### **Explore Performance Task**

### **Duration: 2 Weeks**

### **Summary**

This lesson is the AP Test Explore Performance Task. It has the students create an artifact and answer questions that address the impact of a computing innovation. This course has them practicing doing a similar thing for a different computing innovation in the previous units (particularly their practical assignments). The practice exploration includes teacher feedback.

For these two weeks they are to choose a different innovation and must produce the artifact(s) and answer the questions without teacher guidance or feedback - it is part of the AP exam. Students are provided 8 hours of class time to work on the performance task. In addition to the 8 hours of class time, they may also work on the performance task outside of the classroom if they choose to.

### **Learning Objectives**

* Apply a creative development process when creating computational artifacts. [AP CSP P2, LO 1.1.1]
* Create a computational artifact for creative expression. [AP CSP P2, LO 1.2.1]
* Create a computational artifact using computing tools and techniques to solve a problem. [AP CSP P2, LO 1.2.1]
* Create a new computational artifact by combining or modifying existing artifacts. [AP CSP P2, LO 1.2.3]
* Analyze the correctness, usability, functionality, and suitability of computational artifacts. [AP CSP P4, LO 1.2.5]
* Analyze how data representation, storage, security, and transmission of data involve computational manipulation of information. [AP CSP P4, LO 3.3.1]
* Explain how computing innovations affect communication, interaction, and cognition. [AP CSP P4, LO 7.1.1]
* Analyze the beneficial and harmful effects of computing. [AP CSP P4, 7.3.1]
* Explain the connections between computing and economic, social, and cultural contexts. [AP CSP P1, LO 7.4.1]

### **Teacher Resources**

* [Guidelines for the Explore - Impact of Computing Innovations Performance Task](https://secure-media.collegeboard.org/digitalServices/pdf/ap/ap-computer-science-principles-course-and-exam-description.pdf#page=79) (pages 73 - 77)

### **Example**

The following samples of the AP CSP performance tasks demonstrate the type of responses that would receive a high score with the current performance task rubrics.

* [Sample 1](http://apcentral.collegeboard.com/apc/public/exam/computer_science_principles/232659.html) (High score)
* [Sample 2](http://apcentral.collegeboard.com/apc/public/exam/computer_science_principles/232661.html) (Medium score)
* [Sample 3](http://apcentral.collegeboard.com/apc/public/exam/computer_science_principles/233027.html) (Medium score)
* [Sample 4](http://apcentral.collegeboard.com/apc/public/exam/computer_science_principles/233028.html) (Low score)
* [Additional Information](http://apcentral.collegeboard.com/apc/public/exam/exam_information/231726.html?ep_ch=PR#anchor3) with High, Medium, and Low scoring guidelines

### **Assessments**

* Do the Explore performance task as specified in the [AP Computer Science Principles Course and Exam Description](https://secure-media.collegeboard.org/digitalServices/pdf/ap/ap-computer-science-principles-course-and-exam-description.pdf#page=115) (pages 108 - 110).
* Final tasks are to be submitted through the AP Digital Portfolio.
  + Digital Portfolio [Teacher User Guide](https://secure-media.collegeboard.org/digitalServices/pdf/ap/computer-science-principles-digital-portfolio-teacher-guide.pdf?ep_ch=PR&ep_mid=11294423&ep_rid=240766735)
  + Digital Portfolio [Student User Guide](https://secure-media.collegeboard.org/digitalServices/pdf/ap/computer-science-principles-digital-portfolio-student-guide.pdf?ep_ch=PR&ep_mid=11294423&ep_rid=240766735)