

# Classroom-Based Assessment 1

*Exploring the application of controlled systems  
in a local context*



An Roinn Oideachais  
Department of Education

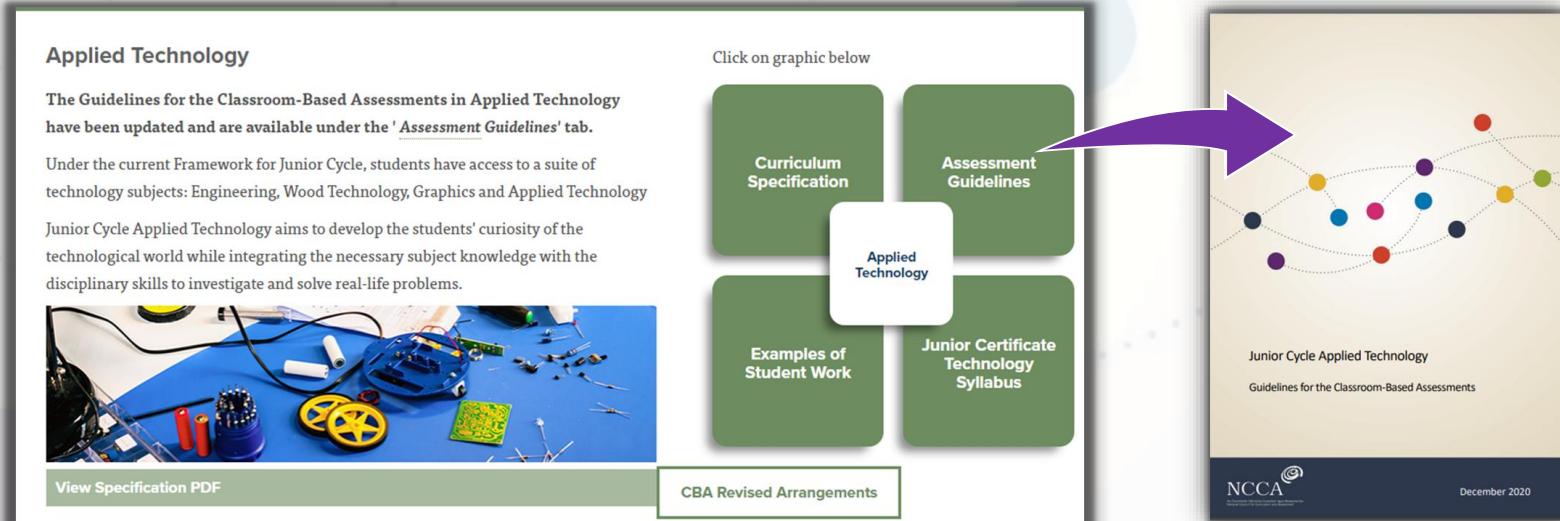


# About this resource:

This resource has been designed as a support for Applied Technology teachers as their students engage with

Classroom-Based Assessment 1: *Exploring the application of controlled systems in a local context*

**Note:** It is recommended that you view this resource in conjunction with the *Guidelines for the Classroom-Based Assessments for Applied Technology*.



**Applied Technology**

The Guidelines for the Classroom-Based Assessments in Applied Technology have been updated and are available under the 'Assessment Guidelines' tab.

Under the current Framework for Junior Cycle, students have access to a suite of technology subjects: Engineering, Wood Technology, Graphics and Applied Technology.

Junior Cycle Applied Technology aims to develop the students' curiosity of the technological world while integrating the necessary subject knowledge with the disciplinary skills to investigate and solve real-life problems.



[View Specification PDF](#)

[CBA Revised Arrangements](#)

Click on graphic below

**Curriculum Specification**

**Assessment Guidelines**

**Examples of Student Work**

**Junior Certificate Technology Syllabus**

Applied Technology

**Junior Cycle Applied Technology**  
Guidelines for the Classroom-Based Assessments

NCCA

December 2020

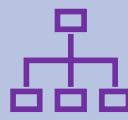
Applied Technology section of [www.curriculumonline.ie](http://www.curriculumonline.ie):

<https://curriculumonline.ie/Junior-cycle/Junior-Cycle-Subjects/Applied-Technology/>

# In this resource, we will...



appreciate the role of Classroom-Based Assessment 1 in Applied Technology



explore the structure of Classroom-Based Assessment 1:  
*Exploring the application of controlled systems in a local context*

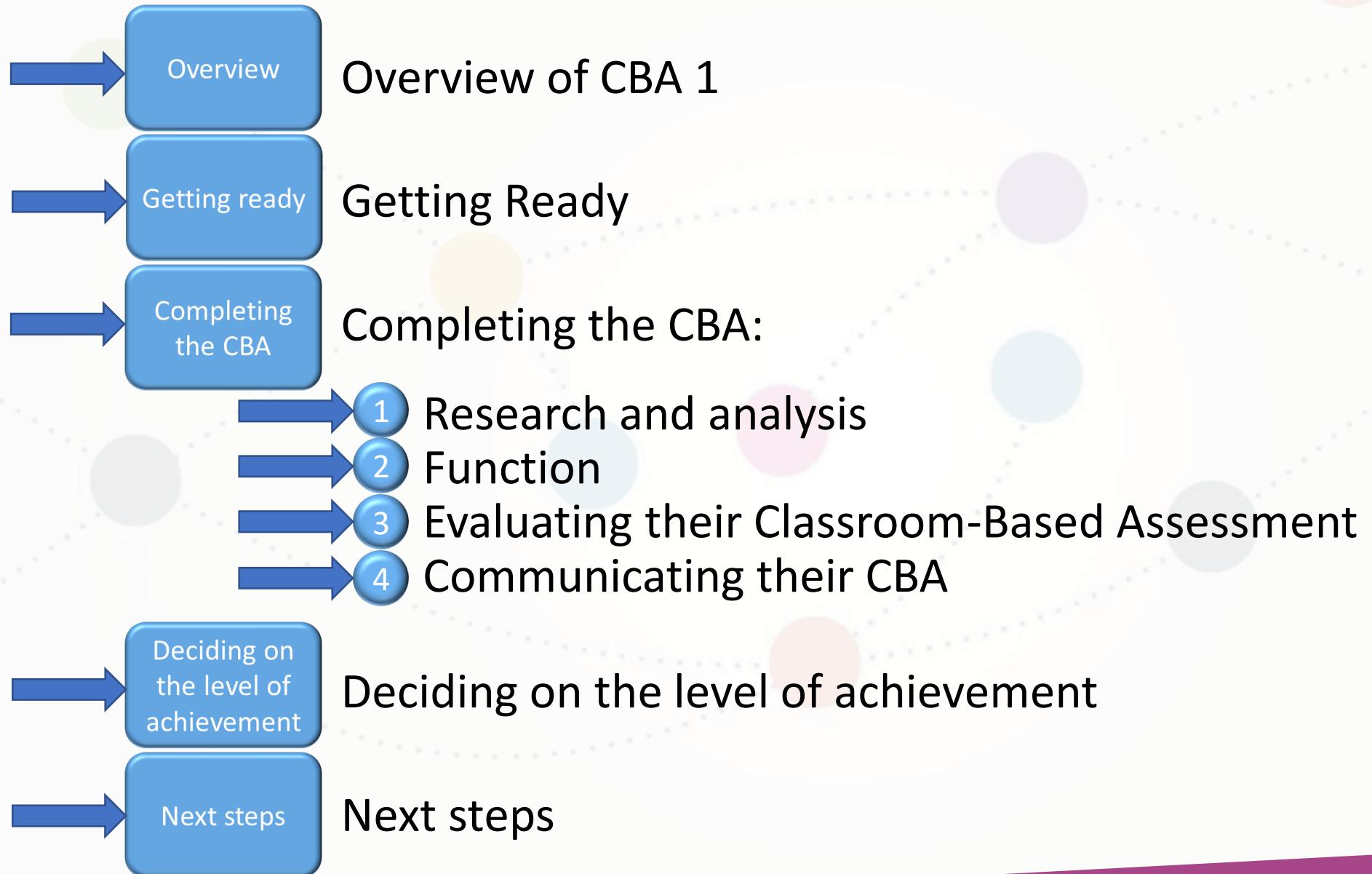


consider the importance of the Subject Learning and Assessment Review process for Classroom-Based Assessments

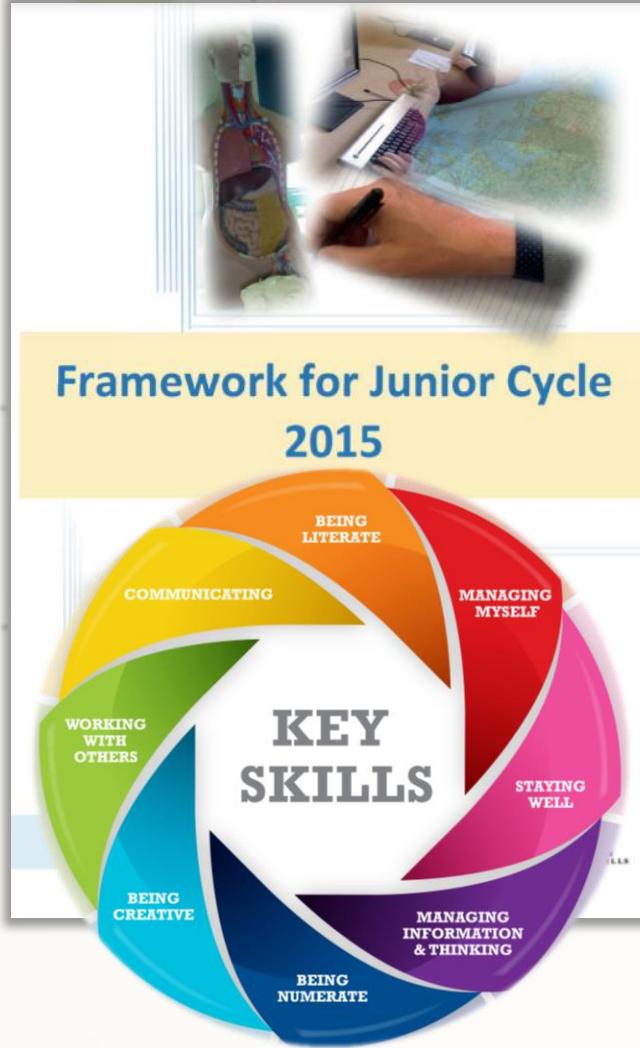


# Home Page

Click on the tiles/buttons below to access each section.



# Classroom-Based Assessments



*'These curriculum and assessment arrangements will promote a focus on active and collaborative learning. In particular, learners will be enabled to use and analyse information in new and creative ways, to investigate issues, to explore, to think for themselves, to be creative in solving problems and to apply their learning to new challenges and situations.'*

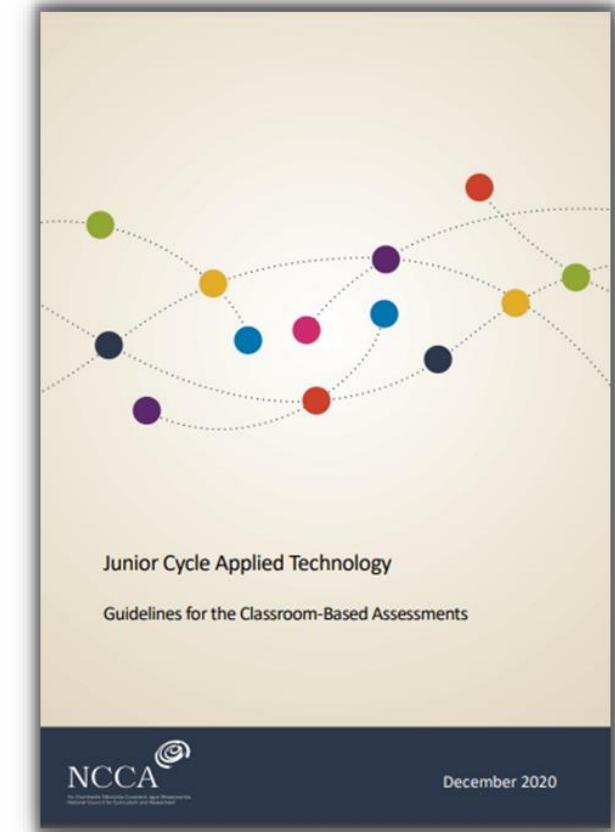
*Framework for Junior Cycle 2015, page 7.*



# Overview

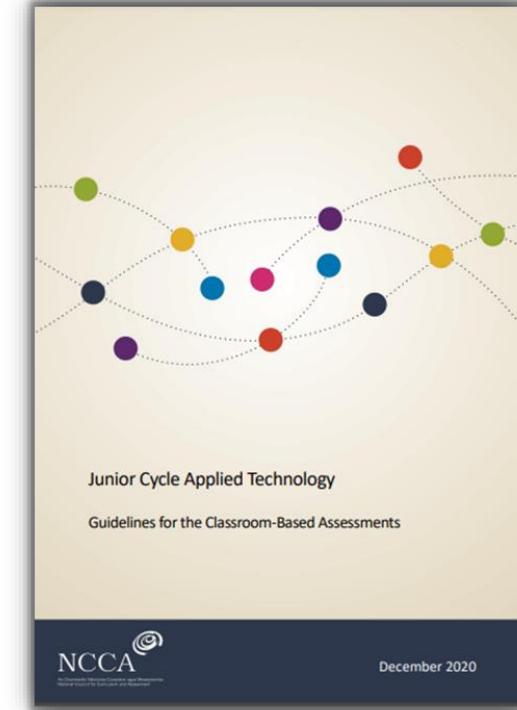
**Classroom-Based Assessment 1:**

*Exploring the application of controlled systems in a local context*



# CBA1: Exploring the application of controlled systems in a local context

Classroom-Based Assessments	Format	Student preparation
<b>Exploring the application of controlled systems in a local context</b>	<p>Investigation and presentation on a controlled system solution</p> <p>Response may be presented in a wide range of formats</p> <p>Students can collaborate, but each student must present an individual piece of work</p>	<p>During a maximum of 3 weeks with support/guidance from teacher</p>



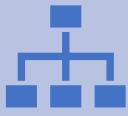
*Guidelines for the Classroom-Based Assessments, page 8.*



# CBA 1: Exploring the application of controlled systems in a local context



...choose an application of a controlled system that is of interest to them in their local context



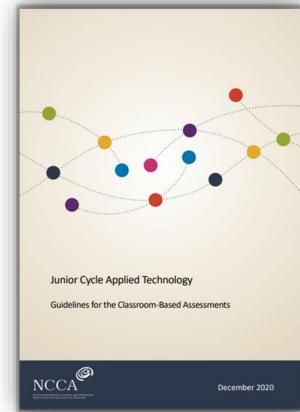
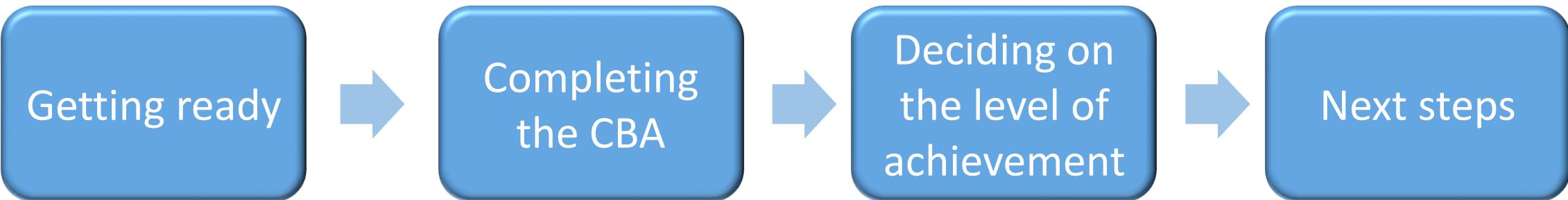
...conduct research in relation to their chosen controlled system



...analyse and draw conclusions on their findings



# Guidelines for completion of the Classroom-Based Assessment



*Guidelines for the Classroom-Based Assessments, page 8.*



# Student preparation

Getting ready

Completing  
the CBA

Deciding on  
the level of  
achievement

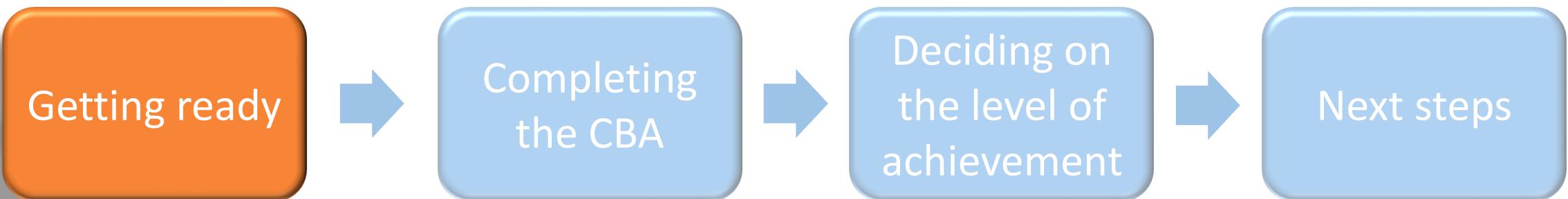
Next steps

*'As part of the ongoing teaching, learning and assessment of the learning outcomes for Applied Technology, students should have opportunities to develop **research** and **evaluation** skills which will help them to engage meaningfully with **Exploring the application of controlled systems in a local context**'.*

*Guidelines for the Classroom-Based Assessments, page 10.*



# Teacher preparation

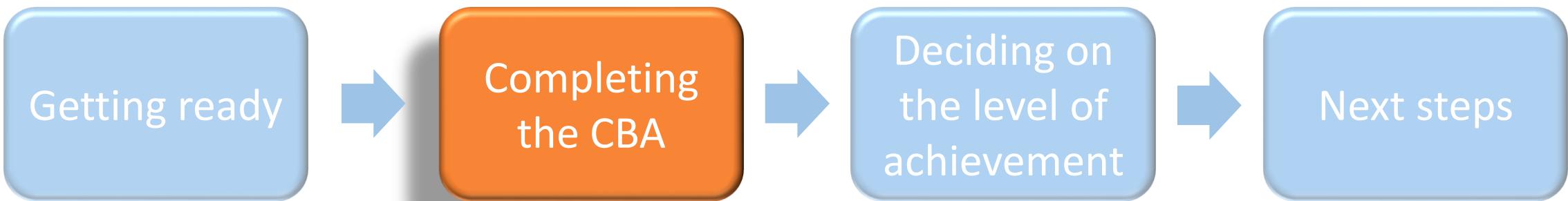


*'Planning for teaching, learning and assessment should develop students' knowledge, understanding, skills and values across the learning outcomes of the specification incrementally in advance of, and during the completion of the Classroom-Based Assessment.'*

*Guidelines for the Classroom-Based Assessments, page 11.*

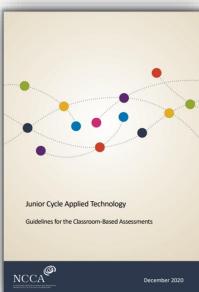


# Completing the CBA



What do we need to do to complete the CBA?

*Guidelines for the Classroom-Based Assessments, page 12.*



# Areas of activity for CBA1

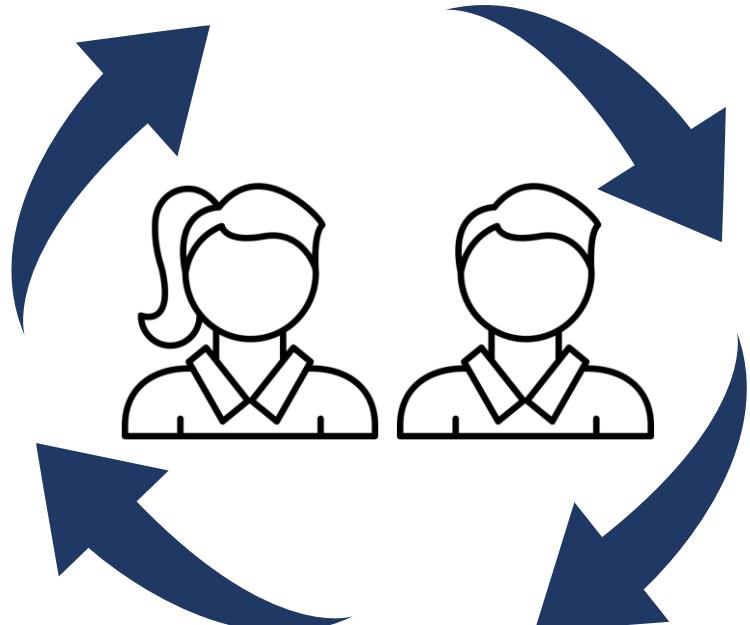
Students will engage in, and document the four areas of activity in their learning logs which contribute to the generation of their evidence of learning and achievement:



**Communicating their Classroom-Based Assessment**



**Evaluating their Classroom-Based Assessment**



**Research and analysis**



**Function**

## Completing the CBA

# Areas of activity for CBA 1



## Research and analysis

‘Each **individual student** must conduct their own research using some field **(primary)** research and/or some desk **(secondary)** research...They should be encouraged to **search effectively, evaluate and synthesise material**’

*Guidelines for the Classroom-Based Assessments, Pages 12 & 13*



## Completing the CBA

# Areas of activity for CBA1: Research and analysis



## A sample of **possible controlled systems**:

- Explore an emergency stop system in a workshop
- Automatic lighting system in a corridor
- Entry/Egress system into a building
- Fire Extinguisher
- Communications control system
- Radio controlled system
- Motion controlled system to enhance inclusivity in our school

*Guidelines for the Classroom-Based Assessments, page 12 and 13*



# Areas of activity for CBA 1

Students will engage in, and document the four areas of activity in their learning logs which contribute to the generation of their evidence of learning and achievement:



Communicating their  
Classroom-Based Assessment



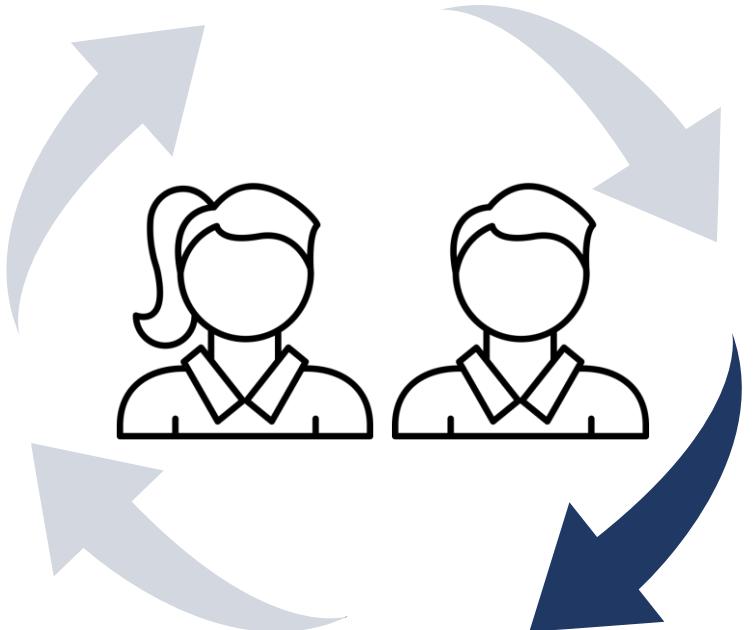
Research and analysis



Evaluating their Classroom-  
Based Assessment



Function



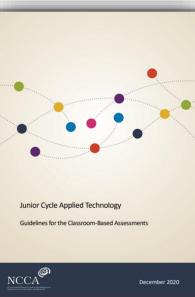
## Completing the CBA

# Areas of activity for CBA 1



## Function

‘Once the research and analysis has been conducted, the students should **relate their findings** to explaining how their chosen controlled system functions. Students can draw on **existing knowledge** of their chosen controlled system but should **support their ideas** with their research to gain enhanced **understanding** of their chosen controlled systems.’



# Areas of activity for CBA 1

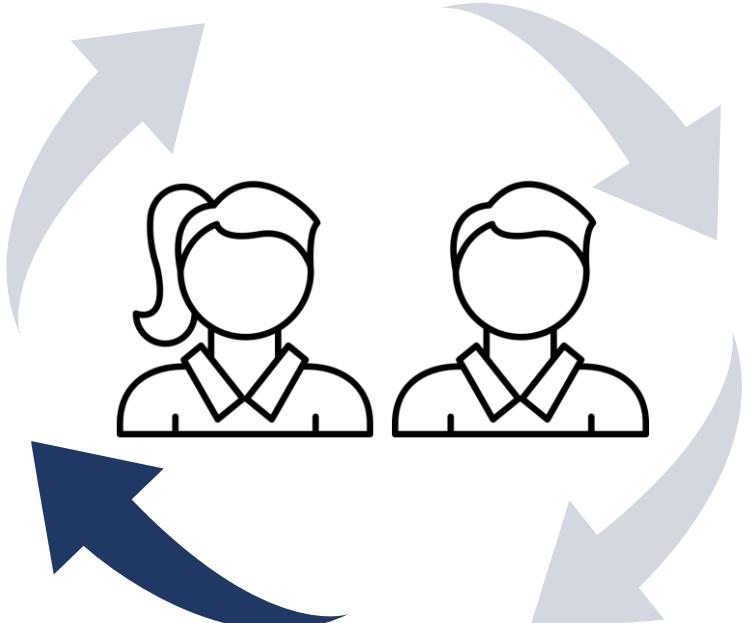
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Communicating their  
Classroom-Based Assessment



Evaluating their Classroom-  
Based Assessment



Research and analysis



Function

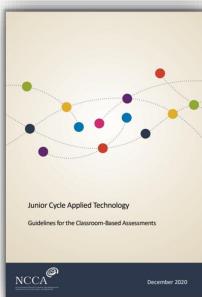
## Completing the CBA

# Areas of activity for CBA 1



## Evaluating their Classroom-Based Assessment

‘The student should aim to develop a personal opinion in relation to the Classroom-based Assessment’.



*Guidelines for the Classroom-Based Assessments, page 14*



# Areas of activity for CBA 1

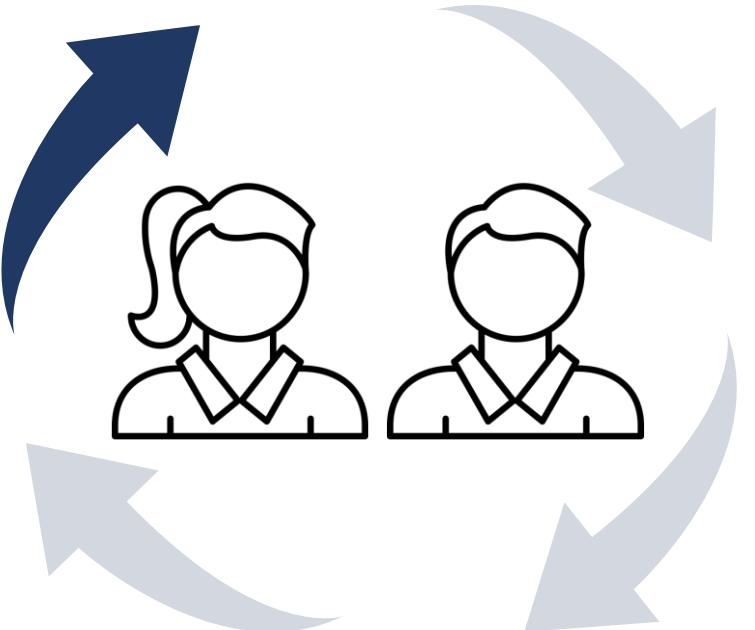
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**Communicating their Classroom-Based Assessment**



**Evaluating their Classroom-Based Assessment**



**Research and analysis**



**Function**

## Completing the CBA

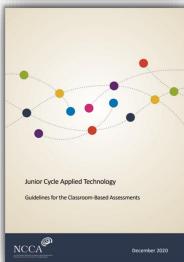
# Areas of activity for CBA 1



**Communicating their**

## **Classroom-Based Assessment**

‘The information should be presented in their own words to demonstrate personal understanding ... Students should be encouraged to identify which information best communicates their work and choose the most suitable medium in which to present it.’



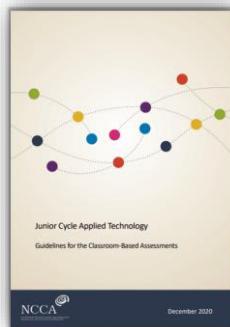
*Guidelines for the Classroom-Based Assessments, page 14*

## Completing the CBA

# Areas of activity for CBA 1: **Communicating the CBA**

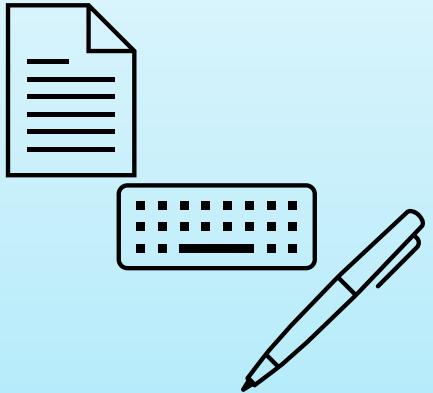
‘The students are required to capture their Classroom-Based Assessment using an **individual learning log**.’

‘The learning log can be produced in any format that is appropriate for capturing the ideas of the students.’



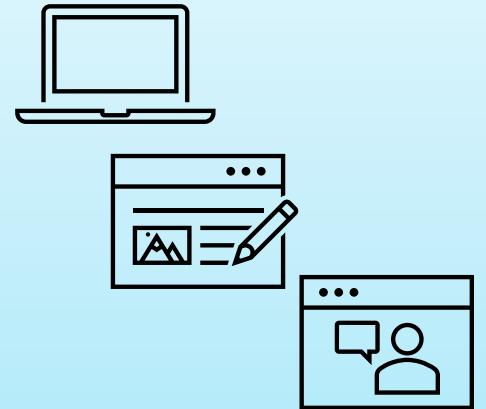
## Completing the CBA

# Areas of activity for CBA 1: **Communicating the CBA**



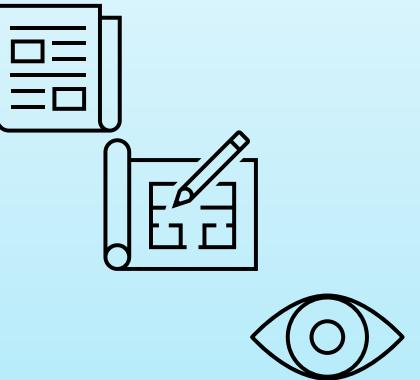
### **Written Form**

- Report Style
- Handwritten
- Typed



### **Digital Form**

- Blog
- Video
- Slide presentation



### **Visual Form**

- Graphics presentation
- Display



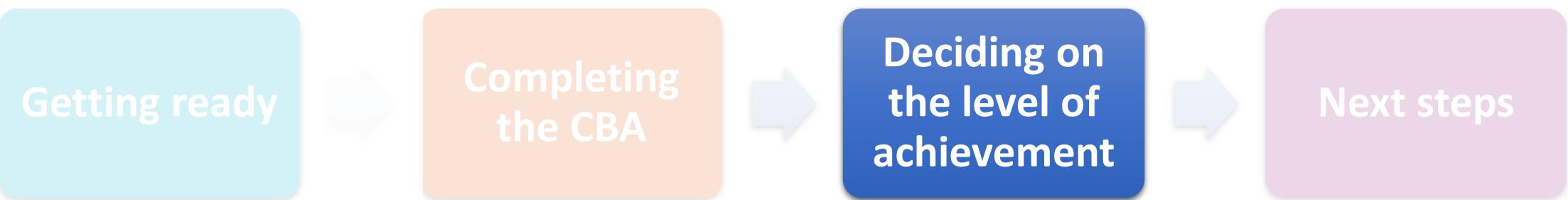
### **Audio Form**

- Podcast
- Voice-over

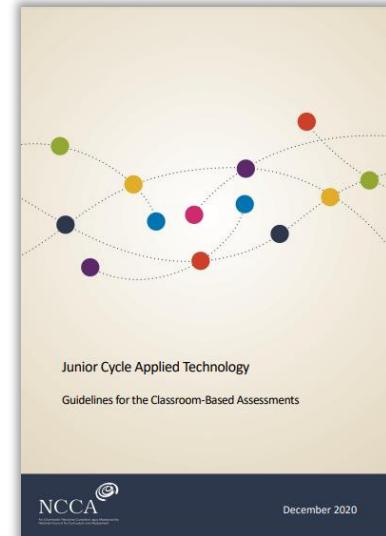
This list is not intended to be exhaustive but serves to offer suggestions as to the possible choices in developing the learning log. Students may present models or prototypes as part of their submission to support their learning logs.



# Deciding on the level of achievement

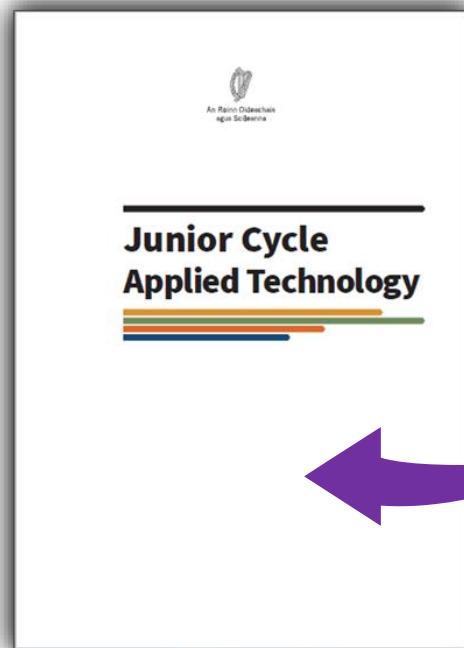


What will support teachers in this work?



# What will support teachers in this work?

Information available at [www.curriculumonline.ie](http://www.curriculumonline.ie)



**Applied Technology**

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Junior Cycle Applied Technology aims to develop the students' curiosity of the technological world while integrating the necessary subject knowledge with the disciplinary skills to investigate and solve real-life problems.

**CLICK HERE FOR THE FULL SPECIFICATION**

[View Specification PDF](#)

[CBA Revised Arrangements](#)

**Click on graphic below**



Curriculum Specification

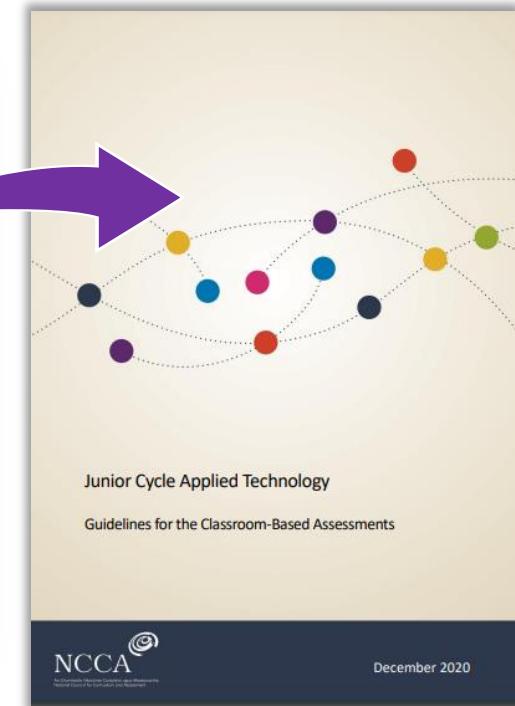
Assessment Guidelines

Applied Technology

Examples of Student Work

Junior Certificate Technology Syllabus

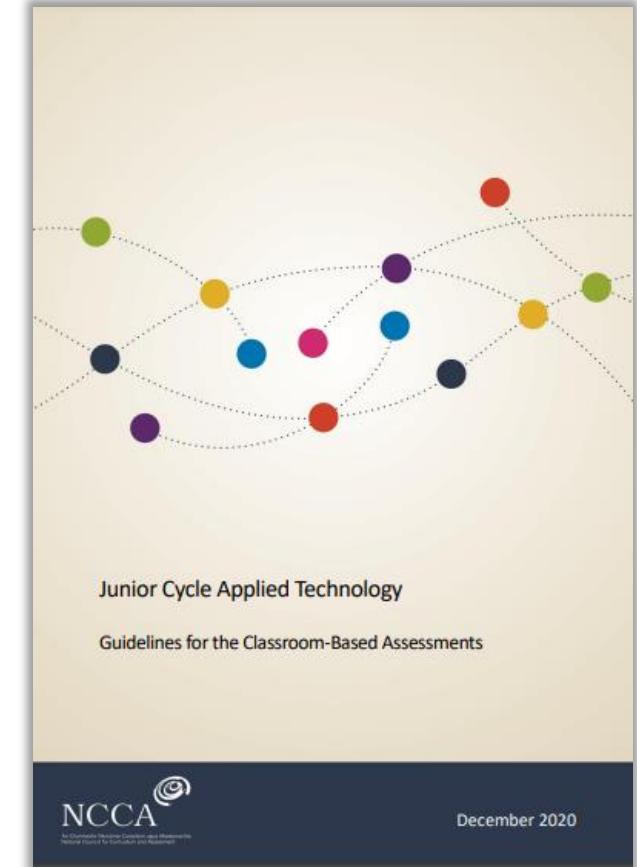
**Examples of Students Work**



# CBA 1- Exploring the application of controlled systems in a local context

There are **four level descriptors of achievement** in each Classroom-Based Assessment:

- Exceptional
- Above expectations
- In line with expectations
- Yet to meet expectations

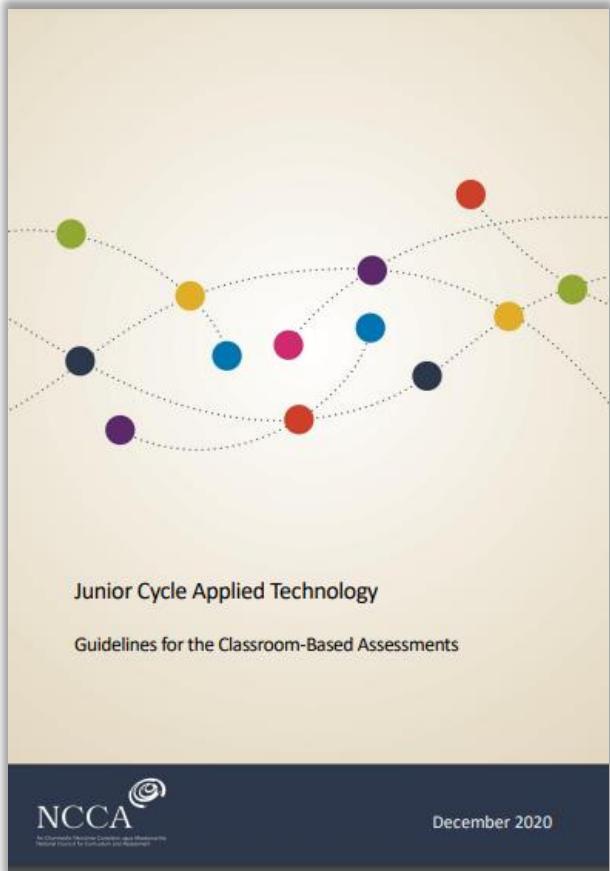


*Guidelines for the Classroom-Based Assessments, page 15.*



# Features of Quality:

## CBA 1- *Exploring the application of controlled systems in a local context*



Features of Quality: <i>Exploring the application of controlled systems in a local context</i>	
<b>Exceptional</b>	<ul style="list-style-type: none"> <li>The research method(s) chosen demonstrated a comparison of a range of sources which led to the production of a comprehensive and detailed analysis of the data/findings</li> <li>The controlled system chosen was investigated with a high level of detail showing excellent understanding of its function</li> <li>Critical evaluation of their task was evident throughout that lead to refinements at various stages resulting in meaningful, accurate conclusions and predictions of its defined function.</li> <li>The presentation of the task is of an excellent standard; using a highly effective medium which allowed for a critical consideration of what information best communicates the task</li> </ul>
<b>Above expectations</b>	<ul style="list-style-type: none"> <li>The research method(s) chosen was effective for the topic and generated an in-depth level of analysis of the data/findings</li> <li>The controlled system chosen was investigated in detail showing a very good understanding of its function</li> <li>The evaluation of their task is at a high level, with relevant and accurate conclusions that indicates a defined function</li> <li>The task is presented to a very high standard, using an effective medium, with careful consideration of what information accurately communicates the task</li> </ul>
<b>In line with expectations</b>	<ul style="list-style-type: none"> <li>The research method(s) chosen was appropriate for the topic and generated some analysis of the data/findings</li> <li>The controlled system chosen was investigated with some reference to its functionality</li> <li>The evaluation was appropriate; conclusions are brief and include some suggestions on a defined function</li> <li>The task is well presented, using an appropriate medium, with careful consideration of what information to communicate to best showcase the task</li> </ul>
<b>Yet to meet expectations</b>	<ul style="list-style-type: none"> <li>The research method(s) chosen for the topic/issue was ineffective and the analysis of the data/findings lacks depth</li> <li>The controlled system chosen was investigated with little detail with little or no reference to its functionality</li> <li>The evaluation of their task offers little or no conclusions and makes no suggestions on a defined function</li> <li>The task is presented in an unsuitable format resulting in an ineffective communication of the Classroom-Based Assessment</li> </ul>



*Guidelines for the Classroom-Based Assessments, page 16.*



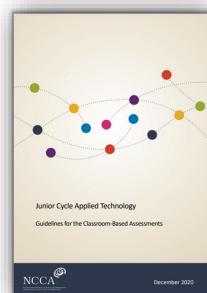
# Features of Quality:

## CBA 1- *Exploring the application of controlled systems in a local context*

### In line with expectations

A piece of work that reflects most of these Features well. It shows a good understanding of the task in hand and is free from significant error. Feedback might point to areas needing further attention or correction, but the work is generally competent and accurate.

- The research method chosen was appropriate for the topic and generated a some analysis of the data/findings.
- The controlled system chosen was investigated with some reference to its defined function
- The evaluation was appropriate and conclusions are brief.
- The findings are well presented, using an appropriate medium, with careful consideration of what information to communicate to best showcase the task.



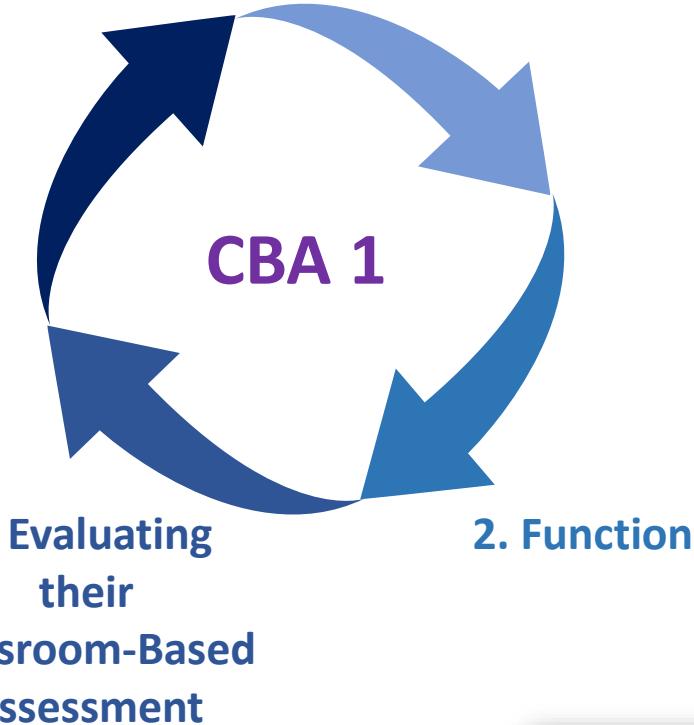
*Guidelines for the Classroom-Based Assessments*, page 16.



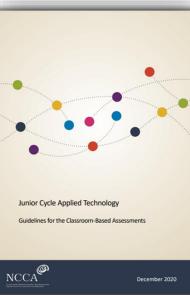
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 A piece of work that reflects most of these Features well. It shows a good understanding of the task in hand and is free from significant error. Feedback might point to areas needing further attention or correction, but the work is generally competent and accurate.

- The research method chosen was appropriate for the topic and generated a some analysis of the data/findings.
- The controlled system chosen was investigated with some reference to its defined function.
- The evaluation was appropriate and conclusions are brief.
- The findings are well presented, using an appropriate medium, with careful consideration of what information to communicate to best showcase the task.

#### 4. Communicating their CBA



*Guidelines for the Classroom-Based Assessments, page 16.*



### **In line with expectations**

A piece of work that reflects most of these Features well. It shows a good understanding of the task in hand and is free from significant error. Feedback might point to areas needing further attention or correction, but the work is generally competent and accurate.

#### **1. Research and analysis**

- The research method chosen was appropriate for the topic and generated a some analysis of the data/findings.

#### **2. Function**

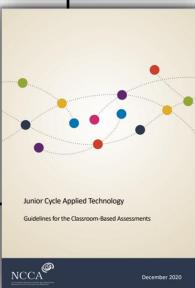
- The controlled system chosen was investigated with some reference to its defined function.

#### **3. Evaluation of their findings**

- The evaluation was appropriate and conclusions are brief.

#### **4. Communicating their CBA**

- The findings are well presented, using an appropriate medium, with careful consideration of what information to communicate to best showcase the task.



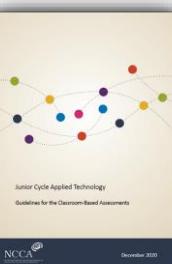


<b>Features of Quality:</b> <i>Exploring the application of controlled systems in a local context</i>	
<b>Exceptional</b>  A piece of work that reflects these Features to a very high standard. While not necessarily perfect, the strengths of the work far outstrip its flaws, which are minor. Suggestions for improvement are easily addressable by the student.	<ul style="list-style-type: none"> <li>The research method(s) chosen demonstrated a comparison of a range of sources which led to the production of a comprehensive and detailed analysis of the data/findings</li> <li>The controlled system chosen was investigated with a high level of detail showing excellent understanding of its function</li> <li>Critical evaluation of their task was evident throughout that lead to refinements at various stages resulting in meaningful, accurate conclusions and predictions of its defined function.</li> <li>The presentation of the task is of an excellent standard; using a highly effective medium which allowed for a critical consideration of what information best communicates the task</li> </ul>
<b>Above expectations</b>  A piece of work that reflects these Features very well. The student shows a clear understanding of how to complete each area of the task. Feedback might point to the necessity to address some aspect of the work in need of further attention or polishing, but on the whole the work is of a high standard.	<ul style="list-style-type: none"> <li>The research method(s) chosen was effective for the topic and generated an in-depth level of analysis of the data/findings</li> <li>The controlled system chosen was investigated in detail showing a very good understanding of its function</li> <li>The evaluation of their task is at a high level, with relevant and accurate conclusions that indicates a defined function</li> <li>The task is presented to a very high standard, using an effective medium, with careful consideration of what information accurately communicates the task</li> </ul>
<b>In line with expectations</b>  A piece of work that reflects most of these Features well. It shows a good understanding of the task in hand and is free from significant error. Feedback might point to areas needing further attention or correction, but the work is generally competent and accurate.	<ul style="list-style-type: none"> <li>The research method(s) chosen was appropriate for the topic and generated some analysis of the data/findings</li> <li>The controlled system chosen was investigated with some reference to its functionality</li> <li>The evaluation was appropriate; conclusions are brief and include some suggestions on a defined function</li> <li>The task is well presented, using an appropriate medium, with careful consideration of what information to communicate to best showcase the task</li> </ul>
<b>Yet to meet expectations</b>  A piece of work that falls somewhat short of the demands of the Classroom-Based Assessment and its associated Features. Perhaps the student has made a good attempt, but the task has not been grasped clearly or is marred by significant lapses. Feedback will draw attention to fundamental errors that need to be addressed.	<ul style="list-style-type: none"> <li>The research method(s) chosen for the topic/issue was ineffective and the analysis of the data/findings lacks depth</li> <li>The controlled system chosen was investigated with little detail with little or no reference to its functionality</li> <li>The evaluation of their task offers little or no conclusions and makes no suggestions on a defined function</li> <li>The task is presented in an unsuitable format resulting in an ineffective communication of the Classroom-Based Assessment</li> </ul>

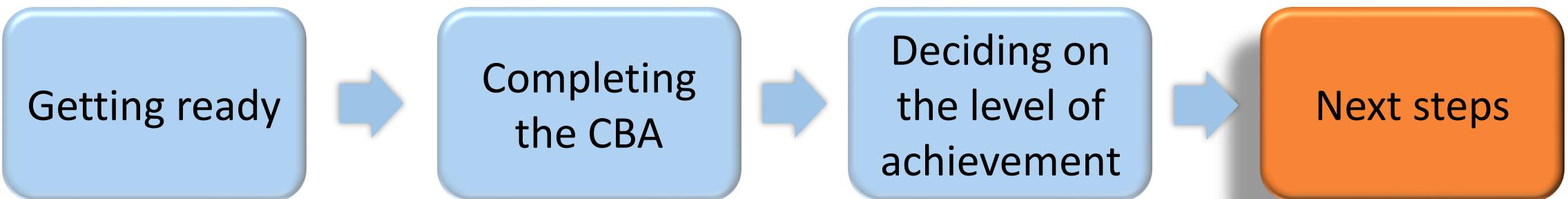
## Areas of Activity for CBA 1

**Research and analysis**  
**Function**  
**Evaluating their Classroom-Based Assessment**  
**Communicating their Classroom-Based Assessment**

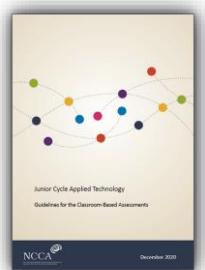
*Junior Cycle Applied Technology Guidelines for the Classroom-Based Assessments: Feature of Quality Pg 16 - 17*



# Next steps



- Subject Learning and Assessment Review meeting
- Recording and reporting results from Classroom-Based Assessments
- Using feedback



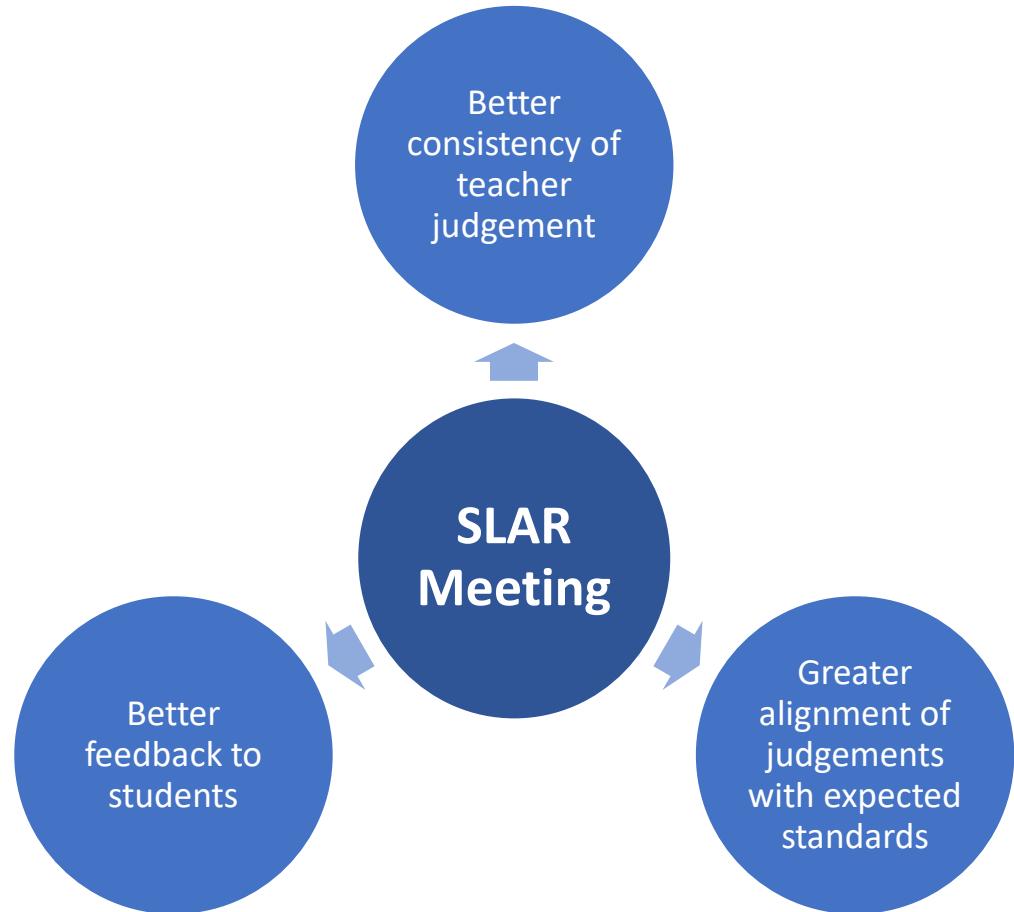
*Guidelines for the Classroom-Based Assessments, page 17.*



# Purpose of the SLAR process

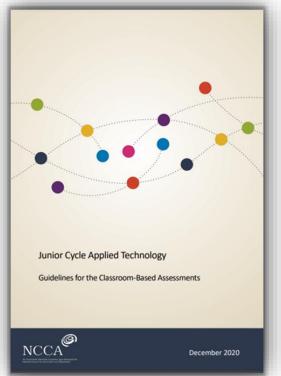
*'It will play an important role in helping teachers to develop an understanding of standards and expectations by enabling them to reflect on the evidence of students' work and to share the learning and teaching strategies supporting that work.'*

*Guidelines for the Classroom-Based Assessments, page 32.*



# Subject Learning and Assessment Review meeting

- Teachers discussing student work at structured meeting
- Develop an understanding of standards and expectations
- One teacher will be allocated two additional hours to prepare for and coordinate each review meeting (Facilitator).



*Guidelines for the Classroom-Based Assessments*, page 17.



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*Exploring the application of controlled systems in a local context*

<b>Exceptional</b> A piece of work that reflects these Features to a very high standard. While not necessarily perfect, the strengths of the work far outstrip its flaws, which are minor. Suggestions for improvement are easily addressable by the student.	<ul style="list-style-type: none"> <li>The research method(s) chosen demonstrated a comparison of a range of sources which led to the production of a comprehensive and detailed analysis of the data/findings</li> <li>The controlled system chosen was investigated with a high level of detail showing excellent understanding of its function</li> <li>Critical evaluation of their task was evident throughout that lead to refinements at various stages resulting in meaningful, accurate conclusions and predictions of its defined function.</li> <li>The presentation of the task is of an excellent standard; using a highly effective medium which allowed for a critical consideration of what information best communicates the task</li> </ul>
<b>Above expectations</b> A piece of work that reflects these Features very well. The student shows a clear understanding of how to complete each area of the task. Feedback might point to the necessity to address some aspect of the work in need of further attention or polishing, but on the whole the work is of a high standard.	<ul style="list-style-type: none"> <li>The research method(s) chosen was effective for the topic and generated an in-depth level of analysis of the data/findings</li> <li>The controlled system chosen was investigated in detail showing a very good understanding of its function</li> <li>The evaluation of their task is at a high level, with relevant and accurate conclusions that indicates a defined function</li> <li>The task is presented to a very high standard, using an effective medium, with careful consideration of what information accurately communicates the task</li> </ul>
<b>In line with expectations</b> A piece of work that reflects most of these Features well. It shows a good understanding of the task in hand and is free from significant error. Feedback might point to areas needing further attention or correction, but the work is generally competent and accurate.	<ul style="list-style-type: none"> <li>The research method(s) chosen was appropriate for the topic and generated some analysis of the data/findings</li> <li>The controlled system chosen was investigated with some reference to its functionality</li> <li>The evaluation was appropriate; conclusions are brief and include some suggestions on a defined function</li> <li>The task is well presented, using an appropriate medium, with careful consideration of what information to communicate to best showcase the task</li> </ul>
<b>Yet to meet expectations</b> A piece of work that falls somewhat short of the demands of the Classroom-Based Assessment and its associated Features. Perhaps the student has made a good attempt, but the task has not been grasped clearly or is marred by significant lapses. Feedback will draw attention to fundamental errors that need to be addressed.	<ul style="list-style-type: none"> <li>The research method(s) chosen for the topic/issue was ineffective and the analysis of the data/findings lacks depth</li> <li>The controlled system chosen was investigated with little detail with little or no reference to its functionality</li> <li>The evaluation of their task offers little or no conclusions and makes no suggestions on a defined function</li> <li>The task is presented in an unsuitable format resulting in an ineffective communication of the Classroom-Based Assessment</li> </ul>



This ‘best fit’ approach allows teachers to select the descriptor that ‘on balance’ describes the work being assessed.



# Subject Learning and Assessment Review Process

## Before a SLAR meeting:



**Students:** Upon completion of their CBA, submit their learning log.



**Teacher:** Carry out a provisional assessment of their students' work based on the Features of Quality and award a provisional descriptor.

## During a SLAR meeting:



**Subject Department:** Discuss samples of their students' work to support consistency of judgement and to develop a common understanding about the quality of student learning against common, externally set Features of Quality.

## After a SLAR meeting:



**Teacher:** Based on the outcomes of the meeting, re-considers the judgements they have made of their student's work, if necessary, and award a final descriptor.



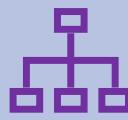
**Teacher:** Record and report results from Classroom-Based Assessments, and provide students with effective feedback.



# In this resource, we...



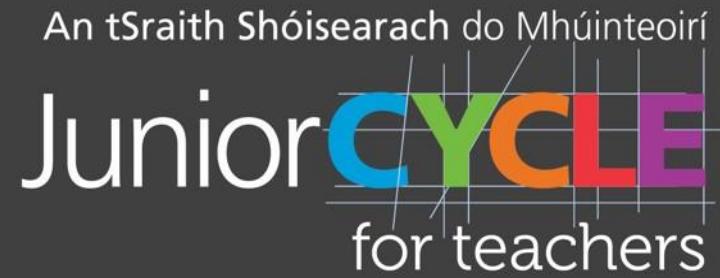
appreciated the role of Classroom-Based Assessment 1 in Applied Technology



explored the structure of Classroom-Based Assessment 1:  
*Exploring the application of controlled systems in a local context*



considered the importance of the Subject Learning and Assessment Review process for Classroom-Based Assessments



# Classroom-Based Assessment 1

## *Exploring the application of controlled systems in a local context*

*Thank you for engaging with this resource.*



An Roinn Oideachais  
Department of Education

