



Oide

Tacú leis an bhFoghlaim
Ghairmiúil i measc Ceannairí
Scoile agus Múinteoirí

Supporting the Professional
Learning of School Leaders
and Teachers

Phase 5: Applied Technology Statements 2023/2024



Introductory text for JCSP Statements Supporting The Junior Cycle Applied Technology

The statements below were developed with input from a number of practicing Applied Technology teachers in JCSP schools. They are offered **as one possible model** that teachers may use to approach the new Junior Cycle Applied Technology Specification. They will be adjusted over time based on feedback from teachers in JCSP schools.

The new Applied Technology Specification may be accessed in full at www.curriculumonline.ie.

In addition, support for teaching of the Junior Cycle Specification may be accessed through the Junior Cycle for Teachers (JCT) Technologies team at www.jct.ie.

It is important to note that the statements below offer a sample approach for the creation of Junior Cycle Applied Technology statements. They do not cover all of the learning outcomes which are expected to be taught in the new junior cycle course.

August 2023

Area of Experience

Technology / Applied Technology

Technology / Applied Technology

Student:

Class:

At Junior Cycle level I can:

Date Commenced: / /

Date Awarded: / /

ATJC1 I can manage myself and my work in Applied Technology

☐☐☐

ATJC2 I understand the role and impact of technology

☐☐☐

ATJC3 I can design, prototype and create final design solutions

☐☐☐

ATJC4 I can create controlled solutions to perform tasks safely and efficiently

☐☐☐

1. **Craft and Materials**

Work with materials having practised the basic skills appropriate for assembling finished pieces

☐☐☐

2. **Theory**

Display basic background knowledge of technology

☐☐☐

3. **Technology and Society**

Display a basic knowledge of the effects of developments in technology on society

☐☐☐

4. **Design Brief**

Compile a design brief for a selected technology project

☐☐☐

Work begun ☐☐☐ | Work in progress ☐☐☐ | Work completed ☐☐☐

I can manage myself and my work in Applied Technology

**Applied
Technology**

Statement Code: ATJC1

Student:

Class:

I can

I have begun ☐☐☐ | I am working on this ☐☐☐ | I can ☐☐☐

This has been demonstrated by my ability to:

- | | |
|---|--|
| 1. Be on time for my Applied Technology class | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| 2. Have all my materials with me for my Applied Technology class | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| 3. Follow the rules of the Applied Technology classroom | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| 4. Work safely when using hand tools | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| 5. Use machinery correctly and in a safe manner | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| 6. Write three personal targets to help me in my Applied Technology class | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| 7. Create a storyboard showing the steps of how I made a project from start to finish | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| 8. Discuss at least 3 skills I used in completing a project | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| 9. Reflect on my work in my Applied Technology class | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| 10. Work with my teacher and other students in a positive and respectful manner | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |

Reflecting on my learning...

One thing I did well...

One thing I did to improve...

I really enjoyed...

because...

I understand the role and impact of technology

Applied Technology

Statement Code: ATJC2

Student:

Class:

I can

I have begun ☐☐☐ | I am working on this ☐☐☐ | I can ☐☐☐

This has been demonstrated by my ability to:

- | | |
|--|--|
| 1. Break down a problem into steps | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| 2. Carry out both primary and secondary research | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| 3. List two areas where technology plays an important role in your local community | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| 4. Discuss how technology can solve problems | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| 5. Give an example of how technology has changed a product | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| 6. Give an example of how technology has made an impact on a manufacturing process | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| 7. List three ways how technology has helped to reduce waste | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| 8. Discuss positive and negative impacts of technology | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| 9. List two examples of renewable energy sources | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| 10. Identify two energy saving devices that could be used in a school | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |

Reflecting on my learning...

One thing I did well...

One thing I did to improve...

I really enjoyed...

because...

I can design, prototype and create final design solutions

**Applied
Technology**

Statement Code: ATJC3

Student:

Class:

I can

I have begun ☐☐☐ | I am working on this ☐☐☐ | I can ☐☐☐

This has been demonstrated by my ability to:

- | | | | |
|---|--------------------------|--------------------------|--------------------------|
| 1. Sketch a solution to include measurements | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Use annotations to explain my design | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Create a prototype | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. Prepare a cutting list | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. Create a project plan to help keep me on track | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 6. Select suitable equipment to perform a task | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 7. Select suitable processes to perform a task | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 8. Pay attention to detail when finishing a project | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 9. List three things that were difficult during the design and making of a project | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 10. List three things that you would do differently if you were to make the project again | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Reflecting on my learning...

One thing I did well...

One thing I did to improve...

I really enjoyed...

because...

I can create controlled solutions to perform tasks safely and efficiently

Applied Technology

Statement Code: ATJC4

Student:

Class:

I can

I have begun ☐☐☐ | I am working on this ☐☐☐ | I can ☐☐☐

This has been demonstrated by my ability to:

1. Draw simple circuit diagrams
2. Represent at least three components using their symbols
3. Follow safety procedures when soldering
4. Discuss how energy is converted from one form to another
5. Describe how an input transforms into an output
6. Test my circuit design
7. Design a circuit using digital software
8. List three different mechanisms and state where they could be used
9. Create a control solution to solve a problem
10. Find a fault in a circuit

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Reflecting on my learning...

One thing I did well...

One thing I did to improve...

I really enjoyed...

because...

Craft and Materials

Technology

Statement Code no: 1

Student:

Class:

At Junior Certificate level the student can:

Work with materials having practised the basic skills appropriate for assembling finished pieces

Date Commenced: / /

Date Awarded: / /

Learning Targets - This has been demonstrated by your ability to:

- | | |
|---|--|
| 1 Follow basic technology room rules | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| 2 Understand the reasons for safety procedures | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| 3 Understand and follow safety procedures | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| 4 Understand and be able to make basic drawings, for example, orthographic, isometric and oblique | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| 5 Measure and mark out the material, using the appropriate tools and measuring instruments | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| 6 Design and cut out simple shapes | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| 7 Display manual dexterity through assembly | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| 8 Produce a simple piece of work | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| 9 Produce your own simple solution to a basic technology working problem | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| 10 Understand the uses of joints | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| 11 List the steps needed to make a simple object | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| 12 Examine the finished item you have made and identify the improvements that could be made | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |

Refer also to: English, Art, Maths, Materials Technology: Metal, Technical Graphics, Materials Technology: Wood, Science

Work begun ☒ ☐ ☐ | Work in progress ☒ ☒ ☐ | Work completed ☒ ☒ ☒

Theory

Technology

Statement Code no: 2

Student:

Class:

At Junior Certificate level the student can:

Display basic background knowledge of technology

Date Commenced: / /

Date Awarded: / /

Learning Targets - This has been demonstrated by your ability to:

- | | | |
|---|--|--|
| 1 | Recognise forms of energy, for example, mechanical, chemical, electrical etc. | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| 2 | Recognise devices that convert energy from one form to another | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| 3 | Learn the units of energy and power | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| 4 | Understand structures that maintain shape under load | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| 5 | Display an understanding of the use of mechanisms | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| 6 | Display an understanding of basic electric circuits, for example, lamp circuit | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| 7 | Understand the uses of simple electronic systems | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| 8 | Understand the basic uses of pneumatics | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| 9 | Understand the basic uses of robotics | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |

Refer also to: English, Art, Maths, Science, Materials Technology: Metal, Technical Graphics, Materials Technology: Wood,

Work begun ☒ ☐ ☐ | Work in progress ☒ ☒ ☐ | Work completed ☒ ☒ ☒

Technology and Society

Technology

Statement Code no: 3

Student:

Class:

At Junior Certificate level the student can:

Display a basic knowledge of the effects of developments in technology on society

Date Commenced: / /

Date Awarded: / /

Learning Targets: Select any 5 objectives to work on

- This has been demonstrated by your ability to:

- | | |
|---|--|
| 1 A brief history of technological developments since the Industrial Revolution | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| (a) State the differences between technology now and during the time of the Industrial Revolution | |
| (b) Identify one advantage and one disadvantage of these changes to today's society | |
| 2 The effects on the environment of technological development | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| (a) State two positive effects of technological development on the environment | |
| (b) State two negative effects of technological development on the environment | |
| 3 Technology and Agriculture | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| (a) List two machines used in agriculture today | |
| (b) List two positive and two negative effects of technology on agriculture | |
| 4 Technology and Social and Cultural Development | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| (a) List two effects technology has had on social and cultural development | |
| (b) Identify two advantages and two disadvantages technology has had on social and cultural development | |
| 5 Technology and Labour | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| (a) List two effects technology has had on labour | |
| (b) Identify two advantages and two disadvantages of these effects | |

Work begun ☒ ☐ ☐ | Work in progress ☒ ☒ ☐ | Work completed ☒ ☒ ☒

Technology and Society

Technology

Statement Code no: 3

Student:

Class:

At Junior Certificate level the student can:

Display a basic knowledge of the effects of developments in technology on society

Date Commenced: / /

Date Awarded: / /

Learning Targets: Select any 5 objectives to work on

- This has been demonstrated by your ability to:

- 6 **The technology gap between the first and third worlds** ☐ ☐ ☐
(a) List two differences between technology in the first and third worlds
(b) Identify two advantages and two disadvantages of technological developments in the first and third worlds
- 7 **Technology and Industry** ☐ ☐ ☐
(a) List two aspects of technology in industry
(b) Identify two advantages and two disadvantages of technology for industry
- 8 **Technology in the Home** ☐ ☐ ☐
(a) List two aspects of technology in the home
(b) Identify two advantages and two disadvantages of technology in the home
- 9 **Food Technology** ☐ ☐ ☐
(a) List two aspects of food technology
(b) Identify two advantages and two disadvantages of food technology
- 10 **An aspect of the history of design** ☐ ☐ ☐
(a) In the case of two products, identify the design changes that have occurred over the years
(b) Identify two advantages and two disadvantages of these changes on the products

Refer also to: English, Art, Maths, Materials Technology: Metal, Materials Technology: Wood, Technical Graphics, Science

Work begun ☒ ☐ ☐ | Work in progress ☒ ☒ ☐ | Work completed ☒ ☒ ☒

Design Brief

Technology

Statement Code no: 4

Student:

Class:

At Junior Certificate level the student can:

Compile a design brief for a selected technology project

Date Commenced: / /

Date Awarded: / /

Learning Targets - This has been demonstrated by your ability to:

- | | |
|---|--|
| 1 Give two reasons for your choice of project from the given selection | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| 2 Design three pieces and choose one, giving reasons for your choice | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| 3 Draw a schematic drawing for each piece of your chosen project | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| 4 List the materials for cutting | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| 5 Record each piece | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| 6 Record the work process involved | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| 7 Record the process involved in assembling the pieces of the project | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| 8 Identify faults in the design, if any | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| 9 Identify difficulties you have come across in designing, making and assembling your project | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |

Refer also to: English, Art, Maths, Materials Technology: Metal, Technical Graphics, Science

Work begun ☒ ☐ ☐ | Work in progress ☒ ☒ ☐ | Work completed ☒ ☒ ☒