SOLO is used to:

- Plan for differentiation;
- Give and receive feedback;
- Develop self-assessment resources;
- Design innovative curriculum;
- Reflect on learning processes and products;
- Undertake research and student led inquiry;
- Integrate e-learning and thinking strategies;
- Establish a school wide common language for learning.

Learning through SOLO Taxonomy

- **Surface understanding**
  - Many ideas
  - Surface understanding
  - Deep understanding
  - extending ideas

- **Relating Ideas**
  - Many ideas
  - Deep understanding
  - Conceptual understanding

- **Conceptual understanding**
  - Extending ideas

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**Differentiation**

'Differentiation' is a term that is familiar to all teachers and is used inaccurately by many; a general misconception by so many teachers is that it means setting extra work for brighter pupils or that you have to have three different versions of worksheets to accommodate different abilities. However, really understanding the term, and effectively putting it into practice, can be one of the greatest challenges to teachers.

According to the Training and Development Agency for Schools, 'differentiation' is the process by which differences between pupils are accommodated so that all students have the best possible chance of learning.

**Inside this issue:**

- **Differentiation**
  - One of the greatest challenges for teachers.

- **Learning Objectives**
  - Challenging objectives leading to exemplary progress.

- **Lesson Planning**
  - Planning exemplary lessons.

- **Solo Taxonomy**
  - An introduction.

- **Solo Taxonomy**
  - Lesson planning support.

There are three categories of differentiation

- differentiation by task, which involves setting different tasks for pupils of different abilities.
- differentiation by support, which means giving more help to certain pupils within the group.
- differentiation by outcome, which involves setting open-ended tasks and allowing pupil response at different levels.

Ideally, you should be using all three types of differentiation to accommodate the different learning styles in the classroom.

Teachers should not rely on differentiation by outcome. This is not seen as best practice and can mean that some children may only write the date or one sentence, which is not acceptable. It is useful to make a list of all the forms of differentiation and put it up on a wall somewhere. Every now and again, look at it and check that you use them all.

Use the data you have at hand to gauge where the pupils are in their learning and to build a profile of the learners in your class. This includes those with SEN, the more able, but also those 'in the middle' who are often neglected because they fall into neither category - they quietly get on with their work and participate only when asked.
Here are a few types of differentiation:

- by classroom organisation and grouping as a way of helping pupils to access knowledge, increase their understanding, develop concepts and practice skills.
- by paired tasks as a way of helping pupils to self-assess, peer assess, target-set and practice skills.
- by outcome as a way of both accessing knowledge and experiences and assessing at the end of the ‘teach and practice’ cycles.
- by resource in order to allow pupils to access information at their own level.
- by questioning in order to allow you to target your questions at specific pupils.
- by learning style and/or intelligence type in order to allow pupils to access information and/or present their work according to their preferred way of learning.

Learning Objectives

All lessons need learning objectives. You need to make it clear what you expect pupils to learn by the end of the lesson. Schools will use different systems for setting objectives, but it’s expected that pupils will learn – by being told or by seeing these displayed – what the learning objectives are. It is not seen as good practice to have pupils copy down the learning objectives as it takes time and can limit progress in the lesson, but you may wish to have pupils stick them into their books or have them on a separate whiteboard or available on each slide so that they can refer to them during the lesson.

When setting your learning objectives you need to be clear about what you expect the learning outcomes to be – success criteria. Having said this, it will have already become pretty evident to you that not all pupils will be able to access the knowledge/skills/understanding you are trying to impart in your lessons to the same level, and because of this your outcomes need to be differentiated.

One way of formalising the differentiation process is by posing the following three questions. By the end of this lesson, what should pupils know? What must pupils know? and what should pupils be able to do? These may be expressed using the language of differentiation like this:

- should learn
- must learn
- could learn
- What am I learning?
- How is it going?
- What do I do next?

It is good practice to link the success criteria or outcomes to different target groups within the class.

For example:
- C grade must be able to...
- B grade must be able to...
- A grade must be able to...

As well as differentiating the outcomes it also continually refocuses and reminds students of their target grades.

You should however, avoid:

- Satisfactory progress if...
- Good progress if...
- Excellent progress if...

This is because it doesn’t take account of the different abilities of the pupils – excellent progress for a low ability pupil will look very different to excellent progress for a high ability pupil, and a mixed ability class may well have both pupils in the same class.

Lesson Planning

Starter activities

All lessons should have a starter activity. The purpose of the starter is to get pupils fully engaged in the learning process as soon as possible, and to engender a sense of pace within the lesson. Starter activities do not have to be directly linked to the main body of the lesson, although they are a good opportunity to use creative strategies to provide that all-important ‘hook’. It is very important that your starter does not take too much time, and that it doesn’t dominate the lesson.

The starter activity could take on numerous forms, including: a brief quiz; a brief research task using reference book; an anagram or crossword puzzle; interpretation of visual or textual material; responding to questions having heard a music track, or having seen a brief video clip; paired discussion on a relevant topic; an opportunity to revisit and improve previous work.

Main activities

When selecting the activities and tasks you intend to use in your lesson, you need to think about a number of key questions:

- Will the tasks and activities enable the learning objectives to be met?
- Will the tasks/activities enthuse and engage pupils of all ability levels? Will they enjoy learning?
- How successful will these tasks and activities be in catering for the different types of learners in your lesson?
- How can you use these tasks and activities to monitor and assess learning?

Plenary activity

Many beginning teachers find that because of their inability to plan effectively, this phase of the lesson often gets squeezed out. However, you do need to understand that this is a crucial part of the lesson because, if carried out properly, it will provide you and the pupils with an indication of whether the learning objectives have been met. As is the case with your starter activities, there is a range of possible formats for your plenary sessions. The suggestions made below, along with those made for starter activities, only ‘scratch the surface’ and you need to carry out more specific and focused research into this aspect of your teaching:

- verbal or written quizzes supported by a follow-up discussion; question/answer sessions in which you select responses from pupils across the ability range; role-play scenarios in which pupils are required to apply their newly gained knowledge, understanding and/or skills.

Solo Taxonomy

SOLO Taxonomy (structure of observed learning outcomes) provides a simple, reliable and robust model for three levels of understanding – surface deep and conceptual (Biggs and Collis 1982).

At the prestructural level of understanding, the task is inappropriately attacked, and the student has missed the point or needs help to start. The next two levels, unistructural and multistructural are associated with bringing in information (surface understanding). At the unistructural level, one aspect of the task is picked up, and student understanding is disconnected and limited. The jump to the multistructural level is quantitative. At the multistructural level, several aspects of the task are known but their relationships to each other and the whole are missed. The progression to relational and extended abstract outcomes is qualitative. At the relational level, the aspects are linked and integrated, and contribute to a deeper and more coherent understanding of the whole. At the extended abstract level, the new understanding at the relational level is re-thought at another conceptual level, looked at in a new way, and used as the basis for prediction, generalisation, reflection, or creation of new understanding (Hook and Mills 2011).