A workshop was developed at the Bank of Canada to give instruction in writing brief summaries of financial analyses to junior economists entering the bank after university. These employees were expected to write these analyses for the senior officers of the institution. It had been found that the specialists had not learned strategies for exploring their statistical data with the objective of identifying the deeper meaning or story in the data and then presenting it in the expected format. They had been following a restrictive sequence of procedures and producing unconnected series of relatively superficial observations about their data, which did not satisfy their audience's need for a story. The workshop had three goals: to make explicit the information needs of the readers, to develop the specialists' ability to use writing strategies for better analysis, and to enable the specialists to provide sharply focused and effectively structured summaries that represented their best judgment, as technical experts, about the essential story contained in the data. The content of the workshop included discussion of the writing process, direct contact with the audience for the texts, and instruction in developing a preliminary writing plan, drafting, and revision. The workshop has resulted in texts containing more meaningful analyses, more direct discussion of the analyses between the specialists and the senior officer, and increased confidence and analytical capacities in the specialists. (MSE)
A recurrent theme in contemporary research into the composing process is the claim that experienced writers use the heuristic power of this process to discover their meaning. Donald Murray is an articulate spokesman for this view:

Writing is a significant kind of thinking in which the symbols of language assume a purpose of their own and instruct the writer during the composing process (1982:18).

The writer's meaning rarely arrives by room-service, all neatly laid out on a tray. Meaning is usually discovered and clarified as the writer makes hundreds of small decisions, each one igniting a sequence of consideration and reconsideration (1982:88).

This view, of course, has important implications for writing pedagogy. And in fact, writing tutors in university settings are successfully teaching student writers how to use the composing process to discover meaning in the factual information of their respective academic disciplines (Freedman, 1982). The question that this article will address is whether writing instructors in a business environment can teach on-the-job writers to use the composing process to discover meaningful patterns in their data and to structure this meaning so as to maximize its effectiveness for the intended reader.

Writing within a business organization, however, has two characteristics that separate it from much academic writing. First, each written communication is directed towards a specific work function. Briefing notes, planning documents, research reports, proposals, feasibility
studies—all are designed for busy readers who will use the information contained in a text to perform a particular aspect of their work. Second, on-the-job writers frequently operate under the pressure of an immediate deadline, or even under the pressure of multiple deadlines, and so must work quickly to take full advantage of the periods of writing time that their schedules permit.

Given the specific functional focus of texts produced in an organizational setting, and the frequent pressure on employees to compose these texts quickly, it might, at first glance, seem impractical for writing instructors in the business world to accent the potential of the writing process for discovering meaning. We would argue that because of the narrow, pragmatic focus of most on-the-job writing, writers in a business organization really have no need for heuristic composing strategies; and that even if these writers could benefit from such strategies, they simply do not have time for patiently developing their meaning.

This paper will present the opposite view. The author will suggest that, indeed, on-the-job writers in business can benefit from learning to use composing strategies to discover and then structure their meaning. The author will suggest as well that business organizations can also gain in cost-effectiveness from process-based writing training which allows middle managers to send reports produced by their staff up the hierarchy to executive decision-makers without having to spend a great deal of time rewriting them. The first part of this paper will set the scene for this discussion by describing the bottom-line expectations of readers at senior levels at the Bank of Canada and the impact of these expectations on junior economists entering the organization from university. The second part of the paper will describe how an in-house writing workshop helped five such economists learn to use the writing process first to discover the deeper meaning, or story, in their financial data, and then to structure this story in bottom-line form. The final part of the paper will discuss the results of the workshop and suggest implications for unity instruction in a business environment.

The Bottom-Line: The Reader's Need For a Story

In the Bank of Canada, which provides the backdrop for this paper, written reports play a key role in communicating information upwards in the hierarchy from the research and analysis level to more policy-oriented levels. Because the latter group has such a large volume of material to read as background for decision-making, they insist on bottom-line writing: these executives want the story—a sharply focused, accurate analysis of the economic forces underlying a set of financial data—presented to them clearly and succinctly; equally important, they
want reports structured so that a concise overview of this story is given prominence at the beginning of the text.  

The assumption implicit in this insistence on a bottom-line structure is that it is more efficient for the busy reader. The reader has the option of stopping after the story overview, if this is all that is needed. On the other hand, if he or she decides to continue on to the supporting detail, the broad conceptual framework provided by the story overview can be used to assimilate this detail more quickly.

Junior economists entering the Bank from university must learn to refine their writing skills to accommodate the bottom-line expectations of their new readers. These economists must make the transition from an academic setting, where they were accustomed to reporting extensively on their research to an audience who was expected to read everything that they wrote, to a business environment where readers will only read reports designed to present a relevant story, a highly focused analysis of financial data, in an immediately accessible form.

To help employees make this transition, the institution provides limited in-house writing training for those who need it. In this training, employees bring on-the-job writing tasks to the instructor, who guides writers through the recursive cycles (planning, drafting, revising) of the composing process.

As an illustration of an approach to writing instruction which brings together a process pedagogy and a bottom-line philosophy, the next part of the paper will describe a writing workshop in which five junior economists learned to use the heuristic power of the composing process to discover their meaning. More specifically, the author will describe how these economists learned to use writing strategies, first, to identify the story contained in a set of financial data, and then, to structure this story in a way that is immediately accessible to their audience.

The Briefing Notes Workshop: Providing the Reader With a Story

The writing situation

Each of the five junior economists who participated in the workshop is a specialist in one particular area of financial activity: banks, non-bank financial institutions, the business credit market, the mortgage market or financing in foreign currencies. Each specialist is responsible for monitor-
ing statistical data in his or her area, analysing the data, and then reporting on this analysis to more senior personnel. At the time of the workshop each of the five participants had been with the institution for approximately three years; none of the five, however, had fully developed the analytic skill required to discover the essential underlying story in his or her data.

The context for the workshop was a writing activity known as the briefing notes write-up, during which each specialist analyses the financial data in his or her area and then, guided by a more senior economist at the middle management level acting as Coordinator, summarizes the significant developments in a text of approximately two pages. This activity occurs every six weeks, on average, and takes three days.

The immediate reader of these briefing notes is the Coordinator, who consults with the specialists during the write-up, providing feedback on successive drafts. When he is satisfied with the texts, he forwards them to the primary reader.

The primary reader is a Senior Officer of the institution who uses the briefing notes as background in preparing for the task of delivering an oral presentation to the Board of Directors, who meet every six weeks to be briefed on financial developments.

Limitations and Goals

The Coordinator of the briefing notes write-up was the catalyst for the workshop. Given the staff resources involved in the write-ups, he wanted them to be as effective as possible. And not satisfied that the preparation of the briefing notes was being carried out as efficiently as it might be, the Coordinator looked to writing training to enhance the specialists' contribution.

In the Coordinator's view the specialists, instead of consistently identifying and presenting a story that would explain trends, or "significant movements" in their financial data, often tended to become distracted by "extraneous surface detail." And having observed them during a number of write-ups as they produced their briefing notes, the Coordinator attributed this lack of focus to a limitation in the writers' composing process.

When the instructor spoke with the specialists prior to the workshop, the nature of this limitation became apparent: they had not learned to draw on the potential of the writing process itself for discovering and structuring meaning. As writers, their repertoires did not include strategy...
gies for first exploring their statistical data, and then identifying and effectively presenting the story underlying "significant movements," or trends, in it.

In general, the instructor found that the specialists, when preparing their briefing notes, tended to follow a rather restrictive sequence of procedures. After an initial hard look at their statistics, and before starting any actual writing, they would typically try to develop ideas in their minds about the data. Then they would attempt to get these ideas down on paper in as organized and polished a form as possible in a first and final draft.

As a result, the specialists, as described by the Coordinator, "would miss the forest for the trees," so that the written product he received from them often consisted of an unconnected series of relatively superficial observations about their data, rather than the deeper story that he wanted. This meant that the Coordinator, in order to give the primary reader the type of information that he needed to prepare his delivery to the Board of Directors, was himself frequently left with the task of taking the specialists' texts and, as he put it, "pulling the story out of the fragments."

Specifically, then, the Coordinator had three goals for the workshop. First, he thought that it would provide a good opportunity to connect the writers with their audience, and so would encourage both the immediate reader, himself, and the primary reader, the Senior Officer, to be explicit about what type of story they needed. (The Coordinator was quite aware that this would force them both to do some careful thinking about just what it was they wanted from the specialists.) Second, as an experienced writer with a good understanding of the composing process, the Coordinator hoped that the workshop would develop the specialists' ability to use writing strategies to discover and present the deeper story in their data. Third, he hoped that the writing training, through this intervention in the specialists' composing process, would enable them, in future write-ups, to provide him with sharply focused and effectively structured texts representing their best judgment, as technical experts, about the essential story contained in their data. While the Coordinator knew that he might not always completely agree with the conclusions reached by the specialists, the groundwork would be done: he would have an analysis to react to, and his interaction with the specialists could then begin at a higher conceptual level.

Discovering and Structuring the Story in Financial Data

The three-day workshop included a number of stages. As usual during a briefing notes write-up, the specialists had both time to work alone and
the chance to confer individually with the Coordinator. In addition, and this was an innovation introduced to the write-up by the instructor, the specialists came together at regular intervals to talk with one another about how the preparation of their texts was going. In another departure from the normal course of events in a briefing notes write-up, the specialists had the opportunity to meet with the Senior Officer to talk about what he needed from them in order to do his job.

Our discussion in this paper of what happened in the workshop will focus on one particular theme—how the specialists learned to use the composing process first to discover the story inherent in their financial data, and then to structure this story in a bottom-line form. The diagram below provides an overview of the different stages in the workshop as viewed from this perspective.

Discussing the Writing Process

Prior to the workshop each specialist had been asked to respond to a “Writing Process Profile,” a series of questions inspired by Linda Flower (1981). Discussion of this “Profile,” to lead off the workshop, was important in several ways. Establishing the concept of writing as a process, it encouraged each of the specialists to stand back and look at his or her own writing practice, and to recognize areas where new strategies could be helpful.

As well as helping the specialists to begin developing a perspective on their own writing practice, the discussion served to introduce the concept that writing is a process that a writer can use to discover meaning. For these writers, this meant seeing the potential of the composing process for recognizing the essential story in the financial data.

Connecting With the Audience

Using the approach to audience suggested by Mathes and Steveson (1976), the specialists were able to characterise their immediate reader.

While the questions posed in the “Profile” are meant to encourage writers to stand back and think about their writing process as a whole, a number of the questions relate specifically to the concept of using composing strategies to discover meaning. Three such questions follow:

a) Do you try to conceptualize the whole briefing note at the beginning after first looking at your data or does this come gradually as you write?

b) Do you ever talk over your ideas with a colleague before starting to plan your briefing notes or from time to time as you proceed? Does feedback from colleagues ever help you see new relationships in your data?

c) Do you usually revise the context of your briefing note? If so, when and how? What factors do you think about as you revise? When revising, does it ever happen that you change your original focus for your briefing note?
<table>
<thead>
<tr>
<th>DISCUSS WRITING PROCESS</th>
<th>Consider concept of using writing process to identify 'story' in set of financial data.</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONNECT WITH AUDIENCE</td>
<td>Hear primary reader explain need for 'story'.</td>
</tr>
<tr>
<td>DEVELOP PRELIMINARY PLAN</td>
<td>Use heuristic strategies to identify trends in financial data; construct visual schema to link trends into rough outline of 'story'. Discuss schema with other specialists.</td>
</tr>
<tr>
<td>DRAFT</td>
<td>Begin to develop 'story' in first draft.</td>
</tr>
<tr>
<td>REVISE</td>
<td>Discuss first draft with other specialists. Refine 'story' and supporting detail in second draft, and discuss with Coordinator.</td>
</tr>
<tr>
<td>REVISE</td>
<td>Use feedback from Coordinator to restructure text into bottom-line form in final draft.</td>
</tr>
</tbody>
</table>

the Coordinator of the briefing notes write-up, who would approve the texts and then send them upwards in the hierarchy; their primary reader, the Senior Officer, who would be using these texts to perform a specific function; and their secondary readers, other economists in the organization, who would use the briefing notes as a reference.

This audience analysis set the stage for a visit from the primary reader, the Senior Officer who uses the briefing notes in preparing himself to address the Board of Directors. The Senior Officer began by explaining that his function is to give the Directors a broad overview of financial developments that have occurred since the last Board meeting. This function determines what he needs from the specialists: "What I look for is the specialists' assessment of their area. How do they explain what's going on? ... The crucial thing is to have a coherent story, coherent and correct.... It's not 'elevator economics': this went up and that went down."

The Senior Officer went on to define his terms. The story should "describe the underlying economic forces" inherent in the statistical data: should focus on important financial developments, offering an explana-
tion of why key events occurred and suggesting “causal linkages” between these events.

He said that only detail supporting the story should be included in a briefing note. “If it’s part of a story—if it feeds into something, that’s fine. But don’t throw in detail that isn’t part of the story. An unrelated detail isn’t going to stick in anyone’s mind anyway.”

The Senior Officer acknowledged the relative difficulty of the analysis involved in identifying the underlying story in a body of financial data. He mentioned that in his own work he often uses the writing process itself to clarify his analysis of financial events, starting with a “general sense of direction” and then gradually discovering his meaning as he writes. “Where you start out is not necessarily where you end up.” He concluded by adding that this process of discovering one’s meaning through writing means, of course, throwing away a lot of material. “It’s painful but you have to do it.”

Developing a Preliminary Plan

To help them explore significant trends in their financial data—the first step in developing their stories—the specialists experimented with three heuristics often used in creative and academic writing but not normally associated with writing in a business context: freewriting (Elbow, 1973), clustering (Ricco, 1983) and tree diagramming (Flower: “issue tree,” 1981). While each person quickly developed a preference for one or two of these new strategies, all five writers found the heuristics useful in exploring their data for trends.

Next, and again this was a new procedure for the specialists, each writer constructed a visual schema of his or her own design to connect the trends identified in the data into a meaningful pattern. In this effort to trace the rough outline of their stories, three of the writers decided to use a cluster as their schema, while the other two used a tree diagram. For each writer the schema would eventually serve as a preliminary plan from which to start drafting.

Whatever the individual preference for heuristics and visual schema, each of the five specialists succeeded in discovering a pattern of the “underlying economic forces” inherent in the data. Then, guided by give-and-take discussion of his or her schema with the other four specialists, each writer was able to refine this story outline to the point where he or she felt ready to draft.¹

¹ During the writing workshop, talking became a powerful heuristic. Discussion with the Senior Officer, with the Coordinator and especially with one another, helped the specialists develop their stories.
Drafting/Revising

In translating visual schema into prose draft, each writer began the process of developing the “coherent story” requested by the Senior Officer from the pattern discovered in the data. In each case, however, as the specialists talked about one another’s first drafts, it became clear to the writer that his or her analysis was incomplete. Through their talk, the specialists were able to go beyond identifying important trends to recognizing deeper underlying relationships in their data.

Using this feedback from one another, the specialists then revised their texts. During this process of revision, the writers developed their stories further, generating explanations for important financial trends and tracing the “causal linkages” between these trends.

When the Coordinator looked at the revised drafts, he felt that each text included the required elements: the analysis was complete, the story visible and coherent—the story contained in the data had been discovered. At this point, however, he asked the writers to restructure their texts into bottom-line form: he wanted the essential elements in each story brought together into an overview, or “umbrella statement” as he called it. This story overview would come at the beginning of each specialist’s text and would be followed by the supporting detail, with each significant trend described in a separate paragraph.

The Coordinator reasoned that this bottom-line structure would be helpful to the Senior Officer in his preparation for addressing the Board of Directors: it would give him the option, at a single sitting, of reading only the story overviews, if what he wanted was a broad sweep of financial developments in the specialists’ respective areas. On the other hand, if he wanted to look at the diverse trends within a particular area, the story overview would provide a context, allowing him to read through this detail more efficiently. As well, on another level, the Coordinator thought that the specialists themselves would gain from the discipline of composing the overviews. He felt that this process would further refine their ability to analyse a set of financial data for the story contained in it.

The specialists were guided in their reactions to one another’s texts by questions suggested by the instructor (adapted from Elbow 1981). Among these questions were the following:

a) What thoughts go through your mind as you read the draft?
b) Are there any ‘roadblocks’ to your understanding?
c) Are you left with a clear sense of the story?
d) Do all the details serve to support the story?
e) Is there the right proportion of generalization to specific detail?
f) From what you know of the primary reader, does the draft address this person’s need for information?
Results and Implications

The results of the briefing notes workshop, according to both the Coordinator and the Senior Officer, have been positive: since the workshop, the specialists have been able to produce texts that provide a more meaningful analysis of the story underlying financial data, an improvement in product that reflects changes in the writers' composing process. These results have important implications for writing instruction in a business environment.

The Coordinator has expressed his satisfaction with the improvement in the specialists' written product. Several months and two briefing notes write-ups after the workshop, he feels that he now receives much better texts from the five writers than he did before. Each specialist now comes to him part way through the write-up with a story representing a carefully considered judgement of the meaningful patterns in his or her data. And because the specialists are more advanced in their thinking about the financial developments reflected in this data, the Coordinator's individual discussions with them can now begin at a more sophisticated level of analysis than was the case before the writing workshop; consequently, a higher quality text can be produced within the limited time period of the write-up.

The Senior Officer has also indicated that he is pleased with the results of the writing training. Some time after the workshop, having just used the specialists' most recent briefing notes to prepare his delivery to the Board of Directors, he said that it was obvious that the writers had worked hard to develop their stories. He said that he had found this focused analysis very helpful, and was particularly pleased that in their texts the writers had limited background detail to "facts that buttressed the story." He had also noticed an absence of unnecessary overlap from one text to the other, and assumed that this was a result of increased collaboration among the specialists during the write-up.

The Coordinator's and the Senior Officer's agreement that the specialists now create a better written product on a sustained basis points to a permanent change in the writers' composing process. Indeed, when the instructor interviewed them three months after the workshop, the specialists concurred. Whereas before the writing training they had lacked composing strategies for discovering and structuring the meaning inherent in their data, they now use freewriting, clustering, tree diagramming, and talking with one another and (whenever possible) with their readers as heuristics to help generate, discriminate among, and organize ideas. The specialists' overall approach to the preparation of the briefing notes has also changed. Before, when composing their texts, the writers had generally followed a set linear sequence of steps in which
they would first, look at their financial statistics; next, try to develop ideas in their minds about this data; and then, finally, attempt to put these ideas down on paper in final-draft form. Now, in contrast, they are able to use repeated cycles of planning, drafting and revising to trace, develop and structure the underlying story.

The comments of one of the specialists reflect the reaction of the group as a whole—he described the briefing notes workshop as a “breakthrough.” Before the training he would typically “try to get [his] ideas straight before starting to write.” Then once he did start drafting, he would labour over his prose “polishing as [he] went along—this was very tedious and would block out any new ideas.” Since the workshop he feels much more comfortable as a writer, composing more quickly and with greater confidence. With a fuller repertoire of strategies for generating and developing ideas (freewriting, clustering, talking with his peers and with his readers), and with a “better organizing procedure for keeping [his] thinking systematic (tree diagramming),” he is better able to “see what’s happening in the data, and to refine [his] story and develop a structure”—as he plans, produces rough drafts and revises.

The results of the briefing notes workshop have a number of implications for writing instruction in a business environment. On one level, there are implications relating to the composing process of individual writers, while on another level, there are implications for cost-effectiveness within an organization.

The results of the workshop clearly demonstrate that on-the-job writers in business, even when producing texts with a specific functional focus under the pressure of deadlines, benefit from heuristic composing strategies. They can learn to use strategies such as freewriting, clustering and tree diagramming within the recursive cycles of the composing process to enhance analytical thinking. These strategies can serve to help business writers discover and structure in bottom-line form the deeper meaning, or story, contained in their data—or put another way, to see beyond the statistical “trees” to the conceptual “forest.” The workshop results also demonstrate the power of talk as a heuristic. The opportunity given the writers to connect with their immediate and primary readers proved to be extremely important. By providing a clear understanding of exactly what type of information their readers needed in order to do their jobs, this interaction acted as a catalyst for the writers in generating ideas about their data, and gave them a definite focus for developing their stories. As well, talking with one another at regular intervals during the preparation of their texts was very important to the writers in helping them to refine these stories.

On another level, that of cost-effectiveness, the results of the workshop
indicate that process-based writing instruction has definite value for a business organization. An organization benefits when heuristic writing activity allows collaboration between a middle manager and his or her employees to begin on a higher conceptual level. There is also a clear advantage in cost-effectiveness when managers can send texts written by their staff on up the hierarchy without having to spend a great deal of time rewriting them. In the business world where in-house writing instruction faces its own bottom line—that of visibly contributing to increased productivity—this is the ultimate consideration.

REFERENCES

Elbow P
1973 Writing Without Teachers New York Oxford University Press
1981 Writing With Power New York Oxford University Press

Fielden J S and R F Dulek

Flower T

Freedman A
1982 A Theoretic Context for the Writing Lab Tutoring Writing ed Muriel Harris Glenview Illinois Scott Foresman

Murray D M
1982 Learning to Teaching Selected Articles on Writing and Teaching Montclair N J Boynton Cook Publishers Inc

Mathes J C and D Stevenson
1973 Designing Technical Reports Writing for Audiences in Organizations Indi napolis Bobbs-Merrill Co Inc

Rico G
1983 Writing in Natural Way Los Angeles J P Taylor Inc