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 evident  Needs further development  Effective practice |  |
| Students work on an engaging project | Not evident  Needs further development  Effective practice |  |
| Open ended project scope | Not evident  Needs further development  Effective practice |  |
| Guided by a design thinking process | Not evident  Needs further development  Effective practice |  |
| Ongoing student reflection | Not evident  Needs further development  Effective practice |  |
| Solutions presented to an audience (public presentation) | Not evident  Needs further development  Effective practice |  |
| Exposes students to STEM careers | Not evident  Needs further development  Effective practice |  |
| Structured feedback for student improvement | Not evident  Needs further development  Effective practice |  |
| Structure teacher registration and evaluation | Not evident  Needs further development  Effective practice |  |

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| Curriculum content | Status | Evidence or suggested improvements |
| Science | Not evident  Needs further development  Effective practice |  |
| Technology | Not evident  Needs further development  Effective practice |  |
| Engineering | Not evident  Needs further development  Effective practice |  |
| Mathematics | Not evident  Needs further development  Effective practice |  |

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

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

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| NESA identified important learning areas | Status | Evidence or suggested improvements |
| Civics and citizenship | Not evident  Needs further development  Effective practice |  |
| Difference and diversity | Not evident  Needs further development  Effective practice |  |
| Work and enterprise | Not evident  Needs further development  Effective practice |  |

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| Overall feedback |
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Reviewer’s signature

Date ­\_\_\_\_\_\_\_\_\_\_\_\_\_\_