Chapter 14

Approaches to Writing

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To advance understanding of writing processes at the university level, a series of investigations were conducted to define a model of writing, approaches-to-writing, and to fully validate a related questionnaire, Inventory of Processes in College Composition. Psychometric methods served to yield five factors, Elaborative, Low Self-Efficacy, Reflective-Revision, Spontaneous-Impulsive, and Procedural, as representative of the interrelationship between students' beliefs and strategies in academic writing. Validity studies encompassed a full range of methodologies and demonstrated support for the model. The discussion concludes with consideration of current applications of the model and inventory and with suggestions for further research.

14.1.   Introduction

While evidence suggests that writing is a valuable educational task demanding focus, expression, and rigor, what university students do when facing a writing assignment, or how they think about writing remains elusive. Writing is cognitively complex, involving multiple attentional demands, strategies, and processes, yet it is also affective involving intentionality and self-expression. It is, perhaps, both an art and a science, inspired yet routine, reflective yet directive. It is the mysterious and very personal nature of writing that has prompted me to conduct a series of investigations focused on how university students think about and engage in their craft. In this chapter, I provide an overview of the development of the approaches-to-writing model, discuss several applications, and offer some ideas for future directions.

14.1.1.   Theoretical Background

In the area of university learning, researchers have described students' approaches to learning as reflective of the relationship between the student and the task (cf. Biggs, 1999). The constructs of deep and surface approaches have become common in the literature based on

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both qualitative studies (Hounsell, 1997; Marton & Saljo, 1976; Van Rossum & Schenk, 1984) and on psychometric analyses (Biggs, 1987; Entwistle & Ramsden, 1983; Kember & Leung, 1998; Schmeck, 1983; Schmeck, Geisler-Brenstien, & Cercy, 1991). In a landmark study, Marton and Saljo (1976) queried students regarding their processes when studying an expository text and concerning the meanings that they constructed in doing so, focusing on what is learned, or how it is that students structure and understand, rather than on how much is learned. Two basic categories of description evolved. Students using a deep-level process focused on what is "signified" by the text, or the implications and intentions, and those employing a surface level process focused on the "sign," or literal meaning (cf. Marton, 1988). In extending the deep and surface paradigm, researchers used psychometric methods to analyze students' responses to survey items, thus advancing the distinction between deep learning, involving the intention to understand or create a meaning, self-referencing, and surface learning as marked by literal translation and the intention to reproduce or memorize information (Entwistle & Ramsden, 1983; Schmeck, 1983; Schmeck et al., 1991).

Deep and surface approaches represent a modifiable dimension reflective of the interaction between the student and the learning environment. Students' intentions and strategies are "framed" by the situation of learning and its related cues. It is the cues and affordances that instructional climates provide which impact the approaches that students take (cf. Biggs, Lai, Tang, & Lavelle, 1999). The deep and surface model had been linked to specific academic tasks such as reading (Marton & Saljo, 1976), studying (Schmeck, 1983), computer programming (Marton & Booth, 1997), and writing (Biggs, 1988; Hounsell, 1997).

14.1.2. *A Model and a Measure*

There are parallels between writing assignments and other academic tasks such as reading, or presenting (e.g., vocabulary, genre or domain familiarity, and problem-solving skills), suggesting that the approaches framework might be well suited to adapt to writing. Also, there are differences but these too support the extension of the model. For one thing, in writing the interaction between learner and task is largely reciprocal because both editing and revising for meaning demand response to one's own product, and to one's own thinking. This is not to say that reading or studying are not reflective but rather to argue that reflection in writing is necessarily more self-referencing. In the revision process, it is as though writers continually grapple to refine and clarify their own creations as they move in successive iterations from the task. Perhaps no other instructional task mandates such dynamic and personal interaction. Along the same line writing is ill-defined with no right answers or specific rules for success, and genre often provides a very sketchy framework. Other tasks are likely to have procedures, rules, and specific desired outcomes. In writing, organization, skills, and following rules alone may be insufficient to create meaning in the deep sense. It is intentionality and beliefs that are integral (cf. Biggs, 1988; Lavelle & Zuercher, 2001). An approaches-to-writing framework takes beliefs and intentions into consideration as well as the strategic processes (cf. Biggs, 1988).

Deep writing goes beyond the literal or technical level. It is as though the meaning becomes greater than the sum of the parts (cf. Marton, 1988). Biggs and Collis (1982) refer

to this phenomenon in their extended abstract level of the Structure of Learning Taxonomy. Along the same line, in studies involving examination of the strategies of children, Scardamalia and Bereiter (1982) differentiated knowledge transforming as opposed to knowledge telling strategies, Graves (1973) argued for reflective vs. reactive writing, and Dyson (1987) suggested a similar difference between socializers and symbolizers. In a landmark study working with twelfth graders, Emig (1971) supported an extensive — reflective distinction, and I have drawn on these ideas in my own work.

A comprehensive model was needed — one that accounted for the intentions of the writer as well as the strategies of writing. Too often examination had focused on writing strategies as divorced from writing beliefs. Along the same line, writing processes had been separated into discrete components: planning, translating, and editing (cf. Hayes & Flower, 1980), doing violence to the assumption of writing as a tool of integration (cf. Vygotsky, 1962), and fostering cohesion often at the expense of coherence (cf. Witte & Faigley, 1988). Writing involves processes working together and instruction that is based on teaching discrete processes brings a technical or reductionistic emphasis. The approaches to learning model seemed an ideal framework with which to better understand writing.

My goal was to develop a comprehensive model and inventory, the Inventory of Processes in College Composition, based on psychometric methods (Lavelle, 1993). A list of 212 true and false statements regarding beliefs and strategies in writing was developed by adapting items from the Inventory of Learning Processes (Schmeck, Ribich, & Ramanaiah, 1977) and the Approaches to Studying Inventory (Biggs, 1988). Items were also based on Biggs' (1988) theoretical extension of his learning model to composition and on Hounsell's (1997) interview study as well as on composition theory. A large sample of undergraduate students (423) completed the inventory. Factor analysis, based on the scree criterion, and orthogonal rotation, common in the student learning survey literature, yielded five independent factors reflective of a total of 72 items (see the Appendix). Two factors, Reflective-Revision and Elaborative, suggested a deep writing approach as they reflected the intention to make meaning and awareness of writing as a tool of learning. The other three factors, Low Self-Efficacy, Spontaneous-Impulsive, and Procedural, were interpreted as surface approaches-to-writing in their strong focus on micro skills, listing or repetition and organization strategies and more passive orientation.

Elaborative is marked by a search for personal meaning, self-investment, and by viewing writing as symbolic. The emphasis is on active, personal engagement and on adeptly managing macro constraints such as audience and voice. Reflective-Revision, the third factor, describes a deep writing approach based on a sophisticated understanding of the revision process as a remaking or rebuilding of one's thinking, "I re-examine and restate my thoughts in revision," Reflective-Revision strategies are thesis-driven, involving taking charge to make meaning in writing.

On the other hand, Low Self-Efficacy, Procedural, and Spontaneous-Impulsive are readily interpreted as surface approaches. Low Self-Efficacy describes a writing approach based on thinking about writing as a painful task. "Writing is always a slow process," writers scoring high on this scale are virtually without a strategy and see the acquisition of micro skills and teacher encouragement as necessary for progress. The fourth factor, Spontaneous-Impulsive, profiles an impulsive and non-planful approach. "My writing just happens with little planning or preparation," this approach is linked to viewing writing as

a one-step procedure. The emphasis on minimal involvement and sticking to the rules is suggestive of a surface approach. The Procedural approach represents a method-oriented approach based on adherence to rules and a minimal amount of involvement: "When writing an essay, I stick to the rules." I actually had a student who, in response to being asked to write a 500 word essay, quit in the middle of a sentence when the word count indicated 500 words!

The scales were found to be fairly independent, interscale correlations ranged from −0.01 to 0.32, and internal consistencies ranged from 0.83 (Elaborative) to 0.53 (Reflective-Revision). The 0.32 correlation was between Elaborative and Reflective-Revision. An initial validity study using the new 72-item inventory, Inventory of Processes in College Composition, was conducted to test for the predictive power of the scales as linked to expository writing outcomes, and to examine the relationship of the scale scores to learning approach as measured by the Inventory of Learning Processes (Schmeck et al., 1977). Regression analysis supported that Reflective-Revision scale scores were strongly predictive of grade in composition ($B = 0.30$, $p < .01$) with Low Self-Efficacy serving as a negative predictor ($B = -0.28$, $p < .01$).

It is perhaps important to note that the original interpretation of the factors used the term writing styles but the scales had since been reinterpreted to represent writing approaches. The construct of style assumed consistency although research supported that variation in scale scores was linked to instruction (Biggs et al., 1999). The notion of approach provided a much more flexible interpretation and one more "instructionally flavored". Furthermore, Biggs et al. (1999) had argued for flexibility in interpretation dependent on research or practical consideration. Table 1 presents the relationship of motives and strategies as linked to writing approaches.

The initial investigation had been promising but questions remained. In order to more fully validate the inventory it was important to examine the relationship of the scale scores to various types of writing, and to emotional reactions to writing such as writing anxiety. Also, looking more fully at students' beliefs about writing, and establishing the validity of the scales across populations were important issues. It also seemed important to test for second-order deep and surface factors as suggested in the literature.

Table 1: Approaches-to-writing.

Approach	Motive	Strategy
Elaborative	To express onself	Visualization, audience, voice, self-reference
Low Self-Efficacy	To acquire skills and/or avoid pain	Study grammar, collaborate, find encouragement
Reflective-Revision	To make meaning	Revision, reshaping, multiple drafts
Spontaneous-Impulsive Just like talking	To get done	Last minute, no planning
Procedural	Please the teacher	Observe the rules, organize, manage writing

In examining the relationship of scale scores to narrative writing performance, Lavelle (1997) hypothesized that Elaborative scale scores, which reflected the need for self-expression, would predict narrative essay outcomes in terms of both complexity and degree of personal investment. Also of interest was the relationship of scale scores to writing apprehension as measured by the Daly-Miller Writing Apprehension Survey (as cited in Lavelle, 1997). In a study involving 74 students enrolled in a mandatory composition course, Elaborative scale scores were moderately but significantly correlated with degree of personal investment in narrative essay outcomes ($r = .40$) and served as negative predictors of writing apprehension ($B = -.54$, $p < .00$). Low Self-Efficacy was correlated with both writing apprehension and writing complexity.

Then Biggs et al. (1999) conducted an experimental study working with graduate students writing in English as a second language. Here the Inventory of Processes in College Composition was given as a pre-test/post-test measure for students attending a writing skills workshop. Significantly lower Procedural and Spontaneous-Impulsive scores, and significantly higher Elaborative scores were found after the workshop. Open-ended feedback supported the view that positive change had occurred.

Nancy Zuercher and I investigated university students' beliefs about themselves as writers and about the experience of learning in writing as related to writing approaches as measured by the Inventory of Processes in College Composition (Lavelle & Zuercher, 2001). Interview data included support for the deep and surface paradigm and as well as variation in students' conceptions of writing, in their attitudes about themselves as writers, and in their felt need for personal expression in writing. Specifically, students scoring high on the Elaborative approach expressed a more personal and affective dimension involving self-reference and feeling in writing whereas, students scoring high on Reflective-Revision expressed a more critical, structural emphasis, incorporating awareness of process and an appreciation for writing as a tool of learning.

It also seemed important to examine development in writing. Would scale scores be different for younger students/students in secondary school? Would a different factor structure more adequately explain secondary writing processes? Would scale scores predict writing competence for secondary students? Lavelle, Smith, and O'Ryan (2002) conducted an analysis involving administration of the Inventory of Processes in College Composition to 398 junior-level (third year) secondary students. Data were factor analyzed using the orthogonal rotation, and examination of the scree plot suggested three process factors. The first factor, Elaborative-Expressive, described a writing strategy based on personal investment and audience concern. The second factor, Planful–Procedural, denotes sticking to a plan, following rules, and "preparing" for writing. Achieving-Competitive, a third factor, reflects a teacher pleasing attitude or doing only what needs to be done to get a good grade. Two factors from the college model, Elaborative and Procedural, were replicated but two were not, Reflective-Revision and Low Self-Efficacy, suggesting a different pattern and the possibility of a developmental trend in writing. Reliabilities for the scales were acceptable: Elaborative-Expressive, $r = .77$, Planful-Procedural, $r = .67$, and Achieving-Competitive, $r = .62$. Both Planful-Procedural and a measure of self-regulatory efficacy were predictive of grade in language arts class but not of the quality of writing under a timed condition. Table 2 reflects the motive and strategy components of each of the approaches to writing for secondary students.

Table 2: Approaches-to-writing for secondary students.

Approach	Motive	Strategy
Elaborative-Expressive	To express oneself	Organization and description
Planful-Procedural	Learn to write, learn skills	Planning and observing rules
Achieving-Competitive	To manifest competence	Managing time

The Inventory of Processes in College Composition provided a valid measure of writing approaches, as well as a useful model for teaching and research. The initial sample size was large ($N = 423$), and validity studies involved diverse and rigorous methods; both statistical and qualitative. The interview research, in particular, served to support and expand the interpretation suggested by the psychometric investigations. Here, students' degree of awareness of process in writing differentiated both the Elaborative and Reflective-Revision approaches from the surface approaches, as did feelings of satisfaction and wholeness upon completion of writing assignments. Both Elaborative and Reflective-Revision encompassed the idea that process was critically linked to learning in writing and to writing outcomes. The Reflective-Revision dimension suggested a more analytic, critical, and perhaps "detached" or covert dimension, whereas students adopting an Elaborative approach consistently acknowledged writing selfhood, ownership, and attachment to writing. On the other hand, those students adopting surface approaches tended to consistently mention a dislike for writing and had no firm conception of themselves as an author-agents. They tended to maintain an exclusive focus on micro-level phenomena such as grammar, spelling, and syntax and to see outside support as critical for development.

In a recent study, the approaches-to-writing model served in development of a valid rubric to reflect the quality of undergraduate writing across the four years of college (Lavelle, 2003). A preliminary study was conducted to test for differences in writing based on writing samples as part of a university portfolio collection. Writing samples were evaluated using both a traditional analytic measure based on organization, integration, fluency, audience, voice, and word usage, and a deep and surface rubric based on level of integration, refection, structure (hierarchical vs. linear), and an assessment of overall meaningfulness. Results supported the validity of the deep and surface rubric as evidenced by the correlation between results based on that rubric and the deep and surface measure ($r = 0.53$). Interestingly, evaluation of both early (first and second year) and late (third and fourth year) writings found no significant differences in the quality of writing as measured by either rubric, calling into question the sequencing and content of freshman writing courses.

14.1.3. *Confirmation*

In re-assessing the psychometric dimensionality of the Learning and Study Process Questionnaires, Biggs and Rhin (1984) carried out a confirmatory factor analysis involving six subscales of the SPQ, and identified two higher-order factors, deep and surface. More recently, Kember and Leung (1998) supported a two-factor model based on deep/meaning and surface/reproducing factors as linked to both strategy and motivational

indicators, which lead to a recent revision of the SPQ as a two-factor, deep, and surface scale for use by teachers (Biggs, Kember, & Leung, 2001).

Tony Guarino and I (2003) wanted to examine the relationships among scales and hypothesized second-order deep and surface factors. We (Lavelle & Guraino, 2003) conducted a confirmatory analysis involving 517 undergraduate students. Specifically, we hypothesized, based on the original study (Lavelle, 1993), that the scales were independent indices that would load on two independent, latent factors. Specifically we thought that Reflective-Revision and Elaborative would be indices of the Deep factor, with Procedural, Low Self-Efficacy and Spontaneous-Impulsive indicating an independent, Surface factor.

Using a two-step structural equation modeling strategy to estimate parameters, and employing aggregated scale scores as observed variables, the hypotheses were tested. A series of confirmatory analyses revealed that the items representing the five scales were valid indicators of their respective factors. Although Chi square values were significant ($x = (5) = 29.91, p < .01$), the model yeilded acceptable goodness of fit indices (.998 and .994 for the CFI and TLI, respectively, and .09 for the RMSEA). All measured variables loaded significantly on their respective factors, and these loaded significantly on the latent factors (see Lavelle & Guarino, 2003 for a full description).

In sum, deep writing is strongly indicated by constructive revision as reflected in the Reflective-Revision scale. Students adopting this strategy take an agentic position, see themselves as makers of meaning and are aware of the powerful role of revision as a tool of transformation (cf. Lavelle & Zuercher, 2001). Thus, deep writing may be similar to what Segev-Miller refers to as transformational; based on deliberate intention and on consideration of macroproposition in the synthesis of text (this volume). The Elaborative approach encompasses personal investment and ownership in writing and is also indicative of deep writing. Researchers had consistently linked dimensions of selfhood to writing skills under the frames of self-regulation (Zimmerman & Bandura, 1994) and self-efficacy (Meier, McCarthy, & Schmeck, 1984; Shell, Colvin, & Bruning, 1995). Table 3 reflects deep and surface writing criteria based on the full spectrum of writing research.

14.1.4. Applications and Suggestions for Further Research

The Inventory of Processes in College Composition serves as a popular tool for diagnosis and remediation in developmental education. At Owens Community College (Ohio, USA),

Table 3: Chi-square and Goodness of Fit Indices for Confirmatory Factor Models

Factor Model	χ^2	df	CFI	TLI	RMSEA
Elaborationist	555.24*	230	.988	.985	.059
Low Self-Efficacy	202.04*	44	.986	.979	.094
Reflective-Revision	93.23*	35	.994	.991	.064
Spontaneous-Impulsive	201.19*	65	.990	.985	.072
Procedural	255.75*	54	.986	.980	.096

* $p < .05$.

Kay Blue used the IPIC to measure developmental education students' approaches-to-writing before and after a course in writing (personal communication, September 7, 2004). The post-test analysis revealed that students scored higher in Elaborative and Reflective-Revisionist and lower on the Low Self-Efficacy scale and Spontaneous-Impulsive scale. Students responded well to the inventory and were interested in both pre-test and post-test results. This fall she is using the questionnaire in all of the developmental writing classes to bolster traditional assessment measures.

Similarly, the Organizational Leadership Program at Greenville College (Illinois, USA) is using the IPIC to acquaint adult reentry students with their writing strengths and weaknesses. The curriculum is also undergoing change to prompt both students and faculty to use deep learning activities, and to develop reflective writing approaches (Dave Holden, personal communication, September 15, 2004). Dave Holden (2004) used the IPIC to test for differences in writing approaches and in the quality of writing of adult, reentry students enrolled in the two-year program. While significant changes were not found, adult learners scored significantly higher on the Elaborative scale and low on the Reflective-Revision scale than traditional age college students. This finding was congruent with other research with adult or nontraditional age college students.

In my own teaching of educational psychology at both the graduate and undergraduate levels, I have consistently relied the deep and surface model as a guide for instruction, delivery, and evaluation with good success. My focus has been on what Biggs (1999) calls "constructive alignment" in designing integrated tasks and assessments that foster meaning. Also, I have not been hesitant to encourage self-referencing activities such as journaling, and I use the deep and surface rubric to evaluate writing, presentation, and discussion activities. Based on the observations of colleagues, and on my own experience, I offer instructional strategies linked to each of the characterisitcs of deep writing (Table 4).

Table 4: Deep and surface writing approach characteristics.

Deep approach	Surface approach
Metacognitive, reflective	Redundant, reproductive
High or alternating focus	Focus at the micro-level
Hierarical organization	Linear, sequential organization
Enagagement	Detachment
Self-referencing, agentic	Passive
Audience concern	Data concern
Thesis-driven	Data or teacher-driven
Revision	Editing
Coherence	Cohesion
Transforming	Telling
Autonomous	Rule-bound
Feelings of satisfaction and connectedness	Just get done

Table 5: Instructional strategies.

Deep approach characteristic	Instructional strategy
Metacognitive, reflective	Relevant tasks, free writing, modeling
High or alternating focus	Genre familiarity
Hierarichical organization	Simple to complex tasks, mapping
Engagement	Task options, providing choice
Authorship, agency	Voice, relevance
Audience	Perspective taking, peer review
Thinks about essay as a whole	Grading rubrics, task integration
Thesis-driven	Modeling, task options, genre familiarity
Revision	Emphasis on full, integrated revision
Transforming, going beyond the assignment	Collaboration and modeling
Autonomous	Task choice, journaling
Teacher-independent	Teacher role is facilitator

In particular, it is important to design an integrated writing environment that fosters both deep beliefs and strategies. Instructors might consider providing choices for students such as choices of topics, types of writing, and timing of assignments, to empower students as makers of meaning. Along the same lines, providing relevant tasks, encouraging perspective taking, and modeling writing are effective instructional tools. Strategies such as genre familiarity and mapping may serve to scaffold developing writers.

Implications for future research are many. It is important to examine the validity of the Inventory of Processes in College Composition for use with a range of populations. While cross-cultural validity is suggested (Biggs et al., 1999), more studies need to fully examine that issue. It would also be useful to fully develop the inventory for use with a secondary or even elementary population. Preliminary results are promising but full validation is important. Longitudinal and cross-sectional studies are also needed to trace development in writing across time, and experimental studies need to be conducted to test for the effects of interventions based on the model.

Finally, it is important for college instructors and developmental educators to use the inventory as a teaching tool. The Inventory of Processes in College Composition and the approaches-to-writing model suggest alternative ways to think about writing and about what writers believe and do when faced with writing tasks. In particular, emphasis on creating a deep writing climate is critical. Too often teachers of writing give verbal support to/for this notion but fail to translate maxims into instructional activities. A recent informal review of composition syllabi from the internet reflects piecemeal instruction as evidenced by syllabi lacking teaching/learning objectives and containing disparate assignments. Along the same lines, administering the Inventory of Processes in College Composition will raise students' awareness of themselves as writers and of strategic options.

Appendix: Inventory of Processes in College Composition

FACTOR I Elaborative

53.	Writing makes me feel good	.62
68.	I tend to give a lot of description and detail.	.56
2.	I put a lot of myself in writing.	.54
11.	I use written assignments as learning experiences.	.51
20.	Writing an essay or paper is making a new meaning.	.49
30.	At times, my writing has given me deep personal satisfaction.	.49
33.	Writing is like a journey.	.48
39.	It's important to me to like what I've written.	.47
22.	I think about how I come across in my writing.	.45
67.	I often think about my essay when I'm not writing (e.g., late at night).	.44
36.	I sometimes get sudden inspirations in writing.	.43
4.	Writing helps me organize information in my mind.	.42
57.	I cue the reader by giving a hint of what's to come.	.41
7.	I often use analogy and metaphor in my writing.	.41
17.	I imagine the reaction that my readers might have to my paper.	.40
34.	When writing a paper, I often get ideas for other papers.	.38
64.	I compare and contrast ideas to make my writing clear.	.38
65.	I visualize what I'm writing about.	.37
12.	Writing reminds me of other things that I do.	.36
73.	Writing is symbolic.	.35
46.	Originality in writing is highly important.	.33
121.	I try to entertain, inform, or impress my audience.	.33
6.	I use a lot of definitions and examples to make things clear.	.31

FACTOR II Low Self-Efficacy

66.	I can write a term paper.	−.54
24.	Writing an essay or paper is always a slow process.	.52
69.	Studying grammar and punctuation would greatly improve my writing	.47
10.	Having my writing evaluated scares me.	.41
21.	I expect good grades on essays and papers.	−.41
60.	I need special encouragement to do my best writing.	.39
47.	I do well on essay tests.	−.38
50.	I can write simple, compound, and complex sentences.	−.37
62.	My writing rarely expresses what I really think.	.36
23.	I like to work in small groups to discuss ideas or to do revision in writing.	.35
8.	The most important thing in writing is observing the rules of grammar, punctuation, and organization.	.35
72.	I often do written assignment/s at the last minute and still get a good grade.	−.33
18.	I can't revise my own writing because I can't see my own mistakes.	.29
38.	If the assignment calls for 1000 words, I try to write just about that many.	.26

FACTOR III Reflective-Revision

27. I re-examine and restate my thoughts in revision.	.52
70. There is one best way to write a written assignment.	−.45
42. I complete each sentence and revise it before going onto the next.	−.41
5. The reason for writing an essay really doesn't bother me.	−.39
59. Often my first draft is my finished product.	−.39
40. Revision is a one time process at the end.	−.39
3. When given an assignment calling for an argument or viewpoint, I immediately know which side I'll take.	−.39
43. My prewriting notes are always a mess.	.36
46. I plan out my writing and stick to the plan.	−.35
32. In my writing, I use a\some ideas to support other, larger ideas.	.33
39. It's important to me to like what I've written.	.33
16. Revision is the process of finding the shape of my writing.	.32
35. The question dictates the type of essay called for.	.31

FACTOR IV Spontaneous-Impulsive

15. My writing 'just happens' with little planning or preparation.	.51
72. I often do written assignments at the last minute and still get a good grade.	.47
51. I never think about how I go about writing.	.45
59. Often my first draft is my finished product.	.45
9. I usually write several paragraphs before rereading.	.42
29. I just write 'off the top of my head' and then go back and rework the whole thing.	.41
48. I start with a fairly detailed outline.	−.40
25. I plan, write and revise all the same time.	.37
41. I am my own audience.	.35
52. When I begin to write, I have only a vague idea of how my essay would come out.	.35
31. Revision is making minor alterations — just touching things up and rewording.	.34
18. I can't revise my own writing because I can't see my own mistakes.	.33
45. When writing an essay or paper, I just write out what I would say if I were talking.	.32
40. Revision is a one time process at the end.	.31
19. I set aside specific time to do written assignments.	.29

FACTOR V Procedural

54. When writing an essay, I stick to the rules.	.54
63. I closely examine what the essay calls for.	.52
62. I keep my theme or topic clearly in mind as I write.	.43
49. I can usually find one main sentence that tells the theme of my essay.	.41

(Appendix: Cond.)

FACTOR V Procedural   *Cond.*

58. The teacher is the most important audience.	.40
14. I like written assignments to be well-specified with details included.	.34
71. My intention in writing papers or essays is just to answer the question.	.33
28. The main reason for writing an essay or paper is to get a good grade on it.	.31
1. An essay is primarily a sequence of ideas, an orderly arrangement.	.29
55. I worry about how much time my essay will take.	.28