Secondary STEM program review tool

STEM is an integrated curriculum approach where strong connections between science, technology, engineering and mathematics can be made through practical, hands-on integrated teaching and learning experiences. This unit review tool is designed to help secondary teachers identify areas of improvement in integrated STEM programs as they work towards best practice STEM unit planning and delivery.

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| Program details |
| Unit name: |
| Unit theme and description: |
| Stage and Year: |
| Year: |
| Duration: |
| School: |
| Review completed by: |

Consider each of the following STEM elements. Identify if each of the elements are not evident, needing further development or effectively implemented in the unit program being reviewed. In the space provided, note any evidence of the element and provide suggestions on how it could be improved.

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| Best-practice STEM elements | Status | Evidence or suggested improvements |
| An authentic, real-world problem or challenge | Not evidentNeeds further developmentEffective practice |  |
| Students work on an engaging project | Not evidentNeeds further developmentEffective practice |  |
| Open ended project scope | Not evidentNeeds further developmentEffective practice |  |
| Guided by a design thinking process | Not evidentNeeds further developmentEffective practice |  |
| Ongoing student reflection | Not evidentNeeds further developmentEffective practice |  |
| Solutions presented to an audience (public presentation) | Not evidentNeeds further developmentEffective practice |  |
| Exposes students to STEM careers | Not evidentNeeds further developmentEffective practice |  |
| Structured feedback for student improvement | Not evidentNeeds further developmentEffective practice |  |
| Structure teacher registration and evaluation | Not evidentNeeds further developmentEffective practice |  |

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| Curriculum content | Status | Evidence or suggested improvements |
| Science  | Not evidentNeeds further developmentEffective practice |  |
| Technology | Not evidentNeeds further developmentEffective practice |  |
| Engineering | Not evidentNeeds further developmentEffective practice |  |
| Mathematics | Not evidentNeeds further developmentEffective practice |  |

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| Cross-curriculum capabilities | Status | Evidence or suggested improvements |
| Aboriginal and Torres Strait Islander histories and cultures | Not evidentNeeds further developmentEffective practice |  |
| Asia and Australia's engagement with Asia | Not evidentNeeds further developmentEffective practice |  |
| Sustainability | Not evidentNeeds further developmentEffective practice |  |

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| General capabilities | Status | Evidence or suggested improvements |
| Critical and creative thinking | Not evidentNeeds further developmentEffective practice |  |
| Ethical understanding | Not evidentNeeds further developmentEffective practice |  |
| Information and communication technology (ICT) | Not evidentNeeds further developmentEffective practice |  |
| Intercultural understanding | Not evidentNeeds further developmentEffective practice |  |
| Literacy | Not evidentNeeds further developmentEffective practice |  |
| Numeracy | Not evidentNeeds further developmentEffective practice |  |
| Personal and social capability | Not evidentNeeds further developmentEffective practice |  |

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| NESA identified important learning areas | Status | Evidence or suggested improvements |
| Civics and citizenship | Not evidentNeeds further developmentEffective practice |  |
| Difference and diversity | Not evidentNeeds further developmentEffective practice |  |
| Work and enterprise | Not evidentNeeds further developmentEffective practice |  |

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| Overall feedback |
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Reviewer’s signature

Date ­\_\_\_\_\_\_\_\_\_\_\_\_\_\_