2019 AP Euro DBQ Sample Response

The Catholic Church and the Scientific Revolution



Evaluate whether or not the Catholic Church in the 1600s was opposed to new ideas in science.

SAMPLE RESPONSE A (7/7)

Public Condemnation	Private Openness	Jesuit Inquiries
Doc 4 – Galileo OI - Vesalius	Doc 1 – Criticism of Copernicus Doc 2 – Cardinal open to empirical demonstration Doc 5 – Private praise from pope	Doc 3 – Wants Academic Freedom Doc 6 – Jesuits playing w/ Telescopes Doc 7 – Jesuits Vs. Descartes

In response to the crisis created by the Protestant Reformation, the Catholic Church organized the Council of Trent, which affirmed Catholic doctrine but showed an openness to reforming church practices. The Council of Trent also authorized the creation of new religious orders, such as the Jesuits, founded by Ignatius of Loyola, which had the dual mission of combatting heresy and promoting education. This dual mission became a balancing act when the Scientific Revolution began to alter ways in which European intellectuals defined knowledge and truth. Empiricism - the belief that knowledge is rooted in sensory experience - began to hold more water than appeals to traditional church teaching. As new scientific discoveries came to light, Catholic clergy had to figure out to what extent they should be embraced or rejected. The result was a mess – at least in the seventeenth century. Although Catholic leaders publicly condemned new ideas in science, some Catholic leaders were open to discussing these ideas in private and the intellectual Jesuits were often directly involved in experiments that confirmed new scientific discoveries.

Catholic clergy were quick to publicly condemn discoveries that posed a threat to Catholic doctrine and traditional understandings of the Bible. The most famous example of this is the Catholic Church's condemnation of Galileo for promoting Copernican heliocentric theory. Galileo noted in a letter that the Bible makes a reference to the sun moving, but he goes on to write that the Bible is not always clear in its "true meaning" (Doc 4). It was not just Galileo's activities that were condemned by the Church. Vesalius, an anatomist, dissected human corpses contrary to standard

Because of a cursory mention of the Council of Trent in a document and the appearance of the Jesuits in other documents, I struggled with **CONTEXTUALIZATION** and ended up rambling a bit more than I normally would because I felt the need to go beyond these things to make sure that my attempt at contextualization was valid and fully separated from the documents.

When it comes to contextualization, overkill is always better than underkill.

A **THESIS** is present that is responsive to the prompt and makes a historically defensible statement followed by a line of reasoning. This thesis is nuanced and hints at a **COMPLEX UNDERSTANDING** of the topic.

A **TOPIC SENTENCE** makes it clear that this paragraph will address the Catholic Church's public opposition to some scientific discoveries.

DOC 4 is accurately described and used as evidence to support the claim in the topic sentence.

The work of Vesalius is presented as **OUTSIDE EVIDENCE** to support the Catholic Church's opposition to scientific discoveries.

rules of human decency at the time. The Catholic Church certainly was not in favor of this kind of behavior, either, although Vesalius made discoveries about human anatomy that would not have been possible if he'd stayed within the boundaries set by the Church and cultural norms.

While the Church was quick to publicly condemn scientific discoveries that threatened its doctrines, there were clergy that were open to discussing advances in science - especially in private. Paolo Foscarini, a Catholic monk and scientist, expressed dissatisfaction with Ptolemy's geocentric theory and was open to empirical discoveries that disproved Ptolemy's theory (Doc 1). As a monk, Foscarini did not occupy a position of authority within the Church and would not have been in a position to speak for the Church, as a whole. Cardinal Bellermine, in response to Foscarini, lauded the monk's work as something of intellectual merit, while also acknowledging the potential problems that the ideas presented to traditional Catholic doctrine (Doc 2). As a cardinal, Bellarmine could speak for the Church hierarchy and it is evident that while he was skeptical, he was open to seeing more empirical evidence. This shows that even Catholic hierarchs were open on some level to empiricism as a standard for knowledge. According to Galileo's daughter, even the pope thought highly of Galileo in private (Doc 5). However, since she was describing the content of letters unavailable to this writer, she could possibly be exaggerating their level of praise of Galileo because she loved her father so much and wanted to encourage him (because let's face it - he was having a hard time).

Eventually, the goals of the Jesuit Order to promote education would bring that order, and the Catholic Church as a whole, to embrace new ideas in science. Christoph Grienberger, a Jesuit mathematics professor, argued for more academic freedom and asserted that new scientific discoveries did not threaten the fundamental truths of Christianity (Doc 3). As a mathematics professor and a Jesuit, Grienberger likely was hoping to live in a world where he did not have to choose between his two callings. He might have had discoveries that he wanted to publish but he did not want to end up like Galileo. An illustration in a text on sunspots from the seventeenth century shows Jesuits playing with telescopes and other tools, using empirical methods to better understand astronomy (Doc 6) This doesn't mean that the whole Jesuit Order was on board, however. The Jesuits of Clermont College SAVAGED Descartes, calling his reasoning "distasteful to mathematics,

Technically, Vesalius was a 16th century figure (like the students, I don't have access to Wikipedia while writing sample essays) but I don't think that diminishes the relevance of this outside evidence.

A **TOPIC SENTENCE** makes it clear that this paragraph will focus on the Catholic Church's openness to discuss science.

DOC 1 is accurately described and used as evidence to support the claim in the topic sentence.

The discussion of Foscarini's lack of authority in the Church presents valid **POINT OF VIEW** (POV+) analysis for **DOC 1**.

DOC 2 is accurately described and used as evidence to support the claim in the topic sentence.

The discussion of Bellermine's position in the Church presents valid **POINT OF VIEW** (POV+) analysis for **DOC 2**.

DOC 5 is accurately described and used as evidence to support the claim in the topic sentence.

The discussion of Galileo's daughter's possible motive to exaggerate the pope's admiration for him presents valid **POINT OF VIEW** (POV+) analysis for **DOC 5**.

A **TOPIC SENTENCE** makes it clear that this paragraph will focus on the scientific inquiries of the Jesuit Order.

DOC 3 is accurately described and used as evidence to support the claim in the topic sentence.

The discussion of Grienberger's possible motives for writing presents valid **POINT OF VIEW** (POV+) analysis for **DOC 3**.

DOC 6 is accurately described and used as evidence to support the claim in the topic sentence.

DOC 7 is accurately described and used as evidence to support the claim in the topic sentence.

philosophy, and theology" (Doc 7). One of their reasons was because they believed that his ideas threatened the Catholic doctrine of transubstantiation and would not allow Christ to be physically present in the bread and wine during communion. LET'S GET THIS BREAD! Eventually, the Catholic Church would drop its opposition to science, even going so far in the twentieth century as to assert that there is no inherent conflict between Catholic doctrine and Darwinian evolution, even though it conflicts with the creation narrative in the Book of Genesis.

Writing LET'S GET THIS BREAD and crossing it out was our gag for this year's AP exams and this seemed like the perfect opportunity to work that into this essay!

A relevant and insightful connection across periods helps to demonstrate **COMPLEX UNDERSTANDING** of this topic.

So even though Catholic officials publicly condemned some scientific advancements in the seventeenth century, some of them were willing to have an open mind in private and Jesuits took a leading role in advancing science due to their emphasis on education. In the end, the Catholic Church was more supportive of science than not.

THESIS RESTATED without looking back at the original thesis.

The thesis is nuanced and also includes a second sentence at the end to make it clear which position is being taken.

SCORING SUMMARY SAMPLE RESPONSE A (7/7)

Contextualization	1	The Counter-Reformation and the idea of empiricism as the basis for knowledge
Thesis	1	The thesis included a defensible claim supported by a line of reasoning and clear preview of points.
Accurately Described (3+)	1	All documents are accurately described.
Supporting Evidence (6+)	1	All documents are used to support arguments.
POV+ (3+)	1	This essay includes four valid examples of Point of View analysis.
Outside Evidence	1	Vesalius is used as outside evidence to show the Catholic Church's condemnation of scientific advancements during the Scientific Revolution
Complex Understanding	1	This essay presents a nuanced view of the question and supports a complex thesis through a clear and organized presentation of evidence.
TOTAL	7	

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