




-  Plumbers,
-  Gasfitters and
-  Drainlayers Board

Course Development Guide



For Training Providers Of
Continuing Professional Development
(CPD)

Accreditation of courses for Competence-Based Licences for Licensed and Certifying Plumbers, Gasfitters & Drainlayers

The following guide is designed to assist you in preparing a continuing professional development (CPD) course and provides the information required for a course to be successfully accredited with the Plumbers, Gasfitters and Drainlayers Board (“the Board”).

The Board has responsibility under the Plumbers, Gasfitters and Drainlayers Act 2006 (“the Act”) to protect the health and safety of the public. This is achieved through the registration and licensing of competent plumbers, gasfitters and drainlayers. The Board’s competency programmes for practitioners are set in accordance with the provisions in the Act. These programmes ensure that practitioners are competent through the undertaking of Board accredited up-skilling courses on a regular basis.

With changes in technology and a growing consumer awareness of compliance requirements, the Board is committed to promoting high standards of workmanship and professional conduct within the industry and believes the CPD of tradesmen plays a crucial part in achieving these goals.

Competence-Based Licensing (CBL)

CBL, having already applied to gasfitters since 2004, will now extend to plumbers and drainlayers with the implementation of the PGD Act 2006 on 1 April 2010. The Board will now require all licensed and certifying practitioners to undertake CPD in order to meet the minimum requirements of CBL.

This will result in over 10,000 licence holders seeking CPD. The minimum points requirement depends on the number of licences held by the practitioner.

Minimum Annual Requirements for Number of Licences Held		
Number of Licences	Total Points Required	Minimum Technical Points Required
1	12	8
2	20	8 per licence
3	24	8 per licence

A maximum of four points can be carried forward to the following licence year if an excess of the required points has been gained. Points that have been carried forward will be reclassified as non-technical points.

Practitioners can only obtain points by attending courses that have been either accredited by the Board, or meet the minimum standards of the NZQA framework; including university study. They must be directly related to the business of plumbing, gasfitting or drainlaying, depending on the licences held; and **approved by the Registrar**.

Process for Accreditation of Courses

The Board is responsible for accreditation, which is designed to ensure courses meet the requirements for the issuing of competence-based licences. In making an application for accreditation, the prospective training provider will submit the required training material to the ITO who will notify the Board of receipt of the application. The ITO reviews the course material, informs and guides the training provider if there are any discrepancies as outlined by Board requirements. On completion of the course review, the ITO will deliver all course material to the Board for approval and point’s allocation.

Requirements for Accreditation of Courses

Course accreditation is based on but not limited to:

- course content;
- presentation;
- course alignment with the Board examination guide and/or unit standards where these align with the Board’s examination guides and, the level of technical content;
- duration of the course (e.g. how long it will take a practitioner to complete the course);
- course delivery mode (e.g. correspondence, online or face to face delivery).

All requirements are outlined on page 3 of this document.

Maintaining integrity of the CPD programme is essential for the Board to meet the requirements of CBL. Notification of changes to existing course structure and content should be sent to the Board; which will then be forwarded to the ITO for review. All accredited courses are subject to audit.

Contact Details

For further information relating to the CPD accreditation process and policies in respect of this, please email the Board at cpd@pgdb.co.nz.

To submit a course for accreditation, in the first instance please submit all requirements for review to:

Belinda Penny

PGDRITO

PO Box 9951

Wellington 6011

DDI: (04) 471 8426

Email: belinda.penny@ito.co.nz

All material provided, once reviewed, will be held by the Board at the Board office, they will be treated as confidential and will not be made available to parties outside the CPD and review process.

Course Accreditation Process Outline

1. The course provider submits all required course material along with the \$204.45 application fee to the ITO for review.
2. The course provider must provide an outline of the following course documentation :
 - Course outcome
 - Identification of the relevant PGD Board examination guide and/or unit standards where these align with the Board's examination guides which the course relates to.
 - Learning objectives
 - Course assessment which correlates to learning objectives, and associated model answers. Illustrate how course attendee is deemed to have successfully completed the course.
 - A calendar displaying when and where the course(s) will be held
 - Name of instructor(s) and details of their qualifications and experience which relates to the course(s) that they will be presenting and assessing.
 - Proposed course duration
 - Course material which may include: instructor notes, power-point presentation, attendee handbook, and any other supporting documentation.
 - Course evaluation form
3. The ITO, upon receiving the application and documentation from the course provider, notifies the Board of receipt and then undertakes a review of this information. This review process may take up to two weeks from the date the documentation is received. All material provided, once reviewed, will be held by the Board at the Board's office, will be treated as confidential and will be unavailable to parties outside the CPD and review process.
4. Following consideration by the Board of the documentation and report supplied by the ITO, the Board will then advise the course provider in writing:
 - If the course is approved, points are allocated to the course and the course details will be loaded to the Board's database and website.
 - If the course is rejected, the training provider will be advised of the reasoning behind the decision with information to guide the training provider of the reasons.

Note: From the date of acceptance a course is issued accreditation for two years.

The Board monitors courses on a continuous basis. Course providers who do not continue to meet the requirements outlined in the accreditation documentation will be notified by the Board and advised of any changes that may be required so the course can stay accredited.

Terms and Conditions for Accreditation

1. The course must comply with current legislation, standards, and codes of practice. All courses must adhere to Board policies and guidelines.
2. The application review fee of \$204.45 must be paid to the ITO.
3. The application form is forwarded to the ITO with all relevant documentation.
4. Course records – Course providers must submit the course results electronically on a weekly basis to cpd@pgdb.co.nz using the template provided (page 6).

It is crucial that course records are supplied **within 1 week** of completion of the course to ensure that licences are issued in a timely manner.

5. Results are recorded as **Achieved (A)** or **Not Achieved (NA)**.
6. The course content and deliverables must be current and relevant for those attending the course as part of their continuing professional development.
7. The instructor must have appropriate technical and educational knowledge and experience relevant to the course they are delivering.
8. The learning environment is appropriate, safe, supportive and adequately resourced.
9. The course must provide measurable outcomes for the knowledge or skills covered.
10. The course must have a clearly defined structure with a statement of course goals and outcomes.
11. The course program demonstrates relevant information to the industry.
12. The Board must be notified in writing of any significant change in course structure or content.
13. Student evaluation form is provided at the conclusion of each course delivery and this must be provided to the Board on request.

Application for Course Accreditation

Course Provider Name: _____

Physical Address: _____

Postal Address if different from above: _____

Contact person: _____

Telephone: _____ Mobile: _____

Email: _____

Website: _____

Course Title: _____

Relevant Unit Standard that Course Aligns to: _____

I have read the enclosed Terms and Conditions for Accreditation and agree to adhere to the requirements set by the Plumbers, Gasfitters and Drainlayers Board ("the Board").

Signature: _____

Name and Title: _____

Date: _____

Please ensure the enclosed checklist and course documentation is supplied with this application

Course Accreditation Checklist

Please ensure that you have supplied the following:

Application Form:

Payment of \$204.45

(Cheques made payable to PGDRITO, or contact Accounts 0800 277 736, or accounts@ito.co.nz for direct credit arrangements)

Course Content:

(Learning Materials/Assessments/Answer Schedule/
Alignment with Unit Standards or guides)

Instructor(s) name(s):

(Provide detail of their qualifications/background and experience)

Detail of the proposed course outcome:

(In brief)

Descriptor detailing course outline, structure and goals

Delivery Medium:

(Contact/ Online/Distance Learning)

Cost of course:

Location(s):

Length of Course:


(Timeline)

Annual Course Schedule:

Suggestions for course accreditation points:

An example of student course evaluation form:

Course Record Template

 Plumbers, Gasfitters and Drainlayers Board					
			Course Provider:		
			Course Code:		
			Course Type:	Plumbing/Gasfitting/Drainlaying (Please circle one)	
			Name of Instructor:		
Date Completed	PGDB Authorisation Number	First Name	Last Name	Achieved (A)/ Not Achieved (NA)	Comments
Please note: Records are to be recorded as (A) Achieved, (NA) Not Achieved or (AB) Absent					
Date sent to the Board:			Number of Practitioners:		

Things to Consider Before Developing a Course Plan

Learning Styles

All human beings have a prominent learning style, which generally falls into one of three categories:

- Visual
- Auditory
- Kinesthetic

Visual learners predominantly learn through reading, writing and looking at diagrams. Presentation of course material is fairly important to the learning process for these people. Professional appearance, grammar, punctuation should be correct in order to be conducive to their learning experience.

Auditory learners predominantly learn through listening, and talking to themselves. When they go to write something down, they tend to speak their words to themselves before they put them to paper. The manner of the course presenter, and other verbal presentations, is important for auditory learners.

Kinesthetic learners predominantly learn by “actually carrying out a physical activity, rather than listening to a lecture or merely watching a demonstration.” They are commonly known as doers and learn from taking part in the instruction; and tend to struggle with learning methods that include reading, writing and listening. Their behaviour may seem disruptive during a course, as they tend to need to play with something while they learn; the instructor needs to accommodate these characteristics by maybe having koosh balls available to be played with during instruction or building practical activities into the course.

It is estimated that most practitioners in the plumbing, gasfitting and drainlaying industries are kinesthetic learners; something the course developer, and course deliverer, needs to keep in mind. Merely using PowerPoint and one-way communication, with a few questions at the end, is not likely to be effective in meeting the learning objectives of the course.

(Information sourced from Wikipedia on 12 February 2010)

Course Trainers

Course trainers contribute just as much to the effectiveness of the course, as does the way the course is developed. An open style body language, and a certain degree of showmanship are necessary, to keep the course attendees' attention. Hugging the laptop or whiteboard, standing continually behind a lectern or desk or on a podium, are all examples that form barriers between the trainer and the course attendees. This in turn creates disenchantment with what is being taught. Maintaining eye contact with course attendees, keeping arms uncrossed and not clutching hands together, will help present a course which is interactive and effective. Getting the trainers to present the course amongst their peers is a good way of building confidence; after all practice makes perfect.

Preliminary Requirements for Preparing an Effective Course Plan

Some good questions to reflect on before writing the course plan are highlighted below. Answering these questions should contribute to the development of a course which is relevant to the trade and delivered at the right level.

Date:

Tutor:

Title of Course:

Links to PGDB Examination Guide and/or Associated Unit Standards:

Which section of the PGDB examination guide and/or associated unit standard does the course relate to the most? See guide: How to Access Unit Standards on the NZQA website.

Prior Knowledge:

What knowledge and skills should course attendees have prior to attending this course? What may need refreshing? For instance, if the course is on waste disposal units, going over how the tailpipe is connected to the waste pipe may be necessary. Consider how the lesson will be introduced. Working out where the course attendees are in their level of knowledge prior to constructing a course plan is always beneficial.

Learning outcomes:

What will course attendees know at the end of this course? (This is where learning objectives are formulated) The best way to construct the learning objectives is by completing the statement, "At the end of the course, course attendees will be able to..." You should come out with no more than six bullet points, highlighting the fundamental reasons for holding the course. Answering the question, "what will course attendees be able to do at the course end?" will also assist in sectioning the course, and developing the course assessment. Once the learning objectives have been developed, transfer them into course information in the outline below, and use them to section the course content.

Focusing on the attendees:

What do course attendees care about most? Why would they be attending this course? Plumbers, gasfitters and drainlayers tend to be passionate about their industry. They tend to like to talk about fundamental industry practices, as well as unique points of a given technology or product. Being able to answer questions, such as "What valves are required on the inlet side of a hot water cylinder?" are a great way to get course attendees talking. They are also a good way to lead into the course material. What "big" questions can the trainer ask that will generate discussion about this topic? What questions can be asked to help students focus on important aspects of this topic?

Activities or tasks:

If most plumbers, gasfitters and drainlayers are kinaesthetic learners who like hands on training, developing a training programme where the delivery is either going to be solely one-way communication or visual, requiring reading and writing, is not likely to be effective. What engaging and worthwhile learning activities and tasks will encourage course attendees to reflect on the course material? Can the use of technology support the accomplishment of the learning objectives, and to what degree? Be aware that too much technology may not be a good thing; particularly for those who have little to do with it. Sometimes the most effective learning can be achieved by triggering discussion amongst respected peers.

Trainer's approach:

How will the trainer support the possible differing learning styles of those attending the course? Here the focus is on the trainer, not the course attendees. They are the ones who are imparting the information, and if they do not undertake the endeavour with enthusiasm and expertise, a barrier to learning will be created. The course attendees will be focusing negatively on the trainer, not the content. The trainer should be varying their teaching approaches in order to make the course interesting and maintain attention of the group.

Evaluating the course and assessing the learning:

How will you ensure that the learning objectives have been achieved? What form of review or testing will be used? Maybe a task which draws out the learning achieved, such as a demonstration, will be appropriate, or a paper test. What level of ability needs to be shown in the testing to ensure the course attendee is competent?

How will you know if the course has been worthwhile for course attendees? If people have unfavourable learning experiences, they tend to do two things: one, they loathe the thought of going back again, and two, they tell others. This is not what you want for your course, or your image.

Materials and resources:

What additional resources and learning material will be required for the course? What technology is required to enhance the course? Kinaesthetic learners like to play as they learn. Koosh balls and other gadgets are good to have readily available.

Course Development Guide

Training Provider:

Enter registered training provider name here

Course Title:

Enter course title here

Associated Unit Standard/ Board Guide:

Enter unit standard and/or Board guide here

To search unit standards there is a guide on the PGDRITO's website, please link to: www.ito.co.nz

To find Board guide, please link to: www.pgdb.co.nz

Learning Objectives:

At the end of the course, course attendees will be able to:

- Identify the relevant legislation, regulations, standards and codes relating to installing a (whatever the course is about).
- Select the necessary tools and equipment for installing a (whatever the course is about).
- Identify the accessories required to install a (whatever the course is about).
- Understand the preparation required for installing a (whatever the course is about).
- Gain knowledge of how to install a (whatever the course is about) correctly.
- Understand what the commissioning requirements are after the (whatever the course is about) has been installed.

(These bullet points are just an example of some learning objectives which could be used in the development of a course, and are the topics for the individual sections of the course. You will see they are the topics of sections 2-7 in the trainer's notes, on the next page.)



Trainer's Notes

#	Activity	✓	Resources	Notes
1.	Course Introduction	✓	PP 1	
1.1	Introduce yourself, giving a brief summary of experience	✓		Sit down.
1.2	If you do not know course attendees, get everyone to introduce themselves, and say where they come from. Whether you know them or not, ask them what they want out of the course	✓ ✓		Stay sitting down for this part, unless they make a comment which is outside "I'm here for CPD." Then get up and go write a comment on whiteboard (this will make those who attend the course feel that you really want to contribute to their development).
1.3	Introduce Course Topic Identify learning objectives For example, "During this course we will cover how to" <ul style="list-style-type: none"> Identify the relevant legislation, regulations, standards and codes relating to installing a (whatever the course is about). Select the necessary tools and equipment for installing a (whatever the course is about). Identify the accessories required to install a (whatever the course is about). Understand the preparation required for installing a (whatever the course is about). Understand what the commissioning requirements are after the (whatever the course is about) has been installed and how the unit works. 	✓	PP 2	Stand up for this sub-section. Do not have arms folded or hands clenched. Use hand motions to emphasise verbal speech.
1.4	Show course attendees their workbooks and invite them to fill in the blanks as course progresses.		Copy of workbook	
2.	Identify relevant legislation, standards, and codes relating to installing a (whatever the course is about)	✓	PP 3	Keep PP up for duration of section.
2.1	Ask course attendees to tell you what legislation, standards and codes they think would be required for installing a (whatever the course is about). Is there anything missing? Fill in blanks using suggestions, such as: How about...? Perhaps ... has some relevance.	✓		Write answers on whiteboard. Course attendees transpose into workbooks. Course attendees should be nodding and agreeing with you, as you proceed Whatever you do, if they give you the wrong answer, DO NOT say "No!" Instead ignore it and use a diversionary tactic such as "How about..."
2.2	Check answers to questions #, # and # of the course assessment, which will be completed at end of training delivery.	✓		This ensures learning objective has been achieved.
3.	Select the necessary tools and equipment for installing a (whatever the course is about)	✓	PP 4	Keep PP up for duration of section.
3.1	Instigate a discussion among course attendees about what they think are the necessary tools and equipment are required. Is there anything missing? If so, fill in the blanks using same approach as in 2.1.	✓ ✓		Write answers on whiteboard. Course attendees transpose into workbooks.

3.2	Check answers to questions #, # and # of the course assessment, which will be completed at end of training delivery.			This ensures learning objective has been achieved.
4	Identify the accessories required to install a (whatever the course is about).	✓	PP 5	
4.1	Discuss various accessories highlighted on power point presentation.		PP 6 Samples	The same diagram is in workbooks for course attendees to copy into.
4.2	Check answers to questions #, # and # of the course assessment, which will be completed at end of training delivery.			This ensures learning objective has been achieved.
5.	Understand the preparation required for installing a (whatever the course is about).	✓	PP 7	
5.1	List what necessary preparation is required of the surrounding area before installation. <ul style="list-style-type: none"> • Power supply • Water supply • Pour concrete • Required measurements of space • Etc, etc 	✓	Workbooks	
5.2	List what necessary preparation is required to the unit before installation.	✓		
5.3	Check answers to questions #, # and # of the course assessment, which will be completed at end of training delivery.			This ensures learning objective has been achieved.
6.	Gain knowledge of how to install (whatever the course is about correctly).	✓	PP 8	
6.1	Discuss the steps of installation, highlighting sequence of events and correct practice.	✓	Workbook	
6.2	Check answers to questions #, # and # of the course assessment, which will be completed at end of training delivery.			This ensures learning objective has been achieved.
7.	Understand what the commissioning requirements are after the (whatever the course is about) has been installed and how the unit works.	✓		
7.1	Play DVD. Discuss the sequence of events for installing a (whatever the course is about).	✓ ✓	DVD	
7.1	Check answers to questions #, # and # of the course assessment, which will be completed at end of training delivery.			This ensures learning objective has been achieved.
8.	Assessment			
8.1	Distribute hard copy tests. All course material is to be removed from table tops. Allow course attendees five minutes reading time, then one hour to complete test.	✓	Hard copy test	There are 20 multi-choice answers, 3 short answer questions, and one long answer question. Assessment should take no longer than one hour to complete.

Examples of Power Point Slides for a Course

(It is recommended to keep use of powerpoint to what is absolutely necessary)

PP 1



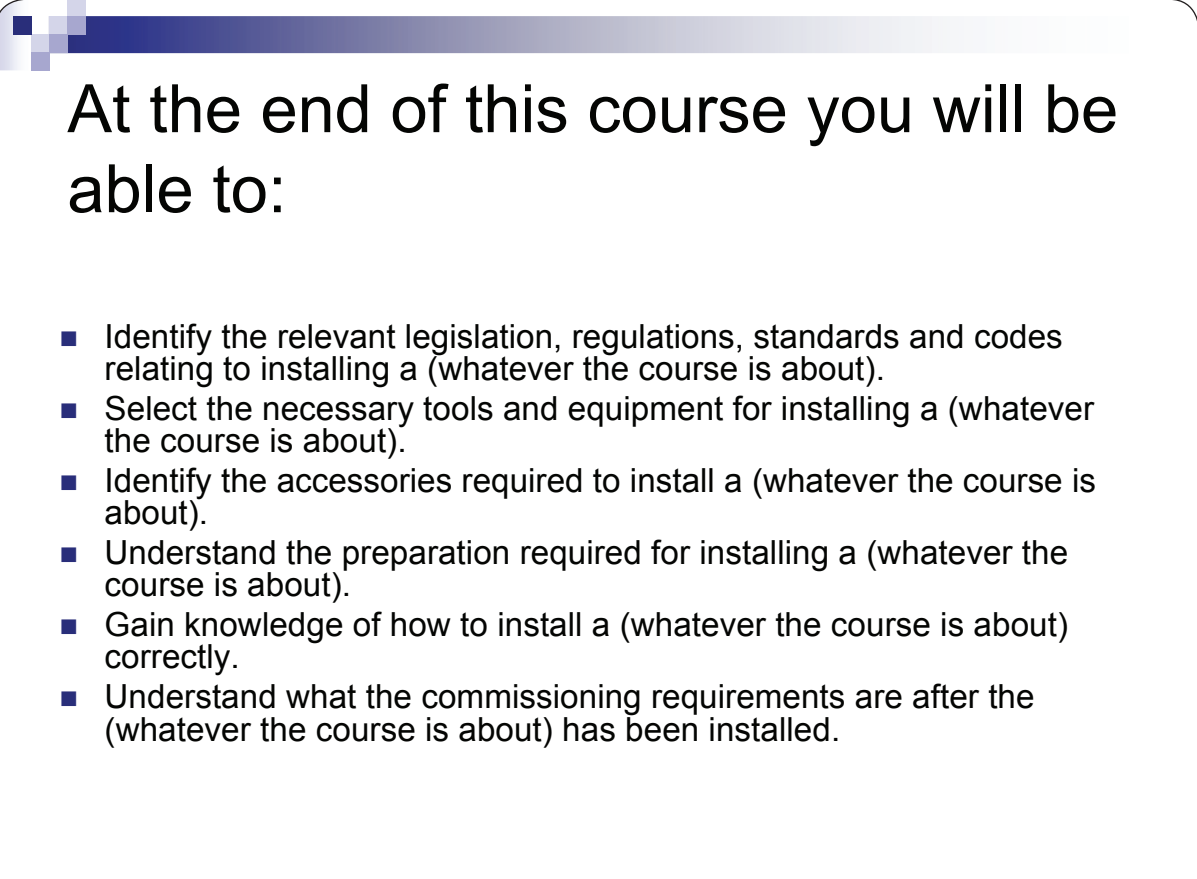
A PowerPoint slide with a light blue background and a dark blue header bar. The header bar contains the text "Course Name" in white. Below the header bar, the text "Training Provider" and "Date" is displayed in black.

Course Name

Training Provider

Date

PP 2



A PowerPoint slide with a light blue background and a dark blue header bar. The header bar contains the text "At the end of this course you will be able to:" in white. Below the header bar, a list of six bullet points is displayed in black.

At the end of this course you will be able to:

- Identify the relevant legislation, regulations, standards and codes relating to installing a (whatever the course is about).
- Select the necessary tools and equipment for installing a (whatever the course is about).
- Identify the accessories required to install a (whatever the course is about).
- Understand the preparation required for installing a (whatever the course is about).
- Gain knowledge of how to install a (whatever the course is about) correctly.
- Understand what the commissioning requirements are after the (whatever the course is about) has been installed.

PP 3

1. Relevant legislation, standards and codes for installing a (whatever the course is about)

PP 4


2. Necessary tools and equipment for installing a (whatever the course is about)

PP 5

3. Accessories required for installing a (whatever the course is about)

PP 6

Accessories for installing a whatever the course is about



This is a picture of an installation diagram for installing (whatever the course is about). It also lists the accessories required for the installation and where in the installation they go.

4. Preparation required for installing a (whatever the course is about)

- Preparing the site
- Preparing the unit

5. Installing a (whatever the course is about) correctly

This could be a picture showing the steps in installing the (whatever the course is about). Pictures are necessary as well as words to cater to the kinesthetic learners.

PP 9

6. Getting it started & how the
(whatever the course is
about) works

PP 10

Course Name

Assessment – Multi-choice
test

Course Assessment

The course assessment is to ensure that learning objectives have been met. These are normally some form of test that expands on the objectives set.

Assessments can either be written, or practical.

For written assessment, questions can be multi-choice, short answer or long answer.

For practical assessment, they could be carried out individually, in pairs or groups.

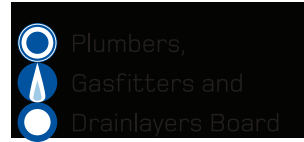




Preparing an Interactive Workbook

This guide is an example only.
It is not to be used as a template
for course development.

Course Name (whatever the course is about)



Training provider insignia should be displayed somewhere like this PGDB logo.

Maybe include here imagery of what the course is about.

Example Only

Workbook

Name:.....

Company:.....



Workbook template developed by Rachel Blackaby

(Course Name)

Learning Objectives

During this course we will cover how to:

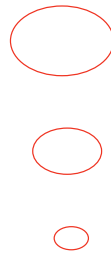
- Identify the relevant legislation, regulations, standards and codes relating to installing a (whatever the course is about).
- Select the necessary tools and equipment for installing a (whatever the course is about).
- Identify the accessories required to install a (whatever the course is about).
- Understand the preparation required for installing a (whatever the course is about).
- Gain knowledge of how to install a (whatever the course is about) correctly.
- Understand what the commissioning requirements are after the (whatever the course is about) has been installed and how the unit works.

Notes

Example Only

Workbook template developed by Rachel Blackaby

Fill in this mind map with your answers



Example
Only

List the tools and equipment needed for installing a (whatever the course is about)



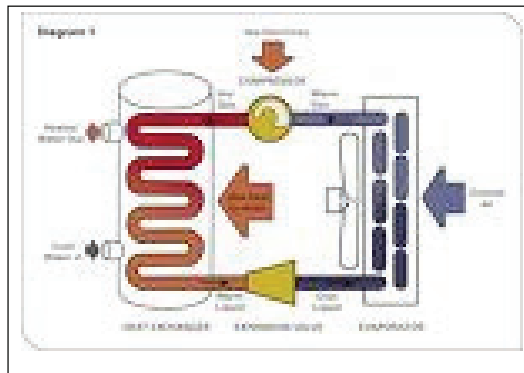
1.
2.
3.
4.
5.
6.
7.
8.
9.
10.
11.
12.
13.

Example
Only

Maybe slot some imagery of an appliance in here.

Accessories Required to Install a (whatever the course is about)

Maybe including an installation diagram here and leaving spaces where course attendees can fill in the blanks of where the accessories go. For example, if a training provider wished to deliver a course on heat pump water heaters, they could use this diagram and leave out the labels.



Example Only

Workbook template developed by Rachel Blackaby

Preparing the Site

The installer must follow these six steps to prepare the site:

1.
2.
3.
4.
5.
6.

Preparing the Unit

The installer must follow these four steps to prepare the unit before installing it:

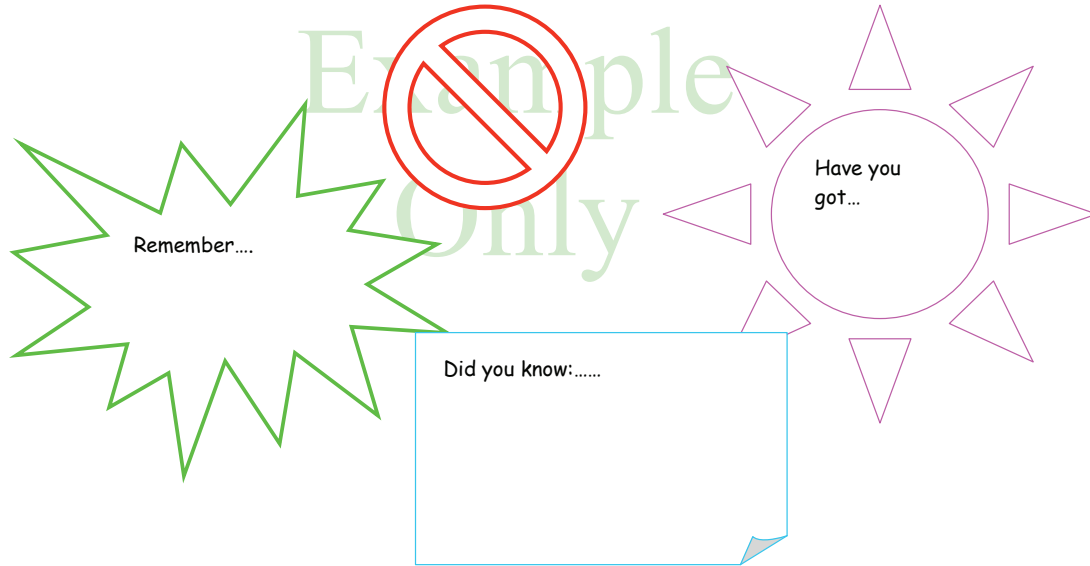
1.
2.
3.
4.

Workbook template developed by Rachel Blackaby

Installing a (whatever the course is about)

Copying the installation instructions, where course attendees do not have to write on them, is a good idea. It means that they will not mistakenly write down the wrong thing; which could lead to warranty complications, or an element of risk for the training provider.

Using starbursts, and other shapes for considerations helps to keep the workbook interesting. For example



Workbook template developed by Rachel Blackaby

Commissioning Requirements

How unit works

Example
Only

Warranty

Workbook template developed by Rachel Blackaby