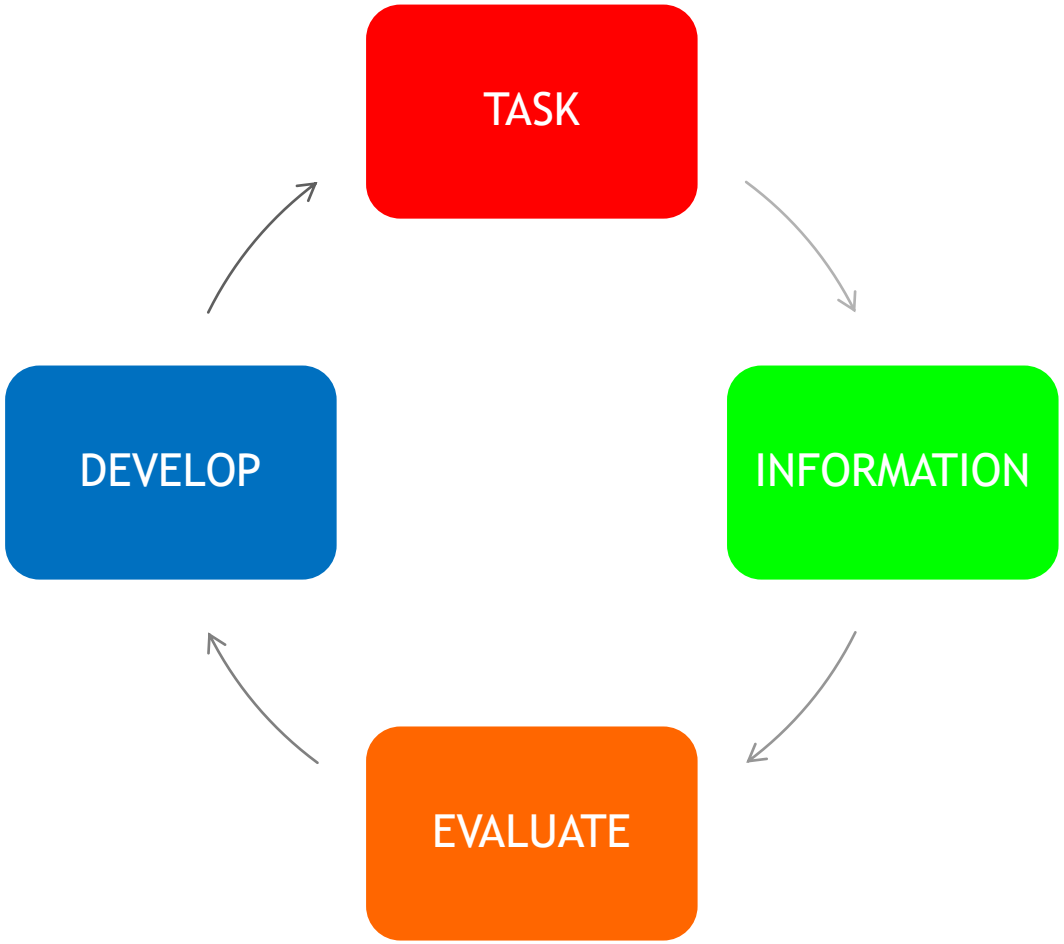
Teaching and Learning

Performance Analysis - TIED Model



Task

A clear task should be set by the instructor, and understood by the client.

It may be a part of a larger task or goal, for example the overall lesson aim, but should be the only task focused on at that moment.

Information

Both the instructor and the client can gather information on the task. This stage is purely gathering the information, not evaluating it or applying it to the task. Enough information needs to be gathered in order for the evaluation to be effective.

- Observation
- Feelings
- Lines in the snow
- Sounds
- Video

Evaluation

With the information gathered, the evaluation stage picks out what is relevant in relation to the task set and makes a judgement on how successful the client was.

The information can be compared to a ‘perfect model’ to help with the analysis and deciding what to choose to focus on.

“**What** would I change in the performance if I could?”

“**Why** is the performance not as we would like it?”

Develop

The information gathered and the evaluation of that information informs the development stage of the TIED model.

The instructor and the client agree on how to change the performance to match the ‘perfect model’ either by repeating the task or by using a new one.

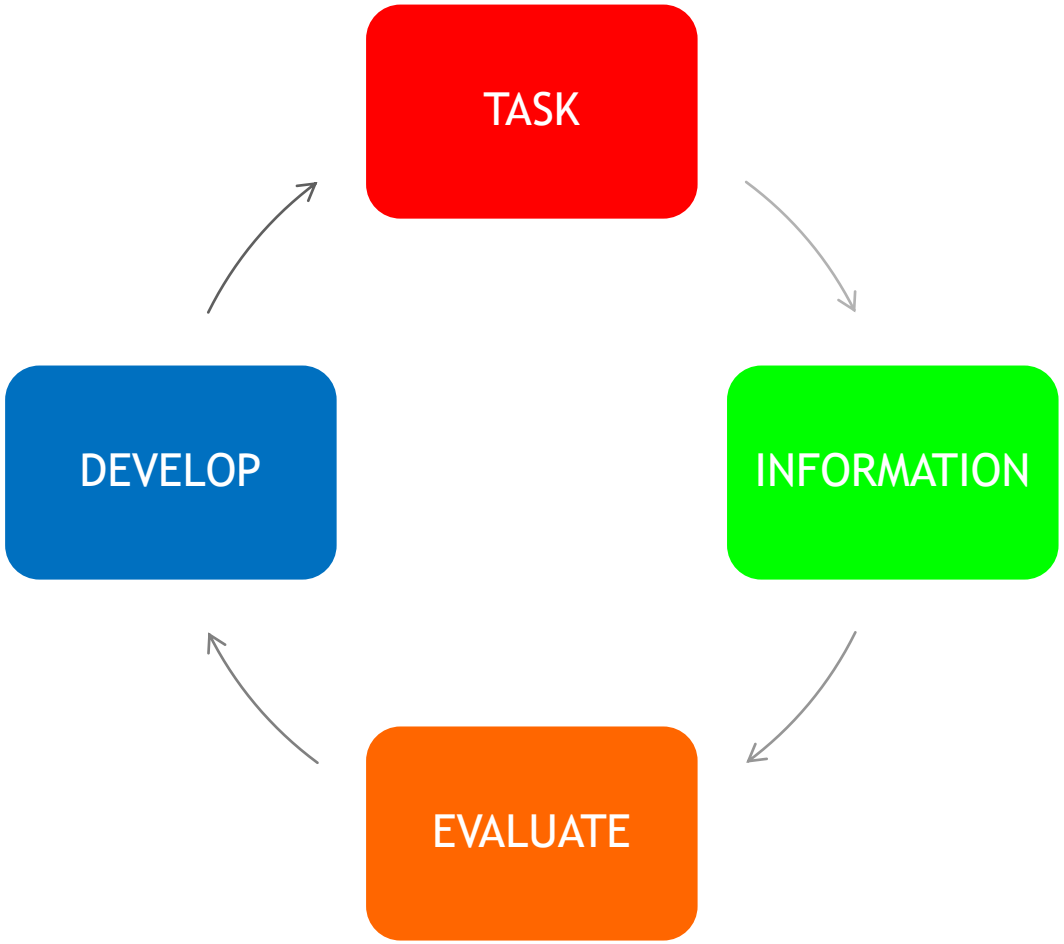
Unsuccessful outcome:

- Repetition lets the client have another go but with the information on how to improve fresh in their mind. This is a common occurrence as most tasks should not be achieved first time every time. If this is happening, refresh your knowledge on goal setting principles.
- The task is altered in order to achieve success e.g. made easier / slower / adapted in some way

Successful outcome:

- Repetition allows reinforcement; remember there is always value in repeating success in order to make the learning permanent. Just because they’ve done it once doesn’t mean they can do it again and again perfectly
- The task is altered in order to make achieving success harder e.g. faster / timed / move on to a different task as the previous is now finished

Performance Analysis - TIED Model



Learners - TIED Model

"Learning is a process combining cognitive, environmental and emotional influences to create changes in skill or understanding"

In order to be effective teachers, we need a basic understanding of the different ways people learn. Clients will go through the TIED model in their own ways during a lesson, and will learn from the different stages.

For example:
- they start to pick up on different or more accurate information
- evaluating how they are skiing in relation to how they want to ski

Learners will favour a certain phase of the TIED model, based on their personalities, experiences and abilities. As instructors we must not allow our own preference to be the only influence on how we use the TIED model with our clients.

Learners - TIED Model

Task

- Willing to try new things
- Not worried about being watched or judged
- Enjoy experimenting
- Happy to try without needing to be given too much information first

Information

- High sensory perception
- Can focus on what is actually happening, not what they think is happening
- Confidence in own ability to notice and feel

Evaluate

- Asks lots of questions
- Analytical
- Trusts own judgement and can rely on self rather than always needing external input

Develop

- Open and decisive
- Trusts their own judgement
- Takes responsibility for own learning

Learner Styles - VAK

Developed by psychologists in the 1920s to classify the most common ways that people learn. Most of us are a mix-and-match of these styles, but will prefer one over the other. Which one may also depend on the context.

- **Visual:** a visually-dominant learner absorbs and retains information better when it is presented in, for example, pictures, diagrams and charts.

- **Auditory:** an auditory-dominant learner prefers listening to what is being presented. They respond best to voices, for example, in a lecture or group discussion. Hearing their own voice repeating something back to a tutor or trainer is also helpful.

- **Kinesthetic:** a kinesthetic-dominant learner prefers a physical experience. They like a "hands-on" approach and responds well to being able to touch or feel an object or learning prop.

Learner Styles - VARK

A variation on the acronym, developed by New Zealand-based teacher Neil D. Fleming, is **VARK**, or visual, auditory, reading/writing, and kinesthetic:

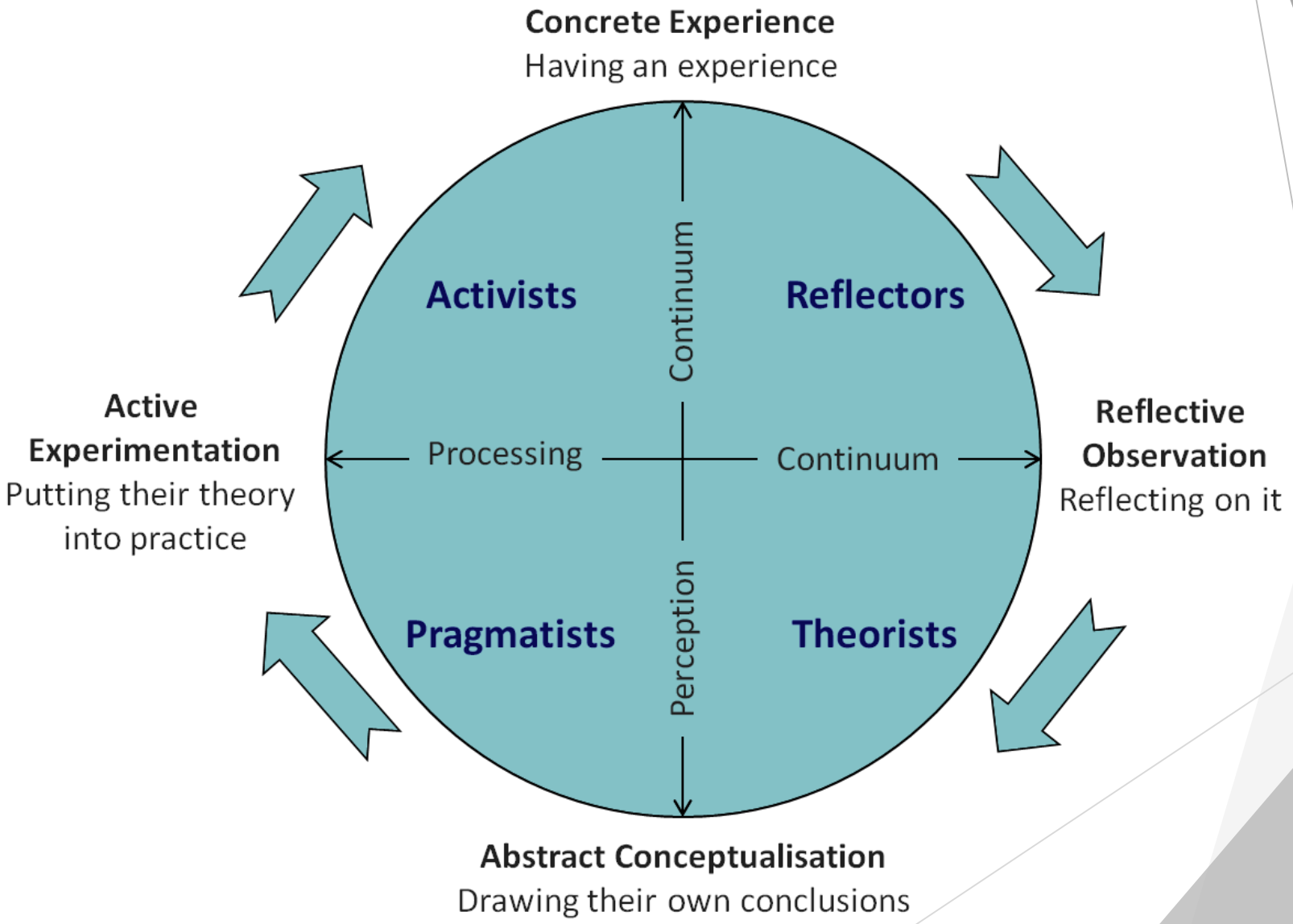
- **Reading/Writing:** a reading- or writing-dominant learner uses repetition of words and writing.

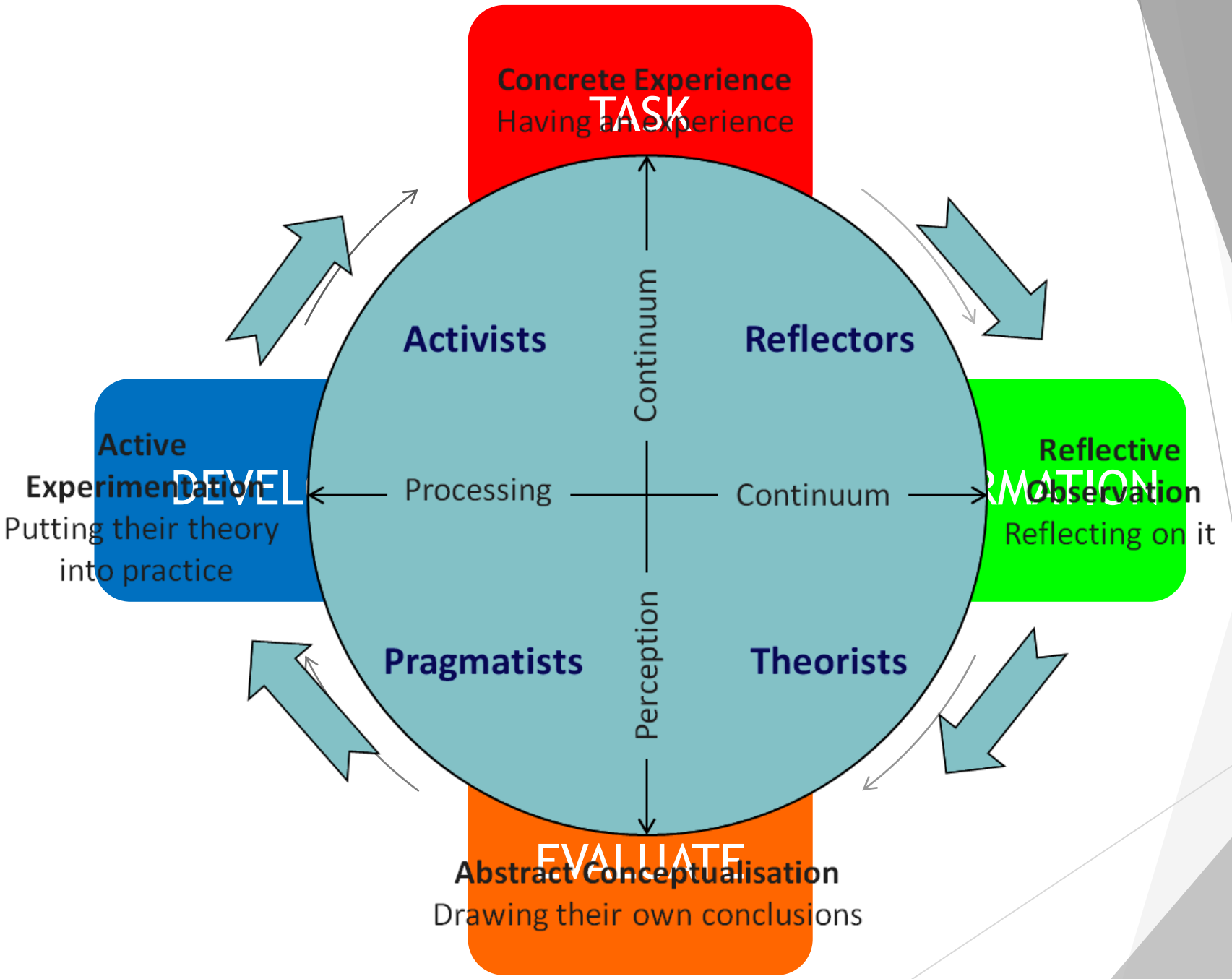
There is an overlap with visual and auditory styles, as words and writing can be both, but, commonly, a person who prefers to learn this way remembers or organizes things best in his mind by taking down notes.

Learner Styles - Honey and Mumford

Activist	Activists are those people who learn by doing. Activists need to get their hands dirty, to dive in with both feet first. Have an open-minded approach to learning, involving themselves fully and without bias in new experiences.	•brainstorming •problem solving •group discussion •puzzles •competitions •role-play
Theorist	These learners like to understand the theory behind the actions. They need models, concepts and facts in order to engage in the learning process. Prefer to analyse and synthesise, drawing new information into a systematic and logical 'theory'.	•models •statistics •stories •quotes •background information •applying theories
Pragmatist	These people need to be able to see how to put the learning into practice in the real world. Abstract concepts and games are of limited use unless they can see a way to put the ideas into action in their lives. Experimenters, trying out new ideas, theories and techniques to see if they work.	•time to think about how to apply learning in reality •case studies •problem solving •discussion
Reflector	These people learn by observing and thinking about what happened. They may avoid leaping in and prefer to watch from the sidelines. Prefer to stand back and view experiences from a number of different perspectives, collecting data and taking the time to work towards an appropriate conclusion.	•paired discussions •self analysis questionnaires •personality questionnaires •time out •observing activities •feedback from others •coaching •interviews

Learner Styles - Honey and Mumford




Concrete Experience
Having an experience
TASK
Activists
Reflectors
Continuum
Active
Experimentation
Putting their theory
into practice
DEVEL
Processing
Continuum
Reflective
Observation
Reflecting on it
Pragmatists
Theorists
Perception
Abstract Conceptualisation
Drawing their own conclusions

Skill Acquisition - Fitts and Posner

A learner goes through three phases when learning a new skill. Each phase builds on the experience of the previous one. Each stage has implications for both the learner and the teacher, and so an understanding of where the pupil is is important.

Previous experiences will influence how quickly they move through the three stages but don't forget that for each new skill the learner will start at the cognitive phase.

Cognitive phase (*Awareness)* – Identification, understanding and development of the component parts of the skill – involves formation of a mental picture of the skill

Associative phase (*Practice*) - Linking the component parts into a smooth action – involves practicing the skill and using feedback to perfect the skill

Autonomous phase (*Aquired*) – Developing the learned skill so that it becomes automatic – involves little or no conscious thought or attention whilst performing the skill

Skill Acquisition - Fitts and Posner

Stages of Learning	Characteristics	Attentional Demands
Cognitive	Movements are slow, inconsistent, and inefficient Considerable cognitive activity is required	Large parts of the movement are controlled consciously
Associative	Movements are more fluid, reliable, and efficient Less cognitive activity is required	Some parts of the movement are controlled consciously, some automatically
Autonomous	Movements are accurate, consistent, and efficient Little or no cognitive activity is required	Movement is largely controlled automatically

Teaching Styles

Command

- Teacher gives direct instructions that the learner follows
- Teacher has all of the responsibility
- Commonly used with beginners or situations with safety concerns

Practice

- Teacher sets up the task, explains, demonstrates and sets limits e.g. time and space
- The learner is given some element of choice; when to start or how many goes
- Pupil spends time in the development phase of TIED

Teaching Styles

Inclusion

- Teacher sets up the task, explains, demonstrates and provides several options or levels of difficulty
- Learner has the choice of the level they practice giving them more responsibility for their own learning, developing their understanding at the same time
- Every person within a group should be able to participate in this type of session; it is the opposite of exclusion

(Inclusion is a teaching strategy, NOT a teaching style…)

Reciprocal

- Teacher sets up task and boundaries of feedback to guide learners understanding and visual interpretation
- Learners work in pairs or groups, with one performing a task and others observing, evaluating and giving feedback within clearly defined boundaries then swapping roles

Teaching Styles

Guided Discovery

- A problem-solving approach, the group is posed a question and come up with a variety of ways to solve it
- The teacher has the end goal already in mind, and guides pupils towards the desired answer using questions, prompts and mini tasks
- The experimentation allows learners to increase their knowledge and understanding

Divergent

- Similar in set-up to guided discovery, but the intended outcome is not pre-planned
- The learners need to have a foundation of knowledge in order to come up with answers to problems
- Requires good knowledge and quick thinking from the teacher in order to be successful, as will need to support learners when they come up with an idea but can't fully explain or demonstrate it
- Teacher also needs to take outcomes form the pupils and put it into a follow-up session so that the learning cycle is complete

Teaching Styles

Learner Design

- Teacher sets the performance area of the session e.g. bumps
- The learner has the choice of what the task or focus of the session is based on what they feel they need to develop, and uses the teacher as a facilitator
- Learner can suggest drills, activities etc or can ask for assistance
- Learner needs a good level of knowledge in order for the session to be successful

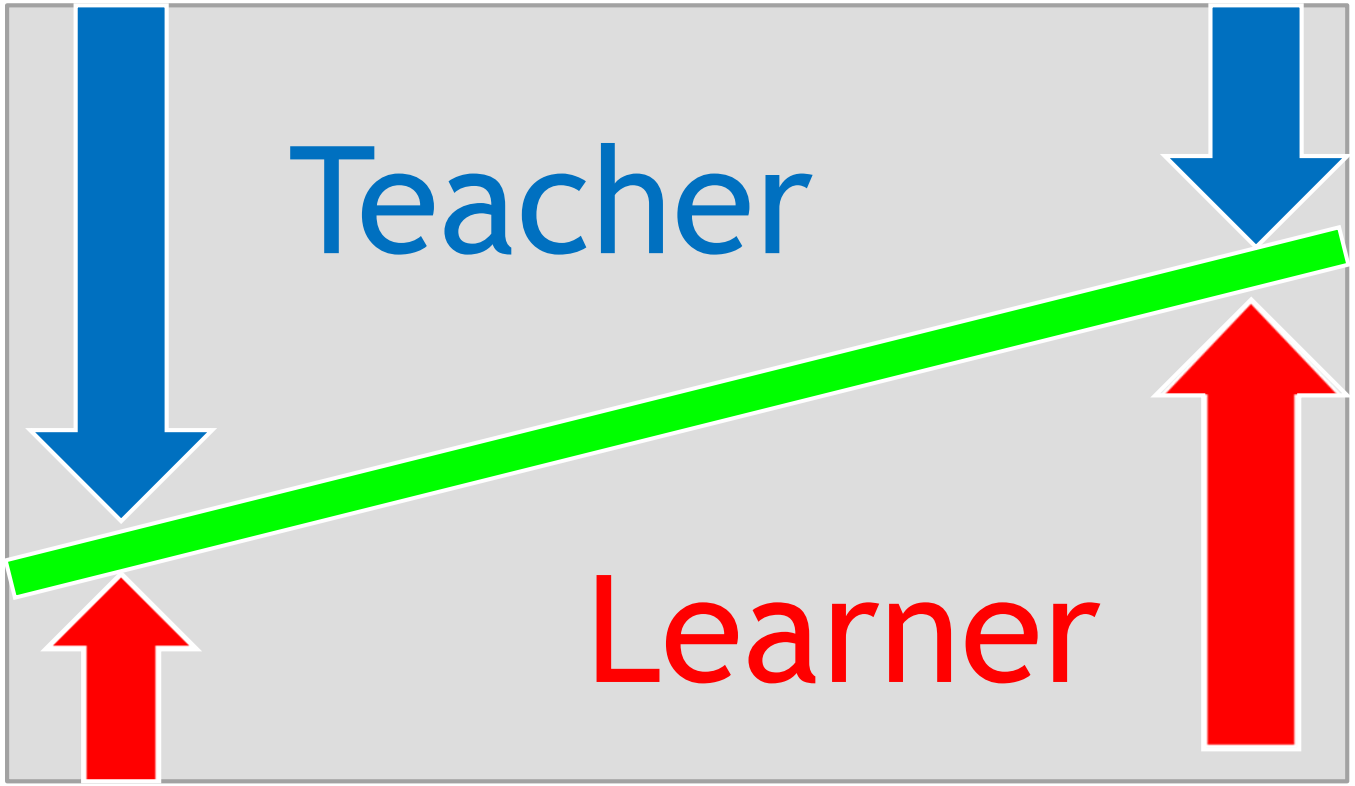
Learner Initiated

- Similar to learner design, this is fully led by the learner
- Any advice, feedback etc is also in the learners control, asking when and what they want
- Tends to come as a follow up session from a previous lesson or specific point they have been thinking about

Self Teach

- Does what it says on the tin

The Responsibility Spectrum

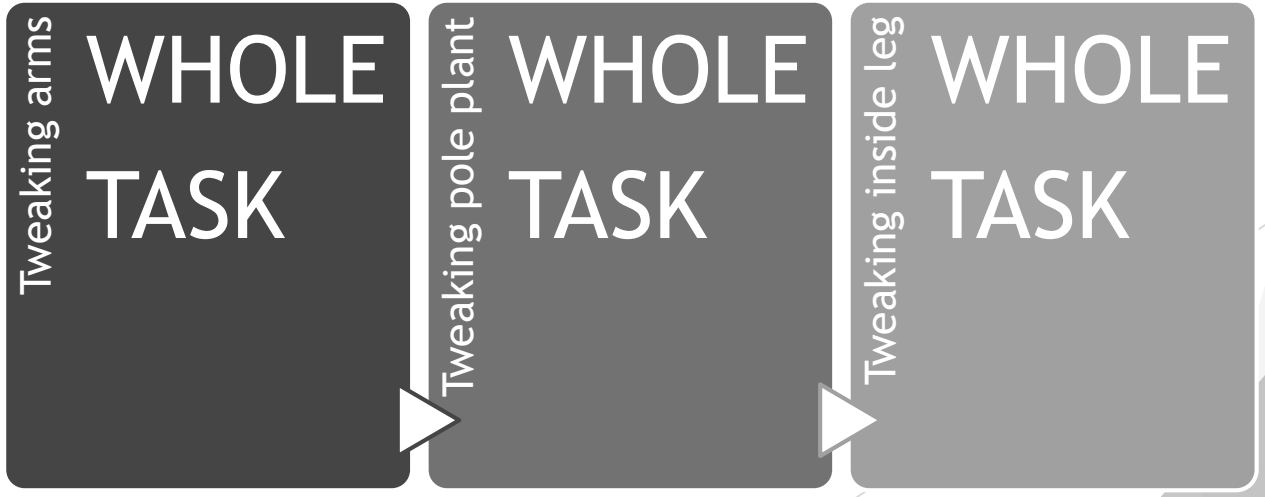


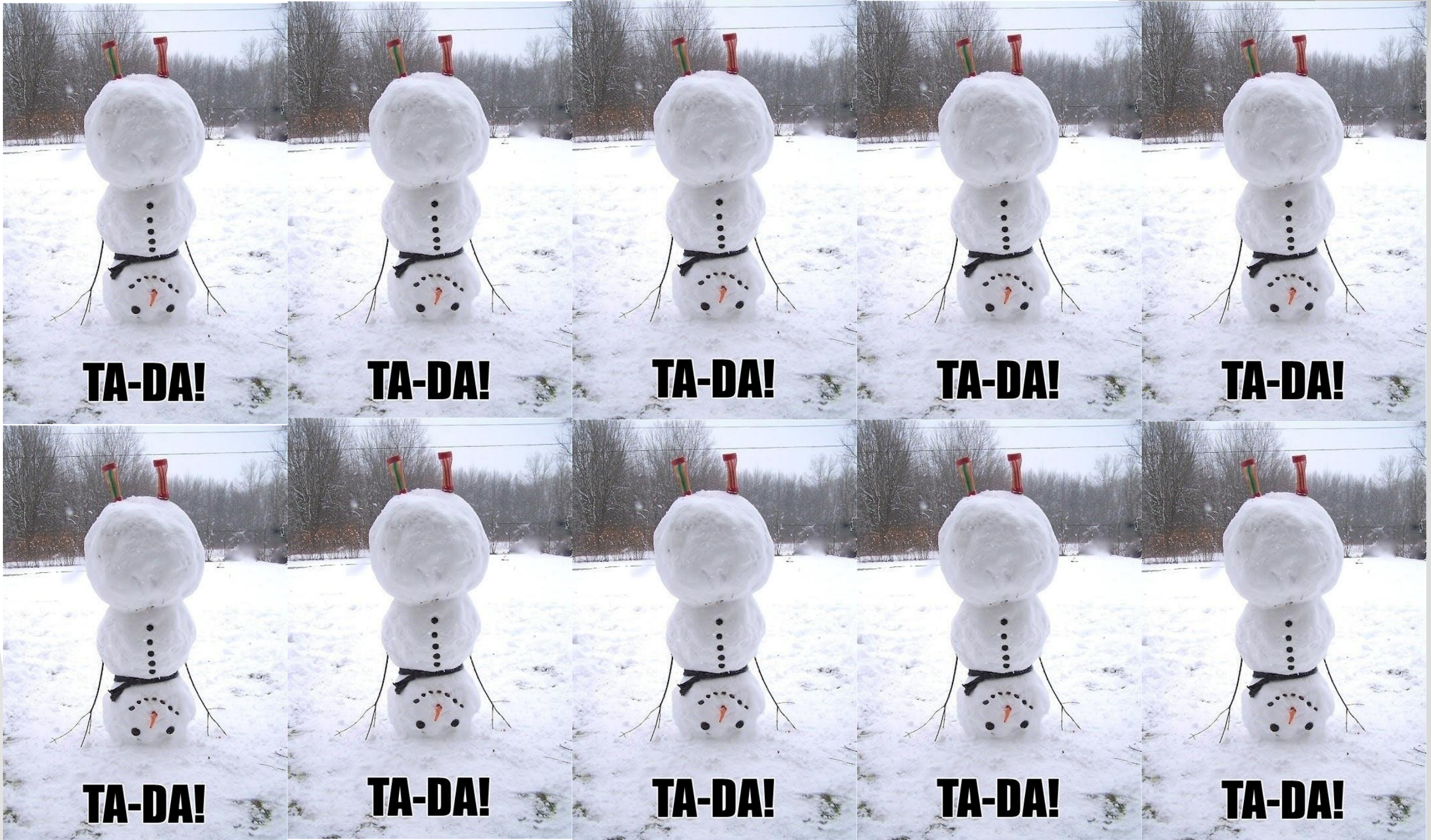
Task Presentation

Chaining

Whole-Part-Whole

Shaping

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