Hong Kong Diploma of Secondary Education

Standards-referenced reporting of Biology and Combined Science (Biology)

HKEAA

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香港考試及評核局
Hong Kong Examinations and Assessment Authority

Standards Referenced Reporting (SRR)

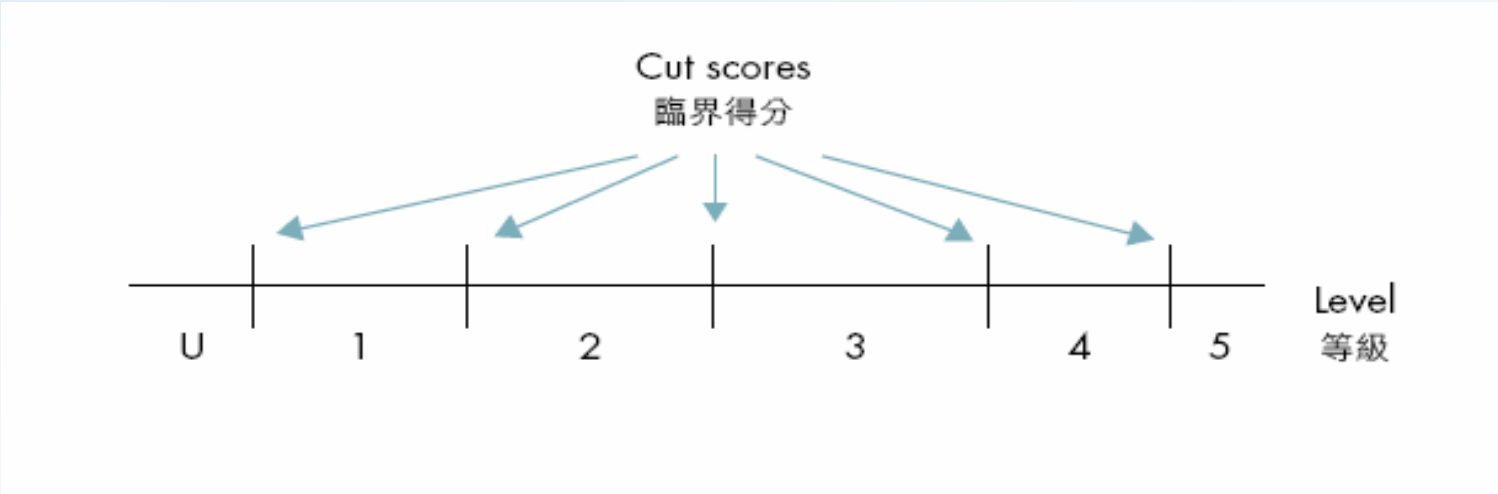
- Five levels of performance: 5 (highest) to 1 (threshold) + unclassified
- 5** (best performance) and 5* (next best group)
- Standards at levels 5 and 4 are set with reference to grades A-D of current HKALE

Features of SRR

- The standards are held constant
- The percentage of candidates awarded a given level may vary from year to year
- The standards of performance are more explicit
- Level descriptors together with samples of performance can illustrate the standards

Standards setting

- A candidate's total subject score is based on both public examination and SBA results
- A panel of judges (experienced teachers, markers, examiners, etc) will determine the minimum scores (cut scores) a candidate must obtain in order to meet various standards (Levels 1-5)



Pilot testing of sample papers

- in June – July 2007
- 13 schools; 328 S6 students [188 (E); 140 (C)] of different abilities
- Whole set of sample papers used
- Purpose of the test:
  - Collect samples of performance of students of different abilities from a range of schools

Drafting level descriptors (1)

- Reference to the learning outcomes and assessment objectives to ensure alignment between curriculum and assessment
- Dimensions used in science subjects:
  - Knowledge and understanding of biological facts and concepts
  - Application of knowledge
  - Higher order skills
  - Communication skills
  - Scientific inquiry and practical skills
- Developed by a working group and received by One Committee

Drafting level descriptors (2)

- Describe typical performance at each level
- Represent “on-average” statements and may not apply precisely to individuals
- Describe what candidates can do; not what they cannot do

Draft Level Descriptors (as of Nov 2008)

The typical performance of candidates at this level:

Level 5

- demonstrate comprehensive knowledge and understanding of facts, concepts and principles in the biology
- apply the concepts of biology to a wide range of unfamiliar situations
- analyse, synthesise and critically evaluate information from multiple perspectives and in an in-depth manner
- effectively and consistently communicate ideas in a succinct, logical and coherent manner with accurate use of scientific terminology and appropriate formats
- design and conduct scientific investigations, evaluate procedures, handle and analyse data collected, and draw valid conclusions

Level 4

- demonstrate sound knowledge and understanding of facts, concepts and principles in the biology
- apply the concepts of biology to unfamiliar situations
- analyse, synthesise and evaluate information from several perspectives
- communicate ideas in a logical and coherent manner using scientific terminology and appropriate formats
- design and conduct scientific investigations, handle and interpret data collected, and draw conclusions

Level 3

- demonstrate adequate knowledge and understanding of facts, concepts and principles in the biology
- apply the concepts of biology to unfamiliar situations with guidance
- construct relationships and analyse information
- communicate ideas in a clear, structured manner using scientific terminology and appropriate formats
- design and conduct scientific investigations, handle and interpret data collected, and draw conclusions with guidance

Level 2

- demonstrate basic knowledge and understanding of facts, concepts and principles in the biology
- apply the concepts of biology to familiar situations
- describe relationships and handle information
- communicate ideas using appropriate scientific terms
- conduct practical work by following instructions, handle and interpret data collected, and draw simple conclusions

Level 1

- recall elementary facts and principles in the biology
- apply the concepts of biology to simple and familiar situations
- handle simple information presented in a straightforward manner
- communicate straightforward ideas using scientific terms
- conduct simple practical work by following instructions and collect the required data

Exemplars

- Selected from samples of students' work in the pilot test
- Annotated to help illustrate the typical performance at each level
- Tentative in nature
- Samples of live performance in the 2012 HKDSE examination to be provided at a later stage

SRR Information Package (available tentatively in June 2009)

- Assessment framework (already on HKEAA website)
- Sample papers (now available on website)
- Suggested answers
- Level descriptors
- Annotated samples of students' work