



Student Performance Q&A:

2004 AP[®] Human Geography Free-Response Questions

The following comments on the 2004 free-response questions for AP[®] Human Geography were written by the Chief Reader, Adrian J. Bailey of the University of Leeds in Leeds, United Kingdom. They give an overview of each free-response question and of how students performed on the question, including typical student errors. General comments regarding the skills and content that students frequently have the most problems with are included. Some suggestions for improving student performance in these areas are also provided. Teachers are encouraged to attend a College Board workshop to learn strategies for improving student performance in specific areas.

Question 1

What was the intent of this question?

This question concerned contemporary patterns and processes of industrial production. Specifically, it used the *maquiladora* system as a case study of a broader trend toward outsourcing and asked students to more generally explain how Mexico was emerging as a center of industrial production under globalization. A map stimulus showed the distribution and size of maquiladora centers in Mexico, clearly clustered along the border with the United States. The question tested awareness with specific materials in the Industrialization and Economic Development section of the course and further enabled students to draw upon their critical knowledge of industrial location theory.

How well did students perform on this question?

Students responded strongly to Part (b), with most scoring at least one point (border location) and the majority going on to recognize the influence of transport costs. In Part (c) students picked up one (cheap labor) and two (proximity to the U.S. market) points. A better-qualified group of students were able to identify third and fourth points in this part (e.g., NAFTA membership, environmental controls). This better-qualified group also identified two Part (a) factors (typically, cheap labor and assembly activities). The best-qualified students were able to list three or more factors in Part (a) and thus demonstrate both a specific knowledge of Mexico and maquiladoras and a general knowledge of globalization.

Therefore, this question differentiated three groups of students: poorly-qualified students, who were able to score two points; students of average ability, who scored between three and five points; and well-qualified students, who scored between six and eight points. The mean score for this question was 3.6 out of eight possible points (or 45.2 percent of the maximum).

What were common student errors or omissions?

- Students showed unfamiliarity with the term *maquiladoras*.
- Map interpretation suggested Mexico's place in the industrial order was due to its coastal resources.
- Responses asserted "proximity between the United States and Mexico" was an important factor in Part (c) but did not explain why (i.e., they failed to discuss the role of the consumer market in the United States).
- Most responses to Part (a) did not provide a full definition of the term "maquiladoras," with reference to its multiple components (see the 2004 scoring guidelines on AP[®] Central [apcentral.collegeboard.com] for details).
- Answers in Part (c) relied too heavily on factors of absolute location like climate and natural resources. While it was possible to use such factors in a complete explanation (e.g., oil reserves increase Mexico's international influence), few responses did anything more than assert factors of absolute location.
- Responses revealed a general lack of familiarity with the contemporary organization of industrial activity.

Based on your experience of student responses at the AP Reading, what message would you like to send to teachers that might help them to improve the performance of their students on the exam?

The following is a summary of ideas that were generated in discussion and collaboration with the 54 Readers and other participants at the 2004 AP Reading. They reflect the wisdom of the members of this group, who have firsthand experience with both teaching the course and scoring the AP Human Geography Exam using specifically developed scoring guidelines. Some comments refer to this question specifically, while others apply more generally.

- Encourage students to structure their responses according to the subparts of the question. They may wish to start each answer to a subpart on a new page in the exam booklet and to leave wide margins around a response so that they can make additions if desired.
- Repeat content information across subparts of an answer if this is appropriate. For example, many students were able to earn credit in both Parts (a) and (c) of this question for discussing cheap labor.
- Help students to improve the literacy of their responses.
- Encourage specific and precise wording. Avoid generalizations by getting students in the habit of providing specific geographic examples with their arguments. Stress the local and regional contexts of broader processes and concepts wherever possible.
- Have students identify and practice responses to command words, including "explain," "define," and "discuss."

- Stress the importance of providing different factors in items that call for a discussion of multiple factors (Part [c] in this question). This is related to the point below.
- Have students use the extra five minutes per question (to be added to the 2005 AP Exam and subsequent exams) to plan out their responses.
- Use resources on AP Central (apcentral.collegeboard.com) to access contemporary teaching materials, case studies, teaching tips, and past exam questions. The AP Human Geography Electronic Discussion Group (EDG) is also used as an active forum by college and high school faculty for the exchange of ideas about teaching the course.
- Offer students practice exams that give them an opportunity to respond to a structured 20-minute free-response question.
- Involve students in discussions about the scoring guidelines from practice exams to familiarize them with the kinds of points that earn credit.

Question 2

What was the intent of this question?

This question gave students an opportunity to relate their knowledge of changes in contemporary agribusiness. The preamble to the question focused their attention on the restructuring of agriculture and its implications for rural land use and the distribution of agricultural production. The question did not call for specific knowledge of poultry production, but rather it examined the principles that apply to agribusiness. As such, it tested students' ability to apply an understanding of how agriculture is being restructured in the United States to the specific case of poultry.

How well did students perform on this question?

Students responded well to Part (a), with most picking up the two points (e.g., diet, "mad cow disease"). They were also able to apply a surface knowledge of agribusiness in Part (b) to claim one point for "large" or "specialized" farms. Fewer recognized or named how organizations were vertically integrated and/or more like manufacturing plants. That is, students scoring two points on Part (b) were of a higher ability group that could apply a key concept. Part (c) also discriminated between those students who described geographic patterns only (e.g., "poultry is located in the south"), so received no credit, and those who recognized the underlying structure (e.g., "poultry is more concentrated in key regions like the southeast"). As a result, relatively few but highly qualified students scored five or six points. The mean score was 2.5 out of six possible points (or 42.3 percent of the maximum).

What were common student errors or omissions?

- Responses showed some lack of knowledge of the ways in which contemporary agribusiness is organized economically and spatially.
- Few students were able to effectively apply their knowledge of underlying concepts (e.g., distance decay, location theory) to this question.
- Explanations of patterns of geographic organization of poultry often turned to uninformed associations between locational patterns and factors of absolute location, including climate and "race."

- Many responses suggested a lack of understanding of the difference between concentration and clustering.
- Many responses suggested a lack of understanding of the difference between economic organization and geographic distribution. For example, many students discussed how poultry was distributed (sent) to markets instead of reflecting upon its spatial organization within the United States.
- Some responses suggested confusion regarding the concepts of supply and demand. For example, students inappropriately attributed an increased demand for poultry (the focus of Part [a]) to supply factors and/or emphasized demand factors while discussing the characteristics of poultry production (the focus of Part [b]).
- Few responses worked with scale in a competent manner. While the question called for a broad and regional scale perspective, many responses discussed urban and rural features.

Based on your experience of student responses at the AP Reading, what message would you like to send to teachers that might help them to improve the performance of their students on the exam?

The following is a summary of ideas that were generated in discussion and collaboration with the 54 Readers and other participants at the 2004 AP Reading. They reflect the wisdom of the members of this group, who have firsthand experience with both teaching the course and scoring the AP Human Geography Exam using specifically developed scoring guidelines. Some comments refer to this question specifically, while others apply more generally.

- Encourage students to be precise in their answers. The use of appropriate geographic examples can help keep answers on track. Avoid overgeneralizing concepts by stressing that processes like agribusiness always have an important geographic context (at whatever scale).
- Design case studies that have built-in redundancy to expand student knowledge of, and confidence with, key geographic ideas, including scale, region, distribution, concentration, and clustering.
- Have students use the extra five minutes per question (to be added to the 2005 AP Exam and subsequent exams) to plan out their responses.
- Encourage students to structure their responses according to the subparts of the question. They may wish to start each answer to a subpart on a new page in the exam booklet and to leave wide margins around a response so that they can make additions if desired.
- Help students to improve the literacy of their responses.
- Use resources on AP Central (apcentral.collegeboard.com) to access contemporary teaching materials, case studies, teaching tips, and past exam questions. The AP Human Geography EDG is also used as an active forum by college and high school faculty for the exchange of ideas about teaching the course.
- Offer students practice exams that give them an opportunity to respond to a structured 20-minute free-response question.
- Involve students in discussions about the scoring guidelines from practice exams to familiarize them with the kinds of points that earn credit.

Question 3

What was the intent of this question?

This question tested breadth (it covered urban and population topics), depth (it asked students to explain the bid rent concept), and application (it tested students' ability to take the concept of population distribution normally discussed at the national scale and apply it at the urban scale). It thus illustrated a crosscutting item that gave students opportunities to demonstrate higher order cognitive skills. Two diagrams were part of the stimulus. The first showed an urban density profile. This is a graphic that is featured in some but not all texts. The second diagram showed two population pyramids. While these are commonly encountered in course materials, the exam diagram referred specifically to parts of an urban area (i.e., they shifted scale from national to local).

How well did students perform on this question?

This question differentiated between students of modest ability, who scored three or fewer points; students of average ability, who scored four points; students of good ability, who scored five and six points; and those very well-qualified students, who scored seven or eight points. The mean score was 3.9 out of eight possible points (or 48.7 percent of the maximum).

What were common student errors or omissions?

- Student responses showed unfamiliarity with the concept of land (bid) rent.
- In Part (a) many explanations of residential population density were superficial and limited themselves to simple descriptions of declining density in the suburbs. While some responses did begin to explain the profile by discussing how accessibility increased the value of land near the center, very few responses went beyond this explanation to discuss how competition between residential and commercial land uses accounted for slightly lower population densities at the center of the city.
- Responses in Part (c) generalized the conditions at locations X and Y and often incorrectly stereotyped why certain groups (including families) showed preferences for locations.
- Generalized responses showed little awareness of differences within groups (e.g., high income or low income, ethnicity, race, sexuality).
- Few responses considered supply factors beyond those suggested by the diagram (e.g., housing type). Little mention was made of the role of racism, segregation, and discrimination.
- Some responses suggested that students only understood the population pyramid concept at the national level and provided incorrect discussions of, for example, the role of infant mortality in Part (c).

Based on your experience of student responses at the AP Reading, what message would you like to send to teachers that might help them to improve the performance of their students on the exam?

The following is a summary of ideas that were generated in discussion and collaboration with the 54 Readers and other participants at the 2004 AP Reading. They reflect the wisdom of the members of this group, who have firsthand experience with both teaching

the course and scoring the AP Human Geography Exam using specifically developed scoring guidelines. Some comments refer to this question specifically, while others apply more generally.

- Encourage students to provide full but specific responses. In Part (a) few students were able to fully and specifically address the question.
- Use resources on AP Central (apcentral.collegeboard.com) to access contemporary teaching materials, case studies, teaching tips, and past exam questions. The AP Human Geography EDG is also used as an active forum by college and high school faculty for the exchange of ideas about teaching the course.
- Offer students practice exams that give them an opportunity to respond to a structured 20-minute free-response question.
- Involve students in discussions about the scoring guidelines from practice exams to familiarize them with the kinds of points that earn credit.