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ABSTRACT

This paper appraises aspects of Anglo-American and Chinese concepts of invention from a historical perspective. It then describes the results of 70 third-year Taiwanese English majors' responses to a Likert scale questionnaire that sought their reaction to Anglo-American strategies of invention in English academic writing. It singles out two randomly selected students' responses to the questionnaire to exemplify the importance of individual variation. Students chose their most preferred techniques for composition design from 26 idea-generating activities that are popular in English-as-a-Second-Language/English-as-a-Foreign-Language writing textbooks. The results suggest that most third-year students are aware of the importance of a systematic approach to idea creation in academic writing, but they prefer to initiate their discovery processes in essay writing with such activities as brainstorming, free writing, and use of their imaginations rather than by more traditional strategies such as outlining or library research. The study discusses implications for Anglo-American and Chinese contrastive rhetoric. (Contains 27 references.) (SM)



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A Study of English Majors' Preferences in Invention

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This paper appraises aspects of Anglo-American and Chinese concepts of invention from a historical perspective. It then describes the results of 70 third year Taiwanese English majors' responses to a Likert-scale questionnaire which seeks their reaction to Anglo-American strategies of invention in English academic writing. It singles out two randomly selected students' responses to the questionnaire to exemplify the importance of individual variation. Students also choose their most preferred techniques for composition design from 26 ideagenerating activities which are popular in ESL/EFL writing textbooks. The results suggest that most third-year students are aware of the importance of a systematic approach to idea creation in academic writing but that they prefer to initiate their discovery processes in essay writing with such activities as brainstorming, free writing, and use of their imaginations rather than by more traditional strategies such as outlining or library research. The study also discusses implications for Anglo-American and Chinese contrastive rhetoric. Writing teachers can interpret these results according to their local situations and make appropriate pedagogical decisions as to how to teach this important aspect of writing.

INTRODUCTION

This study explores the invention strategies in academic composition of 70 third-year English majors in the Applied English Department at Ming Chuan University in Tajwan. Applied English majors are required to take basic composition classes for their first two academic years, and the last two years they study research writing and more advanced professional writing courses. Thus, writing is a core element in their curriculum. As part of the discovery process of essay writing, invention is a crucial aspect in creating topics to write about. What kind of invention strategies have students been exposed to in their writing classes and which ones do they most prefer? Have students been influenced by traditional Taiwanese or Chinese cultural factors when they gather ideas for their essays? Do they have any resistance to a particular Western cultural based strategy which can be explained by Chinese cultural influences? Do students prefer to develop their topics from personal experience or from external sources such as the library? In initiating this study I also wondered to what extent students consider such Western classical aspects of invention as emotional, logical, and ethical appeals toward a specific audience as they prepare their written discourse. Another glaring problem related to invention which basic Taiwanese student writers have is the students' difficulties in providing solid evidence and concrete examples to support their main ideas in their essays. By the time they are third-year students what invention strategies have they embraced to enhance their essay writing?

CHINESE AND ANGLO-AMERICAN INVENTION IN HISTORICAL PERSPECTIVE

In comparing the differences between Chinese and Western rhetoric many complex variables emerge. In both Chinese and Anglo-American thought, attempts to codify the invention process for prose into a rigid system have been relatively unsuccessful.

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For the Greeks, invention or *inventio* was a subject so wide that no one could master it in its entirety. Rhetoricians borrowed their ideas from a broad range of disciplines such as the law, ethics, or philosophy, and often copied ideas exactly (Cole 1991, p. 18). Moreover, invention was not necessarily a creative endeavor. As Pennycook notes (1996), for both Aristotle and Plato imagination was subservient to reproduction or imitation, and there has been a long tradition of copying the ideas of others as a part of invention in both the West and China.

Apparently, classical Greek and Roman rules of invention were more formalized than Chinese, but Chinese rhetoric although less prescriptive, also made use of what Aristotle (trans. 1991) called *logos*, or rational appeal, *pathos* or emotional appeal, and *ethos* or appeal to the character. Both Chinese and Western orators or writers who sought ideas to support their arguments might have used all three of these or have emphasized more than one, depending on the audience being addressed. The main purpose behind these means in the Western tradition was to persuade the audience to accept the writer or orator's point of view. Roman rhetoricians such as Cicero and Quintilian modified and developed Aristotle's ideas and continued to emphasize the combative elements of rhetoric because it was used in debate in the public forum (Burke, 1950/1969. p. 52).

Rational Appeals

Traditionally, some evidence exists that Western and Chinese logical approaches in rhetoric differed. Discovering rational arguments in Western classical rhetoric was done by using a set of questions or *topics*. Wh- and how questions as journalists use today are simplified versions of such topics (Young, Becker & Pike, 1970, p. 4). Chinese appeals which corresponded to the classical *logos* were developed through metaphor, analogy, and reliance on historical examples (Lu, 1998, p. 7). However, Bloch and Chi (1995, p. 261) conclude from studies done by Nakayama and Garret that ". . .there was a preference in Chinese rhetoric for arguing from precedence instead of logic. . .there is less need, therefore, for any formal system of invention in Chinese rhetoric. . ." The explanation for this use of precedence as an alternative to a formal invention strategy is that Confucius viewed history as containing a communal wisdom that was greater than one individual's personal idea about things.

Emotional and Character Appeals

What are the differences and similarities between Chinese and Western appeals to the emotions and character from a traditional perspective? Unlike Greek rhetoric, overt emotional expressions were acceptable in Chinese rhetoric (Lu, 1998, p.112). Western rhetoricians distrusted emotional appeals because they seemed manipulative, but for the ancient Chinese rhetoricians, who were aligned with a king, they signified sincerity, loyalty, and willingness to relinquish one's rights to the state. Moreover, writers such as Mencius did not regard pathos as a separate appeal but included emotion as essential to his rhetorical and philosophical system (Lu, 1998, p. 301). According to Kennedy (1998, p.224) Cicero was also aware that the ". . .sharp distinction of ethos and pathos in rhetorical theory is artificial. Emotional expression is really a part of the ethos of the speaker or writer." Kennedy goes on to infer that the type of emotional appeals used in rhetoric can vary from culture to culture and such forms of pathos as personal attack are more common to Western than non-Western rhetoric. This must be due to the agonistic roots of Western rhetoric. In contrast, Chinese rhetoric has traditionally emphasized harmony, a tradition which comes from Confucianism. Unlike the Greek philosophers such as Plato and Aristotle, who emphasized achieving the



audience's agreement, Confucius stressed the importance of maintaining the social hierarchy (Bloch and Chi, 1995, p. 259). Thus, researchers of the effect of Chinese text structure on English writing have noted that Chinese writers tend to postpone their main points or arguments until the end (Kaplan, 1966, Young, 1982), and this may be due to the importance of maintaining harmony.

Besides Confucian influences on ideas of invention in writing, Taoist influences can be traced back to such writers as Lu Ji (263-303), whose major work *The Art of Writing*, a rhyme-prose essay of literary criticism, had a major impact on subsequent Chinese writers (Barnstone & Ping, 1996). Yet, much advice to novice writers that is also familiar to modern English teachers can be found in this work. Lu Ji noted the importance in effective writing of revision and register; logic in instructional composition; reading of the classics to stimulate one's writing; economy of word choice; and the spirituality of the writing process. Lu Ji stated, "when you're clear and calm, your spirit finds true words" (Barnstone & Ping, 1996, p. 9). For the Taoists, great writing was achieved through a lack of effort and desire. Thus, there are points in common with Western and Chinese traditions of invention at the same time as the Western tradition emphasized the importance of convincing an audience through combativeness and the Chinese through maintaining harmony.

CHINESE AND ANGLO-AMERICAN INVENTION IN CONTEMPORARY PERSPECTIVE

Over the past several hundred years many modifications have been made in Anglo-American and Chinese approaches to essay writing. It is not within the scope of this short paper to describe all of the ramifications of these historical developments but instead to delve into the most recent changes, so we must leap from the origins of rhetoric into the present. Several studies regarding the interplay between Anglo-American and Chinese text structure (Mohan & Lo, 1985; Kirkpatrick, 1997; Myers, 2000) indicate that Chinese in Hong Kong, Mainland China, and Taiwan have incorporated prescriptive Western models of writing into their academic essays in both English and Chinese. It also appears that the teaching of invention strategies which have been first promoted in native-English educational settings have then been incorporated into English and Chinese language writing text books and teacher training courses for language teachers of both languages.

In the late twentieth century a variety of invention strategies flourished in English language texts for the purpose of teaching writing. They developed out of ideas emanating from such purveyors of the so-called New Rhetoric as Toulmin, (1958), Perelman and Olbrecht-Tyteca (1958/1969), and Young, Becker, and Pike (1970). They influenced writing textbooks which encouraged learners to express epistemic and cooperative values rather the agonistic ones of classic rhetoric (Kleine, 1999, p. 144). The New Rhetoric also emphasized that composition should be based on scientific demonstration rather than the study of probability and opinion (Carnes, 1994, p. 170). Young, Becker, and Pike (1970) presented systematic heuristic approaches to invention such as approaching a topic for its contrastive features, its range of variation, and its distributions in larger contexts and by incorporating strategies using discovery methods: preparation, incubation, illumination, and verification. On the other end of the spectrum, writers like Elbow (1981) encouraged writers to develop their ideas through expressing their emotions. Such new approaches took the process of invention beyond the notion that it is simply a means of gathering information for persuasive purposes. Moreover, many invention strategies in writing texts for foreign and second language learners appear to have been promulgated to foster creativity in academic discourse. From the 1970s through the 1990s, a variety of ESL/EFL writing texts from beginning to advanced, incorporated not only traditional invention schemes such as outlining, listing, and



Wh-questions, but also such strategies as using visual aids, cubing, clustering, looping, brainstorming, and free writing. These techniques can be seen in textbooks by Raimes (1978), Leki (1991), Scarcella (1994), and Blass and Pike-Bakey (1993), to name a few examples. Researchers can assume that Taiwanese students' invention strategies in English writing will be highly influenced by these Anglo-American strategies.

METHOD

Participants and Setting

I distributed questionnaires to one-hundred-forty-two students, all English majors in the Applied English Department of Ming Chuan University and collected seventy completed forms. The students had previously studied basic English writing for two years and were attending a one-year research writing class of which they had nearly completed the first semester at the time of this study in December of 2000.

Research Instruments

The participants were given a Likert-scale questionnaire which consisted of twenty questions directed to discover their general attitudes toward various aspects of the invention process. The second section of the questionnaire listed twenty-six different invention strategies and asked them to circle the ones they had used in classes and then asked which one they preferred most. An additional question asked if there were any other ways in which they obtained ideas for writing academic papers. Although the items in the questionnaire were meant to reflect aspects of both modern composition pedagogy and classical rhetoric, they were by no means all encompassing. Although I have analyzed the frequency of responses, the analysis is mainly qualitative and interpretative rather than quantitative. To carry the qualitative analysis further, two students were randomly selected and individual profiles were plotted out to demonstrate individual variations. This strategy was adopted from Williams and Burden (1997).

Results to the Questionnaire and Open-Ended Question

The Likert-scale questionnaire elicited four categories of information: (a) how systematic students were in inventing ideas; (b) their awareness of how to use concrete details and how such details influenced the audience's beliefs and emotions; (c) how they constructed ideas from other's past research; and (d) some discovery aspects of the invention process. Several questions overlapped and can be included in more than one category as seen in Appendix A.

A Systematic Approach to Invention. From their responses to the first category, students appeared to be strongly aware of the benefits of a systematic approach toward invention as 83% agreed or strongly agreed that they must consider many outside factors when developing a topic. 75% agreed that they should take a wide variety of things in consideration before they begin to write; and 64% planned out what they were going to write. Also, it appears that many students believed, as seen by their respective 78% and 76% agreement rates to items 17 and 18 that after they had gathered their ideas, having a sharp focus on the topic they were writing about was important.

Audience Appeals. In considering techniques which influenced their audiences' thinking, 81% agreed that specific, concrete images, had a greater influence on the reader than abstract ideas. Moreover, 68% agreed that they should be aware of differing opinions



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concerning a topic and provide reasons to back up their own opinions. Another 68% agreed that one of the most persuasive ways to convince an audience is through their emotions. However, some students seemed to have some doubts about how general and specific ideas influenced the imagination and feelings of their audience as 51% also agreed that general ideas affected the reader's feelings and imagination more than specific ones. In regard to achieving harmony, 58% of the students believed that effective writing had to resolve conflicts.

Adopting Others' Ideas. Did students construct their essays from others' ideas? 79% agree that they acquired ideas from books, movies, journals, or magazines. Moreover, a few students added that they obtained ideas by discussing their writing projects with friends, relatives, or students from other majors who could help them develop a topic. However, students were doubtful if it was acceptable practice to borrow from others. 41% agreed and 44% were unsure.

Discovery Processes. In terms of discovery, 70% of students agreed that intuition was important in obtaining ideas. Also 58% agreed that they engaged in free writing or brainstorming of the ideas before they organized them. In what may be related to Young et. al's (1970) first two stages of discovery, preparation and incubation, 76% of students agreed that they should have considered many assumptions until they had a clear idea of a topic. Moreover, 78% agreed that when they wrote about a topic it was important to have an assumption about it and stick to it. This latter aspect may indicate a certain degree of inflexibility in their discovery processes, as maintaining an open mind to new categories that might emerge and a willingness to make revisions of ideas is an important aspect of invention. Students should know that the last phase of their writing involves establishing a sharp focus on their topic, but total clarity is not necessary at first in idea generation.

Most Preferred Invention Strategies

In the second section, students circled one invention strategy which they most preferred from a list of twenty-six activities. Sixty-six students responded and the results are summarized in Appendix B. Of the items on the list, 32% preferred brainstorming and 18% free writing. Another 9% chose small group discussion, and 8% chose imagination. These choices do not necessarily reflect the inadequacies of the other strategies because students may not have been exposed to all the strategies in their classes

Factors Related to Individual Variation

As a statistical analysis does not probe into individual variation, I randomly selected two participant's responses to the twenty-item questionnaire. These charts graphically demonstrate (Appendix C) to what extent individual students have different educational experiences. In this case, it reflects the reactions of two students to the invention strategies presented in the questionnaire in Appendix A. In order to account for such individual discrepancies teachers have to provide examples of a variety of invention techniques in their writing classes to meet the diverse discovery processes of their students in English writing.

CONCLUSION AND RECOMMENDATIONS

From the results of the 26-item questionnaire, it appears that a majority of students preferred open-ended and non-evaluative, non-teacher centered strategies when they were discovering ideas. 69% chose such activities as brainstorming, free writing, imagination,



personal feelings, personal experiences, daydreaming, mind-mapping, journal writing, and clustering. Another 9% chose small group discussions suggesting that these students most liked to acquire ideas through social interaction. Only a small percentage seemed to rank such structured activities as outlining, library research, or revision with multiple drafts as their favorite invention strategies. Most of the activities they preferred were ones where students felt that they were free of value judgments or disapproval of their opinions, especially brainstorming, an activity design to elicit ideas without making any judgments no matter how wild and crazy the ideas may sound at first (Cropley, p. 98).

What also stands out from the results of this data is that the majority of students were aware of the need for a systematic approach in invention. In terms of influencing their audiences, they agreed that using concrete examples were important and to a lesser extent, using emotional appeals was considered very persuasive. The results were less strong as to whether or not the students were influenced by a Confucian-based need to maintain harmony. Also a majority of students acquired their ideas from various media sources, which is in line with a tradition in both Western and Chinese writing to borrow from others. As Rank noted (1932/1969, p.67) even a writer of as great a stature as Goethe said that his ideas were collected from a thousand others even though they bore his name.

What might the educational implications be? Teachers need to balance a systems approach and at the same time foster student creativity. Students prefer a relaxed environment in the discovery stage. A systematic approach might be introduced after students have gone through such a preparation phase.

Also, students can be taught the three appeals from classical invention. Not only logical and character appeals but also emotional appeals can change or influence an audience's behavior. In this regard, at advanced levels they might study such examples as Martin Luther King's *Letter from Birmingham Jail*, and note his usage of five specific techniques for emotional appeals: concrete examples, personal examples, metaphors and similes, and comparisons (Crusius & Channel, 1998, p. 13) and then try to apply them to their own writing. They can also use models from literature as exemplified by Shakespeare's speech in *Julius Caesar* wherein they can see the necessity to be specific to evoke emotion; generalizations and abstractions have little influence on the imagination of the audience (Perelman C. & Olbrecht-Tyteca L., 1969/1958, p 147).

With such techniques, one can see that invention can involve a skillful blending of rational and emotional appeals through example and imagery. As a final caveat, as teachers we must remember that different strategies of invention may suit different individuals, as illustrated in Appendix C, and so we cannot be overly prescriptive in our approach to teaching it.

REFERENCES

Aristotle (1991) <u>The art of rhetoric</u> H.C. Lawson-Tancred (Trans.) London: Penguin Barnstone, T. & Ping C. (1996) <u>The art of writing: Teaching of the Chinese masters</u> Boston: Shambala Publications

Bloch, J. & Chi, L. (1995) A comparison on the use of citations in Chinese and English academic discourse. In D. Belcher & G. Braine (Eds.), <u>Academic Writing in a Second Language Essays on Research and Pedagogy</u> (pp 231-274), Norwood, NJ: Ablex Publishing Corporation

Burke, Kenneth (1969) <u>A rhetoric of motives</u> Berkeley: University of California Press (First published 1950)

Carnes L. (1994) The intention of Aristotle's rhetoric. In E. Schiappa (Ed.) <u>Landmark</u> essays on classical Greek rhetoric (pp 157 –168), Davis, CA: Hermagoras Press



Cole, T. (1991) The Origins of Rhetoric in Ancient Greece Baltimore: John Hopkins Press

Crusisus, T. & Channell C. (1998) The aims of argument: A rhetoric and reader Mountain View, CA: Mayfield Publishing Co.

Blass, L. & Pike-Bakey, M. (1993) <u>Refllection and beyond: Expanding written</u> communication Boston: Heinle & Heinle

Cropley, A.J. (1997) More ways than one: Fostering creativity in the classroom Norwood, NJ: Ablex Corporation

Elbow, P. (1981) Writing with power New York: Oxford University Press

Kaplan, R. (1966) Cultural thought patterns in intercultural education <u>Language</u> <u>Learning</u>, 16 1-20

Kennedy, G.A (1998) <u>Comparative rhetoric: An historical and cross-cultural introduction</u> New York: Oxford University Press

Kirkpatrick, A. (1997) Traditional Chinese text structures and their influence on the writing in Chinese and English of contemporary mainland Chinese students. <u>Journal of Second Language Writing</u>, 6 223-244

Kleine, M. (1999) Teaching from a single textbook "rhetoric": The potential heaviness of the book. In X.L. Gale & F.G. Gale (Eds.), <u>Conflicts of culture, ideology, and pedagogy: revisioning composition textbooks</u> (pp137-161), Columbia, SC: University of South Carolina Press

Leki, I. (1989) <u>Academic writing: Techniques and tasks</u> New York: St. Martin's Press Lu, X. (1998) <u>Rhetoric in Ancient China, Fifth to Third Century B.C.E. A Comparison with Classical Greek Rhetoric</u> Columbia, South Carolina: University of South Carolina Press

Mohan, B.A.& Lo, W.A.Y. (1985) Academic Writing and Chinese students' transfer and developmental factors. <u>TESOL Quarterly</u>, 30 (2), 201-239

Myers, J.L. (2000) Rhetorical Style: Chinese Encounter Aristotle. In A. Brown (Ed.), English in Southeast Asia 99, (pp 71-82). Singapore: National Institute of Education

Pennycook, A. (1996) Borrowing others' words: Text, ownership, and plagiarism, TESOL Quarterly, 30 (2) 201-239

Perelman, C. & Olbrecht-Tyteca L. (1969) The new rhetoric A treatise on argumentation Notre Dame: University of Notre Dame Press (First Published 1958)

Raimes, A. (1978) Focus on composition New York: Oxford University Press

Rank, O. (1969) <u>Art and artist: Creative urge and personality development</u> New York: Norton (first published 1932)

Scarcella, R.C. (1994) Power through the written word USA: Heinle & Heinle Toulmin, S. (1958) The uses of argument Cambridge: Cambridge University Press

Williams, M. & Burden, R.L. (1997) <u>Psychology for language teachers</u> Cambridge University Press

Young, R.E., Becker, A.L., & Pike, K.L. (1970) <u>Rhetoric: Discovery and change</u> New York: Harcourt Brace Jovanovich

Young, W.L.L. (1982) Inscrutability revisited. In J. Gumperz (Ed.) <u>Language and Social Identity</u> (pp 72-84), Cambridge: Cambridge University Press



Appendix A

Note: Percentages have been rounded off, so they do not always amount to 100%. Students placed an X under the following categories: SA-strongly agree; A-agree; N-not sure; D-disagree; SD-strongly disagree and were requested to respond to them truthfully.

	SA	A	N	D	SD
1. Getting ideas to write about a topic	1	22	21	24	12
comes to me without any effort or thought.	1	22	31_	34	12
2. When I write a composition, I consider					
who might disagree with my opinion and					
try to show them reasons why they are	10	5.0	1.4	11	Δ
wrong and I am right.	10	56	14	_11	0_
3. Before I write a composition I have a					
clear idea of what I am going to write about	10	<i>5 A</i>	25	1	Λ
because I have already planned it out.	10	<u>54</u>	35	I	0
4. When I write a composition, I don't					
know exactly what I am going to say but					
just write down my ideas first and	1.5	40	20	20	2
organize them later.	<u>15</u>	43	20	_20	
5. Effective writing has to resolve conflicts.	12	<u>46</u>	38	4	0_
6. Writing your general ideas about a					
topic is more effective than using specific	•	20	0.1	20	
examples to prove your point.	9	39	21	28	4_
7. Academic writing should not be about		20	••	^-	0
abstract ideas.	14	30	29	_27	0_
8. General ideas affect the readers feelings	_		•	0.5	
and imagination more than specific ones.	_7	<u> 46 </u>		_25	
9. Specific, concrete images, have a greater	• •				
Influence on the reader than abstract ideas.	<u> 20</u>	61_	16	3	0_
10. When I write about a topic I take a wide					
variety of things into consideration before I					_
begin	<u> 16</u>	59_	19	14	. 0
11. I get some of my ideas for compositions					
from others' ideas such as from books, movies,				_	
journals, or magazines	20	59_	14	7	0_
12. It is acceptable to borrow from others					_
in coming up with ideas.	3	<u>* 39</u>	44	11_	<u>0</u> 74
13. When I write about a topic, I think of it as					_
part of a system with many things influencing in	t. <u> 7 </u>	54	29	10_	0_
14. When I write about a topic, I view it					
as something that is separate from everything					
else and focus on it alone.	1	34	39	25	3
15. When I write about a topic, I view it as					
something which may be affected by many outs	ide				
factors and try to consider those factors.	14_	69	14	3_	0
16. When writing it is important to use your					
intuition to get ideas.	<u> 16</u>	<u>54</u>	26	3	0



	SA	A	N	D	SD
17. When you begin to write about a topic,					
it is important to have an assumption until you					
have a clear idea of your topic.	<u> </u>	54	<u> 16</u>	6	0_
18. When you first write about a topic, you					
should consider many assumptions until you					
have a clear idea of your topic.	23	53_	20	3	1_
19. In academic writing, you should not try					
to achieve a strong emotional reaction in your					
reader	17	30	33	19	1_
20. One of the most persuasive ways to					
convince an audience is through their emotions.	21	47_	21	19	1

Appendix B

Student Preferences from Twenty-six Invention Activities

Students were asked to look at the following activities and circle the ones that they had done in their writing classes and then choose which one they preferred most. Sixty-six out of the seventy participants responded to this section.

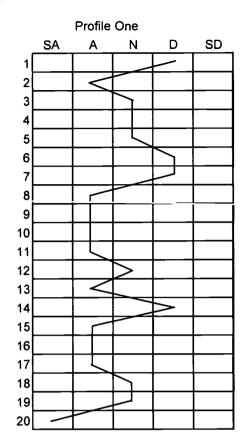
The twenty-six activities: brainstorming, listing, mind mapping, clustering, cubing, outlines, journal writing, revision with multiple drafts, freewriting, word association, looping (writing non-stop on any topic; then stop, read, reflect, and sum up in a single sentence what you wrote), using Wh questions to get ideas about a topic, visualization, relaxation techniques, music, personal experience, library research, daydreaming, night dreaming, small group discussion to get topics or ideas, imagination, personal feelings, thinking of the reader's emotions, thinking of the reader's beliefs, using topics such as comparison, definition, relationship, circumstance...

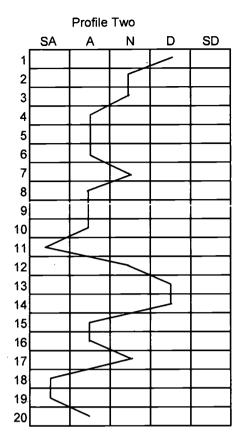
Students preferences in rank order in terms of percentages (rounded off):

1. 32%	Brainstorming
2. 18%	Freewriting
3. 9%	Small Group Discussion
4. 8%	Imagination
5. 6%	Wh-questions
6. 5% each	Revision with multiple drafts; personal feelings; personal experience
7. 3%	Mind-mapping
8. 2% each	Daydreaming; listing; clustering; journal writing; comparison; library research; outlining



Appendix C: Two Random Samples of Response Variation from the Likert-scale Questionnaire









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