraph with sentence requirements in this study. There were no known cases of plagiarism or copying of other student's work. Rather, students appeared proud and humble of their typed essays and a large number of students also were able to take pride in their hand-drawn visual map cover pages. The latter students may otherwise have not had an opportunity to use their talent of drawing in non-linear message making and therefore would not have received any recognition for their developed spatial-visual intelligence. This study reinforces the researcher's determination to strive to include a variety of class activities that promote the eight intelligences in order that all learners have opportunities to exercise their preferred communication form, rather than imposing the status quo linguistic and mathematical logical intelligence focused instruction. Assessment of these activities should also, therefore, strike a balance between qualitative and descriptive rather than strictly quantitative and prescriptive.⁹ Under such conditions a focus on process with the aim of an authentic and meaningful

product may be attainable while learner motivation is maintained, and even increased. This study is an indication that students are able to write longer narrative texts when the challenge is process focused, not product focused and when the fear of failure is not present. In other words, message making and meaningful communication were positive outcomes across all faculties.

Activities that supported the narrative essay writing and mapping were tailored to the multi-leveled and multi-skilled class contexts and the incorporation of blended learning using the CALL system in the computer learning labs for the associated speaking and active listening class activities which promoted a variety of cohesive and holistic learning experiences. Integrated activities included recorded pair discussions with active listening of essay paragraphs and metaphors, reading of graded readers (students wrote an essay paragraph about a graded reader); active reading for communication practice with group members and the author of the essay and peer reviews in random groups in which essays and cover pages were assessed using a rubric in the form of a Can-do checklist.

Linear representations of the essay in the forms of an outline with questions to be answered in each paragraph and homework assignments in which students were encouraged to write details for each of the paragraphs in either English or Japanese to increase intrapersonal communication were provided by the instructor. This activity was followed up with other intrapersonal meaning making activities including solo recordings about the essay paragraphs and the essay metaphors for weekly homework.

Narrative essay writing and metaphorical visual map cover pages were a successful activity in terms of high participation rate and low failure rate. More students than expected reported that the narrative essay writing activity was useful and that the metaphorical visual map cover page (metaphor) was interesting.

5. Limitations of the study and future research

While the number of students in this study gives a good indication of whether or not the activities of narrative essay writing and visual map cover page designing was useful, interesting and satisfying, student participants in the study were from the researcher's classes. Thus, the students had some influence from the researcher. In order to gain better insight into if these activities really promote complexity, the study needs to be extended to other university classes taught by other instructors.

A second limitation of this study is that there were varying degrees of awareness and understanding among students about self satisfaction with the visual map activity.

In particular, more thorough data collection needs to be conducted in order to gain a better understanding of what influences students' concepts of self satisfaction.

Self reported satisfaction is problematic because of the subjective nature of the question in this study. High achievers may not report a high level of satisfaction in relation to their big effort to find original metaphors. Despite putting a lot of effort and thought into their metaphor, these learners did not feel satisfied with the results. Perhaps these learners had high expectations but not a high visual-spatial intelligence. On the other hand, students who did not make a big effort may report a high level of satisfaction because the activity was new to them or because they are low achievers. None the less, this study reflects that reports of high levels of self satisfaction are important because they are related to increased intrinsic motivation. This would be the case when students find the activities compatible with their preferred intelligences.

A third limitation of the paper is with regards to inquiry about imagination. Some students may have felt some dilemma about admitting the importance of the imagination since they have been educated in primarily knowledge based education systems and societies. The information age, of which parents and other respected elders experienced during the eighties and nineties, also reinforced the value of knowledge and in particular, verbal communication.

A fourth limitation of the paper also addresses the question of imagination. Generally speaking, we might find a lack awareness of the roles that both imagination and knowledge play in the learning process, writing process, and in professional and daily life. Intuitively students might have circled Yes, (Imagination is important.) yet not really have clear examples or ideas of the ways in which the imagination operates. Raising awareness of the above is essential and ways in which it can be done would be taken into consideration in future research.

Future research would take into account the importance of including more visual tools in activities such as (extensive) reading, discussion, previewing, reviewing, and reflection. Continued research and documentation into what non-linguistic representations facilitate student's learning and, more precisely, which impact positively on English communication skills.

Endnotes:

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