National Certificate in Building, Construction and Allied Trades Skills (BCATS)

Receive instructions and communicate information in relation to BCATS projects

Unit Standard – 24357

Level 2, Credit 4

Name: _____

Contents

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What you need to do

By the end of this module, you should be able to:

- receive instructions in a construction environment; and
- communicate information related to BCATS projects.

How you will be assessed

You will be assessed by a combination of your communication skills and written work.

You need to show your teacher/tutor that you can:

- understand what instructions are for;
- read/listen to spoken, written, and drawn instructions, and communicate with your teacher/tutor so you understand them or check anything you're not sure about;
- work out who you need to communicate with in a construction environment, for example, your employer, supervisor, co-workers, clients, etc.;
- use spoken, written and drawn communication to receive and pass on information;
- ask for information or help when you need it;
- record and report information; and
- exchange information that fits the situation, occasion and people involved.

Glossary of Terms

Term	Meaning
Abbreviations	Shortened versions of words used to identify construction related information and features
Communication	Communication is a two-way process that involves the exchange of thoughts, messages or information through a common system of speech, signals, writing, graphics or behaviour
Instructions	Information, directions or acquired knowledge
Specifications	Documented instructions (oral, written, and graphic) that may include any of the following: manufacturer's specifications, recommendations or technical data sheets; material specifications; specifications from a specialist source such as an architect, designer, engineer or a supervisor; site or work specific requirements.
Terminology	A vocabulary of technical terms appropriate to a particular trade
Working drawings	A set of drawings which provide the necessary information to complete a project

Introduction

Definition

Communication is a two-way process that involves the exchange of thoughts, messages or information through a common system of speech, signals, writing, graphics or behaviour.

To be successful in the construction industry you need to be able to communicate and interact with people so that you can:

- receive, interpret and act on instructions;
- give clear and easily interpreted instructions;
- be part of the team;
- get the project done to the required standard, efficiently and in the allotted time; and
- be more confident.

Poor communication causes:

- mistakes;
- poor working environments; and
- breakdowns in relationships between customers, supervisors and workmates.

Effective communication requires each party to:

- understand the requirements of the other party;
- meet the requirements of the other party;
- take responsibility for confirming that the information has been correctly received; and
- take responsibility for confirming that the information has been correctly interpreted.

Communication Methods

Communication is the transfer of information from one person to another.

Verbal communication

Using the voice to pass on information or ask questions in a manner that is:

- relevant to the other person's needs;
- straight to the point – clear and concise; and
- structured – presented in a logical sequence.

When the information has been delivered wait a moment so the recipient has time to clarify anything that they don't understand.

Use open-ended questions to confirm that the recipient has correctly interpreted what has been said.

Written or graphic communication

In the construction industry, written information usually relates to a project or training requirements.

When you write information of any sort, make sure it is:

- legible – easily read;
- accurate; and
- submitted on time.

Increasingly, the construction industry is relying on modern communication media (email, cell phones. tablets, apps, etc) to relay information, e.g. digital photos.

Project requirements – include:

- time sheets;
- costing and material requirements;
- health and safety reports; and
- messages for other people on site.

Any questions about aspects of the project are best presented in a simple sketch backed up by notes.

Non-verbal communication

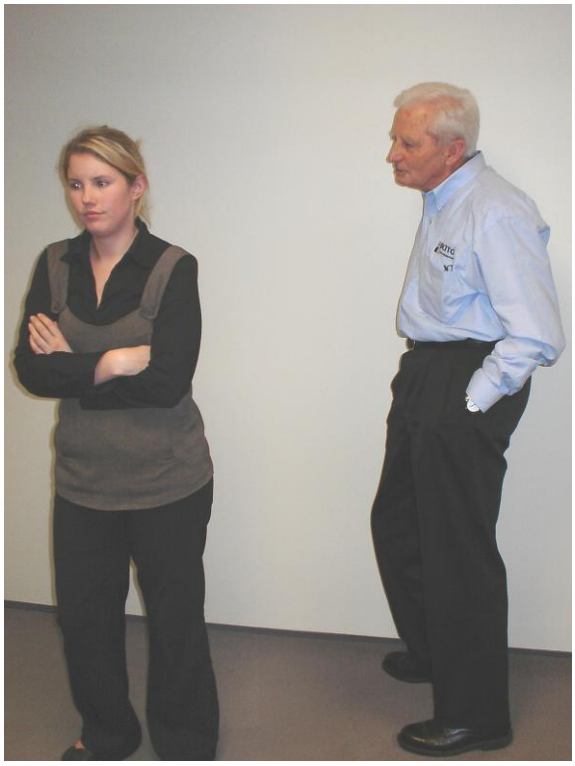
About 80% of human communication relies on visual appearance, body language, positioning, status and facial expression.

Appearance

A person who is well presented and tidily dressed will create a more favourable impression of themselves and the likely quality of their work

Body language

A person who stands straight, maintains good posture, smiles, communicates with their hands and maintains eye contact tends to come across as confident and relaxed.



Negative body language – no communication here.

Positive body language. Eye contact, open gestures, standing straight.

Positioning

As a general rule, people who know each other well can stand closer without feeling uncomfortable. If you are meeting someone for the first time in a BCATS environment, it is best to maintain a professional physical distance. (Considerations such as gender, culture, and status will influence what this distance is.)

Examples of appropriate positioning for conversations in the work situation.

Initial handshake

Receiving specifications. Listening actively and taking notes

Confirming specifications

Hand signals

People in the construction industry frequently rely on hand signals for relaying information about basic tasks when they can see but not hear each other. However, it is critical that both parties (the signaller and the receiver) have the same understanding of what each signal means. A quick check before commencing the task generally clarifies any issues.

It is important to ensure that there is always a clear line of sight between the signaller and the receiver.

Listening

In the construction industry, it is important that employees have listening skills that are sufficiently well developed to allow them to gain a complete and accurate understanding of spoken information or instructions so that they can act on them or pass them on to a third party.

Listen actively is the skill of maintaining an interest in what is being said. The techniques include:

- taking notes;
- eye contact;
- asking question; and
- nodding to acknowledge that what is being said has been heard and understood.

Displaying interest like this helps to increase people's trust in you.

Receiving Information or Instructions

In the construction industry, an instruction is information on how to do or to use something. Being able to receive and interpret an instruction is essential and, in some cases, a matter of life and death.

Instructions will come in many forms:

- written – job specifications, messages,
- graphic – working plans, descriptive sketches, digital photos,
- verbal – over the phone, supervisor instructions, phone calls, and
- non-verbal – hand signals, body language.

Information and instructions will come from a variety of people in the workplace, such as:

- employer
- supervisor
- co-workers
- tradespeople
- suppliers

The way you relate to each individual or group will be different, but if you are to do your job well, you will need to establish an effective communication relationship with each.

There are three key stages in receiving information or instructions:

1. reading or listening to what is being said or asked;
2. checking to clarify anything that is unclear or not understood; and
3. confirming back to check that the information has been correctly understood or interpreted.

Taking notes, to assist with understanding and confirming the requirements of the project, is good practice when receiving information or instructions.

Activity 1

Using role plays, or another suitable method, demonstrate effective communication and listening skills in 3 situations associated with receiving job specifications or instructions.

- Evaluate each other's performance and provide constructive comments.
- Focus on body language and stance.

Scenarios could include:

- applying for a project;
- meeting a customer or new supervisor;
- receiving instructions (emphasis on effective listening techniques and body language); or
- asking questions (emphasis on being assertive, confident and polite).

Identify people who present themselves well. What makes them different from others? How do they stand and speak?

By the end of this activity you will be expected to demonstrate competent listening and communication skills. These are needed to receive job specifications or instructions.

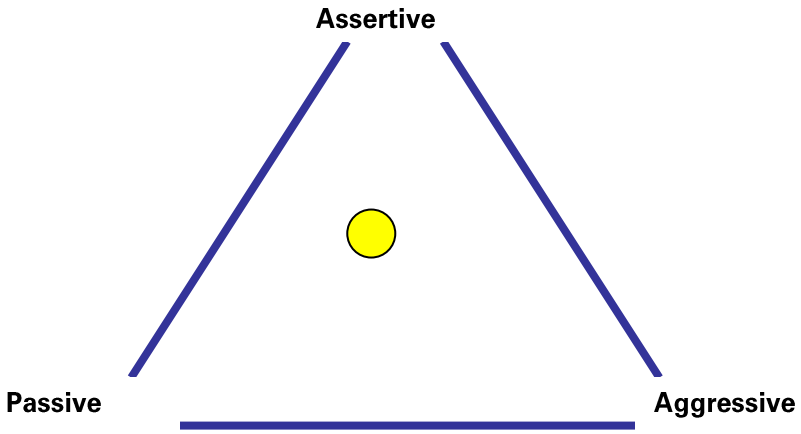
Barriers and Aids to Effective Communication

Barriers to effective communication are situations, practices, languages and other obstacles that reduce the ability of one person to clearly convey their message to another person.

Personality traits

Personality traits are distinguishing qualities or characteristics of a person's character that generally determine how that person is likely to respond and communicate in different situations. These traits can aid or impede effective communication.

The diagram below illustrates the three main personality traits.



Most people have a combination of all three traits; however, one trait is usually more dominant. The way people react and communicate in different situations is often determined by their dominant personality trait.

- Predominantly passive personality will generally avoid any situation that is confrontational or that could demand leadership or responsibility.
- Predominantly aggressive personalities will often use confrontation as a means to distance themselves from responsibility or accountability.
- Predominantly assertive people will generally exude confidence and will deal with issues effectively and in a non-confrontational manner.

Activity 2

1. Describe the way people with each of the personality types is likely to respond to each of the following situations. Each question will have 3 answers.

- Meeting with a customer for the first time.
- Visiting the house of a client.
- Being blamed for damage to a machine caused by a workmate.
- Being paid for fewer hours than have been worked. (Meeting with the supervisor to raise the issue.)

2. Use each of the dominant personality traits, Passive/Aggressive/Assertive, in role plays, or a similar method, to explore each of the scenarios above through to a logical conclusion.

3. Describe the characteristics of the following personality types:

Passive:

Aggressive:

Assertive:

4. Identify a way of dealing with each situation so that the desired result is achieved.

Meeting with a customer for the first time.

Visiting the house of a client.

Being blamed for damage to a machine caused by a workmate.

Being paid for fewer hours than have been worked. (Meeting with the supervisor to raise the issue).

5. List 5 key qualities displayed by an assertive person.

Long chain of command

A long chain of command, or line of people through which information/instructions are passed, can lead to misinterpretation or an accumulation of errors that can result in the receiver getting misinformation. This occurs because the techniques for effective communication are not available to the receiver, who cannot easily verify or query the original information because they receive them second or third hand.

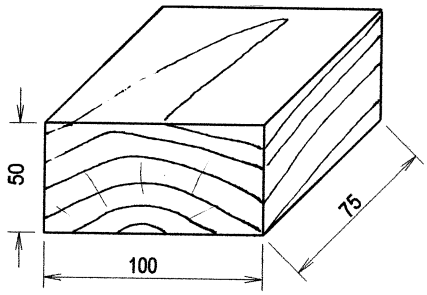
Same words – different meaning

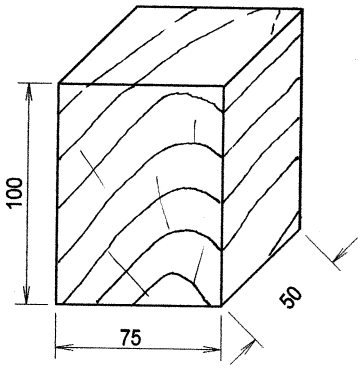
Specifications or instructions that come from outside the company can say the same thing but have entirely different meanings.

Example: Recently, an exporter of wooden components received an order from Japan for: **25,000 pieces 75 x 100 x 50**.

The blocks were cut and delivered, but the order was rejected because the grain was going in the wrong direction so the customer refused to pay.

Reason: In New Zealand, dimensions are read as: Length x Width x Height.
In Japan, dimensions are read as: **Width x Height x Length.**





Checking and confirming the instructions and producing a quick sketch of the order is good practice because it assists with confirming that an interpretation of the instructions is accurate.

Activity 3

Interpret Instructions

The instruction is:

> *Cut 20 blocks of radiata pine at 100 x 80 x 70, round the corners and drill a 10mm hole through the centre.*

In the space below, sketch these instructions – compare answers with others in the class and explain any differences in interpretation.

Trade-specific terminology

The construction industry requires people from a wide range of sectors to work together, contributing their specialised expertise, while also working with customers who may know nothing about the trade.

Each sector has its own special language. Learning the different 'languages' through using good communication skills (such as questioning and clarifying) are essential if all parties are to receive and correctly interpret all information.

Care must also be taken when communicating with customers or people who are not familiar with the terminology of the trade or workplace. Many products and processes have abbreviations and specifications that make little sense to the general public.

New products, with their new abbreviations, are constantly being developed and must be learnt. For example, the phrase **1.200mm x 0.200m x 25mm Rad, Fact, D4S** makes perfect sense to a tradesman, but is likely to make little sense to a member of the general public or someone from a sub-trade.

Personality clash

Communication is all about people interacting with other people. Personality clashes can get in the way of effective information transfer. There will always be people who just do not get along and their behaviours can lead to a complete breakdown in communication, causing a very unpleasant working environment. This can impact on the company through lost contracts and damaged reputation. While personality clashes cannot be avoided, they can be overcome or managed with a professional attitude, courtesy and dealing with issues in a proactive or assertive manner.

Language barriers

New Zealand is home to people from an increasingly diverse range of cultures. This impacts on industry because English is a second language for many. When a non-English speaker is given an instruction they often have to hear it in English then translate it into their native language to understand it. This takes time and can lead to incorrect interpretation. To avoid mistakes, keep communication simple, speak slowly, allow time for them to work out what is required and encourage them to confirm the instruction so that their understanding can be checked.

Distraction

Having a very clear idea of the information that is to be transferred helps the speaker/deliverer to remain focused on the task at hand and to avoid straying off the subject.

Communication Specific to the Workplace

First impression

There is never a second chance to make a good first impression. In just 10 seconds of their first interaction, total strangers form opinions about each other based on how each person looks and behaves. This first impression, or communication by appearance, usually influences their perception of a person's ability or fit for the required task.

When dealing with or meeting people, set professional standards:

- **Be well presented:** Dress according to the expectations of the people and situation involved.
- **Introductions:** When first meeting someone, establish the identity of that person, then identify yourself, who you are representing and the purpose of your visit.
- **Be prepared:** Be well organised, know why the meeting is taking place and display confidence and an interest in the work. Always carry a note pad and pen or a device where you can record information.
- **Listen actively:** Active listening is the skill of maintaining an interest in what is being said. Active listening techniques include:
    - eye contact;
    - asking questions;
    - nodding to acknowledge that what is being said has been heard and understood
    - taking notes;

Displaying interest like this helps to increase people's trust in you, which helps develop good communication.

Job Specifications and Communication

Throughout the construction industry, instructions about what the project is, how it is to be done, materials, finishes, etc, are made available as job specifications before the project begins.

Job specifications can be:

1. drawn;
2. written;
3. verbal; or
4. a combination of ALL of the above and, in many cases, via a modern communication media (e.g. email, mobile phone).

Drawn information includes:

- detailed plans, drawings and elevations; and
- quick sketches or diagrams.

Written information includes:

- handwritten instructions and explanations;
- typed instructions and explanations;
- faxed or mailed instructions; and
- cutting lists.

The problem with delivering instructions in a drawn or written format is that the receiver must be able to read and interpret the information as the writer intended because, often, the writer may not be available to answer questions.

Verbal instructions can either be given in person or over the phone.

Problems with verbal instructions can include:

- instructions not being clear or specific;
- the receiver not listening effectively; and
- the receiver not taking notes and, therefore, forgetting what they have been told.

A combination of written and verbal methods normally provides the best results because effective communication is a two-way process that requires all parties to give, receive and interpret information.

Job specifications in detail

The successful completion of any project will require careful preparation, planning and attention to detail prior to and during construction. The ability to read and understand the information contained in the associated documentation is, therefore, very important.

It is also important to be aware of the different types of specifications that can be used when producing a product, such as:

1. working drawings;
2. cutting lists;
3. piece part drawings;
4. setting sheets;
5. production plans;
6. quality agreement; and
7. other written information/memos relating to the general construction site/work place requirements.

Working drawings or plans: are documents containing construction details – drawings, dimensions and elevations for the project.

A wide range of drawing methods or projections can be used to communicate precise information. These can range from a simple drawing of a single component through to a large number of complicated and detailed drawings for a major construction project.

Cutting lists: are an itemised list of materials, including the name, size, length and number of items. They are used for pricing and completing a project.

Templates, storey rods: are patterns used for the layout and construction of a project where particular accuracy is required.

Setting sheets: specific instructions on how to set up or modify a machine to produce a specialised product. This may include an allocation of time for the operation and can also be used for pricing a project.

Production plans: are the documented processes that must to be followed in order to produce a finished product. A production plan can be written specifications, oral instructions or graphic representations.

Quality agreement: a detailed and documented interpretation of the customer's requirements. It can be used to set out the standard and quality of work required and may detail the grade of material, standard of finish, quality of hardware and other requirements that will ensure the finished product meets the customer's expectations.

Using the job specifications

To ensure the project matches exactly the specifications, it is important to:

1. read through the written specifications with the person providing the information and clarify what is required;
2. check that the working drawings and written specifications provide all the required information;
3. listen to the oral instructions and check that:
    - they match the written specifications;
    - they are easily understood and clearly state what is required;
    - it is possible to visualise the finished product;
    - the materials to be used are clearly identified and appropriate;
    - health and safety requirements have been identified;
    - the required equipment has been identified;
    - any additional instructions or training requirements have been identified;
    - any additional help, information or supervision requirements have been identified; and
    - the expected duration of the project and the completion date have been determined; and
4. confirm the requirements of the Job Specifications with the person who provided the information to ensure that all the information needed to complete the task is available.

Reducing Barriers to Effective Communication

Being clear about the purpose behind the communication, or the reasons for the information or task, will significantly reduce barriers to effective communication.

Asking questions

Sometimes instructions that seem clear to the person delivering them can be confusing to the receiver. This often occurs because the sender has assumed that the receiver has as the knowledge required to correctly interpret a brief or vague statement. Asking questions is the best way to clarify the situation.

Example: "Go and tidy up that timber."

Questions that will help to establish exactly what the speaker wants include:

- Which timber?
- What do you want done with it?
- Who can I get to help?
- Where do you want it stacked?
- When do you want the project completed?

The questions above are all open-ended questions. This form of question starts with **what, where, when, why, how** or **who.** They can never be answered with a simple **yes** or **no** so they help to draw out additional information.

Example: What timber do you want me to use for constructing the cabinet and **how** long do I have to complete the project?

Closed questions start with **is, will, do, have, can** or **are**. They provide part of the answer so can be answered with **yes** or **no**. They are useful when clarifying a **single** piece of information.

Example: "Is this the right timber for the project?"

Leading questions suggest the answer or contain the information that the questioner is looking for. They should be avoided because they prevent the person answering from saying what they actually want to say.

Example: "I have done that wrong, haven't I?"

Confirming job specifications/instructions

To ensure that all parties involved in the project are clear about exactly what is to be done it is good practice to **confirm** that all instructions have been received and understood. This can be done by repeating the **instructions** to the supervisor/customer using **notes and diagrams,** to support the explanation. It is also good practice to wait for the supervisor/customer to **confirm** that the interpretation of instructions is accurate or to **correct** anything that is not right. This process ensures that all parties know exactly what is going to be done, how **well** it is going to be done and **when** completion can be expected.