Understanding the rich variety of personality differences can help teachers to avoid using new technology in ways that separate students from their best sources of strength. Twenty freshman students who were asked to react to 16 statements about writer's strengths and weaknesses not only answered very predictably according to their (Myers-Briggs) personality type, but even commented on the effects of word processing on writing in ways that suggest that the technology magnifies both strengths and weaknesses. Some students found in word processing ways to compensate for the areas in which they are less gifted. Writers need not adapt their habits to the features of technology such as word processors, but should instead use the technology according to their own set of gifts. It would seem that the focus of teaching ought to be on using word processing for its ability to offer compensatory disciplines. (PRA)
About twelve years ago a colleague asked me to fill out a questionnaire that subsequently revealed I was an Introverted Intuitive Thinking Judging type—an INTJ in the code of the Myers-Briggs Type Indicator, a method of personality description based on Jungian models. The description of the INTJ was extremely flattering. Indeed, the descriptions of the other fifteen types were also extremely flattering, though in different ways. My wife turned out to be an ESFP—an Extraverted Sensing Feeling Perceiving type—the opposite of the INTJ in every way, a fact that suddenly explained everything. All previous frustrations became sources of amusement as we learned to see the effects of personality as the controlling factor in our behavior.

The application of this kind of analysis to teaching, learning, and writing seemed promising. For example, we are all familiar with the student’s complaint "But I don't know what you want . . . Just tell me what
you want and I will do it." I had always viewed this as a sign of low intelligence and poor scholarship. Now I could see that this student was a Sensing type and I was an Intuitive type. We were trying to communicate across an immense gulf of personality difference--different ways of perceiving the world and using information. Ninety percent of university professors are Intuitive types, and sixty percent of our students are Sensing types, and the effects of this difference seemed worth exploring. And so it was with the other terms in the Myers-Briggs lexicon.

These explorations were illuminated very beautifully two years ago with the publication of the book *Personality and the Teaching of Writing* by George H. Jensen and John K. DiTiberio. This book places the sixteen Myers-Briggs personality types in the context of current research into writing process and writing pedagogy. It shows very clearly the effects of personality on the way we write and the way we learn and goes a long way toward undercutting dogmatic and unitary approaches to either. It serves as my principal source in this discussion of the influence of personality on how students use word processing.

At the end of last semester in a section of freshman composition in which students used word processing I asked students to answer some questions about their experience. The questions really took the form of sixteen propositions about writing--eight typical strengths and eight weaknesses. I asked students to respond to each proposition with a "yes" or "no" and to indicate what role they felt the word processor played in each case. Earlier in the semester students had completed the Myers-Briggs Type Indicator questionnaire, and I was interested in seeing what correlations might exist between personality type and the way these
students were using the word processor. There are twenty students in the
data base now, and I will be adding sixty more by the end of June. Here
are a few preliminary observations.

Statement number two, "My writing is too conversational for
academic papers," invites comparison of introverted and extraverted
writers. The introverts among us plan and write reflectively and slowly
and can produce academic prose with relative ease. Extraverts, on the
other hand, are more likely to plunge into writing with the easy flow of
inner speech. They are more exploratory than reflective and are better at
using conversation with peers to generate content. Certainly word
processing enhances both the strengths and weaknesses of extraverts. The
ease and flexibility of input encourages maximum use of the advantages of
exploratory writing, and the emphasis on collaboration associated with
computers in college composition programs is well suited to the extravert's
customary way of working. At the same time, however, these features of
word processing can exacerbate the extravert's tendency toward wordiness,
chattiness, and incoherence.

Students responded to statement number two precisely according to
type. In fact, only one introvert even had anything significant to say about
the effect of word processing on the conversational style. She said that
word processing makes it easy to have this weakness, and if you're not
aware of it, your writing will be more like speaking. In contrast, whether
or not they acknowledge the conversational style to be a weakness in
academic papers, all of the extraverts in the sample had something to say
about this effect of word processing. They talk about the ease of getting
down all your thoughts, of being able to add more later, of being informal,
of rambling, and, remarkably, several of them mention that they talk to the computer as if it were another person.

Among the extraverts another distinction emerges between those who are judging types and those who are perceiving types. As writers, judging types are goal-oriented, seek early closure, and favor condensed, if sometimes underdeveloped, writing. Nearly all of the extraverted judging types in the sample mention the importance and ease of editing in the context of the free flow of text input in word processing. However, not a single extraverted perceiving type mentions editing. They acknowledge the joys and pitfalls of informal, laid back rambles with the computer and leave it at that, and this is not surprising because perceiving types delay closure and favor thoroughness and inclusiveness.

If the introverts are silent and the extraverts expressive on the subject of conversational writing, the opposite is the case with statement number 7, "I like to take imaginative and original approaches to topics and assignments." Here the extraverts have little to say on the effects of word processing on creativity. When they say anything at all it is to point out that creativity belongs to the individual and is not likely to be altered by the tools of expression. Perhaps the extraverts consider originality and creativity to have a kind of prior existence that has merely to be discovered and brought to light.

The introverts, however, make a number of observations that suggest they view imagination and creativity as made rather than found. An Introverted Sensing Feeling Perceiving type, for example, says: "The word processor sometimes makes it easier for me to write [imaginatively] because it comes out so flowing without a lot of stopping to think what it is
I want to say next. Other times, however, I sit down in front of the computer and can't think imaginatively. A computer just seems so unimaginative that it stunts my thinking." An Introverted Sensing Thinking Perceiving type says: "The word processor may help taking a second look, but it is the first draft that is usually the most imaginative." Other introverts mention the value of being able to change an emerging text in response to new ideas that the text itself generates, and an Introverted Intuitive Thinking Judging type, the most individualistic and Promethian of the types, says: "The drawback of using a computer for being imaginative is the environment of computer labs. I do my most creative writing late at night in a small, quiet, smoky room where I can let my imagination run free, which is more difficult to do in a noisy, bright, and clinical computer lab." The image of this last writer--with his coffee cup on top of the video display, ashtray on the disk drive, cat hairs on the keyboard--should remind us that the groupiness of the university computer facility may be better suited to the work habits of extraverts than introverts. In any case, the differences between introverts and extraverts on the effects of word processing on imagination and creativity are clear in the sample so far and worth examining in more samples from different classes.

Just as Extraverts see little effect of word processing on creativity, students who are Feeling Perceiving types see little effect of word processing on "using personal experience to express . . . beliefs and personality" in statement number 11. At first, this seems odd because feeling types prefer writing about personal values. Their feelings guide their thinking, and they excel at expressive writing. Perceiving types, as
we have seen, delay closure and like to be thorough, inclusive, and exploratory. One would expect a student who is both a Feeling and Perceiving type to notice the extent to which the textfiling environment of a word processor encourages the writer to record, expand, and store all manner of personal experiences and observations for use in writing. Yet the Feeling and Perceiving students make little mention of doing this, though do it they must. Like the Extraverts who see little effect of word processing on imagination, the Feeling Perceiving students see little effect on the gathering of personal experience--perhaps in both cases because they view the role of word processing as merely instrumental. That is, they are in such complete possession of their gifts for outer experience, for expressive writing, or for thoroughness that they feel these traits will assist them no matter what technology of writing they may be using. The instrumentality is obscured by the ability. As one ENFP puts it: "you either feel comfortable expressing yourself through your writing or you don't, and it won't make a difference if you are using a computer or just writing freehand."

More interesting from the standpoint of connecting personality type with the special features of word processing is using the computer in a way that runs counter to type. In this case, the Thinking Judging students are the ones who acknowledge the influence of word processing. The Thinking types prefer objective, non-personal, highly structured formats for generating content and supporting arguments. And the Judging types, as we have seen, favor manageable goals, a condensed style, and early closure. A student with this combination of personality traits will probably answer "no" to statement 11: "I am good at using personal experience to express
my beliefs and personality." Though their number is small, all of the Thinking Judging students in the sample find something in word processing that helps them put personal experience to more effective use. An Introverted Thinking Judging student still shies away from using personal experience but uses the word processor to try out invented experiences he thinks his audience needs. And the Extraverted TJs claim that word processing makes it easier to use personal experience—to the extent that all of them, contrary to expectations, indicate "using personal experience to express my beliefs and personality" as a strength.

The Myers-Briggs system of personality typing emphasizes that each type represents a set of gifts, and for each set of gifts we have as individuals there is a corresponding set we don't have. We differ from each other as individuals, in part, because we each have a unique mix of gifts and not-gifts, and this seems to be a pleasanter and pedagogically more effective way of thinking about ourselves and our students than using terms like "strengths" and "weaknesses." The pairing of personality types in this system places "weaknesses" firmly in the context of a wide range of gifts that may be developed to various degrees. Once we learn what our gifts are we also know the ways in which we are not gifted. When a new technology like word processing comes along—a technology that influences how we think, learn, and write—our particular array of gifts acquires new contours. The technology may demand a gift be nurtured in a different way, or it may offer new compensations for the gifts we don't have. We have seen, for example, that writers who are gifted with the qualities of Perceiving types write in an exploratory and thorough way. Unless this gift is properly cultivated, word processing can make of this gift a great
burden of data collection gone amuck. The corresponding non-gift characteristics--difficulty to reach closure, reluctance to revise and reformulate and decide--invite us to find in the new technology compensatory disciplines. A Perceiving type writer, for example, might benefit from programs that use rubrics, templates, and cells of various sorts that put boundaries on data collection. A perceiving type can probably put models to more effective compensatory use than a Judging type, so modelling programs might be helpful. In learning and practicing word processing, such a writer might gain more from extended practice with editing than with freewriting.

In responding to statement 16 "My writing can be too broad, often long and tedious, and rambles without conclusion" Perceiving types correctly identify how word processing can over-nurture their gift for exploration and inclusiveness. Every one of them acknowledges how word processing extends the rambling, but most of them also acknowledge that easy revising techniques compensate for the rambles. As expected, the Judging types in their responses emphasize revisionary cutting. As one so typically puts it: "The computer is helpful in letting me go back and weed out all the junk that shouldn't be there." Presumably, however, he learned to go against type at least to the extent of trying out material that later turned out to be junk, but for a Judging type producing tentative junk is a beneficial compensation. Another Judging type student tried out a different compensatory discipline. She used the word processor to write several conclusions, looked at each one in context, and selected the best. In learning to try alternatives she not only takes advantage of word processing technology, but she also borrows from the gifts of her Perceiving
colleagues. In the end, her own gift for closure helps her choose the best conclusion. It is interesting to note that this student is also a Sensing type, which is probably why she needed to write out each conclusion rather than simply trying to imagine each one. Another Judging type student writes the conclusion first and then goes back and leads up to it, the flexible environment of word processing making this quite a bit easier to do than it would be on paper. It is the sort of technique that could serve as a compensatory exercise for her Perceiving colleagues.

The responses to statement 4, "My writing seems too formal, and I am reluctant to express feeling and ideas," show a sharp distinction between Perceiving and Judging types on the reasons they find revising with a word processor beneficial. The Perceiving types edit toward feelings, in one case by adding expressive words, in another by being more relaxed, and in another by expressing "ideas I never knew I had." Judging types, in contrast, edit toward formality, in one case by adding more formal words, in another by excising the effects of getting carried away in an electronic draft, and in another by cutting emotion and adding facts. In the cases of both the Perceiving types and the Judging types word processed revising is beneficial because it enables them to intensify their particular gifts, rather than to compensate for the ways in which they are not gifted.

As a general, if tentative conclusion, it may be said that the students in this sample reacted to the 16 statements about writers' strengths and weaknesses very predictably according to type. Moreover, they commented on the effects of word processing on writing in ways that suggest the technology magnifies both strengths and weaknesses. Some students have found in word processing ways to compensate for the areas in
which they are less gifted. It would seem that the focus of teaching ought
to be on using word processing for its ability to offer compensatory
disciplines. That is, students could be encouraged to use the technology
against type, with an eye toward what the computer can do for them that
they would not do naturally.

We should not assume that writers need to adapt their habits to the
features of the technology—or the features of the technology as interpreted
by a teacher with different personality traits—but rather that they should
use the technology according to their own set of gifts. The same may be
said of interactive programs that serve as adjuncts to word processing.
These programs necessarily reflect the personalities of their makers and
can have adverse effects if they force users into unhabitual ways of judging
and perceiving. Perhaps such programs could include optional pathways
that users could select according to personality type. In any case,
understanding the rich variety of personality differences should help us
avoid using new technology in ways that separate students from their best
sources of strength.