

Some Ideas of Michael Polanyi and Some Implications for Teaching Writing

by

James A. Reither

St. Thomas University, New Brunswick

Although I wear eyeglasses, I can think of at least two very good reasons for switching to contact lenses. The first is vanity. The second is that persistent pain in the neck — specks on the lenses. Now the thing about specks on the lenses is not that their presence offends my sense of personal hygiene; it is that as long as those specks are there I spend as much time looking at *them* as I do *seeing*. And the problem is not merely that I am bothered and distracted by those specks; it is that as long as I am attending to *them* I am blinded to everything else. So, cleaning the specks from my lenses amounts to something more than removing bothersome distractions: it is curing blindness.

In a way, my thesis in this essay is that we teachers of writing have got some serious lens-cleaning to do. I am too timid to suggest that we are blind, but I will venture suggesting that we have some distracting specks on our theoretical lenses, and that if we could remove them we would be able to see our options and goals more clearly. I will also suggest that the pages of Michael Polanyi might well serve as the tissues with which we can clean those lenses.

A reading of Polanyi can help teachers of writing in several ways. It can, for example, offer important theoretical insight into the structure and operations of the process of writing. Having done so, it can, rather more practically, help us in our efforts to evolve workable criteria or principles to guide us in judging the potential efficacy of suggestions and prescriptions others make about writing and the teaching of writing, and in designing our own writing assignments and writing courses. In simpler terms, a reading of Polanyi will help teachers of writing to answer the essential question: "Will it work?"

Central to the philosophy of Michael Polanyi¹ is the notion that the performance of any skillful act (such as swimming, hitting a golf ball, playing chess, memorizing a list of dates, writing, teaching writing) depends upon what he calls "tacit knowledge" or "personal knowledge."

Tacit knowledge manifests itself only in action. It is, therefore, a *process* which, like all other processes, is so profoundly complex that it is not susceptible to complete definition or description. Nevertheless, Polanyi discerns in that process two different (but, in performance, fully merged) kinds of knowing or awareness, identifiable and separable only for analysis. One of these Polanyi calls *focal awareness*; the other he calls *subsidiary awareness*. As operations in a process, these two kinds of knowing or awareness are analyzable only in terms of their relative *functions* in tacit knowing. Thus, *focal awareness* can be thought of as purpose, or intention; specifically, it is where, in the performance of any skillful act, one focuses one's attention; it is what one sets out to do. *Subsidiary awareness*, on the other hand, can be thought of as "instrumental knowledge"² – the elements of one's being that can be brought to bear to achieve purpose or intention; essentially, subsidiary awareness is one's competence, functioning as *skill*. During the performance of a skillful act, one's attention is necessarily focused upon efficient and effective enactment and completion, and one is aware of the components or "particulars" of the enactment only insofar as those components function to effect that enactment – i.e., one is aware of those components subsidiarily.

These meanings become comprehensible only by way of illustration, and, in his efforts to define and distinguish between these two sorts of knowing or awareness, Polanyi offers dozens of examples. Three are particularly illuminating – using a hammer to drive a nail, using a probe to examine something one cannot see, and using language to create meaning. Here is how Polanyi talks about the skillful wielding of a hammer:

When we use a hammer to drive in a nail, we attend to both nail and hammer, *but in a different way*. We watch the effect of our strokes on the nail and try to wield the hammer so as to hit the nail most effectively. When we bring down the hammer we do not feel that its handle has struck our palm but that its head has struck the nail. Yet in a sense we are certainly alert to the feelings in our palm and the fingers that hold the hammer. They guide us in handling it effectively, and the degree of attention that we give to the nail is given to the same extent but in a different way to these feelings. The difference may be stated by saying that the latter are not, like the nail, objects of our attention, but instruments of it. They are not watched in themselves; we watch something else while keeping intensely aware of them. I have a *subsidiary awareness* of the feelings in the palm of my hand which is merged into my *focal awareness* of my driving in the nail. (PK, p. 55)

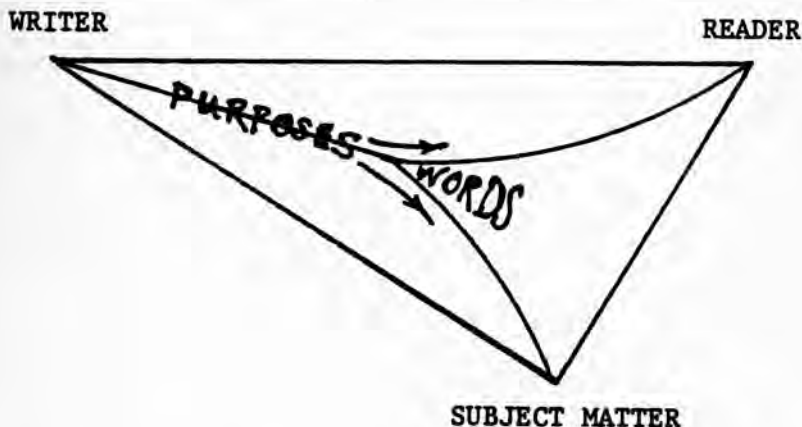
And here is how Polanyi analyzes what occurs when one uses a probe:

We may think of the hammer replaced by a probe, used for exploring the interior of a hidden cavity. Think how a blind man feels his way by the use of a stick, which involves transposing the shocks transmitted to his hand and the muscles holding the stick into an awareness of the things touched by the point of the stick. We have here the transition from 'knowing *how*' to 'knowing *what*' and can see how closely similar is the structure of the two. (PK, pp. 55-56)³

Fortunately for teachers of writing, Polanyi talks frequently about what happens when language is employed to create meaning. He remarks the "transparency of language" (PK, p. 57), noting that when speaking/writing or listening/reading "our focal attention is directed towards the meaning of the words, and not towards the words as sounds or marks on paper" (PK, p. 92). He argues that what words do, then, is "function as indicators, pointing in a subsidiary way to that focal integration [i.e., the creation of

meaning] upon which they bear."⁴

It is especially illuminating and relevant to consider the operation of these two complementary ways of knowing in terms of their relative functions in the rhetorical process. A slight modification of the "communication triangle"⁵ provides a convenient graphic illustration of that process:



In rhetorical terms, the writer seeks to engage in purposeful communication with a particular reader or set of readers about a particular subject matter. Operationally, subject matter and reader are the "objects" of the writer's focal attention; it is in terms of his or her relationships to subject matter and reader that the writer's purposes and intentions are understood. And, operationally, appropriate words in appropriate sequences are (if all goes well) generated in the service of those purposes and intentions; operationally, words are the enactment of the writer's rhetorical aims. As James Kinneavy puts it, "The aim of a discourse determines everything else in the process of discourse. 'What' is talked about, the oral or written medium which is chosen, the words and grammatical patterns used – all of these are largely determined by the purpose of the discourse."⁶

Polanyi expresses the merging of purpose and language in terms of a tacit integration:

Our intention to say something normally evokes our verbal expression of it. . . . We can speak as we do because we feel that many thousands of words are available for our novel purposes, and we can trust the powers of our imagination, bent on this purpose, to evoke from these available resources the implementation of our purpose, just as our intention to raise our arm evokes the coordination of our nerves and muscles in the accomplishment of this intention. (*Meaning*, pp. 57-58)⁷

As these illustrations show us, then, Polanyi's idea is that a skillful act relies for its performance upon two kinds of knowing or awareness, both of which are equally operative in the process, but in different ways, and bearing a special relationship to one another. These two kinds of awareness, merged into an effectively functioning process, constitute tacit,

personal knowledge. Some further characteristics – demonstrating not so much its nature but certain consequences of its nature – are important to teachers of writing.

One is that, as previously intimated, tacit knowledge is not ultimately knowable or articulable; it is “unspecifiable.” According to Polanyi, “the aim of a skillful performance is achieved by the observance of a set of rules which are not known as such to the person following them” (PK, p. 49). The kind of rule referred to here must be sharply distinguished from another sort of rule, which can be known and articulated. Those of us who have played golf doubtless know some version of the standard “rules” for an effective golf swing. They include (for right handers) the following: keep your left arm straight – but not rigidly locked – during the entire swing, hold your head high and unmoving during the entire swing, keep the backswing slow, shift your weight forward (off the right foot and onto the left) just before or at impact of the clubhead with the ball, follow through on the foreswing, effect an “inside-out” swing, and so on. This kind of set of guidelines or directions Polanyi calls “rules of art” or “maxims,” and it is difficult to disagree with what he says about them:

Maxims are rules, the correct application of which is part of the art which they govern. The true maxims of golfing or of poetry increase our insight into golfing or poetry and may even give valuable guidance to golfers and poets; but these maxims would instantly condemn themselves to absurdity if they tried to replace the golfer’s skill or the poet’s art. Maxims cannot be understood, still less applied by anyone not already possessing a good practical knowledge of the art. They derive their interest from our appreciation of the art and cannot themselves either establish or replace that appreciation. (PK, p. 31)

“Maxims” are not, therefore, the actual *enabling rules* governing the performance of a skillful act. They are, instead, articulable guidelines whose function is to direct focal attention to those purposes or intentions which will activate unspecifiable tacit powers. In other words, the maxim which instructs the tyro golfer to “hold the head high and unmoving during the swing” does not *enable* him or her to position the head correctly during the swing. What the maxim does is merely to direct the tyro’s attention to that one component of a good swing so that his or her tacit powers can be brought focally to bear upon that component for as long as is necessary to effect a tacit integration of head-held-high-and-unmoving into the golf swing.

Another characteristic of tacit knowledge is that, because it is unspecifiable, it “cannot be transmitted by prescription, since no prescription for it exists. It can be passed on only by example from master to apprentice” (PK, p. 53). Watching the master at work and experiencing vicariously the gratification of achieving a goal through the enactment of a skillful performance, the apprentice sets out to achieve the same end – which is the enactment – him- or herself:

A novice trying to understand the skill of a master will seek *mentally* to combine his movements to the pattern to which the master combines them *practically*. By such exploratory indwelling the novice gets the feel of the master’s skill. Chess players enter into a master’s thought by repeating the games he played.⁸

Elsewhere Polanyi puts it this way: “We share the purpose of a mind by dwelling in its actions” (*Meaning*, p. 45).

For Polanyi, this “exploratory indwelling” – the self-effacing effort of

apprentices to put themselves into their masters' shoes – is essential to all learning. When successful, exploratory indwelling leads to mastery. Polanyi describes the process of mastering a skill in these terms:

Here the emphasis of our knowing lies on producing a result. The effort involved in acquiring knowledge and skillfully applying it may . . . be said to be guided by a purpose. It is in the light of this purpose that certain things are made to serve us as tools, and that certain movements of the body are skillfully coordinated. The economical and effective achievement of this purpose sets a standard for our skill. It is by striving to reach this standard that we pick up in practice, usually without any focal awareness of doing so, the elements of a successful performance. (*Meaning*, pp. 42-43)

One further characteristic of tacit knowledge will help us to round out an elementary understanding of the concept and its special relevance to us as teachers of writing. According to Polanyi, "subsidiary awareness and focal awareness are mutually exclusive" (*PK*, p. 56); i.e., one cannot, by definition, consciously attend to both at the same time or in the same way. Thus, e.g., "if a pianist shifts his attention from the piece he is playing to the observation of what he is doing with his fingers while playing it, he gets confused and may have to stop" (*PK*, p. 56). Or, similarly (to apply this notion to an example close to the concerns of the teacher of writing): If a writer shifts his or her attention from his or her rhetorical purpose to, say, a rule of grammar or spelling or paragraph development, he or she will not be able to proceed with the writing of the piece until or unless he or she can refocus attention upon the original rhetorical aim. "A serious and sometimes incurable form" of this sort of self-consciousness, Polanyi observes,

is 'stage-fright', which seems to consist in the anxious riveting of one's attention to the next word – or note or gesture – that one has to find or remember. This destroys one's sense of the context which alone can smoothly evoke the proper sequence of words, notes or gestures. (*PK*, p. 56)⁹

One can avoid or free oneself from stage fright only by the "casting forward of an intention [which] is an act of the imagination. It is only the imagination that can direct our attention to a target that is as yet unsupported by subsidiaries" (*Meaning*, p. 57).

Those, then, are some of the ideas of Michael Polanyi that are especially relevant for teachers of writing. Some of the implications – and applications – of those ideas are doubtless already clear. Nevertheless, I would like to point to a few that I believe are particularly significant. If Polanyi's notions are correct – and our experience seems to suggest that, with some modifications and amplifications, they are – then it makes sense that an effective approach to teaching writing will be based upon such assumptions as the following.

First, we must proceed on the assumption that efficient writing performance is a process that demands the "casting forward of an intention" – i.e., that the writer must attend focally to purpose with regard to subject matter and reader and, except at "stuck points," must attend subsidiarily to questions of word choice, grammar, mechanics, paragraph structure, and the like. This would seem to argue that a writing course ought first of all to be rhetoric-based. Such a course would direct student attention to questions regarding the relationships of writers to readers and

writers to subject matters, and to questions regarding effectiveness (as opposed to correctness) of expression. (E.g., "What is it that you have to say about your subject?" "To whom are you going to say it?" "What is it that you intend to do for – and to – your reader?" "How can you keep your reader reading?")

Second, we must proceed on the assumption that the most effective (if not the most efficient) way to get those questions asked is to engage the students with their teachers in an apprentice-to-master relationship. A central task of the writing teacher is thus to seek out and develop ways to promote that relationship. Of course writing teachers cannot emulate, say, carpenters, who work at their craft in the presence of, and with the assistance of, their apprentices. That is, writing teachers cannot ordinarily write with their student-apprentices watching over their shoulders. But writing teachers can emulate, e.g., the golf pro, whose job it is to watch the tyro swing and to diagnose problems and flaws which are then brought to the tyro's attention (in the form of "maxims") so that more effective techniques and procedures can be demonstrated, practiced, and, over time, tacitly integrated into the tyro's game.

Writing instruction methods that echo that relationship have been suggested. These include peer teaching and collaborative learning¹⁰; teachers sharing drafts of their own professional writing with their students, explaining and discussing such things as rhetorical situation and constraints, compositional difficulties, lexical, syntactic, semantic, and pragmatic options considered, and the like; teachers writing the same assignments as (and with) their students¹¹; and – perhaps most important of all – writing teachers utilizing some form of instruction-through-conference (one-to-one tutorials, in or out of the actual classroom) to take the students through an extended, "slow-motion" version of the process of writing, with the teacher functioning as "resource person," "editor," "pro."¹²

These remarks support, by the way, a rather clear set of maxims for writing teachers – none of which is particularly new here, but all of which can be seen now in the context of a solid theoretical rationale. One is that writing teachers must themselves write. How else can they know the sorts of problems and options writers consider as they write? How else can they serve as masters to their student-apprentices? Another is that writing teachers must model and demonstrate the *process* of writing. There is simply no other way they can promote and control the "exploratory indwelling" of their students in that process. Still another is that writing teachers must direct their students' attention to questions of rhetorical purpose and intention during the process, intruding themselves into that process only at appropriate times and only if armed with a carefully thought out set of priorities (essences first, surfaces later).¹³

Third, we must proceed on the assumption that we must learn how to pay more than lip-service to the notion that writing, as a process, is learned by writing. We must, therefore, try to free ourselves of the conventional textbook approach, which is to tell students about writing and then assign them writing exercises. If Polanyi is to be our guide, we must act on the

conviction that writing is learned by a more or less deliberate "exploratory indwelling" – an attempt to do what someone else can do, characterized by an effort to replicate not a product but a process manifested in action and result – which evolves over time and through practice into "mastery." We know that, for the most part, writing is not learned by being told about or by talking about writing, and our intuitions now have a sound theoretical base. Polanyi insists that "no skill can be acquired by learning its constituent motions separately" (*Knowing and Being*, p. 126; emphasis added), and both common experience and available research seem to bear him out.¹⁴ It must be recognized – and the point is both simple and obvious – that not all of the "constituent motions" of the craft and art of writing are or can be known. In fact, extraordinarily little is actually known about how people write and how people learn to write. And, in fact, almost all of the recent research conducted by members of this and other, related disciplines has been devoted to uncovering the "constituent motions" of these processes. What little we *do* know about language acquisition, however, appears to support Polanyi's contentions. Language is learned, we can believe, in use, and, as Walter Loban says, "gaining power and effectiveness with language results from using it in genuine communication situations. . . ."¹⁵

We can also believe, therefore, that students cannot learn to write only by being told the hundreds upon hundreds of explicit "maxims" for spelling, punctuation, sentence structure, paragraph structure, methods of development, modes of discourse, essay organization, rhetorical decision-making, and the like – even if the telling of these maxims is followed up by some practice. Polanyi's point about these kinds of maxims is that "such knowledge is totally ineffectual unless it is known tacitly, that is, unless it is known subsidiarily – unless it is simply dwelt in" (*Meaning*, p. 41). Maxims not internalized through real exploratory indwelling leading, over time, to mastery remain merely maxims. No transition from "knowing *that*" to "knowing *how*" occurs. Unless, therefore, maxims can be taught in such a context and in such circumstances that a tacit integration can be brought about, they may as well not be taught at all.

This is not intended to mean, obviously, either that writing cannot be taught or that the maxims of the profession ought to be abandoned. What is implied, rather, is that (1) even "bad" writers already possess a profound fund of tacit knowledge not only of the writing process but also of the principles and strategies of effective rhetoric – as well as a vast pool of lexical, syntactic, semantic, and pragmatic competence; (2) writing teachers ought to attend primarily to the task of helping students to build upon and refine what they already tacitly and explicitly know (there is no point in making the tacit focal unless doing so will help the students to improve their writing skills); (3) writing teachers should be wary of pedagogies which appear to promise that if the skill is atomized – if the process and its products are broken into constituents and those constituents are studied as separate entities – then the students will later be able to effect an integration of those entities into compositionally and rhetorically effective wholes¹⁶; and (4) an effective approach to teaching writing ought to be based upon the awareness that a vital teaching point

occurs not before or after but *during* an extended version of the writing process. It is at "stuck points" in the process that the maxims of the discipline become most relevant, because at these points maxims can be used to dictate or provoke actions or processes that are either not occurring or are occurring ineffectively. At these points the properly subsidiary can be made focal so that it can be analyzed, practiced, refined, modified – and then, over time, tacitly reintegrated. Writing skill can, certainly, be "improved by alternate dismemberment and integration" (*Knowing and Being*, p. 125). A writer can step back to make the subsidiary focal, but only if he or she has something to step back *from* – only, i.e., if he or she is already engaged with rhetorical purpose and process.

What this all adds up to can be capsulized in Polanyi's observation that "while the articulate contents of science are successfully taught all over the world in hundreds of new universities, the unspecifiable art of scientific research has not yet penetrated to many of these" (*PK*, p. 53). That is, the content of a discipline – including, certainly, its maxims – can be written into textbooks (that may well be the proper function of textbooks), but the tacit knowledge – the art, the skill, the processes – of its practitioners cannot be. Donald Stewart has, in a paragraph, alluded to much of the basic articulated "content" of our discipline. "We teach," he says,

beginnings, middles, and ends; topic sentences and development; the word, the sentence, the paragraph, the theme; narration, description, exposition, and argument; definition, classification, comparison and contrast, analysis, theme indivisible, or strategy unlimited. If we are linguists, we work on their syntax; if we are perceptionists, we improve their powers of observation; if we are pre-writers, we help them to get their concepts manipulable before they begin to write; if we are behaviorists, we get them behaving and then proceed to modify that behavior on the spot; if we are rhetoricians, we make them aware of the subject, speaker/writer, and audience triangle and the way they must mediate between these entities.¹⁷

Much of what Stewart refers to here are the articulated products of our theorizing and our researches – the categories of our maxims – and it is doubtless important that both teachers and students "know" a good deal of that content, *but in a different way*. For us, as members of the discipline, this content is most useful if it is articulable; we need, after all, ways of thinking about the processes and products of writing, and a vocabulary for talking about them when necessary. For our students, however, most of this content need not be articulable. Thus, while as members of the discipline we must be informed about the content of the discipline, it does not follow that as teachers of writing we should spend the bulk of our classroom time explaining that content to our students. Stating the maxims of writing is not teaching writing. Conscientious writing teachers are aware of recent discussions of the writing process, but it seems reasonable to hope that this does not mean that they have therefore now begun explaining the composing process to their students under the delusion that explaining that process is the same as teaching it. Explaining the composing process is without doubt helpful, but it must be thought of as secondary to the more essential tasks of activating and guiding that process until it becomes internalized.

The point is that we must not allow what we know about our discipline to distract us – as specks on our lenses – from the very simple and basic

fact that our ultimate purpose is not to teach our students what we *know* but, rather, *what we know how to do*. And, as Michael Polanyi demonstrates over and over again, understanding that distinction makes all the difference in the world.

ENDNOTES

¹Richard Gelwick, *The Way of Discovery: An Introduction to the Thought of Michael Polanyi* (New York: Oxford Univ. Press, 1977), offers a bibliography and a thorough explication of Polanyi's philosophy.

²*Personal Knowledge: Towards a Post-Critical Philosophy* (Chicago: Univ. of Chicago Press, 1962), p. 88. Subsequent references to this book will be cited as *PK* parenthetically.

³Cf. the frequently argued notion that writing is a way of learning and knowing. See, e.g., James M. McCrimmon, "Writing as a Way of Knowing," in *The Promise of English: NCTE 1970 Distinguished Lectures* (Urbana, Ill.: NCTE), pp. 115-30; rpt. in *Rhetoric and Composition: A Sourcebook for Teachers*, ed. Richard L. Graves (Rochelle Park, N.J.: Hayden, 1976), pp. 3-12. See also James Britton, "Writing to Learn and Learning to Write," in *The Humanity of English* (Urbana, Ill.: NCTE, 1972); and Janet Emig, "Writing as a Mode of Learning," *College Composition and Communication*, 28, No. 2 (May 1977), 122-27.

⁴Michael Polanyi and Harry Prosch, *Meaning* (Chicago: Univ. of Chicago Press, 1975), p. 70. Subsequent references cited parenthetically.

⁵For a well-known and unusually exhaustive discussion of the communication triangle, see James L. Kinneavy, *A Theory of Discourse* (New York: Norton, 1980), pp. 18-20 ff.

*Kinneavy, p. 48.

⁷Not infrequently one hears echoes of these sentiments in the writings of those who argue, implicitly or explicitly, that intention and purpose generate performance. James E. Davis, e.g., say that "Writings should have audiences. If a writer has something to say, and some reason for saying it, he will have come a long way toward discovering how to say it." ("The Blockhead Writer: A Confessional," *Elementary English*, 48 [March 1971], 228-31.) David Holbrook, having read Polanyi, argues the case in these words: "Convince a human being that he or she is being pulled in time towards an organized statement of some aspect of his or her experience, . . . then, once the pen . . . is taken up, all the individual requires is the time to complete the work. But this, of course, is an exacting discipline, involving a concentrated attention to *meaning*. An this, in turn, requires attention to punctuation, and to the way words are used: some grammatical and linguistic skill is needed here – though I would prefer to regard it as the kind of skill a good editor requires. It is a skill which cannot be learnt by futile exercises or developed from linguistics or grammar theory, but is learnt by grappling with meaning." ("A taste of disciplines of being: the value of creative writing," *Critical Quarterly*, 21, No. 1 [Spring 1979], 57.)

⁸"The Logic of Tacit Inference," in *Knowing and Being*, ed. Marjorie Grene (Chicago: Univ. of Chicago Press, 1969), p. 152. Subsequent references cited parenthetically.

⁹Sondra Perl, in her article "The Composing Processes of Unskilled College Writers," points to the potentially debilitating effects of excessive in-process revising, *Research in the Teaching of English*, 13, No. 4 (December 1979), 317-36. See also note 13, below.

¹⁰See Kenneth A. Bruffee, "The Brooklyn Plan: Attaining Intellectual Growth through Peer-Group Tutoring," *Liberal Education*, 64 (1978), 447-68; and his "Staffing and Operating Peer-Tutoring Centers," in *Basic Writing: Essays for Teachers, Researchers, and Administrators*, eds. Lawrence N. Kasden and Daniel R. Hoerber (Urbana, Ill.: NCTE, 1980), pp. 141-49.

¹¹Jim W. Corder, "What I Learned in School," *College Composition and Communication*, 26, No. 4 (December 1975), 330-34.

¹²The best-known advocate of this method of teaching writing is Donald M. Murray. See his *A Writer Teaches Writing* (Boston: Houghton Mifflin, 1968), *passim*; and "The Listening Eye: Reflections on the Writing Conference," *College English*, 41, No. 1 (September 1979), 13-18. Also see Barbara Fassler, "The Red Pen Revisited: Teaching Composition Through Student Conference," *College English*, 40, No. 2 (October 1978), 186-90; and Thomas A. Carricelli, "The Writing Conference: A One-to-One Conversation," Ch. 7 of *Eight Approaches to Teaching Composition*, eds. Timothy R. Donovan and Ben W. McClelland (Urbana, Ill.: NCTE, 1980), pp. 101-31.

¹³Cf. these comments by James Britton, et al.: "Suppose . . . that a teacher has been to some pains to get the process going by engaging the interest of his pupils in a topic to the point where the ideas are flowing freely. If he then makes precise stylistic demands, grammatical prohibitions and admonitions, and insists, for instance, on the looking up in the dictionary of all words where the writer is in doubt, he may bring the conscious choosing and the mediated process of the writer so much into the forefront of his mind that the production of ideas is interrupted to the point where it dries up." *The Development of Writing Abilities (11-18)* (London: Macmillan Education, 1975), p. 37.

¹⁴The most widely-known research into this sort of question is that which documents the fact that formal study of grammar – an *intuitive* knowledge of which is obviously fundamental to writing ability – not only does not contribute to improvement of writing skills but can actually impede such improvement. Beth Neman, in her *Teaching Students to Write* (Columbus, Ohio: Merrill, 1980), pp. 246-51, has provided a superlatively complete bibliography of that research.

¹⁵"Relationships Between Language and Literacy," in *Perspectives on Literacy*, eds. Richard

Beach and P. David Pearson (Minneapolis: Univ. of Minnesota College of Education, 1978), p. 102.

¹⁶Probably ninety percent or more of the textbooks currently on the market presume such a pedagogy, to one extent or another. A curious case in point is Frank J. D'Angelo's *Process and Thought in Composition*, 2nd Ed. (Cambridge, Mass.: Winthrop, 1980). This textbook includes a series of four chapters entitled "Patterns of thought: . . ." These chapters ask students to learn the following patterns: analysis and description (Ch. 4); classification, exemplification, and definition (Ch. 5); comparison and analogy (Ch. 6); narration, process, and cause and effect (Ch. 7). What is curious about this is that in his *A Conceptual Theory of Rhetoric* (Cambridge, Mass.: Winthrop, 1975) D'Angelo argues that these patterns manifest "innate organizing principles, . . . deeper underlying mental operations . . ." — an "internalized system" whose structure "must be genetically inherited" (p. 26). If D'Angelo is correct in this, then his textbook spends a great deal of time teaching students what they already know — as if they did not know it.

¹⁷"Tips for the Freshman," *Freshman English Shop Talk*, 1, No. 2, p. 51; quoted in Richard C. Gebhardt, "Balancing Theory with Practice in the Training of Writing Teachers," *College Composition and Communication*, 28, No. 2 (May 1977), 136.