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| **Assessment task** | |
| Year level | 6 |
| Learning area | Technologies |
| Subject | Design and Technologies |
| Title of task | Processes and production skills |
| Task details | |
| Description of task | Students will define the problem, create a solution to a given problem and present the following components:   1. a proposed design idea or concept that includes diagrams and written text to exemplify a solution. A design may include changes and modification that reflect the changes and improvements made during the design process 2. a detailed sequence of steps – suggested to produce the solution and identify a resource that may be used 3. an evaluation criterion used to justify the design solution and the process, and to assess the suitability of the solution to the given problem.   The production of the product for this activity is at the discretion of the teacher. |
| Type of assessment | Formative and summative |
| Purpose of assessment | To assess student achievement (Processes and production skills) in the Design and Technologies subject, regardless of the context. |
| Assessment strategy | Student work will inform teacher judgement and support a shared understanding of the standard. A shared understanding promotes comparability for all students. |
| Evidence to be collected | As detailed in the task description |
| Suggested time | Varied, depending on the prior learning required. It is suggested that 3–4 hours be allocated to the completion of the task required for the moderation workshop. |
| **Content description** | |
| Content from the Western Australian Curriculum | Students are required to apply the following process and production skills to a Year 6 Design and Technologies subject.  **Investigating and defining**  Define a problem, and set of sequenced steps, with users making decisions to create a solution for a given task  Identify available resources  **Designing**  Design, modify, follow and represent both diagrammatically, and in written text, alternative solutions using a range of techniques, appropriate technical terms and technology  **Evaluating**  Develop collaborative criteria to evaluate and justify design processes and solutions |

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| **Task preparation** | |
| Prior learning | Teachers select a Design and Technologies context suitable to the school and the students. Familiarisation with the selected context knowledge and understanding is necessary, prior to considering a solution to a problem.  The attached marking key may be used to inform and support teacher judgement of student achievement, and provide more fine grain discrimination when explaining the differences between one student's achievement and another's. The marking key is not required at the workshop. |
| Assessment differentiation | Teachers should differentiate their teaching and assessment to meet the specific learning needs of their students, based on their level of readiness to learn and their need to be challenged.  Where appropriate, teachers may either scaffold or extend the scope of the assessment tasks. |
| **Assessment task** | |
| Assessment conditions | Technologies processes and production skills activities are to be completed within class time, over a period of 3–4 hours. |
| Resources | Resources will vary depending on the specific context delivered at the school. |

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| Marking key | |
| Description | **Marks** |
| Investigating and defining | **9** |
| Provides a logical definition for the given problem. | 2 |
| States the given problem. | 1 |
| Subtotal | **/2** |
| Uses appropriate diagrams and written text to exemplify a solution for the proposed design. | 2 |
| Uses diagrams and some written text to give a solution for the proposed design. | 1 |
| Subtotal | **/2** |
| Provides a logical sequence of steps. | 2 |
| Provides a sequence of steps. | 1 |
| Subtotal | **/2** |
| Describes in detail available resources required to develop solutions. | 3 |
| Describes available resources required to develop solutions. | 2 |
| Lists resources that may be available to develop solutions. | 1 |
| Subtotal | **/3** |
| Designing | **8** |
| Develops a range of design features relevant for the given problem. | 3 |
| Develops design features for the given problem. | 2 |
| Develops a design, which may not be suitable for the given problem. | 1 |
| Subtotal | **/3** |
| Develops a range of alternative solutions and modifications relevant for the given problem. | 2 |
| Develops alternative solutions and/or modifications for the given problem. | 1 |
| Subtotal | **/2** |
| Uses a range of appropriate technical terms relevant for the given problem. | 3 |
| Uses appropriate technical terms relevant for the given problem. | 2 |
| Uses general technical terms for the given problem. | 1 |
| Subtotal | **/3** |
| Evaluating | **3** |
| Develops criteria (collaboratively) that include:   * logical ideas and information * evaluation of the design process * improvements and/or changes to the design. | 3 |
| Develops criteria (collaboratively) that include:   * ideas and/or information * changes to the design. | 2 |
| Develops a criterion (collaboratively) relevant to the design. | 1 |
| Subtotal | **/3** |
| Total | **/20** |