

Who is assessment for?

- Student
- Teacher
- Parent
- School Management
- Governors
- LEA
- Government

What is assessment for?

- Identifying the next steps for learning.
- Checking progress
- Motivating
- Diagnostic
- Future achievement
- Record of overall achievement
- Rank order
- Discriminate candidates
- Evaluating a teaching method
- Evaluating a school/LEA
- Setting targets
- Discussing progress with parents/guardians

Formative

Summative

Formative Assessment (day to day ongoing assessment as part of the repertoire of teaching strategies, based on how well students fulfil learning intentions, providing feedback and involving students in improving their learning)

Summative Assessment (snapshot testing which establishes what a student can do at that time).

Research Studies

Many research studies show that improved formative assessment raises standards. Two examples serve to illustrate both the research studies and some of the typical results obtained.

First Example:

- Middle school science curriculum on forces and motion
- Inquiry based, experimental work, group based
- 12 classes of 30 students each
- Each class divided into two for part of their lesson-time.
- One group, the control group, worked on how to improve the module
- The other group, the experimental group, used the same time for discussion of their assessment with peer-assessment of presentations and self-assessment.
- All students given the basic skills test at the outset.
- Outcome measures were: a mean score on projects throughout the course; a score of two chosen projects, and a score test of the physics concepts involved.
- On the mean project score, the experimental group showed a significantly better score than the control when the students were divided into three groups according to low, medium or high scores based on the initial basic skills test. The low scoring group showed better scores, over the control group, of more than three standard deviations; the medium group just over two and the high group just over one. A similar pattern was found for the other two outcomes.
- Addition of formative assessment with a focus on self-assessment has a significant impact on different outcomes for *all* abilities.
- Students understanding the assessment process achieve higher scores.

Second Example:

- Forty-eight 11 year old Israeli students.
- Selected from twelve classes across four schools.
- Half selected from the top quartile of ability (based on tests in mathematics and language) and the other half in the bottom quartile.
- Students were given written tasks and received one of three types of written feedback with returned work.
- Types of feedback included: individually compared comments on the match, or not, of their work with the criteria which had been explained beforehand; grades only and comments.
- For the 'Comments only' group, scores increased and remained high throughout the course. For the 'grades only' group, scores declined but improved on some tasks, but improvement was not maintained. The 'comments with grade' showed a significant decline in scores across the module.
- Tests of students' interest showed a similar pattern.
- Significant difference between high and low achieving groups was that interest was undermined for the low achievers by either of the regimes involving grades, whereas high achievers and in all three feedback's maintained a high level of interest.

Strategy

Planning

Sharing learning intentions:

With students (for every task)

Students self evaluation:

Students are trained to evaluate their own achievements against the learning intention (and possibly beyond), in oral or written form.

Feedback:

must reflect learning intentions of task to be useful and provide ongoing record; can be oral or written.

Target setting:

for individuals over time for ongoing aspects – e.g. reading and writing.

Celebrating achievement:

making links between achievements explicit, treating all achievements in the same way and creating a learning ethos rather than an emphasis on external reward ethos.

Formative Assessment Strategies

Strategy	Purpose
Planning	Ensures clear learning intentions, differentiation and appropriate delivery of National Curriculum; short term plans show how assessment affects next steps by the development of activities and contain assessment notes on students who need more help or more challenge.
Sharing learning intentions: With students (for every task)	Ensures student is focused on the purpose of the task, encourages student involvement and comment on own learning; keeps teacher clear about learning intentions.
Student self-evaluation: students are trained to evaluate their own achievements against the learning intention (and possibly beyond), in oral and written form.	Empowers the student to realise his or her own learning needs and to have control over future targets; provides the teacher with more assessment information – the student’s perspective.
Feedback: must reflect learning intentions of task to be useful and provide ongoing record; can be oral or written.	Track progress diagnostically; informs student of successes and weaknesses and provides clear strategies for improvement.
Target setting: for individuals over time for ongoing aspects – e.g. reading and writing	Ensures student motivation and involvement in progress; raises achievement; keeps teacher informed of individual needs; provides a full record.
Celebrating achievement: making links between achievements explicit, treating all achievements in the same way and creating a learning ethos rather than an emphasis on external reward ethos.	Celebrates all aspects of achievement, provides motivation and self-esteem thus enabling student to achieve academic success more readily.

Summative Assessment

Summative assessment (snapshot testing which establishes what a student can do at that time).

Strategy	Purpose
National Statutory tasks and tests: externally produced, national tests taken at the end of the key stage.	To enable students' and schools performances to be compared, so that standards can be identified and targets set for improvement.
National non-statutory tests: externally produced tests, to be voluntarily administered at the ends of Year 7 and 8.	To provide an opportunity for schools to keep track of students' progress and teachers' expectations.
Baseline tests: LEA or commercially produced tests applied to students at entry to school, ranging from observation of students' behaviour to specific oral or activity items.	To establish the students' abilities at the beginning of their education, so that subsequent achievement can be compared and measured against actual improvement. They can also be used formatively, to identify weaknesses and strengths and provide appropriate learning experiences for individual students.
Commercially produced tests: (e.g. NFER tests): purchased independently by schools, these tests are controlled by publishers	To enable schools to monitor progress through summative means at different points in the Key Stage.
School Tests: in-house tests written by teachers, usually 'end of module' tests, used at the end of a taught unit to establish general attainment or to arrive at interim level judgements (against the statutory level descriptions).	School uses these to make the end of Key Stage levelling easier and to monitor progress between Key Stages.
Class tests: created by individual teachers and used in day to day lessons (e.g. mental number tests).	To improve students' mental recall and establish what they have remembered or learnt so far.
End of Key Stage teacher assessment: Year 9 teachers' decide a level for each student's attainment in the core subjects, using the criteria of the level descriptions and using their professional judgement.	To provide parallel information to parents to accompany test results.

Planning**Lesson Code: 7D5****Lesson Focus: How we can describe living things?**

Links to previous lesson:

Work so far has focused on variations within a species now we are looking at differences between species.

Differentiation Codes:

A = able (level 6)

M = most (level 4/5)

L = least able (level 3/4)

Learning Objectives

Students will be able to:

- Comment on the different use of styles of writing, which may be used to describe living things, and suggest why a particular style of writing is used in a text.
- Handle living organisms in a safe and appropriate manner
- Describe similarities and differences between two living things
- Make suggestions about characteristics to be observed and recorded
- Make appropriate observations of a range of specimens and record these.
- Use scientific vocabulary to describe the body parts of animals.

Teaching approach an activities

- Present pupils with 3 different styles of writing about animals; ask them to guess which animal each piece describes. Discuss the merits of each style of presenting information on animals. Use WS 7D5a
- Work in small groups, provide each group with a variety of living things; ask pupils to identify differences in appearance and behaviour and report back to class. Ensure that pupils handle living things so that no damage or distress is caused.
- Discuss with pupils features and observations that could be recorded in a table. Provide pupils with a recording format for collation of observations. (WS 7D5b)
- Use scientific vocabulary for naming of body parts of one particular specimen from above.

Assessment**Links to next lesson:**

That there is a variation even in common features of a species.

Homework:**Literacy:**

Exploration of styles of writing discussion, recording information; use of a writing frame; labelling

Key words: variation, living, feature, scientific, appearance, observation**Numeracy:**

Counting legs !!!!

ICT:

CD-ROMs and video clips could be used to observe a variety of living things

Evaluation:**Learning support:**Provision and completion of recording format
Help in small groups to identify difference and similarities**Other (e.g. cross curricular work)**

Handle living things with respect.

Lesson Code

7D5

Resources:

7D5a

7D5b

Several sets of living things to contain woodhouse, snail, worm, two types of plant, other pictures of living things, various preserved specimen (yuk), fish (on front bench) Creepy crawlies need to be in see through and sealed container.

Safety:

Subject: SCIENCE Year: 7 Ability: MIXED ECO Support: Yes/No Lesson: 4 of: 7 in <i>DIVERSITY (VARIETY OF LIFE)</i> (scheme of Work reference) Stated students: Stage No <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5	
Learning Objectives	Evidence of Understanding
1. <i>That not all mammals conform to the stereotype – but</i>	Individual project work
2. <i>basic features apply.</i>	
3.	
4.	
Resources: Library Display Material	Preparation: Library booked – Librarian briefed
Links with previous work: Continues from lesson 3 where features of mammals were discussed	Assessment methods to be used this lesson: <i>Individual project work. Discussion with individuals. Presentation next lesson</i>
At the end of the session students will know/be able to do the following: <i>Mammals are a widespread/diverse group. Some lay eggs etc. Discussion with individuals.</i>	

Lesson Planner		Period 4
Date <i>26 January</i>		
Time	Activity	Additional support for more/less able:
<i>5/10 mins.</i>	<i>Settle into library register</i>	
<i>5/10 mins.</i>	<i>Explain task; recap 'mammals', suggest ideas – Bats, Dolphin, Kangaroo (etc). Hint at Platypus. Librarian may need 2-3 mins.</i>	<i>Discussion with group.</i>
<i>20/25 mins.</i>	<i>Research and project on 'Odd' mammals. Drawings and presentation. 'Prize' for best.</i>	<i>Suggestion that some may find the 'odd' ones.</i>
<i>5/10 mins.</i>	<i>Clear up + Q & A session. What have they discovered?</i>	
Main points for recap:		Homework N/A Today
Basic features of mammals		To be collected on: _____

Celebrating Achievement

- Certificate
- Letters home
- Stickers
- Postcards
- Wall of praise
- Display
- Assemblies
- Head of department presents award
- Marking
- Prizes
- Recognition
- Non-curricular

Criteria for Effective Recording Systems

Effective records need to:

- serve a *formative* function i.e. help teachers to answer the question, where next?
- serve a *diagnostic* function i.e. help teachers to identify students' strengths
- serve a *summative* function i.e. fuel the reporting process during and at the end of the key stage (to parents, teachers, students, SMT, governors)
- serve an evaluative function i.e. yield information which can inform whole school decisions.

Records are likely to achieve these purposes if they:

- make explicit what students know, understand and are able to do in relation to the planned/taught curriculum
- are flexible enough to record the achievement of all students
- are manageable and can be easily understood by all who use them
- provide end of key stage teachers with information about achievement, in particular about those parts of the curriculum which were taught earlier in the key stage, but not revisited in the final year
- provide an accurate and reliable record of student achievement
- are consistent throughout the school and are passed on from one teacher to the next
- provide information in a form which allows schools to monitor student achievement and progress.

Cognitive Abilities Test		Group summary of Results (alphabetical)																		
School	Pupil	Age	Sex	Verbal				Quantitative				Non-Verbal				Means				
				RS	SAS	ST	NPR	GR	RS	SAS	ST	NPR	GR	RS	SAS	ST	NPR	GR	SAS	GR
	1	12:00	M	64	94	4	34	=29 th	24	79	2	8	=65 th	61	92	4	30	=45 th	88	=50 th
	2	11:07	F	66	98	5	45	=18 th	37	96	4	39	=37 th	70	105	6	63	14 th	100	19 th
	3	11:01	F	65	98	5	45	=18 th	37	97	5	42	=34 th	59	92	4	30	=45 th	96	=33 rd
	4	11:02	F	!18	70	1	2	=70 th	!14	70	1	2	=74 th	43	78	2	7	=66 th	72	=70 th
	5	11:01	F	50	88	3	21	=46 th	40	100	5	50	=25 th	66	100	5	50	=25 th	96	=33 rd
	6	11:03	F	69	101	5	53	=14 th	36	95	4	37	=39 th	63	96	4	39	=33 rd	97	=28 th
	7	11:04	M	38	80	2	9	=56 th	25	82	3	11	=58 th	67	101	5	53	=23 rd	88	=50 th
	8	11:08	F	43	82	3	11	=54 th	20	75	2	5	69 th	64	96	4	39	=33 rd	84	59 th
	9	11:07	M	39	80	2	9	=56 th	23	79	2	8	=65 th	56	88	3	21	=56 th	82	=62 nd
	10	12:00	M	66	96	4	39	=24 th	48	109	6	72	15 th	61	92	4	30	=45 th	99	=20 th
	11	11:06	F	59	92	4	30	=37 th	41	100	5	50	=25 th	67	100	5	50	=25 th	97	=28 th
	12	11:09	M	83	114	7	82	=2 nd	54	120	8	91	2 nd	72	108	6	70	=8 th	114	=3 rd
	13	12:00	F	21	70	1	2	=70 th	25	80	2	9	=63 rd	!24	70	1	2	=75 th	73	69 th
	14	11:01	M	85	119	8	90	1 st	53	119	8	90	3 rd	78	123	8	94	1 st	120	1 st
	15	11:07	F	45	84	3	14	51 st	26	83	3	13	=55 th	56	88	3	21	=56 th	85	=55 th
	16	11:08	F	63	94	4	34	=29 th	24	80	2	9	=63 rd	69	103	5	58	=17 th	92	=44 th
	17	11:04	M	34	78	2	7	=61 st	31	89	4	23	=47 th	74	113	7	81	3 rd	93	=40 th
	18	11:02	M	60	94	4	34	=29 th	47	110	6	75	=12 th	70	106	6	65	=12 th	103	=16 th
	19	11:04	F	69	101	5	53	=14 th	47	110	6	75	=12 th	69	104	6	60	=15 th	105	=9 th
	20	11:05	M	79	110	6	75	5 th	44	105	6	63	=19 th	66	99	5	47	=30 th	105	=9 th
	21	11:07	M	22	70	1	2	=70 th	28	85	3	16	=53 rd	44	78	2	7	=66 th	77	68 th
	22	11:06	F	61	94	4	34	=29 th	38	97	5	42	=34 th	59	91	4	27	=51 st	94	=37 th
	23	11:05	F	56	90	4	25	=41 st	44	105	6	63	=19 th	52	85	3	16	=61 st	93	=40 th
	24	11:10	F	83	114	7	82	=2 nd	55	122	8	93	1 st	72	108	6	70	=8 th	115	2 nd
	25	11:11	M	80	109	6	72	=6 th	45	104	6	60	22 nd	69	103	5	58	=17 th	105	=9 th

1 Computer corrected date of birth

2 Age unknown. Average age used

3 Age out of range. Oldest allowed used.

4 Age out of range.

Youngest allowed used.@ insufficient data for battery

! Chance level raw score (see pages 42 and 45-46 of manual)

a 5 or more unclear responses.

= Used if several pupils have the same Group Rank

Look at pupil 3 – whose non-verbal score is much higher than their other two scores

Look at pupil 2 – whose quantitative score is more higher than their other 2 scores

Look at pupil 1 – whose verbal score is higher than their other 2 scores

How would you take into account these CAT scores when planning a lesson to meet the individual learning needs of each 3 pupils?

Cognitive Ability Tests (CATs) Briefing Paper

- Cognitive Ability tests are administered by NFER and used by many LEA's and schools
- There are 3 tests
 - verbal
 - quantitative
 - non-verbal

which are then aggregated into the triple/mean score

- The sheet in this pack relates to current pupils in a school
- Look across the top line which contains heading ID, number, age and sex

RS = Raw score – out of 100

SAS – Standardised Age Score – this is adjusted to take into account the age of which pupils took the test

ST= Stamina – by which pupils are organised into 9 levels hence “standard nines”

1 = Very low

9 = Exceptionally high

Stamines are a shorthand of indicating any pupils ability i.e.

NPR = National Percentage Ranking the lower. This figure indicates that pupils have achieved less well in the test. i.e. 1st pupil NPR = 34 means that this pupil is in the bottom 34 of all pupils who took the test nationally.

GR = Group Ranking which places pupils in rank order within the school. Therefore the first pupil on the list = 29th out of the school out of 79 pupils

These 5 aspects are done for each of the 3 tests

NB. ! = not registering on the test

KS3 – Data

2001 KS3 Level 5 or Above

		National Results	School Results	Difference in % Points
English	All	63	51	
	Boys	55	42	
	Girls	72	60	
Maths	All	62	61	
	Boys	62	59	
	Girls	62	63	
Science	All	55	47	
	Boys	55	50	
	Girls	55	43	
English TA	All	64	62	
	Boys	55	53	
	Girls	73	71	
Maths TA	All	64	67	
	Boys	63	68	
	Girls	66	66	
Science TA	All	60	55	
	Boys	59	52	
	Girls	62	58	

1998 KS3 Results

Pupil	English	Maths	Science	SPS	APS
F	L5	L2	L3		
G	L5	L4	L4		
H	L6	L5	L5		
I	L4	L3	L4		
J	L6	L7	L6		
APS					

1. Calculate the specific point scores (SPS) and average point scores (APS) for the pupils.
2. Calculate the average point score (APS) for each subject and the whole cohort.
3. Which subject is:
 - Achieving best?
 - Achieving least?
4. Compare the two sets of data and answer these questions
 - Which cohort achieved the highest ASP score?
 - Overall, is attainment rising or falling?
 - Over the two years, which subject area is achieving the best results?

1999 KS3 Results

Pupil	English	Maths	Science	SPS	APS
A	L5	L4	L2		
B	L4	L3	L4		
C	L6	L5	L6		
D	L5	L5	L5		
E	L3	L4	L7		
APS					

- Calculate the specific point scores (SPS) and average point scores (APS) for the pupils.
- Calculate the average point score (APS) for each subject and the whole cohort.
- Which subject is:
 - Achieving best?
 - Achieving least?
- Compare the two sets of data and answer these questions
 - Which cohort achieved the highest ASP score?
 - Overall, is attainment rising or falling?
 - Over the two years, which subject area is achieving the best results?

Using handout 4.10A identify:

1. the priorities for action;
2. your rationale behind the priorities;
3. the strategies you would use to implement changes;
4. timescale;
5. monitoring and evaluation strategies.

Imperatives!

1. You are in the department for two terms.
2. An immediate need to raise attainment.
3. You need to focus on assessment issues only.

<i>Improving Assessment & Recording</i>	<i>Evaluation Grade</i>				<i>Comments</i>
	1	2	3	4	
Key Questions:					
1. Are there three levels of planning; short, medium and long-term?			✓		QCA SoW used
2. Does short-term planning identify Learning Objectives?				✓	
3. Are these shared with students?			✓		Varies across department
4. Are assessment criteria shared with students?			✓		Varies across department
5. Is marking regular?	✓				
6. Does marking provide comments for improvement?			✓		Little evidence (mechanistic, not developmental)
7. Is assessment information recorded during the year?			✓		
8. Do teachers use this information to inform planning or setting targets?				✓	
9. Is assessment information recorded at the end of the year?	✓				
10. Is this information passed to the next teacher?				✓	
11. Is it used by the next teacher?				✓	
12. Does the department analyse its assessment data?	✓		✓		Reported to HT & Govs.
13. What use is made of this data?			✓		Some isolated examples
14. Is assessment monitored.				✓	Not at all

1 Good 4 Poor

Improving Assessment & Recording

Key Questions:

1. Are there three levels of planning; short, medium and long-term?
2. Does short-term planning identify Learning Objectives?
3. Are these shared with students?
4. Are assessment cultures shared with students?
5. Is marking regular?
6. Does marking provide comments for improvement?
7. Is assessment information recorded during the year?
8. Do teachers use this information to inform planning or setting targets?
9. Is assessment information recorded at the end of the year?
10. Is this information passed to the next teacher?
11. Is it used by the next teacher?
12. Does the department analyse its assessment data?
13. What use is made of this data?
14. Is assessment monitored?