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| **Required fields** |  | |
| Title | **Heart dissection lesson** | |
| Author | Mariel Wiegers | |
| Type of school | Havo, Secondary school | |
| Suitable for Age groups | 15+ | |
| School Subject | Biology, Human anatomy, cardiovascular system | |
| Description of the project | Anatomy lesson of the heart. Aim is for the students to learn, see, feel (and smell) a real heart of a pig. Instead of only the pictures in the book. By seeing, feeling, photographing and drawing the heart they will have more understanding of the anatomy and processes in the heart, valves, veins and arteries. | |
| Timing |  | |
| Outline | 9.00 | Distribute the material,  Introduction of the lesson with the Corinth heart (exterior), make groups |
| 9.10  9.25 | students start drawing exterior of the heart. Make pictures with mobile phone. –anatomy of the aorta, pulmonary artery, coronary arteries, artrium,ventricles  On the active board, the animated heart. 3D rotated to show the valves and way to dissect the heart.  Start dissecting the heart, with help from assistant and teacher.  Explore the inside of the heart, ventricles, atrium, myocardium, difference between the tricuspid valves and artery valves. Make drawings and photos of the inside of the heart. |
| 9.55 | Ending the lesson, cleaning up.  Final conversation of the lesson, what did the students learn, most remarkable differences between the real heart, the pictures and their own imagination/ representation of the anatomy of the heart. |
| 10.10 | The end |
|  |  |  |
| What library / CC app have you used? | Heart section  Heart animation | |
| Resources needed  Assessment criteria | Textbook, BINAS  Mark of their work, pictures and other assignments of this lesson | |
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| **Optional fields** |  | |
| Audiovisual outcome | \*photos, Videos, PowerPoint presentation, etc. | |
| What CC objects have you used | Heart section and heart animated | |
| What 21 century skills | Working together, using 3D animation, using mobile phone->camera and searching skills | |
| What type of technology/apps | Computer, mobile phone camera, internet | |

## **“Drawing makes you look at the world more closely. It helps you to see what you're looking at more clearly. Did you know that?"** **David Almond**

**Used this lesson with students and for colleagues. For the interested colleagues I also used the Corinth animated. They did do it out of interest and did not draw pictures.**

**Most remarkable comments about the heart:**

**-thought the inside was much bigger**

**-the arteries are really tough**

**-thought the valves were so much different**

**About Corinth from colleagues: beautiful program, wished we had this in my time. Makes it so much more clear.**

**The Corinth animated heart helps understanding the heart anatomy. Comparing the real heart with the animated works better than with only the pictures on paper.**