A study investigated cognitive behaviors and processes that contribute to writer's block. Subjects were 10 college undergraduates who had scored at the extreme ends of a writer's block measurement instrument. The 10, 6 "high-blockers" and 4 "low-blockers," varied in their English experience, class standing, and majors. Each was given a writing topic, allowed time to become familiar with it, and then left alone to write for 1 hour. Two videotape machines recorded the students' behaviors and the writing they were doing. At the end of the hour, each student was shown the tapes and questioned about various behaviors that had been recorded. In addition, the amount of time spent in prewriting, planning, and pausing, and the number of words written and deleted were recorded. Finally, the final products were evaluated by two independent raters. Results showed that on the average, high-blockers paused longer, produced shorter drafts, and received lower evaluations than low-blockers. Furthermore, in several cases, high-blockers spent one-half to two-thirds of their time prewriting and planning rather than producing text. Both groups expressed roughly the same number of positive and negative evaluations of their work. The expression of negative evaluations was highly related to low English experience. (Excerpts from three student case studies are included.) (FL)
This document is a summary of the following monograph:

INTRODUCTION

It is a common assumption that writers block because they are reluctant to reveal themselves or are fearful of evaluation. However, I want, this afternoon, to report to you research findings that suggest that there can be other primarily cognitive, (vs. primarily emotional) behaviors and processes that contribute to writer's block. But before I report these findings, I would like to offer a brief tale and an exhortation.

When I first became interested in writer's block, several of the influential faculty at my school tried to dissuade me. They said the problem was too uncontrollable, too messy. In short, too real. Now, three years later with the study completed, I can say, with some assurance, that it is precisely messy and real problems that more of us in writing research should investigate. In our desire for methodological respectability and empirical assurance, we all too often limit ourselves to neatly circumscribable and isolable questions. But writers writing rarely engage in neatly circumscribed and isolated processes. Rather than sidestepping this complexity, I believe we should equip ourselves with as many legitimate techniques as possible -- borrowed from fields as diverse as rhetoric and anthropology -- and set out to explore the wonderfully rich world of writers writing.

Writer's block is one such complex problem. It is messy not only because it involves so many variables but also because it has become so popular a notion -- tinged with heresy and myth. But it can be investigated. Let me quickly summarize the way my chairman, Richard Shavelson, and I chose to investigate the problem. And perhaps the process as well as the multi-faceted methodology we followed can serve as one illustration, anyway, of an investigative approach for a messy, real world writing problem.

What we did.

METHODOLOGY

Step 1. I conducted a number of preliminary interviews and pilot studies with both fluent and stymied university students of high to moderate skill. A number of cognitive, rather than primarily emotional, issues emerged (e.g., some blockers didn't seem particularly reluctant to reveal themselves on paper, but were planning in pretty inflexible ways), so I pursued the cognitive.

Step 2. From these preliminary investigations, I framed a questionnaire. A questionnaire would readily allow us or other researchers and teachers to identify large numbers of stymied or fluent students. But we had other reasons for framing a questionnaire as well: first of all, if we could identify general behavioral and cognitive/behavioral indicants of writer's block, then we could partially avoid the idiosyncracy of personal definition. That is, rather than asking students if they experience writer's block and forever wonder
what the phrase "writer's block" means to them, we could ask if they experience specific behaviors we know are related to some instances of blocking. For example, one questionnaire item could be "I have to hand in assignments late because I can't get the words down on paper," or "I'll wait until I've found just the right phrase." Second of all, if we created subscales (subcategories of questions) that tapped varied behavioral, cognitive/behavioral and cognitive/attitudinal processes, then our questionnaire inquiry could be a bit more refined. That is, we could say more than "the student reports blocking behavior." We could say, for example, "the student also reports problems with editing too early or with organizing complex discourse."

We refined the questionnaire over the year, administering it six times to UCLA undergraduates who ranged in English experience, class standing, and major. I don't have time to report all the psychometrics, but let me briefly note that, on the final administration, reliability alphas for each subscale were high: they ranged from .72 to .87. Let me add that the responses on the cognitive/behavioral and cognitive/attitudinal subscales accounted for 52% of the variation of response on the blocking subscale. That's high for educational research. The instrument proved reliable and valid.

Step 3. I then chose ten students from extreme ends of the 351 undergraduates who took the fifth version of the questionnaire. The ten, six high-blockers and four low-blockers, varied in English experience, class standing and major. I closely explored the writing behaviors of these students via a technique borrowed from decision-making research: stimulated recall. The way I adapted it, stimulated recall worked as follows: Each student was presented with a university-level writing topic and was given some time to become familiar with it. Each was then given one hour to compose, and while composing each was alone. Two videotape cameras -- one partially concealed across the room, another behind the student -- respectively recorded the student from waist up and the student's text emerging on the page. When the hour was over, I returned to the room and played the tapes to the student. What the student saw was a split screen -- he or she on one side, the emerging text on the other. I stopped the tape at every pause, lining out, rescanning, etc. and questioned these behaviors. The student, too, could stop the tape and comment. Our entire series of questions and answers were recorded on audiotape and later transcribed. The transcription, called a protocol, could then be analyzed.

With the assistance of an independent rater, I analyzed the protocols, identifying and tallying, among other things, composing rules, plans used to interpret the assignment, plans and discourse structures used to compose the assignment, assumptions about composing, instances of conflict among rules, plans, and assumptions, instances of editing at inappropriate times during composing, and, finally, positive and negative evaluations voiced by the student about the text he or she was creating.

Step 4. We further decided that the fullest picture of blocking would emerge if we computed additional quantitative measures from the videotape and from the students' written productions, measures that, frankly, are pretty reductionistic, but which could provide one more perspective on blocking or fluency. We recorded time spent prewriting and planning and time spent in
various kinds of pauses, we tallied words written and deleted on assignment materials, scratch paper, and drafts, and finally, we had the essays evaluated by two independent raters.

In the final, comprehensive analysis, then, we brought all our data to bear on the puzzle of writer's block. In summary, the data included questionnaire self-reports, tallies of prewriting, pausing, and planning time, tallies of words produced and deleted, reader evaluations of essays, tabulations of a variety of cognitive and cognitive/behavioral entities and events including rules, plans, assumptions, premature editing, conflict, and self-evaluations, and, finally, observations of mannerisms and other behaviors that would not be caught by the more circumscribed quantitative analyses.

RESULTS

Briefly, here are the results. On the average, high-blockers (vs. low-blockers) paused longer, produced shorter drafts, and received lower reader evaluations (though three of the high-blockers were upper division English majors.) Furthermore, in several cases, high-blockers spent one-half to two-thirds of their time prewriting and planning rather than producing drafts. In addition, the high-blockers (vs. low-blockers) expressed four times as many non-functional, often rigid rules (e.g., "You're not supposed to have passive verbs." "Word choices should not be too simple."). Conversely, low blockers (vs. high-blockers) expressed seventeen times as many functional rules. (A functional rule is flexible, even heuristic. E.G., "Get something written before worrying about editing.") High-blockers edited prematurely twice as often as low-blockers and circumvented such early editing only one-third as frequently. (An example of an editing circumvention is provided by the student who circled and later returned to words he couldn't spell correctly rather than concentrate on each word and lose his train of thought.) High-blockers expressed conflicting rules, planning strategies, and assumptions eight times as often as low-blockers. Three of the six high-blockers (but none of the low-blockers) absolutistically expressed inappropriate or inaccurate assumptions about composing. Five of the six high-blockers planned rigidly or inadequately. Finally, and this supports a cognitive orientation and challenges an affective one, high-blockers and low-blockers, on the average, expressed roughly the same number of both positive and negative evaluations of their work. The expression of negative evaluations was much more related to low English experience. The two students who, by university standards, wrote most poorly liked their writing the least, regardless of whether or not they were fluent or stymied.

But all these numbers are lifeless. I would like to breath a little life into the above data, if only for a few moments. Let me offer you three brief illustrations of what the video camera and audiorecorder captured.

An Illustration of Premature Editing

During her first ten minutes of composing, while Liz was interpreting the assignment for herself by jotting notes on the assignment sheet, she changed passive constructions to active ones, changed "to be", verbs, rejected the word "says" because it was "too colloquial", rejected the word "like" because it was "too simple", rejected a clause because it contained a prepositional phrase, and corrected spelling.
An Illustration of an Inaccurate Assumption

Terryl did not sketch out any sort of plan for a complex assignment because planning discourse:

...is certainly not spontaneous and a lot of the times it's not even really what you feel because it becomes very mechanical. It's almost like -- at least I feel -- it's diabolical, you know, because...it'll sacrifice truth and real feelings that you have.

The result was that, though Terryl wrote felicitously, he composed slowly and with some lack of analytic direction. As one reader put it: "The essay bogs down in description and in unexplained abstractions."

An Illustration of Inflexible Planning

Though Gary understood the assignment, he spent over half his hour meticulously analyzing each sentence of the assignment's reading passage. This analysis resulted in dozens and dozens of his own words and phrases. He then summarized these words and phrases in a list of six items. He then tried to condense all six items into a single topic sentence:

I have concepts. ...such as "existence" and "meaninglessness" and "society" and "life's work" and "personality" and "faith"... and my task here is to say what is being said about all of those all at once.

Obviously, he couldn't say something about his self-generated hodge podge of material "all at once."

IMPLICATIONS

I will list six implications of my research. Within them lies a foundation for treatment, but most of all, they should be regarded as considerations for composition pedagogy in general.

1) We must keep in mind that because of the psychological and sociological complexity of writing, few writing rules can be stated absolutely. Most rules should be taught flexibly and contextually. Concerning the poor, beleaguered passive voice, for example, we should show students how passive constructions can result in awkward and wordy sentences, but we must also illustrate its multiple rhetorical effects. In addition, we must explain that it has its use and purpose with certain academic audiences in certain writing situations.

2) I'll pose this second implication as a question. Have we composition teachers preached "correctness" so long and so convincingly that our students, especially our poorer students, conceive of writing as rule-following, and conceive of good writing as the embodiment of myriad mechanical/grammatical/stylistic rules? I think we need to talk more about discourse and less about correctness.
3) Either through direct instruction or example or process-oriented pedagogies, we need to instill in our students a realistic picture of the composing process.

4) In line with Linda Flower's work, we need to teach our students more and better planning strategies — strategies that are flexible and multi-purposed. And, truth to tell, we need to ask ourselves how much we, ultimately, believe in Romantic inspiration. Do we, really, write so little ourselves or have such a tough time with our writing that we, too, think good writing is the result of spark or even dumb luck, rather than premeditation and rethinking?

5) Many of our students are surprisingly lacking in strategies for framing even moderately complex discourse, and I suspect this lack limits them far more than any haunting fear of evaluation. Lately, a number of politically concerned or process-oriented theorists have underscored the limitations of old chestnuts like the five paragraph essay and the compare/contrast exercise. But our students can't be freed up as writers until they have mastered these and other fundamental frames. Rather than abandoning these admittedly limited forms, we should teach them as strategies and show how they can be manipulated and modified, and, when necessary, discarded.

6) We need to investigate our students' writing processes as well as measure the products of their skills. Through questionnaires or diagnostic conferences, we can unearth assumptions about and attitudes toward writing; we can discover the repertoire of rules and plans and principles that guide, and perhaps stymie, their composing.

CONCLUSION

In closing, I would like to add that I've just started doing some reading about reading, and it has alerted me to a number of interesting parallels with my work on stymied writers. Briefly, I'll note three.

1) I found of great interest the work of Carolyn Burke and Jerry Harste on students' beliefs about reading. Many students hold -- unfortunately have been taught -- to think of reading as decoding words or as pronouncing them correctly or as the cautious movement from one sentence to another. This molecular "correctness" model of reading ... or writing straightjackets our readers as well as our writers.

2) I was also taken by Ann Brown's work on metacognition. Many of our writers as well as our readers are, as it were, locked into one dimension of their processes. That is, they have limited ability to monitor their activity and shift, for example, from editing or reading closely to more global writing or reading strategies.

3) Work on text structure, like Bonnie Meyer's, reminds me that skilled readers approach texts with a knowledge of organizational frameworks. And such structural knowledge is necessary not only to comprehend prose but to produce it. Without a rich repertoire of such structures, students will, for example, read as a string of facts a passage that is written as dialectic and, likewise, will write associational narrative when argument is required.
Though writing and reading are certainly not identical processes, they share more linguistically and cognitively than is indicated by their separate study as separate disciplines in separate departments of our universities. This gathering today seems to be an attempt to heal that conceptual schism. I appreciate being asked to speak at it, for, perhaps, in a very small way, some of the aforementioned findings about writer's block have analogues in research on what happens when reading processes go awry.

A version of this speech was given for the Promising Research Award panel, N.C.T.E., Boston, 1981.