

**The Built Environment Training Alliance Group**

**A Teacher's Guide to the  
BConstructive Programme**

2010





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## Overview for teachers on the BConstructive programme

This document has been written to provide teachers with an overview on how to deliver the BConstructive programme – Levels 1 and 2.

Along with this document, we would also recommend that teachers reference the following documents for a more detailed guide to specific aspects of the programme and its implementation. Click the links to download them.

- [BETA Guide to Assessment](#); and
- [Project-based Assessment](#).

Further documents that can assist teachers deliver the BConstructive programme are found on the website in the “Teacher’s Information” document for each unit standard. See “website resources” on page 6 of this document.

Check the website regularly for any new guides and resources for the BConstructive programme.

## **Assessment methods and documents**

There are 3 main methods of assessment for BConstructive unit standards.

- worksheet only;
- assessor observation; and
- record sheet.

### **Worksheet only**

Where a unit standard deals with showing conceptual understanding (often it will have “Demonstrate Knowledge of” in its title) assessment is undertaken by the student completing a worksheet and, of course, the teacher/assessor marking it.

Worksheets are provided and so too, are model answers. These are always found in the “Teacher’s Information” document on the website.

Worksheets are laid out suitable for double sided printing to save paper. You may print the model answers for your own reference or simply look at them on screen.

Oral questions and an assessment schedule document are also included in the “Teacher’s Information” document.

Oral questions are provided as guides only. For example, you may wish to discuss aspects of the assessment with a student to clarify evidence or confirm their understanding but oral questions are NOT a compulsory part of unit standard assessment

The Assessor Sign-off block, for these worksheet-assessed unit standards, is found at the end of each worksheet. It’s here that you sign off the student as being competent in the unit standard and mark as A (achieved) or N (not yet achieved).

**Units assessed by worksheet are: 22607 – Plans and specs, 24361 – Math processes, 24360 Timber, and all 16 DKO units 25319 to 25334.**

### **Assessor observation**

Generally, the practical BConstructive unit standards are assessed by a combination of:

- your observations of the student as they go about the projects; and
- your examination of their completed projects.

For such unit standards the Assessor Observation Sheet is included in the Teacher Information document on the website and it is on this observation sheet where you find the Assessor Sign-off.

Note that many of these practical projects also require some student paper-work to be attached to the observation sheet. This is usually a copy of a cutting list and/or order form for project materials.

We would encourage you or the student to include a photo of the project and store this with the Assessor Observation sheet you have signed. This will be useful for moderation purposes.

However, all photos must be verified by you (as the Assessor) that the photo shows the authentic work of the student. To this end a simple sample form at the end of this document could be used when collecting and presenting photographic evidence.

**PS:** The photo is about the project (not the student) so make sure the project is not obscured by other elements in the picture!

**Units assessed largely by observation sheets (and some student paper work such as a worksheet, cutting list or order form) are:** 24353 – Sketches and drawings, 12932 – Garden furniture & construction equipment, 12933 – Concrete work, 12935 – Residential deck, 12936 – Non-consent building, 12937 – Pergola, 12938 – Paving, 12939 Retaining wall, 22129 – Fence and gate, 24354 – Safety Level 2, 24357 – Communication, 25919 – Hardware & fastenings, 25920 – Joints and 25921 – Make cupboard.

## Assessment Record Sheet

Some assessments use a mixture of student written material and teacher verification **ON THE SAME SHEET.**

Whenever assessment using a record sheet is suggested, the Assessment Record Sheet is provided as a separate file on the website in **Microsoft Word** format. This means you can edit the sheet to give more or less space for the student to write in. You may also want to change the headings and descriptions on these sheets to reflect your teaching approach.

The Assessment Record Sheet is the tool for the student to document activities or write about different scenarios. In the Assessor section you are to verify the student “claims” via attestation and observation.

Your formal sign-off panel is found at the end of the Assessment Record Sheet.

The assessor section of the Assessment Record Sheet and the formal sign-off panel should not be altered as it aligns your judgement to the unit standard criteria.

Note that most of the units assessed by a record sheet also require other material as part of the assessment (most commonly a Worksheet) and this is noted on the Assessment Record Sheet. As usual, the Worksheet and model answers are included in the “Teacher’s Information” document along with oral questions and the assessment schedule.

**Units assessed by record sheets are:** 12927 – Hand tools, 24350 – Portable power tools, 24351 – Fixed machinery, 24358 – Plan & monitor, 24352 Safety Level 1, 24355 – Materials, 24356 – Workshop practices.

## Practical projects

Attached are some possible sources of projects that can be used for the BConstructive programme.

A wide range of plans is available in books from the local library, in pamphlets from hardware stores (such as Carters, Mitre 10 and Placemakers) and on several websites such as:



<http://doityourself.com>

[www.carters.co.nz](http://www.carters.co.nz)

<http://placemakers.co.nz>

<http://www.bunnings.co.nz/>

[http://www.popularmechanics.com/home\\_journal](http://www.popularmechanics.com/home_journal)

In particular [www.buildeazy.com](http://www.buildeazy.com) has over 180 projects listed. This is a New Zealand administered website and the projects are in metric and imperial dimensions. The projects are not just timber-based but there are some concrete projects as well. In addition, many projects have cutting lists provided. The first (of two) buildeazy project index pages is found at:

[http://www.buildeazy.com/fp\\_start.html](http://www.buildeazy.com/fp_start.html)

## Special note for practical unit standards

We draw your attention to health and safety polices and processes that you should consider for your workshop and site-based works.

**Reference:** “Safety and Technology Education – A Guidance Manual for New Zealand Schools”

This document can be found at:



<http://www.tki.org.nz/r/technology/pdf/saftec.pdf>

The following references are directly relevant to BConstructive practical projects:

- Section 1 Planning for safety
  - 1.1 Identifying and managing risk
  - 1.2 Safety planning
- Section 2 Legal requirements and responsibilities
- Section 7 Safety and materials technology
- Section 9 Safety and structures and mechanisms
- Appendix 1 Template for safety planning
- Appendix 2 Guarding of machinery
- Appendix 4 Recommended ages for using machinery

**Reference:** “Safety and EOTC” (Education Outside the Classroom)

This document can be found at:



[http://www.tki.org.nz/r/eotc/resources/pdf/safety\\_and\\_eotc.pdf](http://www.tki.org.nz/r/eotc/resources/pdf/safety_and_eotc.pdf)

The following reference is directly relevant to BCATS practical projects:

- Page 58 Parental consent – risk disclosure

## Other information

### Website resources

Based on teacher feedback the resources on the website have been simplified and many unit standards have only two documents to download. There are still the same resources available but several have been combined.


Student resource (2105kb) 

As usual there is a student resource for each unit. Many contain extra activities that can help students check their progress before formal assessment.

Teachers info (262kb) 

The major change is that now the Teacher's Information document contains much more than it used to. For each unit it will typically contain (in order):

- Teaching & assessment tips specifically for the unit standard
- Student worksheet if applicable
- Worksheet model answers if applicable
- Oral questions
- Observation sheet for units assessed via observation
- Assessment schedule that shows how collected evidence relates to the unit standard

Assessment record sheet (67kb) 

Unit standards assessed by Assessment Record Sheets have this sheet as a separate document in Microsoft Word format so you can alter it to suit your projects and students.

Some other units have more resource documents such as supplementary record sheets, extra projects and video files. These are detailed in the *Teaching and Assessment Tips* section of the "Teacher's Information" resource.

All website documents have been designed as double sided printing to save paper.

### Video for DKO Glass unit

Unit Standard 25328 – Demonstrate knowledge of the Glass Industry unit has an associated video that has been supplied by the Joinery Industry Training Organisation (JITO). This video is referenced in the student resource and while the assessment does not require information from this video we recommend that students watch it. Thus it is provided on the website and can be downloaded.

It is in the AVI video format so it can be shown full screen at reasonable quality on a computer or laptop. To play this file you will need a media player program that will playback AVI files. Windows Media Player for Windows 7 is fine but if you do not have a suitable media player on your computer, we recommend the following as it is available (for **free**) for all operating systems Windows, Linux and Macintosh:



VidLAN Media player – a **free** open-source player from <http://www.videolan.org/>

This file is 350 megabytes in size so is a large download. It may take 10 to 20 minutes to download (depending on your broadband connection).

You can play this video as part of class instruction or have it available on your school server for on-demand access by students or whatever process best suits your teaching programme.

**PS:** VideoLan Media player will also play DVD on computers with DVD drives.

## iPod video

Many of the “Demonstrate knowledge of [DKO] xx industry” unit standards that form part of the Level 2 qualification have associated video files. You need to be very clear about these video clips.

- They are not a formal part of the learning resource.
- They are supplementary, or extra resources that students may wish to watch.
- The files and frame sizes are very small so that students can watch them on their iPods. They will not look very good if shown full screen on a computer or laptop.
- You are able to give a copy of these videos (via CD or memory stick) to students to put in their iPods.
- If you want to play these files on your school computer you will need a media player that replays the MPEG-4 video format. If you don't have such a player you can use the following free players for any Mac or Windows computer.



Apple iTunes and Quicktime, **free** from <http://www.apple.com/downloads/>

or (recommended)



VideoLAN Media player – a **free** open-source player from <http://www.videolan.org/>

These videos that we have converted to iPod format originally screened on television as part of the “Just the Job” careers oriented series and you may find that your careers advisor has these files on DVD.

## Activity sheets

Some student learning material contains Activities. These are not intended for assessment purposes and therefore are not required for moderation. They are provided as an extra learning resource that you and your students may use.

## Evidence collection

Assessment evidence does not have to be in the traditional paper-based form. If you and your students are comfortable about using other media then by all means use them. We're thinking about such things as photos, videos, websites/blogs, audio, podcasts etc.

However, when such evidence is presented as part of an assessment, you as Assessor must verify it. You must verify that the evidence, however presented, is true and accurate and is the authentic work of the student being assessed.



Student's Name:

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Unit standard:

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(ATTACH PHOTO HERE)

Date:

Site/workshop location:

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Details of task you completed in this photo:

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Verifiers name:

Signature:

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