Young Environmental Champions Program

Australian Curriculum Alignment

The Young Environmental Champions (YEC) program aligns with the Australian Curriculum by fostering key competencies across various learning areas and general capabilities. Specifically, it addresses:

- 1. **Science (ACSSU112, ACSSU116)**: Understanding biodiversity, ecosystems, and human impact on the environment.
- 2. **Geography (ACHGK049, ACHGK060)**: Exploring sustainable use and management of resources and environments.
- 3. **Sustainability Cross-Curriculum Priority**: Focus on sustainable futures and environmental stewardship.
- 4. **Critical and Creative Thinking (ACARA General Capability)**: Encouraging innovative problem-solving related to environmental issues.
- 5. **Ethical Understanding (ACARA General Capability)**: Developing ethical considerations in environmental actions.
- 6. **Personal and Social Capability (ACARA General Capability)**: Enhancing communication, teamwork, and leadership skills.

The program's project-based approach allows students to apply these competencies in real-world contexts, nurturing informed, responsible, and active citizens.

Teacher Professional Learning – NESA Alignment

Catalyst Coaches: This online course is designed to empower educators with the skills and knowledge to effectively mentor and inspire young environmental advocates. It offers insights into fostering leadership, critical thinking, and problem-solving skills among students. Join the course here

How the program aligns with NESA and why teachers should do the workshop

The Catalyst Coaches aligns with the New South Wales Education Standards Authority (NESA) requirements in several ways:

1A. Market and Needs Analysis (Secondary Research)

• **NESA Alignment**: Ensures that the course content and teaching strategies are informed by current educational trends and gaps, meeting NESA's requirements for evidence-based and relevant professional development.

1B & 1C. Market and Needs Analysis (Primary Research)

• **NESA Alignment**: Direct feedback from teachers helps tailor the program to meet NESA's focus on practical, classroom-oriented professional development.

2. Understanding the UN SDGs

• **NESA Alignment**: Aligns with NESA's emphasis on global education and sustainability, integrating these themes into the curriculum.

3A-C. Curriculum Framework Development & Feedback

• **NESA Alignment**: The development of a robust curriculum framework ensures that the program meets NESA's standards for content quality and educational relevance.

4. Content Creation

• **NESA Alignment**: Creating engaging and multidisciplinary content supports NESA's focus on comprehensive education that prepares students for a variety of real-world challenges.

5. Project Prototype

 NESA Alignment: The prototype demonstrates practical application of knowledge, aligning with NESA's emphasis on experiential learning and real-world problem solving.

6. Feedback and Iteration after Teacher Prototyping

• **NESA Alignment**: Iterative feedback aligns with NESA's standards for reflective practice and continuous improvement in teaching methodologies.

7. Finalise Course Materials

• **NESA Alignment**: Ensures that the course materials are of high quality and user-friendly, meeting NESA's standards for professional learning resources.

8. Training and Onboarding for Teachers

• **NESA Alignment**: The training and onboarding process ensures that teachers are well-equipped to implement the program, aligning with NESA's focus on effective professional development.

9A. Promotion Materials

 NESA Alignment: Effective promotion of the program ensures broader reach and impact, supporting NESA's goal of widespread professional development and educational improvement.

9B. Marketing and Partnerships

• **NESA Alignment**: Building partnerships and marketing the program helps in disseminating valuable educational resources, aligning with NESA's objectives for collaborative education and resource sharing.

10. Monitoring and Ongoing Support

• **NESA Alignment**: Ongoing support and monitoring ensure the program's adaptability and relevance, in line with NESA's focus on dynamic and responsive education systems.

11. Evaluation and Reporting

NESA Alignment: Thorough evaluation and reporting help assess the program's
effectiveness, aligning with NESA's requirements for accountability and evidencebased education practices.

Overall, this comprehensive approach ensures that the program not only aligns with NESA standards but also contributes to the broader goals of enhancing teacher capabilities and enriching student learning experiences in the fields of agriculture and science.

Special Events Curriculum Alignment

For Stage 2

For a lesson plan focusing on Earth Hour designed for Stage 2 students (Years 3 and 4) in the Australian Curriculum, the relevant ACARA (Australian Curriculum, Assessment and Reporting Authority) curriculum alignment numbers are as follows:

Year 3

- 1. Science Understanding Biological Sciences
 - **ACSSU044**: "Living things can be grouped on the basis of observable features and can be distinguished from non-living things."
- 2. Science Science as a Human Endeavour
 - **ACSHE050**: "Science knowledge helps people to understand the effect of their actions."
- 3. Geography Knowledge and Understanding
 - **ACHASSK068**: "The importance of environments, including natural vegetation, to animals and people."
- 4. Design and Technologies Processes and Production Skills
 - **ACTDEP018**: "Explore needs or opportunities for designing, and the technologies needed to realise designed solutions."

Year 4

- 1. Science Earth and Space Sciences
 - **ACSSU075**: "Earth's surface changes over time as a result of natural processes and human activity."
- 2. Science Science as a Human Endeavour
 - ACSHE062: "Science knowledge helps people to understand the effect of their actions."

3. Geography - Knowledge and Understanding

• **ACHASSK088**: "The use and management of natural resources and waste, and the different views on how to do this sustainably."

4. Design and Technologies - Processes and Production Skills

 ACTDEP025: "Critique needs or opportunities for designing, and investigate materials, components, tools, equipment and processes to achieve intended designed solutions."

These curriculum codes provide a framework for developing lesson content and activities that align with the educational objectives of Earth Hour, focusing on environmental awareness, science knowledge, and sustainability.

Earth Hour Lesson Plan Stage 3

For a lesson plan on Earth Hour designed for Stage 3 students (Years 5 and 6) in the Australian Curriculum, the relevant ACARA curriculum alignment numbers are:

Year 5

1. Science - Earth and Space Sciences

• **ACSSU078**: "The Earth is part of a system of planets orbiting around a star (the sun)."

2. Science - Science as a Human Endeavour

 ACSHE081: "Scientific knowledge is used to inform personal and community decisions."

3. Geography - Knowledge and Understanding

• **ACHASSK113**: "The environmental and human influences on the location and characteristics of a place and the management of spaces within them."

4. Design and Technologies - Knowledge and Understanding

• **ACTDEK019**: "Investigate how forces and the properties of materials affect the behaviour of a product or system."

Year 6

1. Science - Earth and Space Sciences

• **ACSSU096**: "Sudden geological changes or extreme weather conditions can affect Earth's surface."

2. Science - Science as a Human Endeavour

• **ACSHE098**: "Scientific understandings, discoveries and inventions are used to solve problems that directly affect peoples' lives."

3. Geography - Knowledge and Understanding

• **ACHASSK139**: "The main characteristics of the continents of Africa and South America and the location of their major countries in relation to Australia."

4. Design and Technologies - Knowledge and Understanding

• **ACTDEK029**: "Critique needs or opportunities for designing and explore and test a variety of materials, components, tools, equipment and processes to achieve intended designed solutions."

These curriculum codes provide a basis for developing the lesson content and activities focusing on Earth Hour, highlighting the importance of environmental stewardship, understanding Earth's systems, and the impact of human activities on our planet. These align with the educational objectives for science and geography, encouraging students to think critically about sustainability and their role in protecting the environment.

Student Online Course

"From Idea to Impact" is a program that aligns well with the Australian Curriculum, particularly in its focus on critical and creative thinking, sustainability, personal and social capability, and ethical understanding. The program's emphasis on project-based learning and real-world problem solving resonates with several content descriptions and achievement standards across various learning areas and general capabilities. Join the course here.

Below is a breakdown of how "Idea to Impact" aligns with specific aspects of the Australian Curriculum, including relevant ACARA numbers:

1. Critical and Creative Thinking (General Capability)

- **Content Description (F-10):** Generating innovative and imaginative ideas, solving problems, and developing reasoned arguments (ACCT1101, ACCT1112, ACCT1123).
- **Achievement Standard:** Students apply critical and creative thinking processes to develop and evaluate complex ideas and concepts (ACCTP010, ACCTP020).

2. Sustainability (Cross-Curriculum Priority)

- **Content Description (F-10):** Understanding the ways in which sustainable patterns of living rely on the interdependence of healthy social, economic, and ecological systems (ACSSU112, ACSSU219).
- **Achievement Standard:** Students explore and understand concepts of sustainability, develop skills to design sustainable solutions for real-world issues (ACSSP036).

3. Personal and Social Capability

• **Content Description (F-10):** Developing self-awareness and management, social awareness, and management skills to establish and maintain positive relationships (ACPMP025, ACPMP065).

• **Achievement Standard:** Students demonstrate the ability to work collaboratively, show leadership, and develop empathy (ACPPS020, ACPPS060).

4. Ethical Understanding

- **Content Description (F-10):** Exploring ethical concepts, values, character virtues, and moral decision-making in personal, social, and environmental contexts (ACPPS007, ACPPS037).
- **Achievement Standard:** Students reason and make ethical decisions in project development and implementation (ACPPS072, ACPPS089).

5. Science

- **Content Description (F-10):** Understanding the use of scientific knowledge in problem solving and decision making (ACSSU019, ACSSU073).
- **Achievement Standard:** Students apply scientific methods to design and conduct investigations, and to create project solutions (ACSIS054, ACSIS093).

6. Technology (Design and Technologies)

- **Content Description (F-10):** Developing knowledge and understanding of engineering principles and design processes (ACTDEK029, ACTDEK046).
- **Achievement Standard:** Students use design thinking and technologies to generate and produce designed solutions for authentic needs (ACTDEP035, ACTDEP049).

7. Mathematics

- **Content Description (F-10):** Applying mathematical concepts in real-life contexts, problem-solving, and reasoning (ACMNA098, ACMNA232).
- **Achievement Standard:** Students interpret and use mathematical information to solve problems in project contexts (ACMMG137, ACMMG220).

8. English

- **Content Description (F-10):** Developing communication skills, critical literacy, and text creation abilities (ACELY1688, ACELY1756).
- **Achievement Standard:** Students articulate ideas, theories, and project outcomes effectively in various forms (ACELY1736, ACELY1816).

The "Idea to Impact" program, through its alignment with these curriculum areas and standards, provides a holistic educational experience that not only covers specific subject knowledge but also fosters a range of essential skills and competencies in students. It enhances their ability to think critically, work collaboratively, and engage ethically and sustainably with real-world challenges.