Chief Reader Report on Student Responses: 2017 AP[®] Human Geography Free-Response Questions

Number of Students Scored	199,756		
Number of Readers	758		
Score Distribution	Exam Score	Ν	%At
	5	21,318	10.7
	4	34,587	17.3
	3	41,868	21.0
	2	34,205	17.1
	1	67,778	33.9
Global Mean	2.54		

The following comments on the 2017 free-response questions for AP[®] Human Geography were written by the Chief Reader, Donald Zeigler. 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 preparation 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 were responses expected to demonstrate in their response to this question?

In unit VII, Cities and Urban Land Use, students "examine current trends in urban development," including "new urbanism." More specifically they are expected to "explain the planning and design issues and political organization of urban areas." As a response to this question, students were expected to demonstrate a grasp of how urban landscapes are designed and spatially configured in the context of traditional land-use zoning practices (in which land uses are segregated and spread out) and mixed land-use zoning practices (in which land uses are mixed together and spatially concentrated). Mixed-use zoning is at the heart of the New Urbanism movement. Specifically students are required to understand that "sustainable design initiatives include walkable mixed-use commercial and residential areas and smart-growth policies." New Urbanism is singled out as an example of mixed-use development. (VII D) To answer this question, students may also draw from additional urban sustainability problems mentioned in the Course Description, including suburban sprawl, farmland protection, and housing affordability. (VII E)

Skills required of students include (1) application of the spatial perspective to urban land use, (2) thinking critically about current trends and their geographical impacts, and (3) thinking comparatively in order to enumerate the difference between traditional zoning and mixed use development. All of these skills are related to a single meta-skill: "use spatial thinking to analyze the human organization of space." (I C)

How well did the responses address the course content related to this question? How well did the responses integrate the skills required on this question?

- Responses struggled to identify goals of New Urbanism, often repeating a part of the question prompt. Specifically, "bringing people back to the city" was often given as a goal of New Urbanism; but, the prompt specifies that New Urbanism and mixed-use development are meant "to attract residents back to the city." Hence, no point for that answer. If students had not covered New Urbanism in the course, they could have received points by identifying goals of mixed-use development, which is at the heart of the New Urbanism. Again, both terms are in the Course Description.
- More responses were successful in contrasting mixed-use development with traditional zoning practices. Mixed-use development is specifically mentioned in the Course Description, while traditional zoning practices are often covered as part of (1) urban land-use models and (2) suburbanization. In fact, it is difficult to understand mixed-use development without referencing how classic post-WWII suburbanization was driven by single-land-use zones (residential, commercial, industrial) separated from one another. Some responses simply equated traditional zoning with "old" and mixed-use development with "modern," rather than focusing on land use (a big-picture concept that is part of the unit's title, "Cities and Urban Land Use.")
- Responses struggled to explain benefits of mixed-use development and criticisms of New Urbanism. Some responses lost points because they mixed up "New Urbanism" with "urbanization." Others confused "New Urbanism" with "urban renewal." Responses that showed difficulty in Part A, also had difficulty in Parts C and D.
- Weak content knowledge prevented mastery of the skills required of this question. A basic definitional knowledge of New Urbanism and mixed-use development might have led to a demonstration of critical and comparative thinking skills.

What common student misconceptions or gaps in knowledge were seen in the responses to this question?

Common Misconceptions/Knowledge Gaps	Responses that Demonstrate Understanding
• One goal of New Urbanism is to attract residents back to the city.	• One goal of New Urbanism is to limit suburban sprawl. Another goal is to limit the use of cars with implementation of public transportation.
• One benefit of mixed-use development is that apartments and stores are close to each other.	• With mixed-use development, people are drawn by the promise of convenient shopping because of the proximity of apartments and stores.

Based on your experience at the AP[®] Reading with student responses, what advice would you offer to teachers to help them improve the student performance on the exam?

- 1. Use the Course Description (reinforced by reference to *multiple* textbooks) to guide curriculum development.
- 2. Give attention to all key words and concepts in the Course Description.
- 3. Master definitions; knowing basic information about New Urbanism and mixed-use development would have resulted in students receiving at least some points for this question.
- 4. Thinking critically about advantages and disadvantages (expressed as "benefits" and "criticisms" in this question) is a skill that cuts across the entire subject matter of Human Geography.
- 5. If a question asks for a comparison between two items (e.g., mixed-use and traditional zoning), points can be awarded only if both elements of the question are addressed in the answer.
- 6. Advise students to not provide answers that simply repeat part of the prompt for the question ("to attract residents back to the city" was in the prompt, so it could not be given points as a goal).
- 7. Teachers should give students practice in writing responses to free-response questions throughout the course.
- 8. Just because Cities and Urban Land Use is the last unit in the Course Description does not mean that it should be covered in any less time than other units in the course.

What resources would you recommend to teachers to better prepare their students for the content and skill(s) required on this question?

Curriculum Module on "Urban Geography": <u>http://apcentral.collegeboard.com/apc/public/repository/cm-hum-geo-urban-geography.pdf</u>

Question #2

Mean Score: 4.26

What were responses expected to demonstrate in their response to this question?

In unit II, Population and Migration, students learn "why the population is growing or declining" and relate those trends to fertility, mortality, and migration. They also analyze fertility rates and age-sex structures, and they "evaluate the role, strengths, and weaknesses of major population policies, which attempt to either promote or restrict population growth." As a response to this question, students were expected to demonstrate a grasp of the dynamics of population growth at the regional and national scales. Students were required to explain contemporary trends in population growth and know that (1) "social, cultural, political, and economic factors influence fertility," (2)"population policies include those that promote or restrict population growth (e.g., pronatalist, antinatalist)," and (3) "changing social values and access to education, employment, health care, and contraception have reduced fertility rates." (II B) It is also worth noting that, with only some exceptions (migration, epidemiological transition, and Malthus), students could draw from the full spectrum of Essential Knowledge presented in II B of the Course Description for the unit on Population and Migration.

Skills addressed in this question are (1) applying the concept of scale, (2) thinking critically about possible public policy options (I B), and (3) using maps. (I B) Students are required to think through various scales of inquiry. They are presented with a world map showing variation in rates of natural increase. (I C) From that map, students are required to apply geographic vocabulary on the regional scale by identifying the world region (I C) with the highest rates of natural increase (Parts A and B). Then students are required to think, on the national scale, by suggesting one program or policy that could be implemented by a country to decrease population growth (Parts C and D). Furthermore students are asked to examine geographical issues, including "planning and public policy decisions (e.g., pronatalist policies)." All of these skills are related to a single meta-skill: "use spatial thinking to analyze the human organization of space." (I C) In terms of map skills, students must be able to use the map key to read a map correctly, and they must use their geographical vocabulary to name Africa or one of the subregions of Africa where rates of natural increase are high.

How well did the responses address the course content related to this question? How well did the responses integrate the skills required on this question?

- Most responses answered this question reasonably well, and scores of zero or dash were relatively rare. • Responses identified the region in Part A fairly well. In Part B, responses generally explained the factors that contribute to high population growth. Parts C and D were more difficult in that responses were less likely to describe programs that countries could use to decrease population growth. In that regard, responses most often described programs in which countries offered incentives for smaller families and antinatalist policies that limit the number of children (with China's one-child policy clearly being the model). In terms of potential impacts, many responses linked population increase to the demographic transition model.
- In general, responses integrated content and skills. They identified the region on the basis of the map presented, and demonstrated a switch from thinking at the global and regional scales to thinking at the country scale in order to envision population policies that would reduce fertility.

What common student misconceptions or gaps in knowledge were seen in the responses to this question?

Some responses did not identify Africa or one of its subregions in Part A. This is likely explained by one of two factors: (1) a lack of skill in reading choropleth maps, or (2) a lack of geographic vocabulary to identify world regions. Still, most responses identified the region correctly. In Part B, some responses simply listed factors that contribute to high population growth rates without explaining those factors.

Common Misconceptions/Knowledge Gaps	Responses that Demonstrate Understanding		
• Natural increase in population includes migration (false); natural increase includes births and deaths (true).	• Because there is a high infant mortality rate, women have multiple children so that some will survive to care for them in their old age.		
• Countries should offer a better education.	• Increase educational opportunities for families; this will enable them to increase their abilities and allow them to develop skills they can use to gain more education or go into the paid workforce. That increases the likelihood that they would want fewer children.		

Based on your experience at the AP[®] Reading with student responses, what advice would you offer to teachers to help them improve the student performance on the exam?

- 1. Have students master the map of world regions in the Course Description.
- 2. Provide students with experience reading choropleth maps.
- 3. Teach students how to respond to terms such as "explain" and "describe" when they encounter them in questions; these terms require longer answers.
- 4. Make sure students provide the number of explanations or impacts called for; if the question asks for two, the answer should provide two (no more, no less).
- 5. Practice differentiating between "economic" and "social," as adjectives, to describe contributing factors and impacts (or anything related to causes and consequences).
- 6. Distinguish between natural growth in population (births, deaths) and population growth (births, deaths, migration).

What were responses expected to demonstrate in their response to this question?

In unit IV, Political Organization of Space, "students learn about the nature and significance of the political organization of territory at different scales." As a response to this question students were expected to know that "forms of governance include unitary (centralized government) and federal states." (IV B) In addition, they were expected to know that "powers of the subdivisions of states vary according to the form of governance." The Enduring Understanding to which this Essential Knowledge applies is that "spatial political patterns reflect ideas of territoriality and power at a variety of scales." In other words every polity must make a decision about how power will be shared, or not shared, between a central (or national) government and a set of provincial (or subnational) governments, all of which are defined territorially.

Skills addressed in this question are (1) thinking comparatively ("compare and contrast forms of governance"), (2) applying the concept of scale (national vs. subnational), (3) thinking critically about positive and negative impacts of forms of governance (I B), and (4) using maps (I B). In the case of the last skill, it is important for students to know that maps have titles, in this case, the name of each country (Germany and Japan). All of these skills are related to a single meta-skill: "use spatial thinking to analyze the human organization of space." (I C)

How well did the responses address the course content related to this question? How well did the responses integrate the skills required on this question?

- Many responses provided no answer to this question; others provided an answer that earned no points; and still others earned only one or two points. Clearly, the responses didn't reflection preparation for this question.
- Responses lost points in Part A for one of the following reasons: (1) They did not show the correct countryidentification answer (Japan) and chose Germany instead; (2) although the names of the countries were on the maps themselves, responses contained another country's name; (3) the responses did not show an accurate or complete definition. With respect to the last, there were several sources of error: (a) providing a definition of authoritarian state in lieu of unitary state, (b) providing a definition of nation-state in lieu of unitary state; (c) providing a definition that equated unitary states to states without a system of checks and balances. In fact, throughout the question many response wrongly asserted that unitary states were always authoritarian and federal states were always democratic.
- Responses did not integrate content and skills. Perhaps the most surprising skill-related error was that the answer to Part A wasn't narrowed down to two choices (Germany or Japan) simply through the titles of the maps. As for thinking comparatively, thinking across scales, and thinking critically, few responses demonstrated these skills. Having the rudimentary knowledge as a foundation would help display these skills.
- Responses struggled to reflect the concepts of scale in Parts A and B. In Part C, they tended to define what a federal state was rather than addressing why a country would adopt a federal system. Nevertheless, Question 3 did a good job of differentiating among responses at the higher end of the score distribution.

What common student misconceptions or gaps in knowledge were seen in the responses to this question?

Given the large number of zeroes and dashes, it is clear that the responses do not demonstrate a mastery of the basic vocabulary (unitary state, federal state) required in the Course Description. Having not mastered the basic vocabulary and the concepts behind that vocabulary (Part A), it is not surprising that responses were unable to earn explanation points later in the question (Parts B and C). Not only are the concepts of unitary and federal states a prominent part of the Course Description, they are concepts also covered in all of the leading textbooks students would use in a Human Geography course. In addition, the concept of federalism is covered in U.S. history and government/civics courses taught before high school.

Common Misconceptions/Knowledge Gaps	Responses that Demonstrate Understanding	
• A unitary state is a state that is not ruled by people, and only benefits the ruler in power.	• In a unitary state, some areas are not well served by centralized decision-making due to their unique situations.	
• A federal state is better because a federal state allows its people to vote and is democratic.	• A federal system allows the central government to devolve power to sub-national units in order to address separatist tendencies.	

Based on your experience at the AP[®] Reading with student responses, what advice would you offer to teachers to help them improve the student performance on the exam?

- 1. Not only master vocabulary, but also understand the concepts behind the terms and be able to apply them.
- 2. Teach students how to "explain," i.e., make connections, using words like "because" and "therefore."
- 3. Teach students to back up claims and assertions by providing supporting evidence, which would include examples.
- 4. Focus student attention on how a concept (in this case unitary/federal state) is expressed spatially and is conditioned by geographical realities.
- 5. Distinguish between what is political science (separation of powers into three branches of government) and what is political geography (power sharing between territorial units at national and sub-national scales).
- 6. Follow the AP Course Description and use it as your guide to course content; do not rely on a single textbook.
- 7. Avoid value judgments of unitary and federal systems and stick with where, how, and why these systems exist.
- 8. Teach students to break down questions to understand what is being asked.