IB Assessment forum

Richard Penrose, head of marking
May 2013 session statistics

• 135 countries
• 2156 schools
• 205 nationalities
• 127,304 candidates (6.57% increase)
• 470,203 subject entries (8.44% increase)
• 775 separate examination papers
• 8,030 examiners
• Language A: Literature 255 exam papers produced in 72 languages
• More than 1 million scripts eMarked
Highlights

• eMarking of new group 1 and 2 courses
• Cross-standardisation of group 1 and 2 marking and awarding
• eMarking of new economics course
• Quality of visual arts marking
E-marking with seeding

• IB provide data about components and candidates to RM Education for upload into scoris™
• Scripts sent from schools to scanning centres
• Scripts scanned and made available to examiners in scoris™
• Component senior team set-up practice, qualification and seed scripts
• Examiners ‘qualify’ to mark and are quality assured during marking
• Raw marks are final (unmoderated) marks in IBIS
Benefits to IB of e-marking

- Examiner marking is visible
- Underperforming examiners are coached or removed from the session
- Re-allocation is rapid – no script movements
- Less clerical checking – Scoris does the sums
- Examiners mark to the PE standard
- No frenzy of re-marking inconsistent examiners
- Standardisation and Grade Award meetings can be remote
Examiner Feedback

May 2013 eMarking questionnaire

- Simulation marking: M11 Positive 82.09%, M12 Positive 82.57%, M13 Positive 83.96%
- Familiarization marking: M11 Positive 74.46%, M12 Positive 79.34%, M13 Positive 85.65%
- Practice scripts: M11 Positive 77.51%, M12 Positive 83.15%, M13 Positive 88.65%
- Qualification (Standardization) marking: M11 Positive 89.44%, M12 Positive 91.44%, M13 Positive 87.03%
- Entering marks: M11 Positive 81.90%, M12 Positive 85.91%, M13 Positive 99.94%
- Adding annotations (e.g., tick, cross): M11 Positive 83.05%, M12 Positive 82.72%, M13 Positive 86.58%
- Adding comments: M11 Positive 73.89%, M12 Positive 84.58%, M13 Positive 89.68%
- Using marking tools (e.g., ruler, protractor, multi-line overlay): M11 Positive 73.89%, M12 Positive 82.72%, M13 Positive 86.88%
- Communication tools (e.g., sending a message to your team leader): M11 Positive 79.55%, M12 Positive 89.68%, M13 Positive 80.70%
- Marker guide / documentation: M11 Positive 86.42%, M12 Positive 82.30%, M13 Positive 80.70%
- Provision of system feedback on practice, qualification and seed responses (i.e., the ability to view the Principal Examiner’s marks and comments alongside your own): M11 Positive 70.73%, M12 Positive 80.70%, M13 Positive 80.70%
Benefits to candidates of e-marking

- Wealth of data on candidate performance available ([IBResultsExtra](#))
- Digital return of EURs
- Candidate’s work is marked anonymously, removing risk of examiner bias
- Examiner work is constantly compared to the PE standard
- IB exam delivery can scale at the rate of IB growth
- Negligible risk of losing scripts
**QIGing**

- A QIG is a question item group - a part of an examination paper that can be marked separately.
- QIGing is the division of an examination paper into QIGs, parts that can be marked separately.
- Examiners can choose to mark some or all QIGs in an examination paper.
- Examiners can attempt to qualify for marking in as many or as few QIGs as they want.
Benefits of QIGing

• By combining seeding and QIGing, the productive work of examiners who can mark some QIGs accurately but not others is retained
• Reduces problems caused by examiner shortages
• Examiners can concentrate on those questions which they are good at marking
• Increased accuracy of marking because the markscheme for an individual question can be held in the examiner’s working memory
Low points

- ToK marking quality
- Performance on Literature written assignment
- Visual arts eCoursework upload
- Errors in Mathematics SL papers
TOK marking quality

• Changes in May 2013
• New titles each session
• Marking quality control tightened
• New notes on each title for examiners
**Written assignment: assessment criteria**

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Description</th>
<th>Marks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Criterion A</td>
<td>Fulfilling the requirements of the reflective statement</td>
<td>3</td>
</tr>
<tr>
<td>Criterion B</td>
<td>Knowledge and understanding</td>
<td>6</td>
</tr>
<tr>
<td>Criterion C</td>
<td>Appreciation of the writer’s choices</td>
<td>6</td>
</tr>
<tr>
<td>Criterion D</td>
<td>Organization and development</td>
<td>5</td>
</tr>
<tr>
<td>Criterion E</td>
<td>Language</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>25</strong></td>
</tr>
</tbody>
</table>
What do Principal Examiners say?

- Criterion A has presented difficulties. Candidates struggled to show a good understanding of cultural and contextual elements through oral activity done in class, hence reflection by students has been ambiguous, confusing and unclear in many cases. (Spanish)
- Criterion A: The nature of this expectation seemed not to be understood entirely by teachers directing candidates in this activity. (English)
What do Principal Examiners say?

• Candidates have found criterion C, the focus on the appreciation of author’s choices, particularly challenging this session. (Polish)

• Criterion C: Candidate outcomes ranged from almost no address of authorial choice to some excellent work. (English)

• Criterion C: very limited analysis, so examiners cannot find a great appreciation of the meanings in techniques, tone and intention.
Visual arts

• 1379 schools electronically submitted visual arts work from 12742 candidates
• 295 examiners assessed the work onscreen over the four components

Rin Tachihara, United World College of South East Asia
Matsubokkuri Koen, Acrylic on canvas, watercolour, pinecones, pine needles, dried leaves
eCoursework upload problems

Candidates uploaded photographic/video evidence, copies of workbook pages, other supporting materials including recording of interview (up to 1Gb file) via IBIS upload tool

• Infrastructure issues
• “Banned” word list
• Coordinator/teacher not familiar with above
• School firewall problems
• Schools’ concerns with assessment outcomes
Consultation with schools

- Over 1000 responses to survey relating to upload experience
- Over 500 teachers volunteered to take part in further consultations from which five working groups being set up to:
  - trial a prototype of a new more user-friendly interface design
  - assist in simplifying guidance notes on the upload
  - give informal hints and tips to support teacher colleagues in other schools, encouraging positive use of the subject forum of the OCC
  - permit our IT team to conduct an in-depth analysis of a small number of schools systems to understand better why the process was so problematic for some and relatively easy for others
  - consider viable alternatives and potential solutions to make the upload easier in future.
What now?

1. Change the process
2. Change the look and feel
3. Better error reporting
Change the process

Select files → Upload files → Add metadata → Submit

Changes to files are managed through the same screen
Change the look and feel

1. This is still IBIS
2. Thumbnails
3. Spreadsheet style screen for metadata
Better error reporting

1. More detail about errors
2. More information for schools
Then what?

1. Further IB development
   - Enhancements to the new UI
   - Bespoke client

2. API

   ePortfolio → API → IB
Other issues raised by schools

• Psychology IA moderation
• Biology (and other group 4) IA moderation
• Extended essay marking quality
• Academic misconduct
Benefits of E-coursework upload

- All script / material movements are digital
  - No postage costs
  - Nothing gets lost in the post
  - Nothing gets stuck at customs
- Ease of plagiarism checks, for school and IB
- Errors in submission can be corrected by candidate and school before submission
- Upload process requires authentication of candidate work
- Dovetails with e-marking
- Multi-media upload provides new possibilities for assessment tasks to curriculum review teams
Dynamic Sampling™ for IA e-marking

Moderator downloads sample of 3

Teacher's marks within tolerance

Teacher's marks stand for all candidates

Teacher's marks outside tolerance

Moderator downloads 2-7 more

Teacher's marks consistent

Moderation applied to all candidates
Category 1 EUR mark changes
Category 1 EUR mark changes

![Histogram showing changes in scaled marks for Category 1 EUR marks.](chart.png)
Grade change rate

Below average:
  Biology HL, Physics, Physics EE, Chemistry, History HL, Mathematics SL, HL & studies, ESS

Average (26%):
  English language and literature, Visual arts, French B HL, Economics EE and HL, Biology EE, Psychology EE, Geography HL, English B HL

Above average:
Academic misconduct

The IB investigated more than 1000 academic misconduct cases during the May 2013 session. Of these:

- 52% are plagiarism cases
- 25% are collusion cases
- 12% are exam related cases
- 11% are miscellaneous cases

On average

- 62% of the cases are reported by examiners
- 20% of cases are reported by schools
- 18% of the cases are detected through random sampling
Questions?