**Integrated Assessment Task – Year 7 da Vinci, 2011:**

**Topic: The Power of Creativity**

**Rationale**

*"Iron rusts from disuse, stagnant water loses its purity and in cold weather becomes frozen; so does inaction sap the vigours of the mind"* Leonard da Vinci.

Leonardo da Vinci who was born on April 15th 1452 was one of history’s greatest creative and imaginative geniuses. Born in the Renaissance period, a time when creativity flourished, Leonardo da Vinci was a gifted and talented individual who mastered many fields such as: art, aerodynamics, anatomy, optics, physics, engineering, architecture, natural history and mathematics. His ideas, inventions and art continue to inspire people across the world.

The da Vinci program you are currently in is based on Leonardo’s seven principles of learning:

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| **Curiosita** | An insatiably curious approach to life and an unrelenting quest for continuing learning |
| **Dimostrazione** | A commitment to test knowledge through experience, persistence, and a willingness to learn from mistakes |
| **Sensazione** | The continual refinement of the senses, especially sight, as the means to enliven experience |
| **Sfumatio** | A willingness to embrace ambiguity, paradox and uncertainty |
| **Arte/Scienzia** | The development of the balance between science and art, logic and imagination – “whole-brain” thinking |
| **Corporalita** | The cultivation of grace, ambidexterity, fitness, and poise |
| **Connessione** | A recognition of and appreciation for the inter-connectedness of all things and phenomena – systems thinking. |

This integrated assessment task is designed to tap into your creativity and encourage you to think like a Renaissance man. You will be drawing upon knowledge and skills that you have gained from a range of your subjects, and applying it to the task we have designed for you.

**Focus Question 1:**

* **In what ways has the genius and creativity of Leonardo Da Vinci enhanced the quality of life of people throughout the world today?**

**Skills:** Investigation, analysis, explanation, evaluation and synthesis

**Focus Question 2:**

* **How can creative thinking help solve current global issues?**

**Skills:** Investigation, analysis, explanation, evaluation and synthesis

***Task Commences: Term 1, Monday March 6th – Gallery Introduction Seminar***

**Task Completion: *Presentation Evening: Term 2, Thursday May 26th***

**Nature of the Assessment Task**

Your task is twofold:

1. Firstly, create a presentation in **any form** using **any medium of production** that represents your understanding of how Leonardo’s creative genius has enhanced humanity today. Focus on **one** aspect of his creative genius such as: transport or medicine. Your presentation must explore, reflect and inform this one aspect of his creativity and its application.
2. Secondly, you are to use your creative skills to develop an original and feasible solution to any current global issue. In developing your creative solution you must demonstrate clear links to course outcomes for English, Mathematics, Visual Arts and Science. Feel free to also draw inspiration and guidance from other course outcomes such as those for History, Geography, Christian Studies, Languages, PDHPE and Technology. You could consider one of the following issues:

* Global warming
* Poverty
* Transport problems such as congested highways in major cities such as Sydney and Paris
* Rising sea levels
* Water supply
* Food shortage
* Natural disasters
* Free choice

1. Thirdly, you have to create a poster that advertises the way that you have applied your creative thinking to the global problem you have selected.

**Assessment**

* Final presentations will be marked by the Dean of Students and the Senior Academic Master for Stage 4. A Grade and comment will then appear on each student’s Semester One report.
* Outstanding presentations may receive recognition through an academic merit award

Before you begin, spend some time researching the meaning of ‘creativity’. What is it? Who has it? Where can you get? Can it really change the world we live in? Did Leonardo possess it?

**Form and Medium of Presentation**

Use your imagination, skills and passion to select the most appropriate form and medium of production for your presentation. You could choose to use one or more of the following:

* A short video
* An advertisement
* A hypertext
* Storyboard
* Narrative
* Podcast
* Blog – using edublog.com
* Web page or website
* Sound recording
* Slide show
* Power point
* Prezi
* Poster
* A diorama including written information
* Photographic essay that includes words
* An ICT object for an interactive whiteboard
* A recording or written transcript of a radio talk back show
* A television show such as ‘Hypothetical’

**Two examples of global issues possibly solved through creativity solutions:**

1. **Ecological Footprint**

**Question:** *Why is it important to reduce our ecological footprint?*

**Presentation Form:** A pod cast or a recorded interview or a recording or written transcript of a radio talk back show

**Content:** A series of voc pops with a range of people such as:

* **Science:** a scientist who explains what an ecological footprint is and the steps we could take to reduce it.
* **Mathematics**: a student who has calculated his family’s ecological footprint in terms of electricity and water usage, amount of garbage, consumption of food and means of transport.
* **English:** a poet who has composed a poem about reducing our ecological footprint.
* **Visual Arts:** an artist who has used recycled garbage to create artworks.
* **Geography Mandatory**: a Geography teacher who explains our changing relationship with the environment because of the growing size of our ecological footprint or a person from a country such as India who expresses his or her anger at the disparity between the size of his or her country’s ecological footprint and the western world - The average American has an impact of 30 acres. By contrast, the average impact of someone living in India is 2 acres.
* **PDHPE**: a sportsperson could argue that people need to walk more instead of using transport that deplete our resources and contribute to rising pollution.
* **Technology Mandatory Graphics**: a graphic designer who describes his or her slowmation that represents our ecological footprint.

1. **Rising sea-levels**

**Question:** *If the global mean sea level rises by 50 cm what will be the consequences for coastal Australia?*

**Presentation Form:** A faction narrative

**Content:** A narrative set in 2100 in the Hills District that incorporates factual information:

* **English:** the science fiction genre, the structure and the use of imagery and figurative devices.
* **Mathematics:** the narrative incorporates the use of graphs and number (fractions and decimals) to represent the rising sea levels and future predictions; such as including an extract from a newspaper article that features these details.
* **Science:** a scientist in the narrative offers creative and imaginative solutions to making the most of available resources.
* **PDHPE:** the narrative includes a character suffering from mental health problems because of overcrowding, lack of fresh water and increasing pollution.
* **HSIE (History):** the narrative includes factual information about the historical events that led to the rise in sea levels. Footnotes could be used to indicate where factual information has been included.
* **Technology Mandatory:** the narrative includes a description of the factors affecting the design of housing and/or transport in 2040. A sketch of the design could be included in the narrative.
* **Drama and/or Music:** the narrative that is presented as a power point or slide show includes a montage of images accompanied by music OR the narrative is a recording that includes music to reflect the mood and the shifting narrative.

**You will be assessed on how well you:**

* Demonstrate understanding of the concept of creativity through the exploration of your topic.
* Demonstrate evidence and application of research.
* Synthesise and apply the knowledge and skills of your KLAs.
* Communicate your ideas and understanding through your selected form and medium of production, and your poster.

**Outcomes to be assessed:**

**English:**

6. A student draws on experience, information and ideas to imaginatively and interpretively respond to and compose texts

9. A student demonstrates understanding that texts express views of their broadening world and their relationships within it

**Mathematics:**

WMS4.5 - Working Mathematically: Links mathematical ideas and makes connections with, and generalisations about, existing knowledge and understanding in relation to Stage 4 content.

**Science:**

4.4 Identifies choices made by people with regard to scientific developments

4.16 Accesses information from identified secondary sources

4.18 With guidance, presents information to an audience to achieve a particular purpose

4.26: A student recognises the role of science in providing information about issues being considered and in increasing understanding of the world around them.

**Visual Arts:**

4.4 recognise and use aspects of the world as a source of ideas, concepts and subject matter in the visual arts

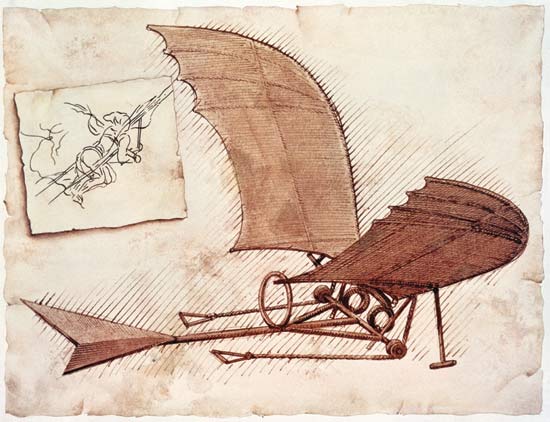
4.5 investigate ways to develop meaning in their artworks

**Resources**

**Leonardo da Vinci and Creativity**

* Leonardo da Vinci: <http://www.lairweb.org.nz/leonardo/>
* Creativity: <http://members.optusnet.com.au/charles57/Creative/index2.html>
* Museo Nazionale della Scienza e della Tecnologia Leonardo da Vinci**Museo Nazionale della Scienza e della Tecnologia Leonardo** da Vinci**:** <http://www.museoscienza.org/english/leonardo/>
* Leonardo da Vinci: <http://www.lairweb.org.nz/leonardo/>
* Creativity: <http://members.optusnet.com.au/charles57/Creative/index2.html>
* Museo Nazionale della Scienza e della Tecnologia Leonardo da Vinci**Museo Nazionale della Scienza e della Tecnologia Leonardo** da Vinci**:** <http://www.museoscienza.org/english/leonardo/>
* Museum of Science, <http://www.mos.org/leonardo/index.html>

**Global Issues**

* Climate Change, <http://www.epa.gov/climatechange/>
* Ecological Footprint, <http://en.wikipedia.org/wiki/Ecological_footprint>
* Ecologic – Power House Museum, <http://www.powerhousemuseum.com/education/ecologic/games.htm>
* Global Issues: <http://www.globaleducation.edna.edu.au/globaled/page1.html>
* Global warming, <http://green.nationalgeographic.com/environment/global-warming/gw-overview.html> (Includes videos and pod casts)
* Rising Sea levels, <http://www.science.org.au/nova/082/082key.htm>
* Saving our Environment – Learn: Pollution, <http://library.thinkquest.org/C0111401/learn_pollution.htm>
* Science Daily – Deforestation, <http://www.sciencedaily.com/releases/2007/11/071114111144.htm>
* WHO – Pandemics, <http://www.who.int/csr/disease/influenza/pandemic/en/>
* Millennium Development Goals: <http://www.undp.org/mdg/>

**Assessment Task Marking Guidelines**

**Student Name:**

**Comment:**

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| --- | --- |
| **Performance Descriptor** | **Marking Guidelines** |
| **Sophisticated** | * Sophisticated understanding of the concept of creativity * Insightful evidence and application of research * Sophisticated synthesis and application the knowledge and skills of the KLAs * Skilful communication of the ideas and understanding through form and medium of production |
| **Effective** | * Effective understanding of the concept of creativity * Effective evidence and application of research * Effective synthesis and application the knowledge and skills of the KLAs * Effective communication of the ideas and understanding through form and medium of production |
| **Sound** | * Sound understanding of the concept of creativity * Sound evidence and application of research * Sound application the knowledge and skills of the KLAs * Sound communication of the ideas and understanding through form and medium of production |
| **Working towards** | * Limited understanding of the concept of sustainability * Limited evidence and application of research * Limited application the knowledge and skills of the KLAs * Limited communication of the ideas and understanding through form and medium of production |
| **Not demonstrated** | * Little or no attempt to engage with the demands of the task |