DOCUMENT RESUME

ED 306 605   CS 211 887

AUTHOR   Ackerman, John
TITLE   Students' Self-Analyses and Judges' Perceptions:
                Where Do They Agree? (Reading-to-Write Report No. 4.)
                Technical Report No. 23.
INSTITUTION   Center for the Study of Writing, Berkeley, CA.;
                Center for the Study of Writing, Pittsburgh, PA.
SPONS AGENCY   Office of Educational Research and Improvement (ED),
                Washington, DC.
PUB DATE   May 89
NOTE   36p.; For the other reports in this series, see ED
                285 206, and CS 211 845-853.
PUB TYPE   Reports - Research/Technical (143)

EDRS PRICE   MF01/PC02 Plus Postage.
DESCRIPTORS   Comparative Analysis; *Freshman Composition; Higher
                Education; Reading Writing Relationship; *Revision
                (Written Composition); Self Evaluation (Individuals);
                Student Evaluation; *Task Analysis; *Writing
                Evaluation; Writing Research
IDENTIFIERS   *Reading to Write; *Self Monitoring; Writing
                Strategies

ABSTRACT
                This study is the fourth in a series of reports from
the Reading-to-Write Project, a collaborative study of students'
cognitive processes at one critical point of entry into academic
performance. The study of task representation reported here explores
how students and teachers perceive the same writing assignment by
comparing the reported representations of a reading-to-write task
from freshman writers with the essay evaluations from trained judges.
Subjects, 72 students enrolled in four sections of a freshman
composition course, received a follow-up assignment to revise their
first draft of a time management essay. The experimental group
received instruction in "organizing plans" and an introduction to
writing issues in task representation, and completed a Self-Analysis
Checklist (S-AC). The control group received the lecture (minus the
revision assignment) and an introduction to the self-analysis
procedure. Trained judges then rated the essays produced by both
groups. Comparison of the judges' and the students' representation of
the task indicated that judges and students disagreed far more than
they agreed on features in the final product, but that these rival
perceptions could be tempered by prompting and instructing students
to "interpret with a purpose" when they revised a first draft.
Results also indicated that the bases for the different perceptions
and expectations are the more interesting and practical findings from
this study. (Five figures and three tables of data are included; the
Reading-to-Write study reference list, the S-AC, and an appendix of
data are attached.) (RS)

ED306605

CENTER FOR THE STUDY OF WRITING

Technical Report No. 23

STUDENTS' SELF-ANALYSES AND JUDGES' PERCEPTIONS: WHERE DO THEY AGREE?
(Reading-to-Write Report No. 4)

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May, 1989

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CENTER FOR THE STUDY OF WRITING

Preface to the Reading-to-Write Reports

> So I'm just gonna--I don't care, I'm just going to interpret them the
> only way I can interpret them. . . . Let's just put what the authors
> agreed on. *Authors agree* -- We'll just -- If at least two of them
> concur, we'll say they agree. *Authors in general agree that. . . .*
> But then they don't agree -- There's nothing you can say about
> this. . . .
>
> Can I leave it at that. . . . Oh give me a break, I don't know what
> I'm doing. I'm only a freshman. I have no idea what to do.
> <div align="right">Darlene, a first-semester freshman</div>

Darlene's college assignment asked for synthesis and interpretation. The paper she turned in--a short, simplistic review of material from her sources--failed to meet her own expectations and her readers'. And yet, a chance to look at the process behind this unsophisticated product revealed serious thinking, a complicated, if confused, decision process, and a trail of unused abilities and discarded ideas--an active encounter with academic discourse that her teacher would never see.

The study presented here takes an unusually comprehensive look at one critical point of entry into academic performance. It shows a group of freshmen in the transition into the academic discourse of college, looking at the ways in which they interpret and negotiate an assignment that calls for reading to write. On such tasks, students are reading in order to create a *text* of their own, trying to integrate information from sources with *ideas* of their own, and attempting to do so under the guidance of a *purpose* they must themselves create. Because these reading-to-write tasks ask students to integrate reading, writing, and rhetorical purpose, they open a door to critical literacy. Yet this same interaction often makes reading-to-write a difficult process for students to learn and to manage.

In order to get a rounded picture of cognition in this academic context, the study looks at the thinking processes of these students from a number of perspectives, drawing on think-aloud protocols of students writing and revising, on interviews with and self-analyses by the students, and on comparisons of teachers' and students' perceptions of texts the students wrote. It attempts to place these observations within a broader contextual analysis of the situation as students saw it and the social and cultural assumptions about schooling they brought with them.

What this study revealed were some radical differences in how individual students represent an academic writing task to themselves--differences which teachers might interpret as a simple indication of a student's ability rather than a student's interpretation of the task. The students were often unaware that such alternative representations existed or that they might hold such significance. Some images of the task, for instance, such as those dominated by the goals of comprehension, summary, and simple response, offered little or no place for critical response, original synthesis, or interpretation for a rhetorical purpose.

The reading-to-write task students imagined for themselves also had a direct effect on performance: it affected the goals they set, the strategies they used, and the

ways they solved problems during composing. And it led to differences in teachers' evaluations of the texts--although, this study suggested, these evaluations may confuse the conventions of organization (e.g., use of topic sentences) with the writer's control of ideas. When students began to examine their options and attempt the more demanding task of interpreting for a purpose, certain students, whom we called the Intenders, showed important changes in their writing and thinking process. These changes, however, were not evident in the text and nor apparent to teachers. Finally, this study showed how students' images of the task were rooted in the students' histories, the context of schooling, and cultural assumptions about writing which they brought to college.

It is not surprising to find that some of the images students bring with them are at odds with the expectations they encounter at a university. However, when the expectations for "college-level" discourse are presented in oblique and indirect ways, the transition students face may be a *masked* transition. That is, the task has changed, but for a number of reasons, the magnitude and real nature of this change may not be apparent to students, even as they fail to meet the university's expectations.

One of the key implications of this study is that reading-to-write is a task with more faces and a process with more demands than we have realized. We see students thinking hard and doing smart things, even when they misgauge their goals or their written text fails to meet certain standards. This close survey of the cognitive and social landscape of reading-to-write in a college class gives one added respect for the students in this transition and for the complexity and sophistication of the "freshman" task as they face it.

The Reading-to-Write Project was carried out as a collaborative effort at the Center for the Study of Writing, at Carnegie Mellon. We designed the study to create a range of alternative perspectives on the process of reading-to-write and on the way cognition is shaped by the social context of school. The following technical reports present the design and collaborative history of the study; analyses of the cognitive processes we observed, of the texts, and of students' perceptions of both; and a set of conclusions, from different theoretical perspectives, on how students manage this entry into academic discourse:

Reading-to-Write Report 1.   **Studying Cognition in Context:**
(CSW Tech. Report 21)   **Introduction to the Study.**
                       Linda Flower

Reading-to-write is an act of critical literacy central to much of academic discourse. This project, divided into an Exploratory Study and a Teaching Study, examines the cognitive processes of reading-to-write as they are embedded in the social context of a college course.

Reading-to-Write Report 2.   **The Role of Task Representation in**
(CSW Tech. Report 6)   **Reading-to-Write.**
                       Linda Flower

The different ways in which students represented a "standard" reading-to-write task to themselves led to marked differences in students' goals and strategies as well as their organizing plans. This raised questions about the costs and benefits of these alternative representations and about students' metacognitive control of their own reading and writing processes.

Reading-to-Write Report 3.
(CSW Tech. Report 22)

Promises of Coherence, Weak Content, and Strong Organization: An Analysis of the Student Texts. Margaret J. Kantz

Analysis of students' Organizing Plans (including free response, summary, review and comment, synthesis, and interpretation for a rhetorical purpose) also revealed a hybrid plan in which certain coherence conventions gave the promise of synthesis while the paper's substance reflected a simpler review and comment strategy. Both students and teachers, it appeared, may sometimes confuse coherence strategies (for text) with knowledge transformation strategies (for content).

Reading-to-Write Report 4.
(CSW Tech. Report 23)

Students' Self-Analyses and Judges' Perceptions: Where Do They Agree? John Ackerman

Any writing assignment is a negotiation between a teacher's expectations and a student's representation of the task. Students' Self-Analysis Checklists showed a strong shift in perception for students in the experimental training condition, but a tellingly low agreement with judges' perceptions of the texts.

Reading-to-Write Report 5.
(CSW Tech. Report 24)

Exploring the Cognition of Reading-to-Write. Victoria Stein.

A comparison of the protocols of 36 students showed differences in ways students monitored their comprehension, elaborated, structured the reading and planned their texts. A study of these patterns of cognition and case studies of selected students revealed both some successful and some problematic strategies students brought to this reading-to-write task.

Reading-to-Write Report 6.
(CSW Tech. Report 25)

Elaboration: Using What You Know. Victoria Stein

The process of elaboration allowed students to use prior knowledge not only for comprehension and critical thinking, but also for structuring and planning their papers. However, much of this valuable thinking failed to be transferred into students' papers.

Reading-to-Write Report 7.
(CSW Tech. Report 26)

The Effects of Prompts Upon Revision: A Glimpse of the Gap between Planning and Performance. Wayne C. Peck

Students who were introduced to the options of task representation and prompted to attempt the difficult task of "interpreting for a purpose of one's own" on revision were far more likely to change their organizing plan than students prompted merely to revise to "make the text better." However, the protocols also revealed a significant group of students we called "Intenders" who, for various reasons, made plans they were unable to translate into text.

Reading-to-Write Report 8.
(CSW Tech. Report 27)

Translating Context into A :tion.
John Ackerman

One context for writing is the student's history of schooling including high school assignments and essays. Based on protocols, texts, and interviews, this report describes a set of "initial reading strategies" nearly every freshman used to begin the task--strategies that appear to reflect their training in summarization and recitation of information. From this limited and ofte 1 unexamined starting point, students then had to construct a solutior path which either clung to, modified, or rejected this a-rhetorical initial approach to reading and writing.

Reading-to-Write Report 9.
(CSW Tech. Report 28)

The Cultural Imperatives Underlying
Cognitive Acts.
Kathleen McCormick

By setting reading-to-write in a broad cultural context we explore some of the cultural imperatives that might underlie particular cognitive acts. Protocols and interviews suggest that three culturally-based attitudes played a role in this task: the desire for closure, a belief in objectivity, and a refusal to write about perceived contradictions.

Reading-to-Write Report 10.
(CSW Tech. Report 29)

Negotiating Academic Discourse.
Linda Flower

Entering an academic discourse community is both a cognitive and social process guided by strategic knowledge, that is, by the goals writers set based on their reading of the context, by the strategies they invoke, and by their awareness of both these processes. As students move from a process based on comprehension and response to a more fully rhetorical, constructive process, they must embed old strategies within new goals, new readings of the rhetorical situation. However, for both social and cognitive reasons, this process of negotiation and change that academic discourse communities expect may not be apparent to many students for whom this becomes a confusing and tacit transition.

Reading-to-Write Report 11.
(CSW Tech. Report 30)

Expanding the Repertoire: An
Anthology of Practical Approaches
for the Teaching of Writing.
Kathleen McCormick et al.

One important implication of this entire study is that students themselves should come into the act of examining their own reading and writing processes and becoming more aware of cognitive and cultural implications of their choices. This set of classroom approaches, written by teachers collaborating on a Reading-to-Write course that grew out of this project, introduces students to ways of exploring their assumptions and alternative ways of represent aspects of the task.

Acknowledgments

STUDENTS' SELF-ANALYSES AND JUDGES' PERCEPTIONS:
WHERE DO THEY AGREE?

By
John Ackerman
University of Utah

The task of forming a clear representation of an assignment is a challenge for both teachers and students of writing. From the standpoint of the teacher, assignments comprise the heart of the writing course where theories of learning, semester objectives, and target skills are translated into an occasion for practice and assimilation (Bartholomae, 1982). For the student a writing assignment is an exercise in pragmatics. Each student must decide how to represent the information before her, mediating the teachers' explicit and implicit requirements while at the same time reconciling what is possible and desirable. These decisions appear at times to come quickly, with little evaluation, the product of years of schooling. Yet, for a given assignment, students surprise us with their diversity and inventiveness when they face a range of choices and consequences.

It is not surprising, then, that the assignment given by an instructor and the assignment taken by a student are not in many cases a reciprocal fit. Giving and responding to an assignment is an act of negotiation that depends on a number of variables. Among them are:

- the feasibility of teacher expectations (is the assignment doable as it is presented?)
- the clarity with which an assignment is presented
- a given teacher's willingness and ability to alter or tailor an assignment
- the student's history with whatever genre or type of writing is sought
- the student's familiarity with a topic and facility with the preferred language
- a student's stature in class and the personal circumstances that surround an act of writing
- practical constraints resulting from other assignments in school and out

This formidable list could mean that assignments have so many variables that reasonable agreement between teachers and students is impossible. This of course is not the case--diversity and complexity do not prohibit the successful completion of an assignment. Instead, the list of variables illustrates the multiplicity of contributing factors involved in representing and acting upon an assigned piece of writing.

In Report 2 of this series Linda Flower argued that, first, a task is something people construct even when they assume there is a common sense version everyone would hold and, second, the level of complexity for a given task can vary enormously . In other words, although we gave our students a writing assignment that involved reading from sources--a common academic assignment--we expected a variety of approaches. But on a practical level what does it mean for students to represent a task differently? Do varied representations bring noticeably different results, in this case, in the type and quality of a draft? And how does the range of student representations match their instructors' perceptions, a critical question if for no other reason than an instructor's perceptions eventually translate into an evaluation and a grade?

The study of task representation presented here explores how students and teachers perceive the same assignment . We compared the reported representations of

the reading-to-write task from our freshman writers with the essay evaluations from trained judges. We did not assume that a trained judge simulates the evaluation procedures of a teacher, who often (and wisely) tailors a text evaluation to a given student's progress or to shifting demands in an academic writing situation. Yet we wanted to know how the consensus of three judges (teachers who designed and taught the course) compared with student perceptions. We found that teachers who served as judges and students who composed the essays disagreed (67% of the time) far more than they agreed on features in the final products. However, we also discovered that these rival perceptions could be tempered somewhat by prompting and instructing students to "interpret with a purpose" when they revised a first draft. As mentioned in the Introduction, one class period was devoted to listing and describing the categories of information and decisions that accomplished writers often address when they write from sources. The students who received this instruction tended to revise their essays to incorporate more complex and sophisticated rhetorical plans, and the gap between teacher and student perceptions was lessened.

We also learned that the bases for the different perceptions and expectations are the more interesting and practical findings from this study. By looking closer at the range of decisions the students faced and their responses as they wrote, we can understand better how students negotiate our assignments and how we can best intervene. This report begins with a summary of the student accounts of how they composed a first draft. Tallies and comparisons of their reports provide a basis for contrasting how students and teachers evaluated the same essays. Conclusions from these comparisons point toward commonalities in student task representations and toward ways teachers can predict students' initial responses to a writing assignment and guide revision.

The Study

The analysis reported here centers on a Self-Analysis Checklist, one component in the "Teaching Study" which also includes the reading-to-write assignment, the lecture on the concept of task representation as described in Report 2, and a procedure for independently rating the student essays. During a regularly scheduled class lecture, students were given the Self-Analysis Checklist (S-AC) which briefly described five major decisions that a range of writers made working through the same assignment:

- *Major Sources of Topic Information* - ranging from text-based ideas to the student's own experience with the topic

- *Text Format* - the image a writer has of the type of prose desired, from summaries to persuasive essays

- *Organizing or Rhetorical Plan for Writing* - within the text, the way a writer arranges and presents information

- *Strategies* - nine practical concerns and approaches to finding and shaping ideas for a draft

- *Goals* - twelve general purposes and objectives that appear to guide composing.

The 40 minute lecture detailed the range of options that accompany each of the five decision categories with examples and as much time for questions as possible. These options also appeared on the S-AC (Appendix I).

At the beginning of the lecture, the S-AC was handed to each student. While they listened and referred to their drafts, they selected the decision options that best represented how they had composed the paper. In this way the checklist augmented the lecture by asking students to make links between the lecture and their own writing. The checklist also provided an outline, summarizing and illustrating key points in the lecture. For example, while the students listened to a description of a major consideration for a writer, the Source of Topic Information, the checklist offered four common options: assigned texts (readings), a mix of text ideas and personal commentary, prior experience related to the topic, and previously learned concepts which could be applied to the writing. In addition, each option was accompanied by descriptions and definitions written in short, personal, and complete sentences. Students also had the option to present and describe their own option for this decision and the four decisions that followed. Throughout the lecture, then, with their drafts and the checklist before them, the students recalled and recorded the decisions they made as they composed.

The S-AC was central to our exploration of how our students represent their assigned writing since it eventually captured the reports of 72 students across four sections of freshman writing. These guided reports do not provide the detail found in a protocol analysis or other forms of cued recall. The checklist does, however, indicate in a balanced, consistent way how four sections of freshman writing, using our framework, perceived their composing. A guiding premise in this study was that the *representation* of an act of composing matters at least as much as the decision processes and circumstances inferred from final products or coded in a "think aloud" transcript. Since one of our general goals as researchers was to surmise how writers and readers construct and reconstruct the same text differently, our students' personal representation of an academic writing task became an object of research worthy of time and interest.

Besides offering a relatively accurate and consistent way to recollect how a writing assignment was perceived, we hoped that the S-AC would serve as a tool for inquiry. It might help students evaluate future pieces of writing, anticipate a useful approach to a draft, or provide a vocabulary for talking about writing in college. In class discussion following the task representation lecture, we learned that many students were surprised and encouraged to discover that their decisions and strategies are common and therefore acceptable, creating for some students a currency in what they normally do. For other students, the checklist was also an organizing tool for sorting through at least some of the myriad of decisions they normally face in writing.

To restate, both groups, experimental and control received a follow-up assignment to revise their first draft of the time management essay. As the experimental group received instruction in "organizing plans" and an introduction to writerly issues in task representation, they completed the S-AC. One week later, when the second draft of the assignment was due, both groups received the checklist. The experimental group, of course, completed the S-AC on their revisions while the control group received the lecture (minus the revision assignment) and the introduction to the self-analysis procedure. This system gave us two major comparisons. The perceptions of the experimental group could be compared over two drafts of the same assignment, and the two groups of students could be compared according to their revisions.

The final component in the study, an independent rating of the first and second drafts, adds another perspective to the students' reported perceptions. Three instructors were trained and asked to blind rate the student essays according to the four "organizing plan" options introduced in lecture and listed on the S-AC. The raters' decisions resembled those of a teacher who must evaluate a paper largely on explicit text features.

These ratings and eventually the comparisons between student and teacher perceptions are limited to organizing plans because we assumed that rhetorical plans would dominate how students finally composed and would appear in their final products (Meyer, 1982).

To clarify their judgments, the raters refined the four options listed for the students under organizing plans (see Kantz, Report 3). The student category of Summary was expanded to include the following categories: Summary, Review and Comment, Main Idea, and Frame. This extension was not inconsistent with what the students heard in lecture. As students filled out the checklist they were told to select Summary if their plan had been to summarize (or review) and comment. For this analysis "Summary" includes both summary and its variants.

What Our Students Reported

The presentation of the study findings begins with how students reported their task representation using the S-AC. We must interpret these findings with caution because the checklist data depend in part on recollection and because we could not monitor influences such as the lecture environment (pacing, distance from speaker) much less attitude or proximity to friends. Our impression, however, from administering the checklist and from talking with students in class following the lecture, was that students took this exercise seriously like any other classroom exercise in the semester (which is what it was meant to be). The data created both a context for exploring why and how the students composed two versions of the time management essay and a basis for comparing the students' perceptions and those of the independent judges. The S-AC presented five major decisions in task representation. Beginning with the first three decisions-- "Source of Information, Format, and Organizing Plan" -- students could only choose one option which allowed us to compile the frequencies reported below. For the remaining two decisions-- "Strategies and Goals" --students were encouraged to select more than one option, creating more of a cumulative measure and allowing the checklist to account for more idiosyncrasies between students as will be discussed later in this paper.

Three Decisions: Source of Information, Format, Organizing Plan

Table 1 compares for drafts one and two the experimental group's declared sources, formats, and plans. To simplify the table and focus discussion, the only options listed are those that received the most attention from students (highest frequencies). A complete listing of the selections and frequencies from the Self-Analysis Checklist can be found in Appendix II.

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		Draft #1	%	Draft #2	%
Source	Text	32		06	
	Text and Comments	54		41	
	Prior Knowledge*	15		53	
Format	Standard Theme	50		24	
	Summary + Opinion	25		24	
	Persuasive Essay	07		47	
Plan	Summary	43		18	
	Synthesis	25		12	
	Interpret with a Purpose	11		59	

* For brevity in Table 1 and 2, "What I Already Knew" and "Prior Concepts" from the Checklist are collapsed under one heading,. "Prior Knowledge," to focus the comparison between text-based and experience-based ideas.

**Table 1. The Task Representation Options Selected
by the Experimental Group for Drafts 1 and 2.**

We wanted to know if the lecture and revision instructions lead to a shift in student perception and helped them revise their drafts. As Table 1 illustrates, on the first draft the experimental Group reported primarily drawing upon Text (32%) and Text + Comment (54%) as sources of information for their essays, accounting for 86% of all selected options in this category. These students also tended to prefer, a Standard Theme format (50%), and plans to Summarize (43%). This set of options all decreased in the revision, sometimes dramatically. For their revision, students reported depending on Prior Knowledge* as a source of information (53%), a Persuasive Essay as a format, and the assigned plan to Interpret (59%).

This shift suggests that the lecture and assignment led to a change in representation, a change toward the explicit goal of the assignment to "interpret with a purpose." We do not ignore the normative influences of a public lecture or our students' own eagerness to be seen as "good students"--they could have been telling us what they thought we wanted to hear. Evidence to the contrary, however, comes with the number of students reporting what *was not* assigned (41% chose options other than Interpret). The checklist also was introduced as a personal exploration into the students' representations of how they composed. Through the Reading to Write course their teachers had encouraged self reflection and an awareness of reading and writing as a social and cognitive process. And, as mentioned earlier, when the students made their selections, they were reminded to refer to their drafts as an aid to memory. Therefore, we read this self analysis, with due reservations, as a meaningful indicator of what students *thought* they were indeed doing. The experimental group perceived their first drafts as text-based, standard theme, summaries primarily, and their revisions tended more to be seen as depending on prior knowledge to construct persuasive interpretations.

Table 2 below, lists the reported options for the same three decisions, cast this time according to the second major comparison in the study, the revisions of the experimental and control groups.

Source		Experimental	%	Control	%
Source	Text and Comments		41		66
	Prior Knowledge*		53		18
Format	Summary + Opinion		24		21
	Standard Theme		24		58
	Persuasive Essay		47		18
Plan	Synthesi:		12		58
	Interpret with a Purpose		59		15

Table 2. The Task Representation Options Selected by the Experimental and Control Groups When They Revised to Produce Draft #2.

Did the different revision instructions lead to different self perceptions? Apparently so; the reported representations for the two groups differ at each option shown here. The control group's revision decisions look much like those associated with the experimental group's first draft (66% vs. 54% for Text and Comments, 58% vs. 50% for Standard Theme) listed in Table 1. The exception to this trend is the high percentage of plans to Synthesize for the control group. For this group, the instruction to "make better" lead some students to change from Summary to an attempt to synthesize. The similarity between draft one (experimental) and the revision (control) coupled with the experimental group's preference for Prior Knowledge as a source, Persuasion as a format, and Interpretation as a plan support the claim that representations did vary between groups, following the lecture on task representation. As noted, the difference in organizing plans is striking. Random sampling should have guaranteed that the two groups had equivalent abilities and both groups revised under roughly the same circumstances. The experimental group saw themselves as writing a more "purposeful" statement or time management, one that integrates more personal knowledge of the topic and attempts to engage an audience. This perception will be tested later against the scores of the trained raters.

If stock is taken in the highest percentages from the data, a generic student for each group begins to emerge. Although correlations between options are difficult to infer from the frequencies listed in Tables 1 and 2, the percentages imply certain patterns of behavior. For example, a Synthesis written in a Standard Theme format using Text ideas plus Comments is a plausible schema for writing a typical freshman essay involving sources. In reality, none of our students exactly fit the profile of the "generic student." Not one of 72 students participating in the study chose each of the six most popular options. This fact matches our intuition and early prediction that students have diverse and complex representations of a reading-to-write task. The value of seeing the patterns of task representation lies in understanding the assumptions and habits that students bring to a piece of writing. If we can draw a bead on those assumptions and familiar strategies--even in a hypothetical way--we can more accurately offer guidance to students and alternative ways to progress.

Within the general trends evidenced thus far, there appear to be correlations among reported perceptions by both groups that are worthy of attention. The options most often selected by students are illustrated in Figure 1. The figure is read by beginning with the highest number in a row. For example, in the first row of the 11

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students who chose Text selections, 8 also chose Standard Theme and of those 7 chose Summary. And in the last row, of the 17 control students who wrote Standard Themes, 10 reported reliance on a Standard Theme format. Shaded areas correspond with categories where no clear trend was apparent, and thus there is no correlation to consider.

SOURCE	FORMAT	PLAN	GROUP
11 TEXT	8 STANDARD THEME	7 SUMMARY	E & C
15 TEXT and COMMENTS	(no more than 5 of any of the formats)	7 SUMMARY	E & C
14 TEXT + TEXT and COMMENTS	░░░░░░░░░	14 SUMMARY	E & C
░░░░░░░░░	13 STANDARD THEME	14 SUMMARY	E & C
░░░░░░░░░	10 PERSUASIVE ESSAY	10 INTERPRET	E
░░░░░░░░░	10 STANDARD THEME	17 SYNTHESIS	C

Figure 1. Interrelationships among Source, Format, and Plan

Figure 1 shows that connections are higher among pairs of decisions. For example, the Text option under source correlates fairly highly with a Standard Theme format and Summary plan. In fact, the only plan that connects with source options is a Summary. This implies that if a student chooses a Synthesis or Interpret plan, the information for those papers will come from a variety of sources. A strong relationship appears to exist between Summary plans and Standard Theme formats for both groups, as we might predict. After all, the utilitarian Standard Theme is often characterized as consisting of stock arrangements of generally recognizable ideas (Bartholomae, 1985). A strong relationship also appears between the Interpret plan and the Persuasion format (experimental group). The relationship between dominant formats and plans does not appear to carry for a Synthesis (control) which poses the questions: Do syntheses invoke a wider range of formats (the opposite seems likely)? Or, is the difference a perceptual issue, perhaps tied to the difference in tasks? To sum up, students seem to create clusters or pairs of options such as plans to summarize and standard theme format and persuasive formats and plans to interpret. However, the correlations suggested by these data are tentative at best, and we are skeptical that such simple patterns exist, given the complex nature of the task representation phenomenon.

Strategic and Goals

So far the data have shown that there are patterns in how the groups, using the S-AC, responded to an explicit request to interpret their decision processes and final products. We found differences between first and second drafts for the experimental group and differences between experimental and control groups. The patterns illustrated above show that, while no generic student exists, there are meaningful

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couplets that provide insights into the thinking patterns that lead to certain types of student drafts. The last two decisions presented in the lecture on task representation and on the checklist, strategies and goals, should be seen as supplementary information. The students could select one or more options under each decision to try and paint a clearer picture of their task representation. In addition, we asked each student to "predict" what strategies and goals a "graduate student" would bring to a similar piece of academic writing. Table 3, like Tables 1 and 2, lists only those selections that received the most attention from the students. (see Appendix I for a complete listing).

		Experimental			Control	
		draft 1	%	draft 2	%	draft 2	%
Strategies	Gist & List	16		03		02	
	Skim & Respond	16		06		11	
	Organizing Idea	18		23		20	
	Audience Needs	02		11		11	
	Own Purpose	06		17		07	
Goals							
	Present Learning	20		06		09	
	Do the Minimum	13		04		07	
	Page Requirement	12		00		03	
	Influence Reader	00		20		05	
	Cover Key Points	18		08		14	
	Originality	00		10		11	

Table 3. Strategies and Goals*

*These percentages are calculated from the total number of selections, not the total number of students making selections.

Table 3's clearest message is that one strategy or goal does not dominate the field. The variety of options selected indicates the complexity of the students' decision processes in contrast with patterns or trends. Student choices varied widely, and all of the 21 options in both categories drew responses (and no student wrote in "other" options). Interesting differences appear between the first and second draft for the experimental group. These students paid more attention to an Organizing Idea (23%) and writing for your Own Purpose (17%) as strategies and to the goal of Influencing a Reader (20%) in the revision, though the latter two of these selections were not prominent in the selections made by the control group.

In the preceding section of this report, the possibility of patterns among decisions was explored. A similar question would be whether any of the goals and strategies appear to cluster around, for example, a plan to interpret or synthesize. When strategy and goal options were compared with plans, we found that a given plan elicited the full range of strategies and goals with no clear trends in the proposed connections between decisions. The strategies and goals freshmen predicted for the older students, however, did reveal a trend. Both groups were remarkably consistent in their prediction (+ or - 02% on all but "audience needs"). Collectively, on the checklist and later in class, the students predicted that older students would be more concerned with

"originality" (represented by the Springboard strategy for their own ideas and Originality as a goal) and "audience." Graduate students were thought to have more time and control over their work since they wrote to peers and mentors who appreciated the creation of a personal frame addressing a reader. This revelation helped to focus discussion later in class. We explored why many students saw their roles as academic writers limited in comparison to older students, and in doing so we began to examine several of the assumptions underlying our students' notions of authority and originality in school.

The number of common perceptions, patterns between decisions, and even the diversity of options students reported choosing raise the thorny issue of what to do with this description of student thinking, beyond puzzling over it. Should discrete decisions or patterns of representation be taught? We think not. There is no evidence so far that one representation leads safely to a successful final draft. One virtue in this whole enterprise was the added ammunition to show students that a safe route to an "A" paper does not exist. At best the trends and shifts in student perceptions do suggest ways to anticipate and predict reasonable behavior for a writer in a given situation. For example, from the students' vantage point, an exclusive investment in Text material as a source of information for a draft probably will not lead efficiently to an Interpretation as sources that tap Prior Knowledge. The true metal of these perceptions, however, will appear when they are tested against the judgments of others. After all, if a piece of writing goes public, its worth is largely defined by the reader's perception of its message.

Organizing Plans

To compare the students' perception of their papers, specifically the organizing plans, with the rhetorical plan readers might respond to in the texts, both versions of the essays were submitted to a rating by three independent judges. The judges were asked to sort the papers on the basis of seven essay categories. Because the categories used extended the categories on the students' checklists, the judges were allowed to make finer distinctions between drafts. Figure 2 shows both the students' options for organizing plans and the judges' elaborated categories.

Students		Judges
• summary	. . . .	• summary
	. . . .	• review comment
	. . . .	• isolated main point
	. . . .	• frame
• response	. . . .	• response
• synthesis	. . . .	• synthesis
• interpret	. . . .	• interpret

Figure 2. Categories of Essay Plans.

Before looking at how judges' and students' perceptions compared, it would be helpful to characterize any trends or patterns in the judges' scoring. In contrast to the student selections, listed and categorized above, the raters showed relative balance across all seven categories for both drafts. For example the students labeled 72% of their revised papers either a Synthesis or Interpret with a Purpose plan. The raters, in turn, used these categories more conservatively to account for only 42% of the organizing plans. The conservative nature of the judges' scoring may be a result of

their training, their experience as readers of academic writing, or refinements in the coding scheme. At any rate, this difference forecasts the categories on which students and judges disagreed.

Agreement between Students and Raters

Of the 72 possible comparisons between the experimental and control students and the judges' evaluations, 67 comparisons were made. The loss of five comparisons resulted from students who failed to attend lecture, complete the second checklist, or turn in a revised essay. The percentage of comparisons remained consistent across both versions of the essay and across groups. As stated in the introduction of this report, students and judges agreed on all organizing plans for both drafts 37% of the time. This low agreement suggests that they saw different texts--or brought different criteria to the judgment process, or both. Looking closer at specific agreement and disagreement, the raters and students reached agreement more often with the more complex organizing plans: Syntheses (5 of 25), and Interpretations (4 of 25) although the individual rates of agreement for plan are not strong (no higher than 20%). No pattern of disagreement appeared save the disproportionately high number of mismatches for Response plans. Only one student labeled any draft a Response while the judges found seven. This judgment may have been affected by the lower value placed in the classes or during the lecture on a "personal response" to the topic (vs. the readings) in the context of an assignment where critical reading of outside authorities is stressed.

Agreement shifts noticeably from the first draft to revision, but not from one group of students to the next. In the first draft comparisons (all with the experimental group), agreement was higher at 48% than the overall average of 37%. In the second draft, agreement for both groups with the judges dropped to around 33% (30% for control and 35% for experimental). Two reasons for the across-the-board drop are possible. First, students in the experimental group, who were attempting a more complex task, may have had more difficulty either recognizing or carrying out such plans. One way of considering the instruction in task representation as successful is to predict that it leads to a more accurate but complicated picture of the task. Predictably this complexity would hinder their ability to label and carry out text plans since they were asked to rethink text features and their assumptions about essay writing. Or, concentration simply may have dropped when the students were asked to judge their writing after they had revised and were preparing to move along to other assignments in the course.

To understand further where students and judges agreed, signal detection analysis was used to separate and plot the number of student decisions for a given plan against those of the raters. A signal detection analysis of the checklists and ratings presents not only the instances that students and judges agree or "hit," it also scores "misses" and "false alarms." The latter two measures help us to understand the nature of the disagreement between students and judges. Since signal detection analysis depends on a standard, fixed score, the judges' expertise and decisions were taken as our assumed standard for assigning hits, misses, and false alarms. A "miss" in this case occurs when a student says "yes" to a plan when the text has been rated something else, and a false alarm occurs when a student fails to recognize a given plan.

To say that our judges have the final word made intuitive sense in that a teacher must decide and act upon some standard for evaluating papers, however arbitrary. In using signal detection analysis, we do not ignore the opening claim of this report--that what is possible and acceptable in a writing assignment is practically and finally negotiated between teachers and students. Nor do we forget that trained raters do not

proceed in the manner of a teacher evaluating a class's performance or a writer's self-evaluation of a draft. To compare teacher and student perceptions, a standard must be assumed, and v e chose the consensus reached by three teacher-evaluators. Figure 3 portrays the four possible comparisons inherent in signal detection analysis.

Judges

	Yes	No	Total
Students Yes	• Hit Both Say Yes	• False Alarm Judges No Students Yes	Yes
No	• Miss Judges Yes Students No	• Correct Rejection Both Say No	No
Total	Yes	No	67

Figure 3. Comparisons in Signal Detection.

For the signal detection analysis, the judges' extended Summary categories were collapsed so that we could score all four student options. For Summary, this meant that a student judgment was scored a hit if it matched any of the judges' first four categories. Figure 4 lists the scores for each of the four student text plans. These scores are included in this report to show the reader how the judges labeled the essays in the 67 comparisons and where students agreed with those labels.

Summary

14	1	15
25	27	52
39	28	67

Synthesis

6	17	23
7	37	44
13	54	67

Interpret

4	14	18
4	45	49
8	59	67

Response

1	5	6
6	55	61
7	60	67

Figure 4. Scores from Signal Detection for Four Text Types.

The 67 possible comparisons become the total number of possible hits or chances for complete agreement. The four totals for the "yes" column (bottom left corner) illustrate how the judges used the four categories of text plans to label the student essays. Judges found most often Summaries (39) and Syntheses (13) as the collapsed categories might predict. The 37% agreement for students' and judges' perceptions across all plans can also be checked by dividing the number of hits (for example, 14 for Summary, 6 for Synthesis...) by the judges' total "yes" for all plans (or 67). The probability of student "hits" and "false alarms" is listed below in Figure 5 and shown in the accompanying graph. By plotting hits against false alarms it is easier to see the relative power of the hits in a given category of text plan. The ideal location on the graph would be high along the vertical axis and to the left along the horizontal, meaning that hits would far exceed the probability of false alarms.

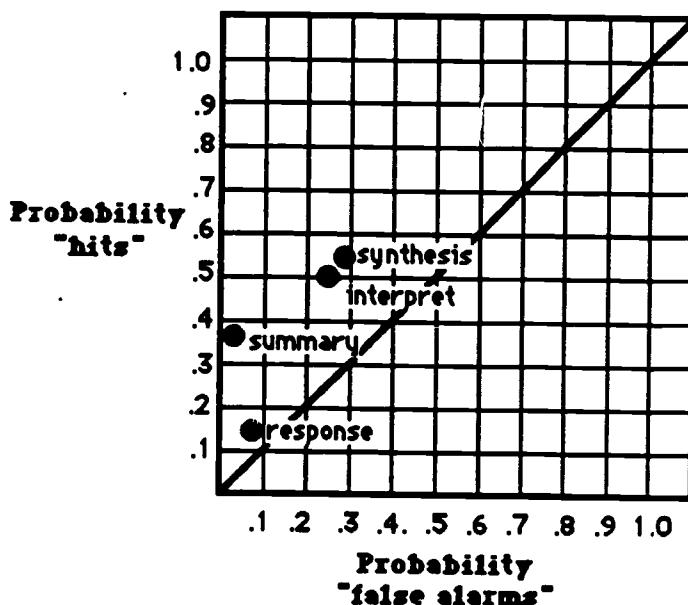|	Hits	False Alarms
Summary	.37	.03
Response	.14	.08
Synthesis	.54	.29
Interpret	.50	.24

Figure 5. Probability of Students Making Hits and False Alarms.

The signal detection analysis shows us that students are fairly accurate in judging a Summary insofar as they rarely label their texts a summary when a text is something else (probability of a false alarm = .03). The low hit rate (.37), however, means they often thought texts had a more complex organizing plan than the judges did. Since students almost completely avoided the Response plan, when judges were categorizing texts as Summaries, Review and Comment, Main Ideas and Frames, students were seeing themes as Syntheses and Interpretations. With these latter plans, the students had a higher hit rate (.54 and .50 respectively), with a higher false alarm rate as well (.29 and .24). Generally, they saw complexity when to a reader's eyes, complexity was not there.

Conclusions with Implications for Teaching

This report opened with the twin premises that forming a clear, practical representation of a writing assignment is a challenge for both teachers and students and that the level of complexity between one representation and another can vary enormously. Certainly if we look at the wide range of Goals and Strategies reported by both student groups alone, complexity and individuality are the norm. Even though trends and patterns in student perceptions appeared in the summarized totals from the Self-Analysis Checklists (Tables 1, 2 and 3), a "generic student" does not exist. The checklist presented five major decision areas with over 30 options, and students took advantage of the entire corpus to describe their essays. The data can be read, then, as evidence for the high number of contributing factors involved in representing a writing assignment.

Any further conclusions from this data must be considered against the problematic nature of inquiry into teachers', students', or anyone's perception of a complex task. For our analysis we chose to assume that judges' perceptions approximated teachers' perceptions, that our self-analysis instrument tapped in a consistent way important considerations in the students' composing, that our judges' basis for evaluating essays was reasonably comparable to the students' application of the text-plan categories. Tracking out perceptions is messy, yet the compiled frequencies of student selections did illustrate shifts in reported perceptions and patterns or connections among task decisions and options. At the very minimum these shifts and patterns help the teacher-researchers in this study to understand, in the context of this reading-to-write assignment, what it means to represent a task differently. The lecture on task representation and directions to revise to "Interpret with a Purpose" appeared to lead to shifts in perceptions: for the experimental group Prior Knowledge as a source of information, Persuasion as a format, and Interpretation as an organizing plan all increased following the lecture with specific revision directions. From another angle, the control group who revised without specific instructions produced a second version of the time management essay similar to the experimental group's first draft, except for the proportionately high number of Synthesis plans. Assignment directions and instruction in the five major decisions at least contributed to the contrasting perceptions in the two groups.

Shifts in perception, however, do not equate with finished products. Student perceptions of text plans did not tend to match those of the judges and the signal detection analysis revealed that students found complexity (synthesis and interpret plans) in drafts when readers did not. Perhaps a more telling contrast is the fact that the shifts and difference in perceptions between groups did not result in any significant difference in final products. Though the experimental and control groups saw their revised text as more complex (15 "Interpretations" and 16 "Syntheses"), judges agreed with these perceptions less than 10% of the time. Also, the judges saw no difference in the number of complex text plans (Syntheses and Interpretations) for both groups (11 for the experimental, 10 for the control).

The students' perceptions, then, could have been influenced by the goal to revise toward complexity, embedded in the lecture and revision directions, rather that actual refinements they saw in their texts. This mismatch between writer and reader perceptions helps to build a case for instruction and practice in evaluating both emerging and target text plans and the corresponding decisions in generating them. In this light, the gap between student perceptions and the judges' evaluations mirrors the traditional distance between the image writer's have of their own drafts, a reasonable and predictable egocentricity, and a reader's often rival interpretation of the same text (Flower, 1981; Kroll, 1978). Practice in recognizing text plans and exploring the

13   20

decision processes behind them could narrow the perceptual distance between writers and readers so that the two can begin to build a comparable vocabulary to refer to academic genres and conventions.

Casting the specific points of misperception in terms of a dialogue--how writers negotiate an assignment and a reader's perception of their texts--places a value on recognizing the patterns and connections that emerged from the student reports. Both student groups appear to associate Text sources with Standard Theme formats and Summary plans, a pattern that reflects "schooling" in summarizing explicit information in reading material (Applebee, 1984b). The commonality of this and other associations (Persuasion format and Interpret plan) is supported by an auxiliary question on the Self-Analysis Checklist. Students were asked if they saw their decisions on the task as representing their "standard" strategies or goals. We explained that a standard strategy (or goal) would be typical or especially familiar, one that has been used to complete a number of academic writing assignments. They reported that half of their options for these two decisions were standard, meaning they were common and somewhat comfortable. Practice in recognizing decision patterns and alternative strategies, such as the consideration of Prior Knowledge as a source of information, could help students to re-examine standard strategies and goals and other habits and commonplaces. If students consciously attend to assumed standards and perceived risks in a writing assignment, the negotiations among teachers, students, and assignments may become more explicit and, thus, open for discussion and critique. From a cognitive perspective, students may then sharpen their regulatory mechanisms (Brown, 1985; Palincsar and Brown, 1983) which help to predict and monitor progress with a draft. From a social perspective, the negotiation of expectations and perceptions--can strengthen the collaborative nature of a writing classroom. We want to underscore the positive contribution that the Self-Analysis Checklist made to the Reading to Write class. It helped students to be aware of an existing repertoire of thinking strategies and of the gains and losses that one approach can bring in a given situation. And importantly, for some students it raised the possibility of extending and enriching this repertoire, an issue which surfaced repeatedly in classroom discussion through the semester.

Practice in recognizing text plans, relationships within decision processes, and the interplay between decisions and final products may, in turn, nudge students toward a perception of writing closer to that of older, more advanced students. Awareness and an increased repertoire of strategies is a reasonable step one might take to acquire more flexibility, authority and "originality" in the writing of academic essays, where students have both a reason to write for readers and possess more means to do so. Writing for critical readers will remain an act of negotiation but added awareness and control over composing strategies and text features are a form of "ownership" --a step, we would argue, toward reader-sensitive composing in the context of college-level writing class.

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SELF-ANALYSIS CHECKLIST

Name _____

MAJOR SOURCE OF INFORMATION   `check one`

□ ASSIGNED TEXT
- I stuck to the key words, sentences, and ideas from the readings
- I didn't import additional information

□ TEXT + MY COMMENTS
- I used the text's key ideas with support from my experience and the readings
- I partly used my thinking and partly the assigned readings

□ WHAT I ALREADY I KNEW ABOUT THE TOPIC
- I used my personal experience and opinions on Time Management
- The readings served as a springboard; I didn't have to borrow printed information

□ PREVIOUS CONCEPTS + TEXT
- I used my own knowledge to provide a unique main idea
- I supported this idea with examples from the readings

□ OTHER: Write a detailed description of your information source in full sentences.

TEXT FORMAT   `check one`

□ NOTES OR A SUMMARY PARAGRAPH OR TWO

□ SUMMARY PARAGRAPHS WITH AN OPINION PARAGRAPH

□ STANDARD SCHOOL THEME FOR ANY READER
- I wrote an introduction, a body with several paragraphs, and maybe a conclusion
- I use a thesis statement and topic sentences

□ PERSUASIVE ESSAY FOR AN ACADEMIC OR PROFESSIONAL PUBLICATION
- In my formal introduction I raised an issue or indicated the purpose of the essay
- I organized the body paragraphs around an argument

□ OTHER: Describe the format of your paper in complete sentences.

ORGANIZING PLAN FOR WRITING   `check one`

□ SUMMARIZE THE READINGS
- I reduced each paragraph in the readings to key points
- I reviewed the key points in an orderly way, adding nothing extra

□ RESPOND TO THE TOPIC
- I pursued my own ideas about the topic
- I didn't repeat the specific points made in the readings
- I made the piece mine, n   he stated authorities

□ ORGANIZE AROUND A SYNTHESIZING CONCEPT
- I payed attention to the ideas in the readings
- I found or invented a specific concept to account for these ideas
- I used a synthesizing concept to organize my paper

□ INTERPRET FOR A PURPOSE OF MY OWN
- I used information sources to do something for a specific reader or purpose
- I selected only ideas from the readings or my experience that fit this goal
- I organized the essay around my own outside purpose

□ OTHER: If your plan is different, describe it in detail and complete sentences

SOURCE
FORMAT
PLAN

STRATEGIES   `if necessary, check more than one`

□ GIST AND LIST

□ GIST AND LIST + OPINIONS

□ READ AS A SPRINGBOARD FOR THINKING

□ TELL IT IN MY OWN WORDS

□ SKIM TO INTERESTING POINTS AND RESPOND

□ DIG OUT AN ORGANIZING IDEA

□ DIVIDE THE IDEAS INTO CAMPS OR SIDES

□ CHOOSE WHAT MY AUDIENCE NEEDS TO KNOW

□ USE THE TEXT FOR MY OWN PURPOSE

□ OTHER? Describe your strategy in complete sentences.

STRATEGIES

GOALS   `check those that apply`

□ TO DEMONSTRATE THAT I UNDERSTOOD THE MATERIAL

□ TO GET A GOOD IDEA OR TWO OUT OF THE ASSIGNMENT

□ TO PRESENT WHAT I LEARNED

□ TO COME UP WITH SOMETHING INTERESTING TO SAY

□ TO DO THE MINIMUM AND DO IT QUICKLY

□ TO FULFILL A PAGE REQUIREMENT

□ TO TEST MY OWN EXPERIENCE

□ TO COVER ALL THE KEY POINTS IN THE READINGS

□ TO BE ORIGINAL OR CREATIVE

□ TO LEARN SOMETHING FOR MYSELF

□ TO INFLUENCE MY READER

□ TO USE THE READING TO TEST SOMETHING I ALREADY KNEW

GOALS

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Appendix II

Total Number of Selections with Percentages from the Self-Analysis Checklist

SOURCE	Experimental draft #2 N = 28 - %	draft #1 N = 23 - %	Control draft #2 N = 33 - %
text	9 -.32	1 -.06	5 -.15
text + comments	15 -.54	11 -.48	22 -.66
prior knowledge	1 -.04	5 -.22	1 -.03
previous concept	3 -.11	5 -.22	5 -.15
other	0 -.00	1 -.04	0 -.00

FORMAT	N = 28 - %	N = 33 - %	N = 23 - %
notes/summary	3 -.11	1 -.03	1 -.04
summary ¶/opinion	7 -.25	7 -.21	4 -.17
standard theme	14 -.50	19 -.58	6 -.26
persuasive essay	2 -.07	6 -.18	12 -.52
other	2 -.07	0 -.00	0 -.00

PLAN	N = 28 - %	N = 33 - %	N = 23 - %
summarize texts	12 -.43	5 -.15	3 -.13
respond to topic	5 -.18	2 -.06	1 -.04
synthesizing	7 -.2	19 -.58	3 -.13
interpret	3 -.11	5 -.15	15 -.65
other	1 -.04	2 -.06	1 -.06

	Draft #2			Prediction	
	Exp	Exp	Control	Exp	Control
STRATEGIES	N = 49 - %	N = 46 - %	N = 91 - %	N = 62 - %	N = 49 - %
gist and list	8 -.16	2 -.04	2 -.02	0 -.00	1 -.02
g and 1 + opinion	8 -.16	6 -.13	12 -.13	3 -.05	2 -.04
springboard	2 -.04	1 -.02	6 -.07	10 -.16	7 -.14
tell it in own words	4 -.08	5 -.11	14 -.15	2 -.03	2 -.04
skim and respond	8 -.16	2 -.04	10 -.11	5 -.08	3 -.06
organizing idea	9 -.18	10 -.22	18 -.20	10 -.16	8 -.16
take sides	6 -.12	5 -.11	13 -.14	8 -.13	6 -.12
audience needs	1 -.02	5 -.11	10 -.11	15 -.24	14 -.28
own purpose	3 -.06	10 -.22	6 -.07	9 -.15	7 -.14
other	0 -.00	0 -.00	0 -.00	0 -.00	0 -.00

	Revision			Prediction	
	Exp	Exp	Control	Exp	Control
GOALS	N = 60 - %	N = 57 - %	N = 100 - %	N = 71 - %	N = 65 - %
understanding	6 -.10	5 -.09	9 -.09	6 -.0	3 -.05
get good idea	4 -.07	4 -.07	8 -.08	2 -.03	2 -.03
present learning	12 -.20	3 -.05	9 -.09	5 -.07	6 -.10
interesting to say	7 -.12	9 -.16	18 -.18	6 -.09	7 -.11
do the minimum	8 -.13	3 -.05	7 -.07	1 -.01	0 -.00
page requirement	7 -.12	0 -.00	3 -.03	1 -.01	0 -.00
test experience	3 -.05	1 -.02	4 -.0	2 -.03	3 -.05
cover key points	11 -.18	4 -.07	14 -.14	6 -.09	12 -.20
originality	0 -.00	6 -.11	11 -.11	16 -.23	12 -.20
learn something	4 -.07	7 -.12	7 -.07	1 -.01	1 -.02
influence reader	0 -.00	13 -.23	5 -.05	22 -.32	18 -.30
test my knowledge	4 -.07	2 -.04	4 -.04	2 -.03	1 -.02