

# **Student Performance Q&A:**

# 2007 AP<sup>®</sup> Human Geography Free-Response Questions

The following comments on the 2007 free-response questions for AP<sup>®</sup> Human Geography were written by the Chief Reader, Tim Strauss of the University of Northern Iowa in Cedar Falls. 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?

Ouestion 1 focused on the basic elements of von Thünen's agricultural land-use model, the principles underlying this model, and the application of this model to current spatial patterns of agricultural land use. Thus, this question linked an abstract geographic model, the hypothetical spatial pattern predicted by this model, the principles and spatial processes generating this pattern, and the real-world application and evaluation of the model outside its theoretical and historical context.

The question contained two drawings as stimulus. The first (drawing X) depicted a man with boxes of fresh produce. The second (drawing Y) depicted a combine being driven in a field. The stem of the question stated that the diagrams reflected agricultural activities in the hinterland, as opposed to the center or market, of a large urban area. In part A students were assessed on their basic knowledge of the spatial patterns predicted by the von Thünen model. Specifically, they were asked to predict the locations of the activities shown in X and Y within the hinterland, relative to a large urban area. In part B students were prompted to explain the location of either X or Y to show their understanding of the underlying principles generating the expected spatial pattern. Part C then asked them to consider contemporary agricultural land-use patterns and discuss why they are different from those of the von Thünen model.

This question tested students' knowledge of the "Agricultural and Rural Land Use" section of the *AP Human Geography Course Description*, in particular the "Rural land use and settlement patterns" section of the Topic Outline, in which the von Thünen model is cited as a model of agricultural land use. In addition, an important goal of the course is for students to learn the

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importance to human geographers of understanding spatial patterns, as well as the spatial processes underlying these patterns.

### How well did students perform on this question?

Students did moderately well on this question. The mean score was 2.91 out of a possible 7 points (41.6 percent of the maximum achievable score). In part A many students correctly predicted the locations of drawings X and Y relative to a large urban area. Of these, many then used underlying principles of the von Thünen model to explain the location of the activity shown in X or Y in part B. The importance of perishability and accessibility were the most commonly cited factors; the roles of land costs and extensive versus intensive agricultural production were cited less often, although these issues were generally included in the stronger responses. In part C fewer students fully discussed factors that explain differences between contemporary agricultural land-use patterns and those predicted by the von Thünen model. Students who identified such factors in part C most frequently mentioned the role of improved transportation systems and improved methods of agricultural transport (e.g., refrigeration). However, few students then specifically discussed the effect on spatial patterns of agricultural land use. Instead, many provided only generalized discussions of ways in which contemporary agriculture is different from agriculture in 1826, without reference to either the von Thünen model or to theoretical or actual agricultural land-use patterns.

This question differentiated among three groups. Students who were unfamiliar with the von Thünen model, or had a superficial understanding of it, typically earned 0 or 1 point, usually in part A. Students who were familiar with the model and its characteristics generally earned 2–4 points, mainly in parts A and B. Finally, students who understood the principles underlying the model and who could, in varying degrees, assess and apply it in a contemporary context earned 5–7 points.

#### What were common student errors or omissions?

- Many students confused the von Thünen model with the concentric zone model or other urban models. Others confused it with the core-periphery model. Some mistook von Thünen for Malthus.
- Some students did not explicitly identify drawing X and/or drawing Y, or they confused the two.
- In part A some students tried to identify where specifically in the world the activities depicted in the drawings were located (i.e., their absolute location), rather than their location relative to a large urban area.
- Some students interpreted drawing X as depicting a market at a city center, rather than an agricultural activity in the hinterland. These students typically correctly identified the relative locations of X and Y, although they generally had more difficulty applying the principles underlying the von Thünen model in part B to explain the location of this activity.
- Many students were familiar with the basic spatial pattern proposed by von Thünen, but several then had difficulties in part B discussing the underlying principles and processes generating this pattern.
- In part C many students mentioned differences in agriculture between 1826 and today but did not link their discussions to spatial patterns as required by the question. These students seemed to interpret part C as a broad question about how agriculture has changed over time (citing, for example, the Green Revolution, biotechnology, genetically

modified organisms, or agribusiness) rather than about how current agricultural land use differs from that proposed by von Thünen's model.

- Many students gave only partial answers and could have gained points by adding more discussion or being more specific. For instance, several students cited "technology" as a factor in part C but did not refer to a specific type of technology. Others mentioned the importance of improved transportation but did not then explicitly link this factor to changes in agricultural land-use patterns.
- Several students made general references to the fact that farming requires a lot of land or to the decreased percentage of workers involved in farming, but without reference to the effects on spatial patterns of agricultural land use.

#### 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?

See suggestions at the end of the discussion of question 3.

# **Question 2**

#### What was the intent of this question?

This question required a synthesis of concepts related to the revival of minority languages. The introduction to the question notes that while English is becoming more widely spoken as a global lingua franca, minority languages such as Welsh, Basque, and Inuktitut are undergoing revival. Students were then asked to discuss three distinct factors that promote the revival of minority languages. They were thus prompted to show, in an integrated response, their understanding of the contrasting forces of globalization and local diversity, in this case emphasizing factors promoting local diversity, using the key cultural element of language to structure their discussion.

The question evaluated how well students could apply their knowledge of the "Cultural Patterns and Processes" section of the Course Description, which discusses "how geographers assess the spatial and place dimensions of cultural groups" as defined by several elements, including language, and how the geography of language is used to illustrate processes of cultural diffusion and cultural differences at various scales. The question is also related to themes highlighted in the first section of the Course Description ("Geography: Its Nature and Perspectives"), such as globalization and place. Moreover, the importance of understanding relationships among patterns and processes at different scales is one of the major goals of the course. In their responses, students could also draw from their understanding of topics in other sections of the Course Description, notably the "Political Organization of Space."

#### How well did students perform on this question?

The mean score was 1.27 out of a possible 6 points (21.2 percent of the maximum achievable score). The most commonly cited factor in promoting the revival of minority languages was the desire of groups to maintain or preserve their distinctive cultures. The role of devolutionary forces was also mentioned by several students, as was the influence of government policies to increase national unity. Other students identified the importance of minority languages in promoting tourist

destinations. The performance of students on this question varied according to the number of unique factors identified and the depth of discussion related to each.

This question differentiated among three groups. Students who did not cite any factors, or who cited only the desire for cultural distinctiveness, earned 0 or 1 point. Those who provided additional discussion, and perhaps another factor, earned 2–4 points. Students who identified and discussed three distinct factors promoting minority languages earned 5 or 6 points. Students clearly found this question to be challenging.

#### What were common student errors or omissions?

- Many students misunderstood the concept of a minority language. Several confused it with a lingua franca or with extinct languages.
- Several responses were poorly organized and did not clearly distinguish between the factors being discussed.
- Many students gave repetitious answers. Rather than discussing three distinct factors, they discussed the same factor in several different ways.
- Some students cited increased isolation as a factor in the revival of minority languages, although the question assumed the importance of globalization and thus increased interaction. Conversely, several students argued that increased trade and economic activity promoted the learning of minority languages for business purposes by individuals from other cultures.
- Several students interpreted this question as focusing on cultural diffusion and emphasized immigration processes. Others concentrated on the revitalization of languages by scholars or "outsiders," or on increased literacy rates.
- Some students discussed appropriate factors (e.g., tourism, nationalism, modern communication) but misapplied them or discussed them in an incorrect context.
- Some students focused on the intrinsic value of minority languages, rather than providing analytical discussions of factors promoting their revival.
- Several students identified appropriate factors but were penalized for incomplete discussions of process or a lack of supporting examples. Others cited examples but did not explicitly identify the factor being discussed.

#### 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?

See suggestions at the end of the discussion of question 3.

# **Question 3**

#### What was the intent of this question?

The intent of this question was to evaluate students' knowledge of key concepts related to the structure and activity of the global economy and to discern the impacts of this global economy within distinct national and regional contexts. Specifically, this question required students to show their understanding of the new international division of labor, its key features, and its influence on the socioeconomic structure of both the United States and developing countries.

The context of the question was established by an introductory statement that economic restructuring is transforming the world economy. Part A asked students to define and discuss the critical features of the new international division of labor. In part B students were prompted to explain an impact of the new international division of labor on the socioeconomic structure of the United States. Similarly, in part C they were asked to explain an impact of the new international division of labor. China, and India.

This question evaluated students' knowledge of material from the "Industrialization and Economic Development" section of the Course Description, which includes "accounts of economic globalization, which accent time-space compression and the new international division of labor." Part B of the Topic Outline for this section ("Contemporary patterns and impacts of industrialization and development") emphasizes the "Spatial organization of the world economy" as well as deindustrialization, economic restructuring, and related issues. Moreover, the Course Description notes the importance of understanding "geographies of interdependence in the global economy" and the effects of the global economy on nations, regions, and communities. Although this question focused on issues of industrialization and economic development, material from other sections of the Course Description (for example, "Population") was also useful in answering the question, especially in parts B and C.

#### How well did students perform on this question?

Overall, students did somewhat well on this question. The mean score was 1.71 out of 6 possible points (28.5 percent of the maximum achievable score). Many had some understanding of the new international division of labor, enough to earn at least partial credit in part A. Quite a few could also identity an impact in part C and, to a slightly lesser extent, in part B. However, they found it more challenging to provide complete explanations for full credit in parts B and C. In general, students performed best in part C, usually by discussing effects on employment, although several explained the impacts on wage differentials, variations in regional growth within a country, and social relations. In part B students most frequently explained impacts related to job losses and deindustrialization, whereas a few mentioned influences on regional economies and labor relations. Overall, students had the most difficulty illustrating a complete understanding of the new international division of labor in part A.

This question differentiated among three groups of students. The first group (earning 0–1 point) was largely unfamiliar with the concept of the new international division of labor. The second group had some understanding of the concept and could discuss its results in a general sense. Students in this group earned 2–4 points. Students earning 5 or 6 points had a good understanding of the international division of labor and its key features and could discuss in some depth its effects on both more- and less-developed countries.

#### What were common student errors or omissions?

- Several students illustrated a poor understanding of the key characteristics and processes underlying the new international division of labor.
- Some students defined the new international division of labor as a supranational organization or agency that oversees the global economy or regulates labor. Several discussed it as a bureau of the United Nations, World Trade Organization, European Union, or World Bank. Others defined it as a worldwide labor movement.

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- Many students seemed to have a general understanding of core–periphery relations and of more developed and less developed countries, but fewer could fully link such concepts to the new international division of labor.
- Some students provided general descriptions of the world economy without explicitly addressing the question being asked.
- Many students mentioned different sectors of the economy (e.g., primary, secondary, tertiary) in their discussions of the "division of labor," but without reference to the spatial organization of economic activity at the international level.
- Some students provided discussions of global migration patterns or illegal immigration without explicitly connecting such discussions to the new international division of labor.
- In parts B and C many students identified effects but did not provide complete explanations for full credit.
- In parts B and C many students summarized social or economic impacts in general, or at the aggregate or national level, without explaining the influence of the new international division of labor on socioeconomic structure within countries.
- Some responses suffered from outdated information, an emphasis on opinion over explanation and analysis, rudimentary writing skills, and poor organization.

#### 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 171 Readers and Ouestion and Table Leaders of the 2007 AP Human Geography Exam. They reflect the wisdom of members of this group, who have firsthand experience with both teaching the course and scoring the exam, using scoring guidelines developed specifically for these questions.

- Focus on the AP Human Geography course outline and consult a wide variety of textbooks, supplements, and related instructional materials in class preparation to ensure comprehensive coverage.
- Train students how to take the exam. Teach them to take five minutes per question to carefully read the question, taking the time to interpret correctly any stimulus material, identify key words in the question, and outline their responses in a manner consistent with the structure of the question. Teach students not to restate the question or write introductions and conclusions. They should directly answer the question. Also, encourage them to attempt to answer every free-response question, and remind them to proofread their responses to ensure that every element of each question has been addressed.
- Teach students to organize responses into sections, using the structure of the question as a guide, and to begin each question on a new page. Encourage them to write legibly. Consider teaching them to underline key points, ideas, and phrases in their answers. Stress the importance of writing responses in a clear and organized manner. Several Readers noted poor writing skills and the use of excessively informal writing styles, sometimes resembling text messaging.
- Provide practice exams that give students an opportunity to respond to structured freeresponse items. Replicate the experience of the AP Exam in your classroom as much as possible. Consider creating practice exams with two or three questions to give them experience with time management. Involve students in the scoring of these exams to familiarize them with the concept of the scoring guidelines and with the kinds of answers

that earn credit. More generally, incorporate writing exercises into lessons whenever possible.

- Train students to be explicit and precise in their responses and not to assume that unstated information and arguments will be taken for granted by the Reader. Readers for all three questions noted that students lost points by not finishing their thoughts. This was especially seen in part C of question 1, in which many students mentioned factors related to agricultural change but did not explicitly link them to land-use patterns. In questions 2 and 3, students often failed to earn points because of missing or incomplete discussions, even when appropriate factors or impacts had been identified.
- Make sure students understand what is expected when prompts like "explain," "define," "identify," and "discuss" are used in a question. Have students practice responses to such prompts. Also, train them to identify other key words in each question. For instance, several students lost points by not directly addressing the issue of *pattern* in part C of question 1, by not providing *distinct* factors in question 2, and by not addressing the impacts on socioeconomic *structure* in parts B and C of question 3.
- Encourage students to provide specific examples to support their explanations when appropriate.
- Stress interconnections across different sections of the course outline. Encourage students to integrate concepts from different areas of the course.
- Reinforce the importance of being familiar with relevant vocabulary. Encourage students to define terms in their own words to help them understand key geographic concepts, and to apply these concepts to a variety of contexts.
- Stress the importance of a spatial perspective in addressing the content of AP Human Geography and preparing for the exam. Train students to become familiar with applying concepts, as well as analyzing spatial processes and linkages, across multiple geographic contexts and at a variety of scales from local to global.
- Ensure that students understand the models used in human geography (e.g., von Thünen's agricultural land-use model, central place theory, and urban land-use models), their underlying assumptions, the contexts in which they are used, and the differences between them. Teach students to understand not only the hypothesized patterns predicted by these abstract models but also the principles, processes, and assumptions generating these patterns. Train them to apply these models in actual spatial and temporal contexts, teaching them to appreciate both the insights to be gained and real-world complications to be addressed.
- Train students to be analytical, to focus on the geographical and spatial aspects of questions, and to develop process-oriented responses when appropriate. Ensure that they understand relationships between spatial processes and spatial patterns.
- Integrate current events into course material and class discussions of geographic concepts, using a variety of national and international news sources. Consider the use of in-depth case studies linked to the concepts and material of the course, and stress to students the importance of applying course concepts to real-world contexts.
- If possible, consider attending a College Board workshop to gain up-to-date knowledge on content and teaching strategies. Teachers new to the field of human geography may especially benefit from such workshops taught by experienced instructors.
- Use the resources on AP Central<sup>®</sup> (http://apcentral.collegeboard.com) to access contemporary teaching materials, case studies, teaching tips, and questions from past exams. The AP Human Geography Electronic Discussion Group is also used by college and high school faculty as an active forum for the exchange of ideas about teaching the course.
- Consider applying to be an AP Exam Reader.

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