Rubrics:

- Measure achievement along a continuum.
- Identify the logical progression of skills, building complexity.
- Use achievement standards and content descriptors as a guide.
- Can be co-created with students.

Typically a rubric employs some sort of scale that describes levels of performance that relate to each criteria being assessed.

For example, consider a rubric that can be used to assess students achievements in the design process to implement a digital solution. This rubric can include criteria for the key stages such as empathy, design, prototyping, texting and modifying and finally reflection. An completed example may include the following:

	Empathy	Design	Prototyping	Testing and modifying	Reflection
Extending	Uses more than one way to collect information about the user and this is evident in their game design. Analyses users and evaluates information from multiple perspectives.	The design is clear to read. It includes labels, arrows and lines to show flow. The visual diagrams show the relationship between user decisions.	The platform was selected with reference to what was trying to be achieved and after testing. Iterations were made as issues were raised. The user was always centre of the prototyping process.	Observes and questions more than one user, making changes based on the feedback and retesting final prototype.	Articulates, using subject specific language, the process they went through and can explain in detail challenges and the steps taken to overcome these.
Proficient	Designs game after evaluating information about the user from more than one source.	Creates a design that uses symbols to explain process.	The platform was selected with reference to what was trying to be achieved. Iterations were made as issues were raised. The user was discussed throughout the process.	Observes and questions users, making changes based on the feedback.	Explains the process they went through and can explain challenges and the steps taken to overcome these.
Developing	Designs game using some understanding of user.	Considers the user when developing design.	Makes iterations to the design but chooses platform without testing.	Observes user or asks questions but does not take on feedback.	Describes how the game works and can acknowledge the steps taken to overcome these.

Emerging	Develops game using prior knowledge of the user.	Develops a design by listing elements.	Relies on own experiences to make game.	Uses prior knowledge to make changes, or uses self as an example.	Describes how the game works without reference to the design process.

Sample Assessment rubric: Cindy Thornton (Flinders Island)

An example of a rubric for a programming project for Years 7-8 students may include a focus on the following

- *Managing a digital project*
- *Defining and decomposing the problem in terms of functional requirements & restraints*
- *Designing and user experience*
- *Assembling hardware*
- *Design algorithms incorporating branching and iterations*
- *Programming*

Student performance can be developed on a continuum to enable teachers to assess students and how well they performed against each criteria.

Achievement standard criteria	E	D	C	B	A
Managing a digital project	Poor management of project	Needed reminders to stay on track	Used class GANTT timeline to manage project	Adhered to class GANTT timeline to manage project	Managed project independently in school & home time
Defined & decomposed the problem in terms of functional requirements & restraints	Poor understanding of the problem	Needed assistance to define & decompose the problem	Defined & decomposed problem. Completed sample projects to help understand restraints.	Clearly defined & decomposed problem. Applied knowledge of function & restraints.	Excellent ability to define & decompose problem in terms of functional requirements & restraints.
Designing: **Design user experiences**	Unfinished/unclear, unworkable design	Design communicates intentions; shows some necessary components; some consideration of end user	Design clearly communicates intentions; shows necessary components; demonstrates function. Consideration given to end user	Design clearly & accurately communicates intentions; is annotated & detailed; shows necessary components; demonstrates function. Focus on needs of end user.	Design is unique & innovative; clearly & accurately communicates intentions; is detailed; shows necessary components; meets needs of variety of end users
Assembling hardware	Construction is incomplete and/or inaccurate. No understanding demonstrated.	Components are assembled following instructions with teacher assistance. Limited under-standing of how components work in the circuit.	Components are assembled safely & correctly, following the diagrams, with assistance as required. Demonstration of basic understanding of circuits.	Components are assembled safely & correctly with understanding of polarity and circuits. Some assistance may be given	Components are assembled independently, safely & correctly demonstrating understanding of electronics. Hardware allows for automation of heat pump.
Programming: **Design algorithms incorporating branching & iterations**	Programming is incomplete, little effort	Program is copied from sample code with little understanding	Program works & allows for data collection & presentation, includes branching & iterations. Basic understanding of code	Program is efficient & annotated allows for data collection & presentation, includes branching & iterations. Good understanding of code	Programming is elegant & efficient. Excellent understanding. Programming allows for automation of heat pump
Modifying: **Test & modify digital solutions**	Solution not tested	Solution tested, no consideration given to modifications	Solution tested & modified where required	Solution tested. Various modifications implemented.	Solution tested in different conditions. Modifications made to optimise performance & aesthetics.

Rubric for student self-assessment and teacher assessment, courtesy of Cindy Thornton (Flinders Island)