Beginning college-level writers are, generally, beginning students across the curriculum. They have as little experience with history or biology, as disciplines, as with writing. Thus it may seem unreasonable to ask subject matter teachers to deal with these students’ writing on top of teaching them discipline-based knowledge and skills. Subject matter teachers may resist facing papers full of mechanical errors and unsupported generalizations. They may feel they don’t know how to teach their students to write, especially when writing teachers themselves often complain they don’t know where or whether to begin. It’s no wonder so many basic college courses require no papers and give only objective or short-answer tests.

But while it is understandable for subject matter teachers to back off from the teaching of writing in their courses, it is not wise. Teaching writing across the curriculum has won considerable support throughout higher education on the strength of arguments about the relationship between writing and learning content, and about the relationship between writing and conceptual and analytical thinking. There is no need to detail these arguments here. The point is that if they are true for advanced students, they are surely true for beginning students. Therefore, as more and more subject matter and writing instructors come to agree about the value of writing in subject courses, it is important that they work together to create models that teach content and writing together.

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This paper describes one such model developed by two faculty members, one in writing and one in history, who designed, taught, and evaluated a history course in which writing played a central role. We taught the course, a survey of African history, at a private university where there are few if any basic writers, where most of those who enrolled in the course were a little beyond the basics in writing but were almost completely uninformed in African history.

RATIONALE AND GOALS

On the basis of our past experience both in introductory history courses and with beginning writers, we identified four problem areas beginning college writers have in content courses. The first of these involves attitudes toward writing in subject matter courses. The other three are essential thinking and writing competencies: analysis of information and conceptualization of ideas, analysis of frames of reference, and effective structure in writing. Our perception of these difficulties shaped our goals and the techniques we devised to integrate writing and subject matter learning in this course.

We had several goals connected with writing. First, we sought to find transferable techniques for integrating instruction in writing with instruction in subject matter in undergraduate courses. This goal was based on the rationale that writing about subject matter enhances the learning of the subject matter and simultaneously improves writing. Second, and more specifically, we wanted to find methods and materials by which students could develop conceptual and analytical thinking through writing. This goal and our methods were based on the premise that while most beginning college level writers have the ability to conceptualize and analyze, they have done so in styles of thinking we would not consider analytic. What they need, as Mina Shaughnessy noted, is conscious awareness of these skills, and instruction and practice in the styles of thinking and ordering used in academic discourse. Finally, we wanted to

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1This history and writing course was self-paced. However, we have chosen not to discuss this aspect of the course in order to avoid confusing the elements of self-paced instruction with writing instruction in general.


identify and teach to key difficulties which we believe beginning writers face in content courses such as history: analyzing and hypothesizing about data; analyzing others' points of view; and structuring expositions of complex questions. To help overcome these difficulties, we sought to engage students in writing about subject matter by providing writing tasks with realistic rhetorical situations.

For the writing component of the course, we selected and adapted key concepts of the Functional Writing model developed by A.D. Van Nostrand and his colleagues5 and devised some additional instructional techniques. We presented writing instruction in units spaced evenly throughout the course, making instruction sequential and cumulative—i.e., each unit built upon and continued to use what was learned in previous units. The five units of writing instruction were all based on the rationale that the essence of both thinking and writing is making relationships. Each unit focused on a different skill: making inferences; analyzing an author's frame of reference; accommodating readers; planning an extended written statement; and writing coherently.

In order to make each of these five thinking-writing skills manageable for our students, we presented each one by the same step-by-step procedure, using as content the topic then being studied. In each instance we explained the operations that constituted the skill and provided an example of applying the skill, using course content. Then students applied and practiced the skill while incorporating additional course information. Finally, students received feedback in individual conferences which provided formative evaluation of their degree of mastery of the skill and of the substance. Frequently students used this feedback to revise their writing. For two of the writing units we provided supplemental self-instructional materials. After completing each unit, students needing additional practice used these materials to continue to develop the specific skill. In general the supplemental materials used course content so that students maintained their progress through the course.

In other words, we wanted to make writing an integral part of the history course—i.e., we wanted to use writing to advance the study of content. Therefore, we used writing in place of such verbal activities as discussions or oral reports, making writing serve similar functions. Also, we used writing to help students approach course content in various ways. Upon beginning a new topic, students gathered introductory data in order to generate a broad hypothesis, which they could then test against detailed study of that topic. In the midst of studying a topic, students wrote to

analyze data in depth. A third kind of writing activity helped students synthesize, extend, and evaluate their study of a topic.

We pursued these goals of learning the subject matter and improving writing and thinking simultaneously. The methods we used to approach the four specific problem areas we identified, and our general goal of integrating instruction in history and writing, are described below.

STUDENT ATTITUDES TOWARD WRITING

Unfortunately, few students see history or other discipline-based courses as a place where they should be required to write or where the quality of their writing matters. When they have written in such courses in the past, it was usually in a testing situation; they wrote to show what they knew. Since many beginning college students have poor self images as writers, they feel put upon when writing quality suddenly "counts." And since writing may be a difficult and unpleasant task for them, they may feel overburdened when confronted with instruction in writing as well as instruction in subject matter. Two undesirable attitudes toward a content/writing course may result: a shrugged shoulders attitude toward writing—"it simply doesn't matter and isn't worth the fuss"—or a resentment toward the writing and toward the course which sometimes erupts in open resistance to learning.

We attempted to deal with these attitudes in several ways—partly by spacing writing throughout the course, but primarily by explaining in advance the importance of this element of our course. First, we told the students at the initial class meeting that the course involved instruction in writing as well as in history, and we explained how writing about a subject helps writers learn facts and develop insights into that subject they might not otherwise develop. Second, at that same class meeting, we gave a writing pretest; we asked the students to write a paragraph describing their perceptions of Africa south of the Sahara. Finally, throughout the course we continually explained our emphasis on writing, by specifying in each unit where writing occurred the writing goal as well as the subject matter goals. By means of these explanations we intended both to allay objections to writing in our history course and to encourage students to care about the quality of their writing in the course.

FORMING CONCEPTS FROM DATA

In thinking and writing about unfamiliar subject matter, most beginning students seem to lack conscious, systematic strategies for inventing or inferring something significant to write about.6 When they are assigned a

6Shaughnessy, passim.
topic—or worse yet, a choice of topics—they have trouble knowing where or how to begin. When they are given an array of information on a topic, they have difficulty finding a focus, or at least a narrow enough topic to write about meaningfully. They need strategies for selecting important information, inferring a relationship among that information, and asserting that relationship.

The first unit containing writing instruction focuses on these three tasks. The strategy presented consists of a series of recursive steps designed to teach the general skill of conceptualization. In addition, the strategy teaches specifically the skill, necessary in history, of testing information and inferences about that information against each other, in order to weigh possibly conflicting evidence and make the inferences as accurate as possible. Another goal of this unit is to show that more than one inference can be made about any set of information, that there can be many “right” answers, that interpretations of history are complex and open-ended.

The format by which we presented instruction in skills of conceptualization begins with this task:

| Given: | 1) Topic: *Africa Today* |
| Collecting information: | 2) List below 6-7 pieces of information about Africa that you find in the newspaper excerpts and in the chart included in this unit. Two sample items are already here to help you start your list. |
| Finding a common relationship and writing an organizing idea: | —new mineral resources found in some nations |
| Using your organizing idea as the basis for a paragraph: | —changing prices for copper hurt Zambia’s budget |
| | 3) Write a sentence that summarizes (organizes) all the information listed above (or almost all). This assertion should not catalogue or list all this information, but rather should state a way in which these pieces of information are connected to each other. |
| | 4) Write a paragraph that uses at least 4 of the pieces of information from your list to explain, justify or prove the assertion written in #3. Use this assertion as an idea around which to organize your paragraph—i.e., make it serve as an organizing idea. As you include each piece of information, be sure you also connect it to the organizing idea. |
Writing a revised, developed organizing idea:

5) Finally, write a sentence that summarizes the significance of the paragraph you have just completed about Africa today. This sentence should not merely be a restatement of the assertion written in #3 above, but should go beyond that sentence to clarify and/or expand what you said in the paragraph.

As students go through these steps, they consciously practice certain key skills: In selecting information from reading, they must decide what is important and must separate relevant from irrelevant information; in making an inference, they must find a theme in a set of information; in writing a paragraph, they must show how the chosen information relates to the inference they use as an organizing idea.

When they have completed this part of the unit, students go on to test their inference, or hypothesis, against more detailed study of the topic. They are presented with additional information; they test their revised organizing idea and this new information against each other reciprocally; then they write another paragraph. The format for this task is as follows:

1) Write your revised organizing idea here:

2) List below the new information for this unit that:

   A. Supports the organizing idea          B. Contradicts (refutes) the organizing idea

3) List below three or four new ideas you get about Africa today from the information you have just studied. Cite evidence from this information to support each idea:

<table>
<thead>
<tr>
<th>New Ideas About Africa Today</th>
<th>Supporting Evidence</th>
</tr>
</thead>
</table>

4) Reexamine the sentence you wrote in item #1 above. If you wish, rephrase this sentence in order to clarify it or rewrite this sentence in order to modify it. This new sentence should take into account the evidence and new ideas you have found in this assignment.

5) Write a paragraph that uses some of the relevant evidence above to explain, justify, or prove the assertion you wrote in #4.
Working with data on "Africa Today" in these two activities, most students form the concept that "change" is an important trait of Africa today. With changes occurring in all phases of life—political, social, and economic—the greatest writing problem is to focus in further, to a set of information and ideas manageable in a paragraph. Here is one student’s solution to this problem:

Africa the continent as well as the nation is going through a period in which many events are taking place because of change. Medical technology has changed the methods for treating illnesses and because of this African’s life expectancy has increased as well as the life expectancy of his cattle. The increasing population has also affected Africa because there are now more and more cities being built. This has had the effect, on some Africans, of changing their expectations in life. Black Africans now want large homes and cars. This has caused an increase in the interest of education thus now more of the African nations are putting large parts of their revenues into education. Change has caused series of events to take place.

In this paragraph we can see the writer’s struggle to choose information—the reference to cattle, for example, certainly seems out of place. But with all the awkwardness, we can see also the gradual emergence of an idea: the progression from increased life expectancy to increased population to changes in life styles and goals has about it an air of logical thinking and an air of conceptual discovery.

Students who had difficulty with this unit used the supplementary materials designed to give further help with the formulation of organizing ideas. These exercises ask students to distinguish between given valid and not-so-valid organizing ideas for a set of information and ask them to state more than one organizing idea for a given set of information, thus making the point that several valid organizing ideas are possible.

Throughout this unit, the recursive interplay between information and inference replicates the recursive nature of the writing and thinking processes. At the same time, what the students write becomes a purposeful probe of subject matter.

ANALYZING OTHERS’ FRAMES OF REFERENCE: ASSESSING WRITER BIAS AND ACCOMMODATING READERS

While awareness of others’ points of view is of primary importance in all writing, assessment takes on particular importance in the discipline of history and, indeed, in the other social sciences. Students need to be able to assess bias in what they read, see, or hear as well as to accommodate their readers’ points of view in order to persuade their audience when they write. The concept of frame of reference helps students become aware of how
people's basic perceptions—attitudes, assumptions, and expectations—condition their choice of what to report, how to interpret information, and what to believe. By manipulating frame of reference in writing, students become conscious of the concept and make it a part of their analytical resources as writers and as students of history. Thus they can become not only better consumers of messages produced by others, but also better producers of their own written messages. We presented the concept of frame of reference in two units, the first focusing on evaluating bias as one reads, and the second focusing on evaluating and using the readers' frames of reference as one writes.

The unit on assessing an author’s bias involves several skills. Students need to acquire sensitivity to connotations of words in order to see how the words supply clues to bias. They need to learn to spot assumptions underlying a stated or implied idea. They must be alert to what is left unreported as well as what is reported by an author. They must be able to distinguish evidence from hypotheses about evidence and statements of proveable fact from statements of opinion or value judgements. In sum, they must develop the conscious habit of evaluating where a writer is "coming from," in order to understand clearly and evaluate fully what the writer is saying.

The unit introduces the concept of frame of reference by presenting two opposing statements dealing with the question, “Does Africa have a history?” and by eliciting the idea that opposing answers to this question rest on different definitions of “history” and different assumptions about Africa. Hugh Trevor-Roper, with a bias toward the European past, defines history as “purposive movement toward a pre-conceived goal” and concludes about Africa that “There is only the history of Europeans in Africa... The rest is largely darkness.”7 Leon Clark, with a broader frame of reference, defines history as the record, derived from oral tradition and archeology as well as written documents, of a people’s past. Judging a people’s history on its own terms and not according to the criteria of outsiders, he concludes that Africa has a rich and significant history.8 Students analyze the different frames of reference implicit in these statements and examine how and why Trevor-Roper and Clark select different facts to arrive at their different opinions.

Next students write to learn more about frame of reference and about Africa's past. They gather more information on Africa's past through a slide-tape and readings; select a narrowed topic about Africa's past, such as trade, Arabian influence, or African nations and states; and select and list information on that topic. They write a description of Trevor-Roper's frame of reference and state an organizing idea that comes out of his frame of reference and that relates their list of information. Then they write a paragraph using this information to support their organizing idea, with the goal of convincing a reader as Trevor-Roper would. Finally, they write a sentence that expresses more precisely than the original organizing idea what the paragraph actually says. Then they repeat this same task, taking on Leon Clark's frame of reference.

As writing teachers know, getting out of one's own head and into another's, a difficult job for all writers, is especially hard for beginners, who tend to exhibit considerable egocentrism—i.e., they may not realize that others have different points of view from their own, let alone be able to see things from others' points of view. For students who had difficulty understanding the concept and identifying and taking on another's frame of reference in the unit described above, we provided a supplemental writing unit which breaks the strategy down into smaller steps. This activity asks students to arrange a list of 15-20 words (names of countries) into groups and then to write a label or title that expresses what the words in each group have in common. Next, the students arrange the same words in different groups and label each new group. In the next step, they examine two given groupings of these same words, one grouping by number of letters in the words and one grouping by number of syllables in the words. Finally, they identify a way of thinking or frame of reference that might inspire this way of grouping and identify the frame of reference or way of thinking that inspired their own groupings. (See Appendix A.) The supplemental material in this unit also gives students additional practice in identifying an author's frame of reference. It leads them through the process by asking them to identify those words, facts, and ideas in a text that help a reader detect the author's frame of reference.

By writing and rewriting about course content from different points of view, students generate insights not only into the subject matter but also into those who have participated in the making of this subject matter—in this case, Europeans, Arabs, and Africans of times past and present. In a sense, this ability to see the possibility of opposing—and perhaps equally "valid"—points of view is what historical mindedness is all about. And this is important, because developing a sense of historical mindedness is an important goal of introductory history teaching.
We next turned the frame of reference problem the other way, asking students to write about the changing life and values of traditional, rural Africa to audiences with different frames of reference. The students read about this change in a novel, Achebe's *Things Fall Apart*; identify the characters' frames of reference; and write from the frame of reference of an African in the novel to other characters in the novel. They write to a British colonial officer and then write the same assertion to a group of indigenous Africans. The assignment looks like this:

A. From the point of view of Okonkwo's friend, Obierika, write a paragraph to the British Commissioner and a second paragraph addressed to the leaders of Umuofia, suggesting a new title for the book the British Commissioner is planning to write. On a separate sheet of paper write the following:

1) Obierika's (writer) frame of reference.
2) British Commissioner's (reader) frame of reference.
3) List of information Obierika could use as evidence in communicating with the Commissioner.
4) Organizing idea (the main point Obierika wants to make).
5) Paragraph to British Commissioner.
6) Revised/developed organizing idea.
7) Frame of reference of leaders of Umuofia (reader).
8) Revised list of information to be used for these new readers.
9) Organizing idea (the main point Obierika wants to make).
10) Paragraph to readers of Umuofia.
11) Revised/developed organizing idea.

In writing these paragraphs, the students replicate the process of generating inferences and identifying others' frames of reference which they have practiced previously. At the same time, they develop awareness of the relationship between the writer's frame of reference, selection of
information, and assertion of an organizing idea; and of the relationship between the reader's frame of reference and the writer's selection of what to say and how to say it.

**STRUCTURING A WRITTEN STATEMENT**

The skills of conceptualization and analysis are not only basic to thinking about history, but also to writing complex, coherent statements about history. In writing, analysis and conceptualization underly the skills of organization—creating a structure—and of achieving coherence—revealing the structure to readers. Beginning college students may have difficulty with organization of history papers because organizing a multi-paragraph written statement often involves making complex relationships: synthesizing large amounts of heterogeneous and perhaps conflicting information in order to understand and articulate a question or assertion. They may have difficulty with coherence because they must write about the parts of that question or assertion in a way that reveals and resolves its complexity.

To achieve structural coherence in complex historical papers, writers need to learn first to make a plan, a plan in which major points are sequenced into a logical structure. Then they need to use this plan as they compose, following its structure and revealing it to readers. To make the structure clear, writers must keep their focus on major points they wish to make, explain and support these points, and help readers keep track of where the writer is and where the writer is going. We devised two units to deal with structure: one on planning a multi-paragraph written statement and one on coherence.

The first of these units takes students through a series of steps they have already practiced and adds new material on sequencing. The writers identify a historical problem (find a focus to write about) by reading a given selection, make a hypothesis in response to this problem, assemble and evaluate evidence that supports or refutes the hypothesis, and analyze the reader's frame of reference. To devise a structure or sequence in which to argue the hypothesis, using the evidence they have selected, they do this assignment:

1) Look again at the set of information you have collected and cross out what you can't use to explain your hypothesis.

2) Find relationships—commonalities—among the pieces of information you have listed. Then group or categorize the items according to these relationships. For example, you may be able to classify your bits of information as *effects* of change and as *causes* of change. Or you may decide
that you have categories that describe various aspects of life in a village, such as government, family life, and social customs.

3) List below your categories of information and on the line at the top of each list write a word or phrase that describes (labels) the common feature.

Label: a) ____ b) ____ c) ____ d) ____ e) ____

Information:

4) Write an assertion about each of the above categories.

5) Using your organizing idea for the essay (hypothesis above) and your reader’s frame of reference as your guide, decide on the best order in which to present your assertions about your categories of information. Number the assertions above to indicate the order in which you would present them.

To help students with the sequencing part of the activity, we present information and instruction in logical relationships or patterns, focusing primarily on commonly used patterns such as chronology, cause-effect, comparison-contrast, problem-solution, classification, and division.

With this plan in hand, the student is ready to write an extended paper. Instruction on how to begin—another frequent source of difficulty for our writers—starts with a method for writing introductions: tell your audience what you want to say about your subject (your organizing idea), your major supporting points (the organizing ideas of the individual paragraphs), and the order in which you intend to make these points. While this method for introduction seems, and in fact is, somewhat formulaic, it clearly helps beginning writers not only to forge through the psychological barrier of facing the blank page, but far more important, to crystallize their thinking and writing. The sample below illustrates one student’s fundamental grasp of writing introductions to structured papers.

Africa’s past is much stronger, older and more developed than commonly suspected. For example, highly centralized, advanced states existed in Africa much earlier than similar states in Europe. Unknown to many, Ethiopia is the oldest continuing Christian empire in the world. Also, these ancient African empires were not isolated from the outside world, as exemplified by early African trade. With specific detail of African states and their contact with the outside world, a glimpse into Africa’s vast and rich past can be gained.

The final writing unit asks the students to pull together and use all the competencies they have practiced—to demonstrate what they have learned
about African history and about thinking and writing. The student plans and writes a paper on African independence movements, repeating the process used in the previous unit. This paper includes a conclusion that states a developed understanding and clarification of the original hypothesis—i.e., the conclusion functions in exactly the same way as the clarifying sentence, or revised organizing idea, that students learned to write for their paragraphs in the first writing unit. In this sense the completed essay brings the students a full circle.

Instruction comes full circle also in that the process of making relationships is finally turned from a focus on the writer’s thinking to a focus on the reader—i.e., the unit deals with making relationships clear to readers. Discussion and explanation of readers’ needs in comprehending a written statement emphasize the importance of revealing relationships at all levels of a statement: between all major assertions and the organizing idea of the whole statement, between successive major assertions (the organizing ideas of paragraphs), between the organizing ideas of a paragraph and the assertions that develop it, and between the successive assertions within a paragraph.

A device to help students perceive and gain coherence in the paragraph is Young, Becker and Pike’s concept of lexical chains. According to this concept, the lead or main sentence in the paragraph introduces a focus, and that focus keeps recurring in the paragraph, providing a linked chain. The writer maintains the focus by repeating old information in each sentence; at the same time, the writer develops the paragraph by adding some new information in each sentence. Repetition occurs—the chain exists—by means of repeated key words, synonyms, and pronouns. Here is an example of a paragraph with the chain highlighted by italicized key words and bold-faced pronouns:

The great social change—the coming of the city and the modern way of life—was not a pleasant experience for the Africans who were and are caught up in it. The new men of the towns and the mines lived in a world of bitter poverty and great personal frustration. The harsh discipline of a regular job and the loneliness of being a stranger made an African envy the familiar life of his less enterprising brothers at home in the village. On every side the African in the town was confronted and brushed aside by the vastly greater wealth, education, and skills of his European rulers, from whom he was separated by a social gulf as great as the difference between his tiny shack and their comfortable houses with many servants. And whether it was called

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color bar or culture bar, the African's pride and self-confidence were hurt by European prejudice.\textsuperscript{10}

The chain concept helps writers see how readers come to understand the relationship between assertions, the line of reasoning that carries one through a series of sentences. Also, the chain concept helps writers see how to provide clues to the sequence of their argument. For example, the reference to "towns," "poverty" and "frustration" in sentence two echoes the implications of "city" and "not a pleasant experience" in sentence one.

CONCLUSION

Our attempt to bring writing in the course full circle—more precisely, to provide instruction from prewriting strategies to the multi-paragraph paper—while also presenting new subject matter, was extremely ambitious, in fact too ambitious. Knowing this, we yet felt it was important to design and test sequential materials for dealing with the specific writing difficulties we identified as major ones; and by focusing on these four problems, we were able to a reasonable extent to control the course design. However, problems related to the amount of material appeared as we taught the course, some of which we predicted and some of which we did not predict. There were, as well, some satisfying results.

Student attitudes toward writing instruction and emphasis in a discipline-based course were initially and remained more resistant than we had expected. Many students, however, found the writing instruction valuable and even said it was the highlight of the course. And finally, even the most reluctant students seemed to come to appreciate the value of the writing instruction, in spite of the difficulties they had with it and the time it took.

As for the competencies of conceptualization, analysis, and structure, the students simply did not have enough time to master all of them. Because they were both beginning writers and beginning history students, they needed repeated practice in grouping information about African history, in finding a focus among that information, in making inferences, in identifying others' points of view, in sequencing information, in providing clues for the readers; and they needed more time for revision than we could give them. The lesson here is that there is real danger of overloading courses that integrate subject matter and writing instruction, especially at the introductory level.

Given these problems, however, we can identify some successes. We and an outsider compared preliminary writing samples with final essays. We all concluded that there was marked improvement in students' abilities to conceptualize, analyze, and structure information, and that development of these thinking and writing competencies helped the students gain sophisticated insights into the subject matter. Also, the students gained important new skills of detecting bias and analyzing others' points of view. An interesting feature of our results is that the more able writers, who in general tended to pay cursory attention to the writing instructions, improved relatively little, while noticeable improvement occurred in the writing of the weakest students, who tended to follow the writing instruction seriously and conscientiously. In sum, the evaluation showed that those students who used the writing instructions well wrote progressively better statements about course content.

What works in this model—particularly what furthered the development of writing abilities of the weakest students—is the tasks in each unit which are based on accepted theory about the teaching of writing. They are tasks that give students a real reason for writing—to make sense of an aspect of African history—and real readers, i.e., they invite "real rhetorical acts." The tasks are presented in a series of units. Each unit includes and builds upon skills practiced in previous ones, and all units are linked by the emphasis on making relationships. The progression of these units is developmental: it presents more and more complex tasks and encourages students to reach toward more and more maturity in thinking and writing. The cumulative nature of the subject matter undergirds the developmental progression of the thinking-writing tasks. Teaching writing to beginning college writers by integrating writing in subject matter courses works at least partly because these courses open up possibilities outside the traditional composition course.

APPENDIX

1. Look at the following list of words.

<table>
<thead>
<tr>
<th>Cuba</th>
<th>Rhodesia</th>
<th>West Germany</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chile</td>
<td>Greenland</td>
<td>Australia</td>
</tr>
<tr>
<td>Poland</td>
<td>England</td>
<td>Paraguay</td>
</tr>
<tr>
<td>Nigeria</td>
<td>Japan</td>
<td>Liberia</td>
</tr>
<tr>
<td>China</td>
<td>Russia</td>
<td>India</td>
</tr>
</tbody>
</table>

2. List all the above words having a common feature in a single group under one of the lines below. On the line write a word (or title) that tells what the words in that group have in common. Do the same for words having another feature in common. Repeat this until all the above words are grouped. You may have two or more groups.

3. Look at the words in #1 again. Can you think of another way to classify or group them? Write the new groups below. Again, put a label over each group that tells what the words in that group have in common.

4. One person once arranged the words in #1 as follows:

<table>
<thead>
<tr>
<th>Cuba</th>
<th>Chile</th>
<th>Russia</th>
<th>England</th>
<th>Rhodesia</th>
<th>Greenland</th>
<th>West Germany</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>Poland</td>
<td></td>
<td>Nigeria</td>
<td>Paraguay</td>
<td>Australia</td>
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</tr>
<tr>
<td>Japan</td>
<td></td>
<td></td>
<td>Ireland</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>India</td>
<td></td>
<td></td>
<td>Liberia</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5. Look at the items in each group. Write on the line above each group what the items in that group have in common.

6. What is the way of thinking behind this grouping of these words?

7. Here is another way the person who did the grouping of words in #4 grouped these same words. Write on the line above each group what the items in that group have in common.

<table>
<thead>
<tr>
<th>Cuba</th>
<th>India</th>
<th>Nigeria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chile</td>
<td>Rhodesia</td>
<td>Liberia</td>
</tr>
<tr>
<td>China</td>
<td>Paraguay</td>
<td>West Germany</td>
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<tr>
<td>Japan</td>
<td>Australia</td>
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</tr>
<tr>
<td>Russia</td>
<td>Poland</td>
<td></td>
</tr>
<tr>
<td>England</td>
<td>Ireland</td>
<td></td>
</tr>
<tr>
<td>Greenland</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
8. What is the way of thinking behind this grouping of these words?

9. Describe the attitude or frame of reference behind these groupings of the words.

10. What was your way of thinking when you grouped the words in item 2?

11. Describe the frame of reference behind your grouping of these words.

12. Did you use a different frame of reference in your second way of grouping them (item 3)? If so, describe that frame of reference.