Key Stage 3 National Strategy Progression into and through Year 9 key messages

This leaflet is for teachers who were unable to attend the national training. It summarises the main points and is best used as part of a departmental meeting. Other Key Stage 3 Strategy materials can be found on the website at **www.standards.dfes.gov.uk/keystage3**.

During the first year of the ICT strand schools have received several sample teaching units for Year 7 and Year 8. These units have very detailed scripts and clear directions. The *Framework for teaching ICT capability: Years 7, 8 and 9* provides additional guidance about structuring lessons and using a range of teaching styles. As pupils progress towards the end of Key Stage 3 – and ultimately into Key Stage 4 – planning for progression continues to be critical. The challenge for the teacher is to ensure that pupils are given as many opportunities as possible to achieve the higher levels, while continuing to provide the structure and support they still need.

The four main sessions in this training unit cover the issues and challenges for teaching ICT capability in Year 9. Participants discuss the opportunities for differentiated outcomes for pupils, consider methods of teaching using extended pieces of work, and focus on the planning necessary for teaching the Year 9 Framework objectives.

1 Moving into Year 9 – issues and challenges for ICT teaching

Progression into the Year 9 Framework objectives involves pupils:

- becoming increasingly **independent** in their use of ICT tools and information sources;
- developing the ability to design **information systems** and to evaluate and suggest improvements to existing **systems**.

Part of the challenge of teaching Year 9 is to bridge the gap between Key Stage 3 and Key Stage 4. At Key Stage 3, teaching needs to be planned to give pupils opportunities to progress through the objectives. Giving pupils more independence is not the same as giving them less teaching. The role of the teacher remains crucial.

As pupils make progress, it will be necessary to provide them with opportunities to engage in open-ended tasks that allow them to **apply their ICT capability independently**.

During Year 9 it will be necessary to:

- give time for extended projects and assess how much direction to give pupils;
- manage pupils of different abilities and maintain pace and focus during longer pieces of work;
- provide assessment opportunities and make statutory end-of-Key Stage 3 assessments.

Ref DfES 0232/2003

Teaching in Year 9 should build on the work of the Strategy so far, based on:

- structure and pace of lessons;
- ICT Framework objectives;
- teaching to objectives;
- range of teaching styles as identified by the ICT Framework;
- teaching/modelling new knowledge, skills and understanding.

As their ICT capability increases, there is a parallel need for pupils to become more sophisticated in their use of ICT skills and techniques. This will be an iterative process throughout Key Stage 3, as pupils encounter a broader range of software and hardware and become more skilled and efficient in using them. Efficiency is a key characteristic of level 6 in the National Curriculum for ICT.

Year 9 teaching needs to plan for:

- keeping structured lessons and continuing to teach new knowledge, skills and understanding;
- increased project management and a systems approach;
- more focused teacher direction and increased differentiation;
- more pupil involvement in decision-making and choices;
- more evaluation and modification by pupils;
- increased integration of objectives.

2 Identifying opportunities for differentiated outcomes

The current set of Year 7 and Year 8 sample teaching units exemplifies how the yearly teaching objectives might be grouped and taught. The nature and the detail of the script gives teachers, particularly teachers who are inexperienced in ICT, clear guidance and structure on how ICT Framework objectives could be taught. However, there are some points to note.

- Access to higher levels may be limited by the way the teacher directs the pupils. With careful planning, teachers could adapt units for more differentiated outcomes.
- Similarly, units could be given more structure and scaffolding for less able pupils.
- Some of the sample teaching units offer advice on differentiation for pupils of lower or higher ability. However, teachers will need to adapt the units according to the experience and knowledge of pupils in their classes.
- The fact that a particular objective has been taught does not necessarily mean that every pupil has achieved that objective. For example, it may be necessary to check pupils' understanding by observing them using the new knowledge and skills independently, within a different context.
- Extension activities offer a useful opportunity for pupils to demonstrate their understanding within a different context.

Ref DfES 0232/2003

Sample teaching unit 8.5 includes the development of an extended piece of work. The unit should be taught at the end of Year 8, to provide a transition into more independent work in Year 9. It exemplifies how to consolidate and extend the Year 8 objectives and prepare pupils for Year 9 work.

Some Year 8 objectives are:

- revisited but in a different context;
- extended from previous work;
- taught for the first time.

Progression into Year 9 objectives involves:

- increasing independence (design, create, select, ...);
- working within a system (construct, test, document, ...);
- more reflection (evaluate, modify, judge, ...);
- drawing conclusions (conclude, justify, ...).

Key points

- This is the first time that a sample teaching unit has dealt explicitly with the system life cycle.
- Longer, sustained units allow pupils to develop concepts of system development, for example, test, modify, refine.
- As scripted, the lessons provide limited opportunities for pupils to make their own decisions. However, the notes could be adapted at some stages for some pupils.
- Teachers could either present the unit as scripted, or open up opportunities for some or all pupils to work more independently at various stages of the system life cycle. Given such opportunities, some pupils may reach higher levels.
- At each stage, some decisions must be made. The extent to which these decisions are made by teacher or pupil is significant. For example:
  - Do pupils design the system or is this provided for them?
  - Does evaluation lead to further design and analysis?
- The 'implement, test and evaluate' elements of the system life cycle are clearly evident within the sample teaching unit. Further opportunities for more independent work on the design and analysis stages could be built in.
- Careful planning is critical to facilitate differentiated outcomes.

3 Planning for extended pieces of work

There are several tools that can assist the planning and management of extended pieces of work. These might include:

- Gantt charts or similar timeline-based tools to refocus pupils on keeping to deadlines and expectations of success;
- project diaries;
- project documentation;
- tools, such as mind-mapping, to help organise their thinking;
- the system life cycle;
- ongoing evaluation.

These tools can be modelled by teachers and subsequently used by pupils independently.

The four case studies used during the training unit demonstrate how some of these planning and monitoring tools might be used.

4 Planning to teach the Year 9 ICT Framework objectives

The case studies have been developed by teachers working within schools. They:

- are based originally on Year 9 QCA units and demonstrate **one way** in which the Year 9 QCA units could be approached for a given set of pupils;
- are **not** fully developed sample teaching units;
- exemplify **one way** of teaching some of the Year 9 ICT objectives;
- include support materials for teachers and pupils;
- include some indicative outcomes.

Teachers need to do significant planning of their own before they can teach the extended projects required in Year 9. The case studies provide stimuli for that planning. A suggested planning checklist includes:

- a focus on Year 9 ICT Framework objectives;
- lesson structure;
- each stage of the system life cycle;
- review and evaluation points;
- integration of planning tools;
- resources and support materials;
- opportunities for differentiated outcomes;
- assessment opportunities.

Note that each of the case studies was designed for a particular class, based on the teacher's knowledge of pupils' previous experiences and abilities. Teachers would need to adapt the units to suit local circumstances and plan for differentiated outcomes for their own pupils.

Ref DfES 0232/2003