# Bloom's Taxonomy

(Taken from: www.learningandteaching.com and businessballs.com)

Bloom's Taxonomy provides a structure for planning, designing, assessing and evaluating training and learning effectiveness. Determine the main domain of learning the session/lesson/topic and use the suggested verbs to construct the learning outcomes, starting at the base and moving upwards. The Outcomes should be SMART (Specific, Measurable, Achievable, Realistic and Time Bound).

1. **Cognitive domain** (intellectual capability, ie., **knowledge**, or **'think'**)
2. **Affective domain** (feelings, emotions and behaviour, ie., **attitude**, or **'feel'**)
3. **Psychomotor domain** (manual and physical skills, ie., **skills**, or **'do'**)
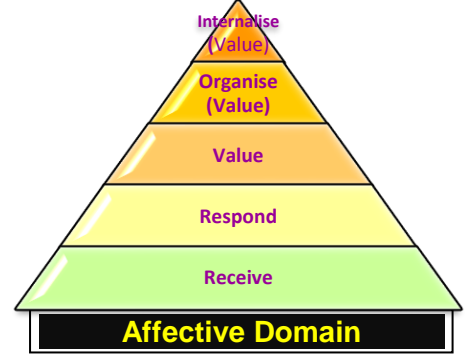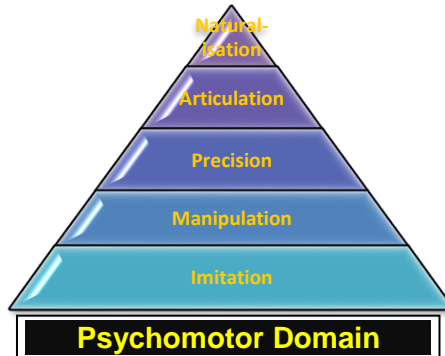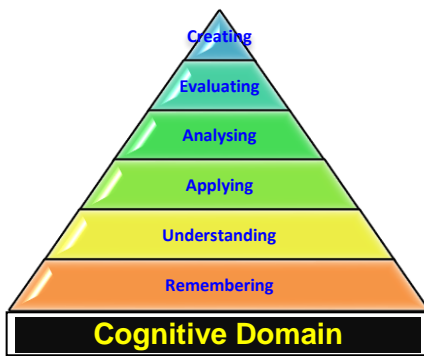
Cognitive Domain

Creating	develop, plan, build, create, design, organise, revise, formulate, propose, establish, assemble, integrate, re-arrange, modify
Evaluating	review, justify, assess, present a case for, defend, report on, investigate, direct, appraise, argue, project-manage
Analysing	analyse, break down, catalogue, compare, quantify, measure, test, examine, experiment, relate, graph, diagram, plot, extrapolate, value, divide
Applying	use, apply, discover, manage, execute, solve, produce, implement, construct, change, prepare, conduct, perform, react, respond, role-play
Understanding	explain, reiterate, reword, critique, classify, summarise, illustrate, translate, review, report, discuss, re-write, estimate, interpret, theorise, paraphrase, reference, example
Remembering	arrange, define, describe, label, list, memorise, recognise, relate, reproduce, select, state

Psychomotor Domain

Naturalisation	design, specify, manage, invent, project-manage
Articulation	construct, solve, combine, coordinate, integrate, adapt, develop, formulate, modify, master
Precision	demonstrate, complete, show, perfect, calibrate, control,
Manipulation	re-create, build, perform, execute, implement
Imitation	copy, follow, replicate, repeat, adhere

Affective Domain

Internalise Values	act, display, influence, solve, practice,
Organise Values	build, develop, formulate, defend, modify, relate, prioritise, reconcile, contrast, arrange, compare
Value	argue, challenge, debate, refute, confront, justify, persuade, criticise,
Respond	react, respond, seek clarification, interpret, clarify, provide other references and examples, contribute, question, present, cite, become animated or excited, help team, write, perform
Receive	ask, listen, focus, attend, take part, discuss, acknowledge, hear, be open to, retain, follow, concentrate, read, do, feel

What are the PLTS

QCA developed a framework for describing personal, learning and thinking skills (PLTS) that applies to learners. The personal, learning and thinking skills framework comprises six groups:

- independent enquirers - creative thinkers - reflective learners
- team workers - self-managers - effective participants.

These generic skills, together with the functional skills of English, mathematics and ICT, are essential to success in life, learning and work.

Working with the PLTS framework

For each group of PLTS, a focus statement sums up the range of skills and qualities involved. This is accompanied by a set of outcome statements that are indicative of the relevant skills, behaviours and personal qualities. Each group of skills is distinctive and coherent. The groups are also interconnected and learners are likely to encounter skills from several groups in any one learning experience. To develop independence, learners need to apply skills from all six groups in a wide range of contexts.

The six areas of the PLTS framework

Independent enquirers

Focus: Young people process and evaluate information in their investigations, planning what to do and how to go about it. They take informed and well-reasoned decisions, recognising that others have different beliefs and attitudes.

Young people:
- identify questions to answer and problems to resolve
- plan and carry out research, appreciating the consequences of decisions
- explore issues, events or problems from different perspectives
- analyse and evaluate information, judging its relevance and value
- consider the influence of circumstances, beliefs and feelings on decisions and events
- support conclusions, using reasoned arguments and evidence.

Team workers

Focus: Young people work confidently with others, adapting to different contexts and taking responsibility for their own part. They listen to and take account of different views. They form collaborative relationships, resolving issues to reach agreed outcomes.

Young people:
- collaborate with others to work towards common goals
- reach agreements, managing discussions to achieve results
- adapt behaviour to suit different roles and situations, including leadership roles
- show fairness and consideration to others
- take responsibility, showing confidence in themselves and their contribution
- provide constructive support and feedback to others.

Effective participants

Focus: Young people actively engage with issues that affect them and those around them. They play a full part in the life of their school, college, workplace or wider community by taking responsible action to bring improvements for others as well as themselves.

Young people:
- discuss issues of concern, seeking resolution where needed
- present a persuasive case for action
- propose practical ways forward, breaking these down into manageable steps
- identify improvements that would benefit others as well as themselves
- try to influence others, negotiating and balancing diverse views to reach workable solutions
- act as an advocate for views and beliefs that may differ from their own.

Self managers

Focus: Young people organise themselves, showing personal responsibility, initiative, creativity and enterprise with a commitment to learning and self-improvement. They actively embrace change, responding positively to new priorities, coping with challenges and looking for opportunities.

Young people:
- seek out challenges or new responsibilities and show flexibility when priorities change
- work towards goals, showing initiative, commitment and perseverance
- organise time and resources, prioritising actions
- anticipate, take and manage risks
- deal with competing pressures, including personal and work-related demands
- respond positively to change, seeking advice and support when needed
- manage their emotions, and build and maintain relationships.

Reflective learners

Focus: Young people evaluate their strengths and limitations, setting themselves realistic goals with criteria for success. They monitor their own performance and progress, inviting feedback from others and making changes to further their learning.

Young people:
- assess themselves and others, identifying opportunities and achievements
- set goals with success criteria for their development and work
- review progress, acting on the outcomes
- invite feedback and deal positively with praise, setbacks and criticism
- evaluate experiences and learning to inform future progress
- communicate their learning in relevant ways for different audiences.

Creative thinkers

Focus: Young people think creatively by generating and exploring ideas and making original connections. They try different ways to tackle a problem, working with others to find imaginative solutions and outcomes that are of value.

Young people:
- generate ideas and explore possibilities
- ask questions to extend their thinking
- connect their own and others' ideas and experiences in inventive ways
- question their own and others' assumptions
- try out alternatives or new solutions and follow ideas through
- adapt ideas as circumstances change.