



CAMBRIDGE

Our Approach to Assessment

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A part of the University of Cambridge

- **Prepares** students for life; developing an informed curiosity and a lasting passion for learning.
- At the heart of a **global learning community** with more than 10,000 schools, including the US.
- **Working in partnership** with educators worldwide, including 40 national governments and education reform projects.



Cambridge Pathway

Cambridge
Pathway



A clear path for educational success from age 3 to 19

Cambridge
Early Years
Age 3+

Cambridge
Primary
Age 5+

Cambridge
Lower Secondary
Age 11+

Cambridge
Upper Secondary
Age 14+

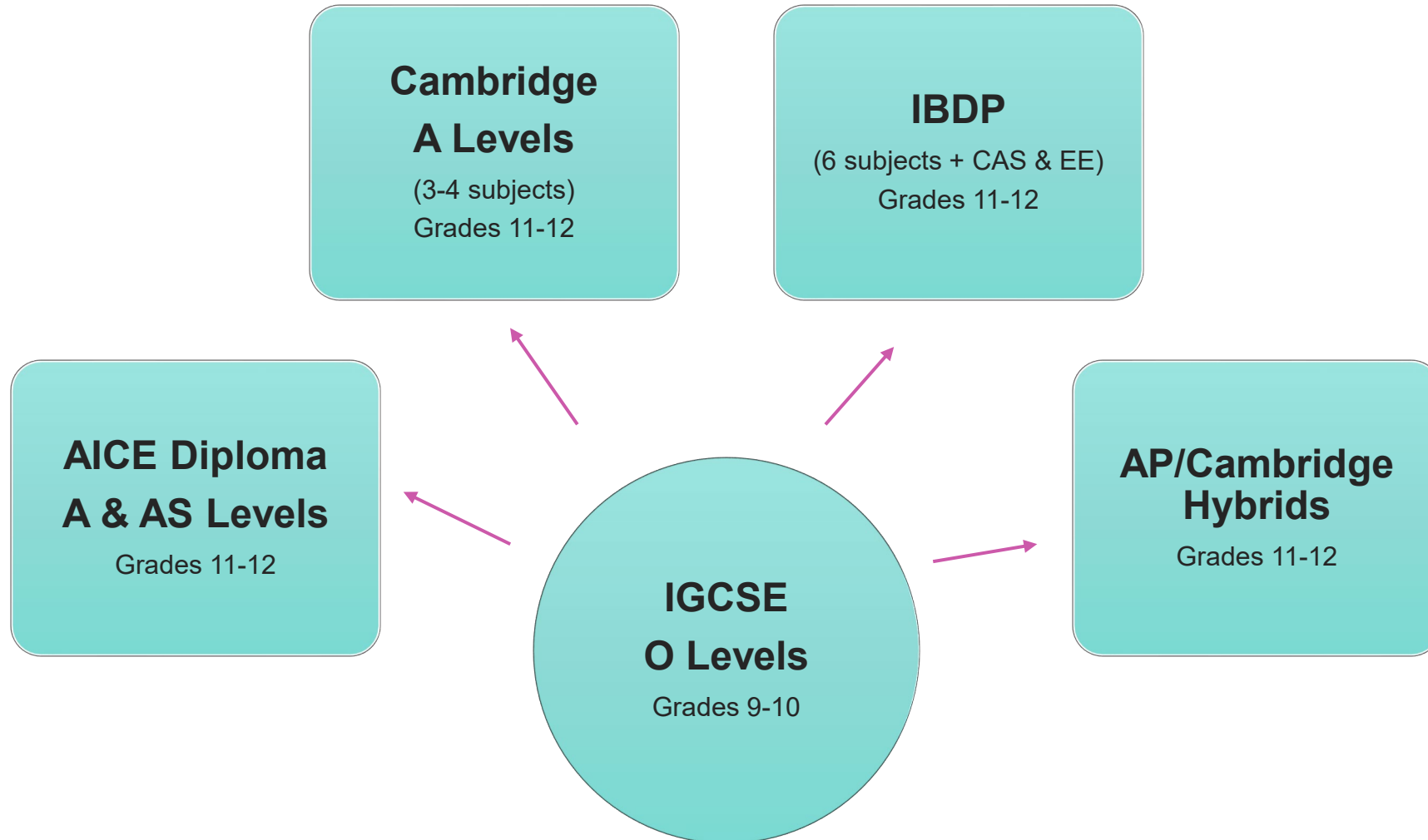
Cambridge
Advanced
Age 16+

Cambridge Professional Development for teachers and school leaders

Ready for
the world



IGCSE Foundation for College Rigor



Cambridge International Advanced AS and A Levels

- **Opportunity for in-depth learning in over 55 subjects**
- AS levels are taught over one academic year/180 instructional hours.
- A Levels are taught usually over two academic years, w/ 360 instructional hours.
- Required Global Research and Perspectives (GPR) course prepares students to approach learning with local global relevance.
- Tens of thousands of successful Cambridge International students gain entrance at leading universities worldwide.



An established and well-known rigorous curriculum



Focuses on developing the skills and knowledge required for university study in higher education around the world



Teaching essential key concepts for the subject, integrating critical thinking skills

AS and A Level Subjects

Mathematics and Science	Languages	Arts and Humanities	Interdisciplinary and Skills Based Course
<ul style="list-style-type: none"> • Biology 9700 • Chemistry 9701 • Computer Science 9618 • Design and Technology 9705 • Environmental Management 8291 • Further Mathematics 9231 • Information Technology 9626 • Marine Science 9693 • Mathematics 9709 • Sports & Physical Education 8386 • Physics 9702 • Psychology 9990 	<ul style="list-style-type: none"> • Afrikaans Language 9679, 8679 • Arabic 9680, 8680 • Chinese 8681, 8238, 9715 • English Language 9093 • French 8682, 9716 • German 8683, 9717 • Hindi 8687, 9687 • Japanese Language 8281 • Portuguese 8684, 9718 • Spanish (First Language) 8665 • Spanish 8022, 8685, 9719 • Tamil 9689, 8689 • Urdu 8686, 9676 	<ul style="list-style-type: none"> • Accounting 9706 • Art and Design 9479 • Biblical Studies 9484 • Business 9609 • Classical Studies 9274 • Drama 9482 • Digital Media & Design 9481 • Economics 9708 • Geography 9696 • Hindi Literature 8675 • Hinduism 9487 • History 9489 • Islamic Studies 9488 • Law 9084 • Language & Lit in English 8685 • Literature in English 9695 • Media Studies 9607 • Music 9483 • Sociology 9699 • Spanish Literature 8673 • Travel and Tourism 9395 	<ul style="list-style-type: none"> • Global Perspectives and Research 9239 • Thinking Skills 9694 • English General Paper 8021

Cambridge Global Perspectives

- Thinking and skills course
- Made up of 6 global challenges, each challenge is six hours long
- Maximum student engagement
- Often integrated into other courses or whole school assemblies



Assessing Learner Attributes Through a Global Lens

- Our approach in Cambridge International AS & A Level Global Perspectives & Research encourages learners to be:
 - confident, explaining, analyzing and evaluating global issues and communicating arguments
 - responsible, researching extensively and selecting suitable material from a globally diverse range of sources, directing their own learning
 - reflective, developing a critical awareness of their personal standpoint and how that impacts on their response to different opinions and diverse ways of thinking
 - innovative, thinking creatively to propose solutions to issues
 - engaged, working collaboratively to develop each individual's potential in pursuit of a common goal.





Developing the Cambridge learner attributes

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US Grade - Cambridge Equivalents

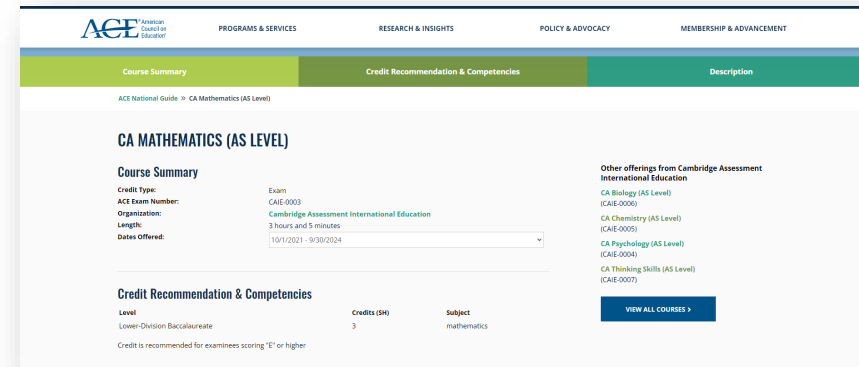
USA	AS Level	A Level	IGCSE
A+	a	A*	A*
A	a	A	A
B+	b	B	B
B	c	C	C
C+	d	D	D
C	e	E	E
D+	n/a	n/a	F
D	n/a	n/a	G
F	Ungraded	Ungraded	Ungraded

Recommended Credit by Examination Award

Credit Recommendations		
Subjects	AS Level	A Level
Humanities & other fields	3 credits	6 credits
Sciences w/Lab	4 credits	8 credits

American Council on Education Learning Evaluation

- ACE stands as an independent evaluator of courses and exams whose credit for prior learning recommendations are *trusted* by higher education faculty.
- Courses or exams are reviewed on a 3-yr cycle.
- ACE Faculty Reviewers consider how well the assessment (or course) matches to the content and skills covered in college-level courses in that subject.
- The exams submitted are chosen for their utility as lower-division/general education courses at most US colleges and universities.



Level	Credits (SH)	Subject
Lower-Division Baccalaureate	3	mathematics

- Recommendations are now published on [ACE National Guide](#).
- The reviews recommend college credit awarded for grade of E or higher across the five subjects.



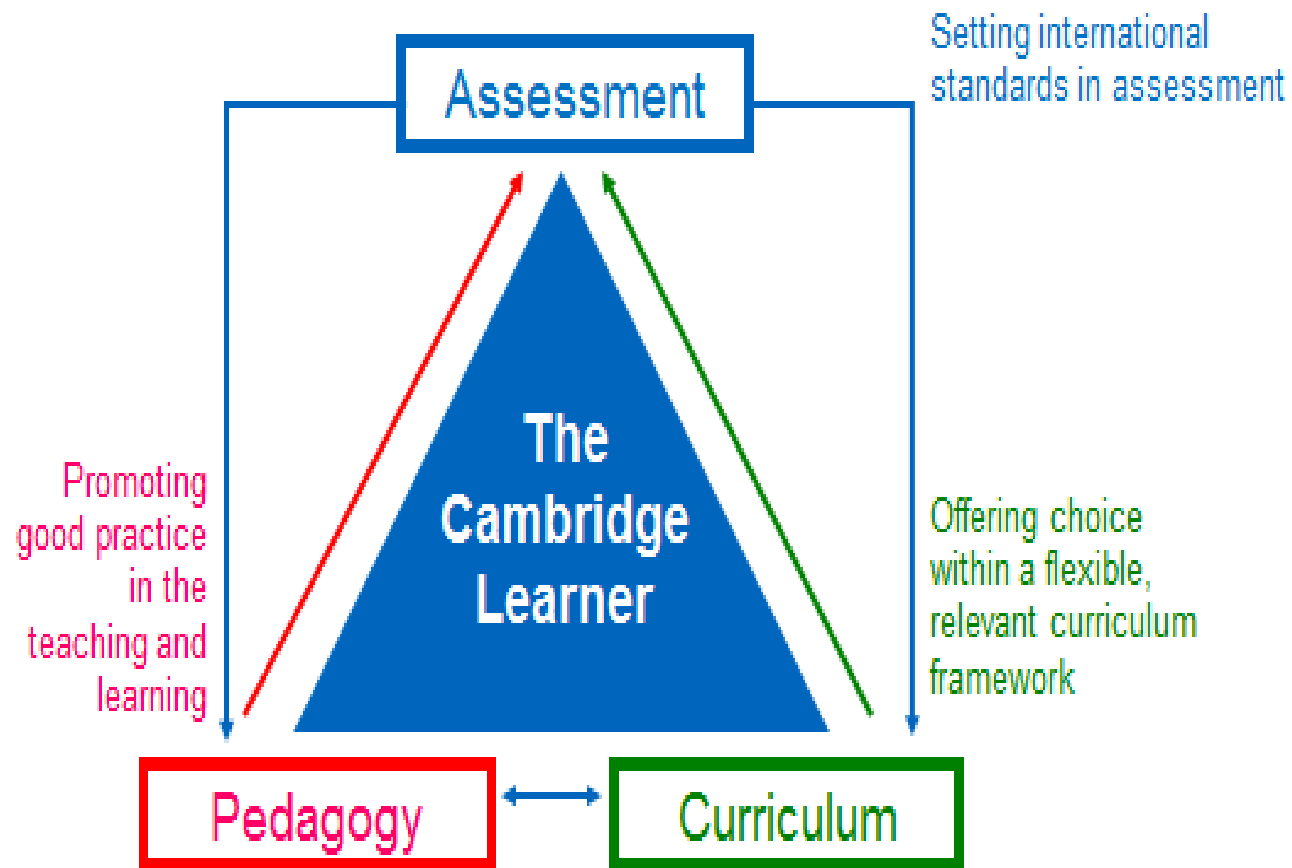
CAMBRIDGE

Approach to Assessments

<https://www.cambridgeinternational.org/usa/higher-ed/training-videos/>

“Achievement for All” through a Coherent Aligned System of Education

- High Expectations Standards, Curriculum and Syllabus
 - Curriculum is backwards designed
 - Detailed course syllabus
 - Provides clear picture of what students should know
- Instructional Professional Development
 - Centered on *teaching and learning* as well as test preparation
- High Quality Assessments
 - Multiple formative and summative assessment methods
 - Rich item level data and reporting
 - Mastery based assessment system
 - Measuring critical thinking and problem solving



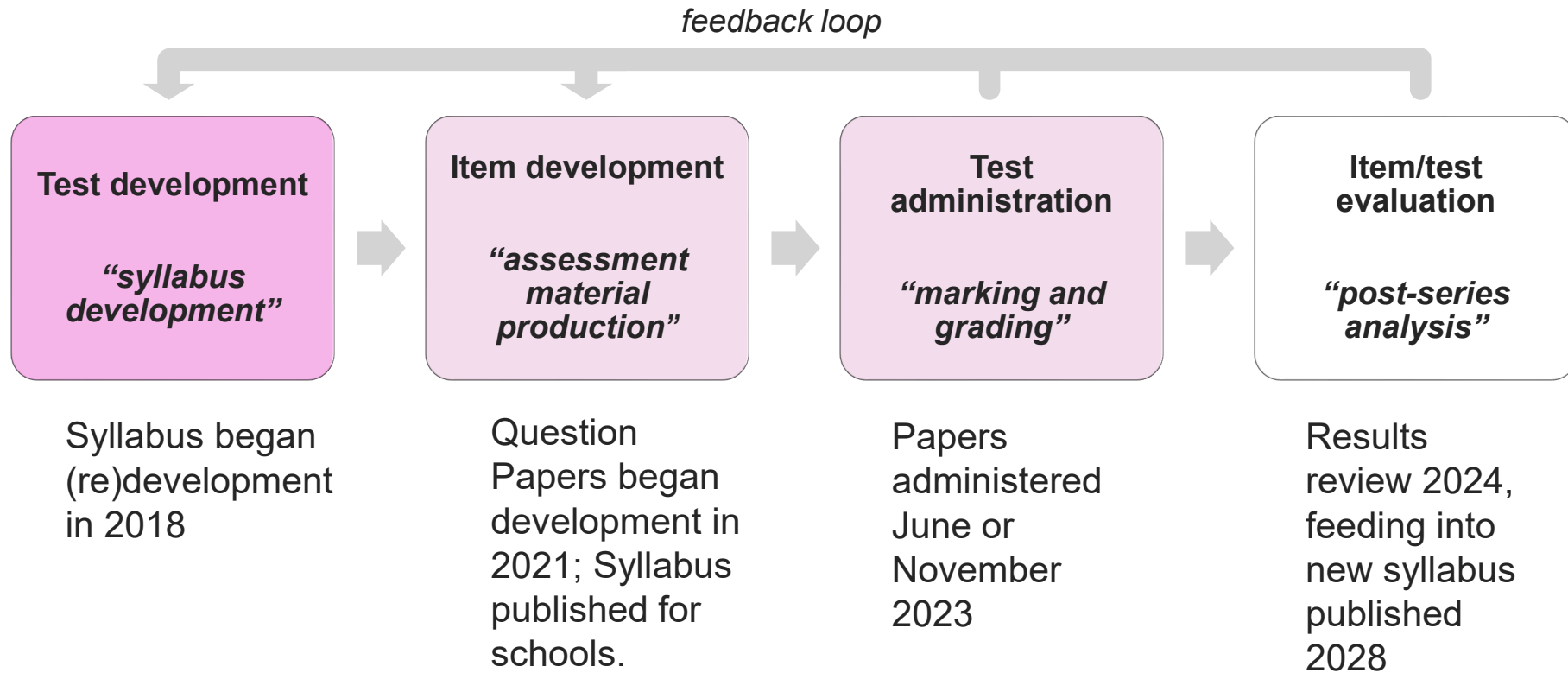
Higher Education Stakeholder Engagement

- Birmingham City University, UK
- Community College of Denver, US
- Emory University, US
- Georgia Institute of Technology, US
- Indiana University, US
- Massachusetts Institute of Technology, US
- Northern VA Community College, US
- Rice University, US
- Troy University, US
- University of Cambridge, UK
- University of Canterbury, UK
- University of Central Florida, US
- University of Edinburgh, UK
- University of Houston, US
- University of Malaya, MY
- University of Pretoria, ZA
- University of Texas, Austin, US
- University of West Florida, US
- University of Westminster, UK
- Vanderbilt University, US

Sample of Institutions Consulted in AS/A Level Development

Overview

Cambridge operates a “sessional model” for test development and administration



Test Design & Development

- Cambridge routinely reviews and redevelops syllabuses every 3–5 years, or as required
- It involves engagement with internal and external stakeholders
- It is the most significant opportunity to draw on assessment functioning data from several sessions

UK Terms

syllabus document

- scheme of assessment (overview)
- assessment objectives
- subject content

specimen assessment materials

- scheme of assessment (detailed)
- content sampling

paper setter guidelines

- targets for content sampling and demand

US Terms

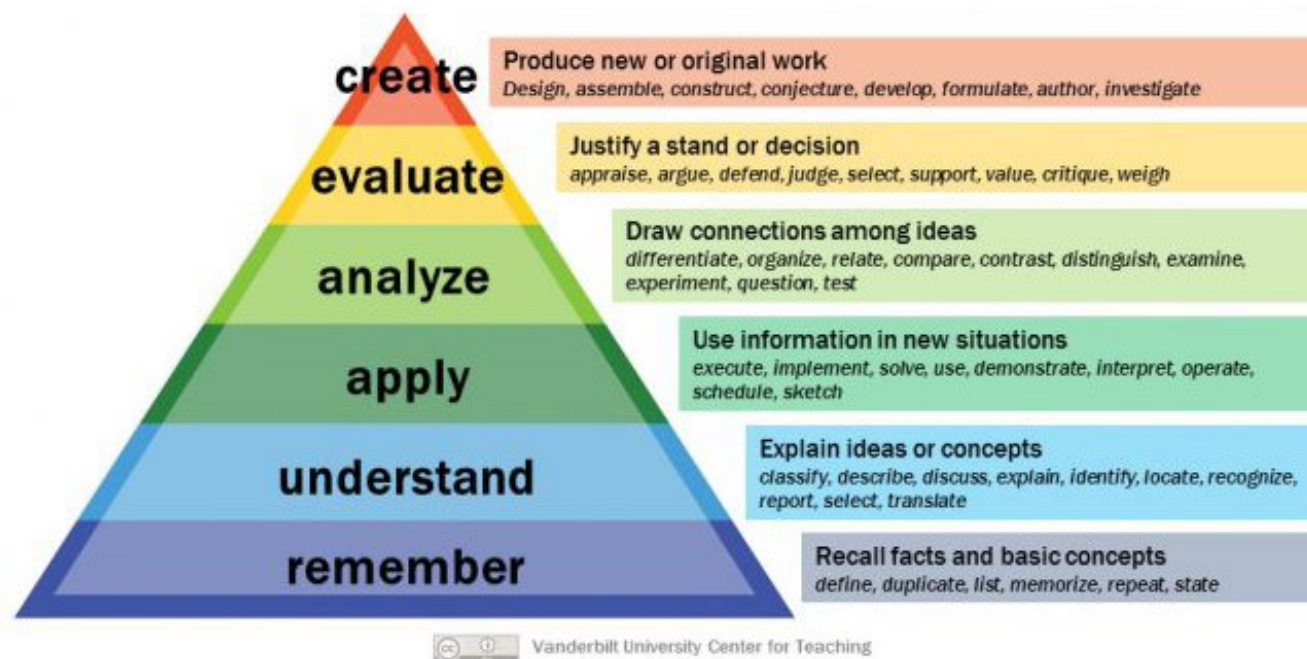
content standards developed

assessment structure defined

blueprint established

Assessments: Thought-Provoking Exams

- Assess what we know to be of value: deep subject knowledge, conceptual understanding, and higher-level thinking skills.
- Rely strongly on written essays, requiring development of thought and argumentation
- Remove scaffolding, gradually, throughout question
- Require the application of knowledge in unfamiliar contexts
- Encourage connections to be made between topic areas or concepts
- Include lab practicals for science subjects and in-person interviews for languages
- Use reliable and internationally standardized rubrics and grading schemes

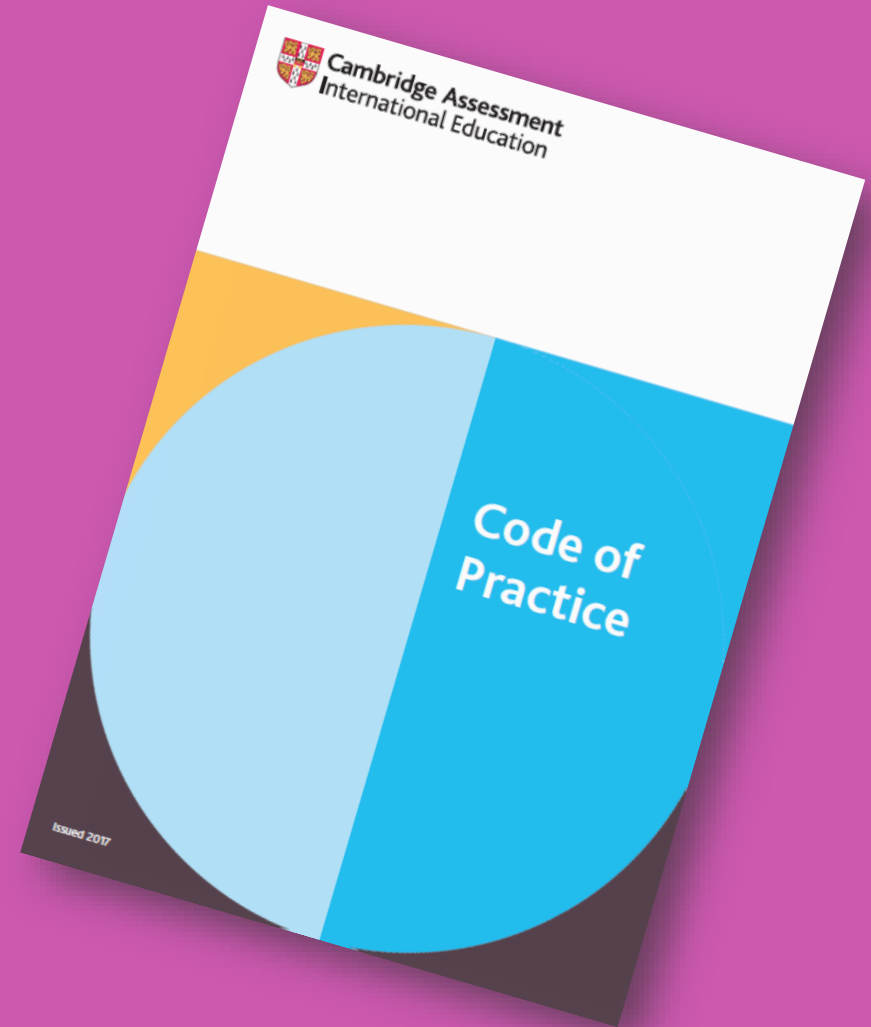


Our Code of Practice

We develop our exams according to a Code of Practice.

This Code both

- sets out our approach to assessment and
- demonstrates transparency to those who use our assessments



Devising and Updating Syllabuses

Considerations:

- Candidates: what are their needs and backgrounds?
- Is the syllabus fit for purpose?
 - Is the content **up-to-date**? Does it reflect latest thinking?
 - Does the syllabus content **sample** the subject appropriately for the level?
 - Does the content permit **progression** to a higher level?
- Does the content reflect Cambridge Learner attributes?

Item Development—Question Papers

- The assessment material production cycle lasts around two years, from commissioning to administration
- The process is centred on the component level, aiming to create ‘balanced exam papers’
- Through the process, there are rigorous, well documented quality assurance activities

UK Terms

draft assessment materials

- question papers meeting specification
- mark schemes for items/questions

specification sheets

- record of setting decisions
- evidence of alignment with targets

typeset assessment materials

- standard and adapted formats
- pre-standardisation mark schemes

audits of quality assurance and sign-off

- feedback from reviewers

US Terms

items authored and revised

item sensitivity review

quality checks carried out

assessments approved for use

Producing Question Papers

Must meet requirements regarding:

- Validity
 - Conforms to syllabus (content, assessments objectives)
 - Avoids irrelevant matters, testing what it is meant to test
 - Avoids construct under-representation (the test is too narrow in focus)
 - Covers a fair proportion of the syllabus
- Discrimination (distinguishes between different abilities)
- Appropriate level overall but allows performance at all levels (not too easy or too hard)

Producing Question Papers

Must meet requirements regarding:

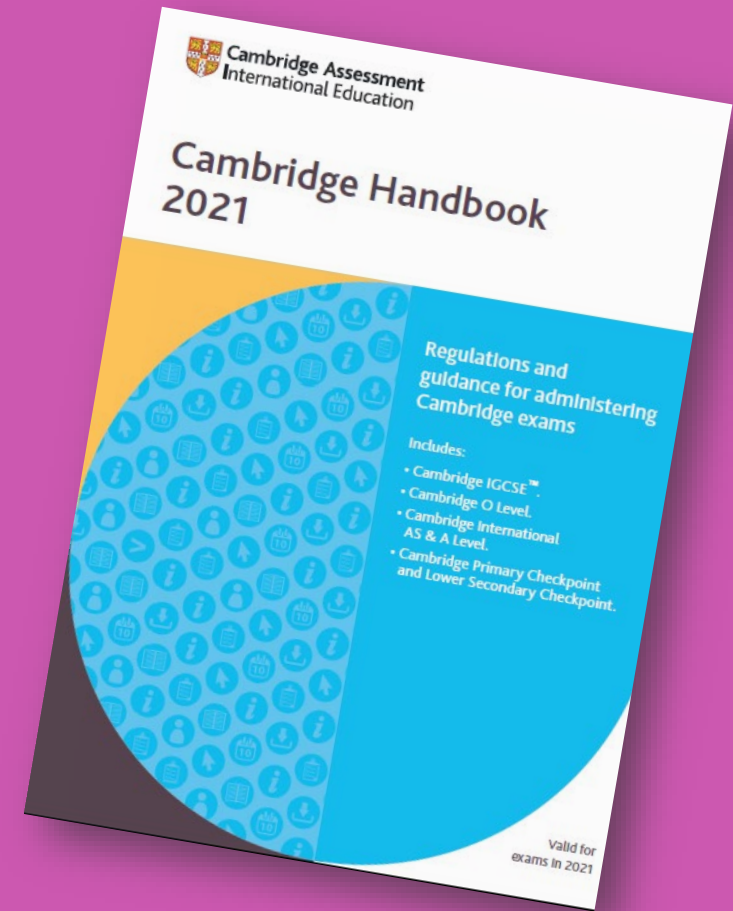
- Use of accessible and clear language
- Factual correctness and accuracy
- Allows performance at all levels (not too easy or too hard)
- Cultural appropriacy for wide international candidature

Other considerations:

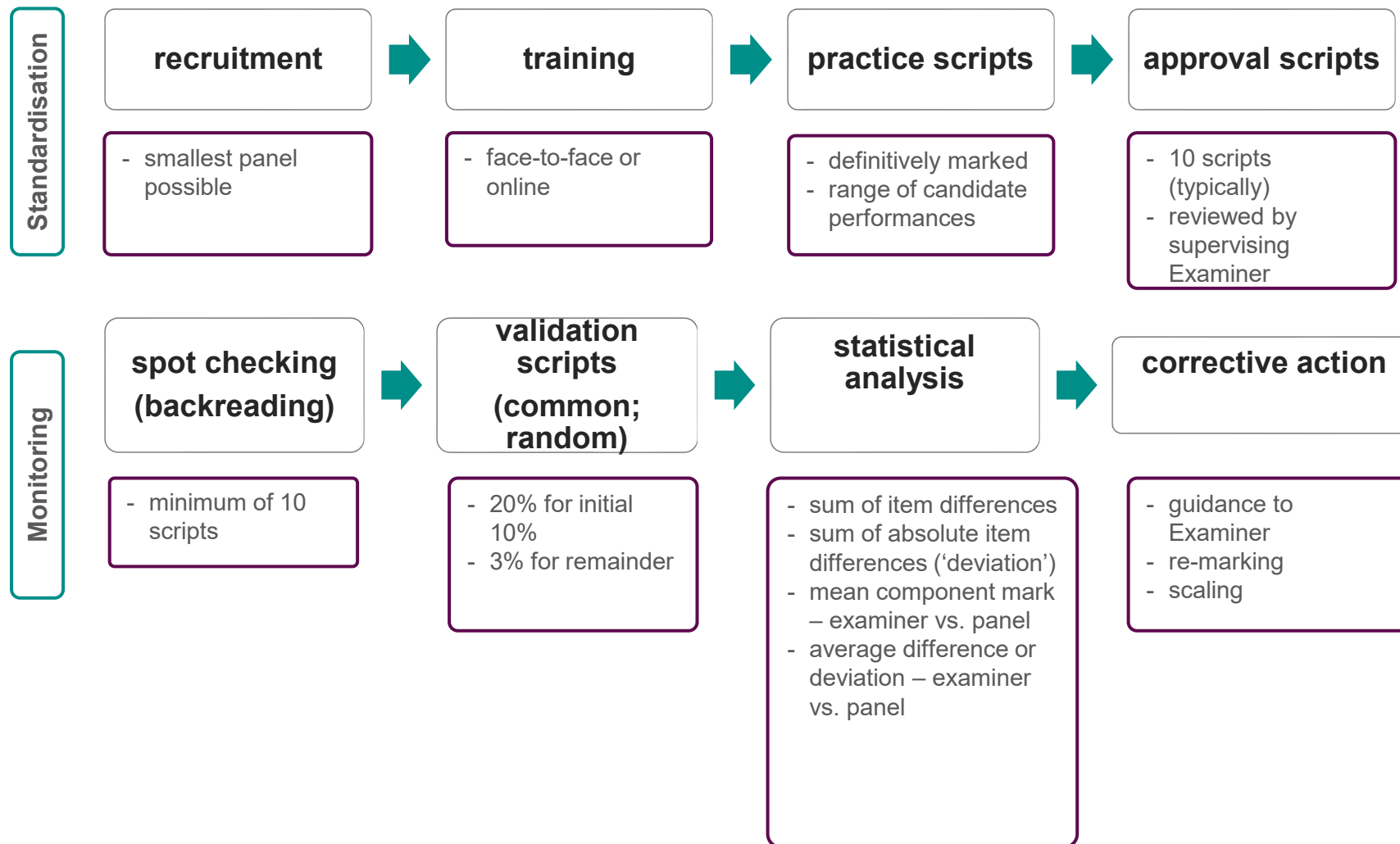
- length of exam
- number and type of components
- number and type of items
- manageability in large schools in different settings
- time variants
- examiners being able to mark it reliably.

Administration of the exam

- Timetabling: setting an international timetable, windows and fixed dates
- Production of handbook for centres
- Standardised conditions
- Special consideration arrangements
- Suitable test locations and conditions
- Security: training and monitoring of invigilators; secure storage at schools; secure despatch/transfer of materials



Marking Process for Examiners



Marking a.k.a Scoring

- The vast majority of items are hand scored by expert examiners
- Assessment Specialists are recruited, trained, approved and monitored
- Qualitative monitoring – spot-checking (backreading) and review of performance on validation scripts
- Statistical monitoring – based on examiners' performance relative to the entire panel of examiners

UK Terms

definitive assessment materials
- finalised mark scheme and guidance

standardisation materials
- practice scripts
- monitoring scripts

examiner performance auditing
- supervision records
- statistical monitoring reports

US Terms

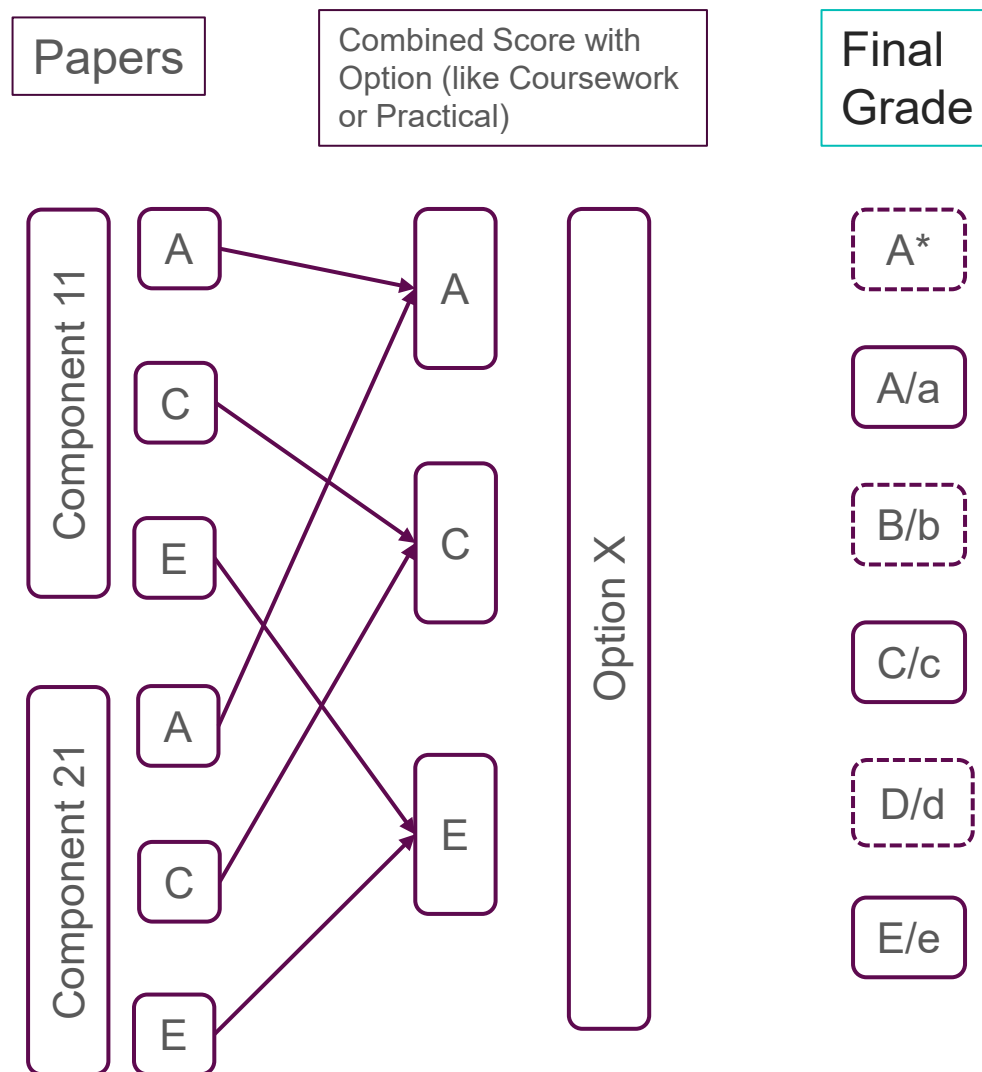
scoring rubrics finalised

Scorers trained (“standardisation”)

Scorers monitored

Grading Process

- Cut-scores are set for every assessment series – the aim is to **“maintain the awarding standard from the previous year”**
- Standard setting draws on statistical evidence and expert judgement
 - evidence of the difficulty of the test
 - evidence of the ability profile of the cohort
- Statistical techniques:
 - **equates across variants**
 - **between subjects**
 - **over time**



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B+	b	B	B
B	c	C	C
C+	d	D	D
C	e	E	E
D+	n/a	n/a	F
D	n/a	n/a	G
F	Ungraded	Ungraded	Ungraded

WES 2014, <https://wenr.wes.org/2014/02/a-guide-to-the-gce-a-level>

Recommended Credit by Examination Award

Credit Recommendations		
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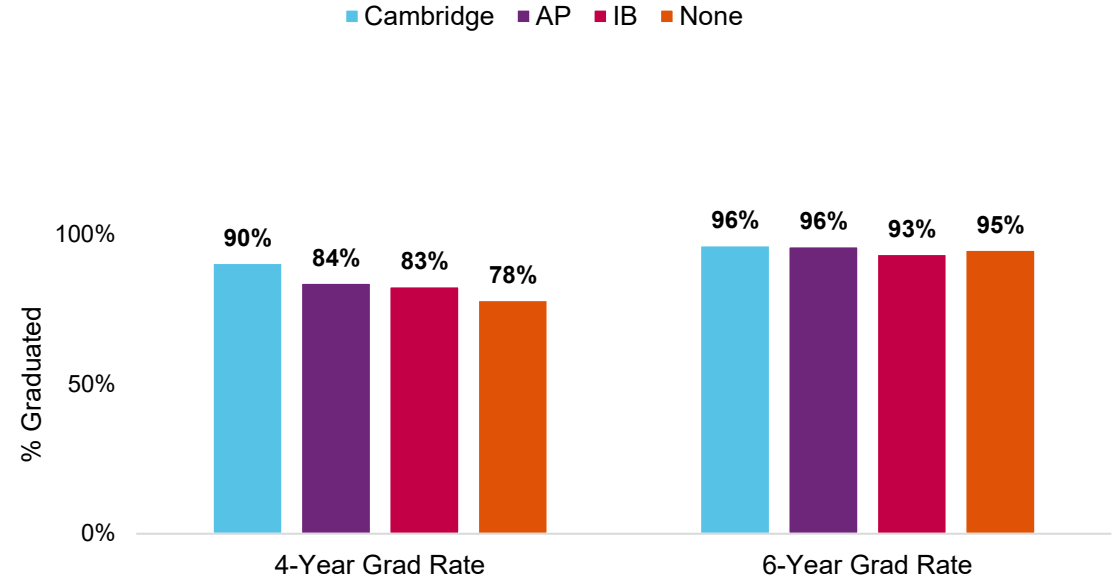
Placement Validity Research

Research studies conducted by university partners

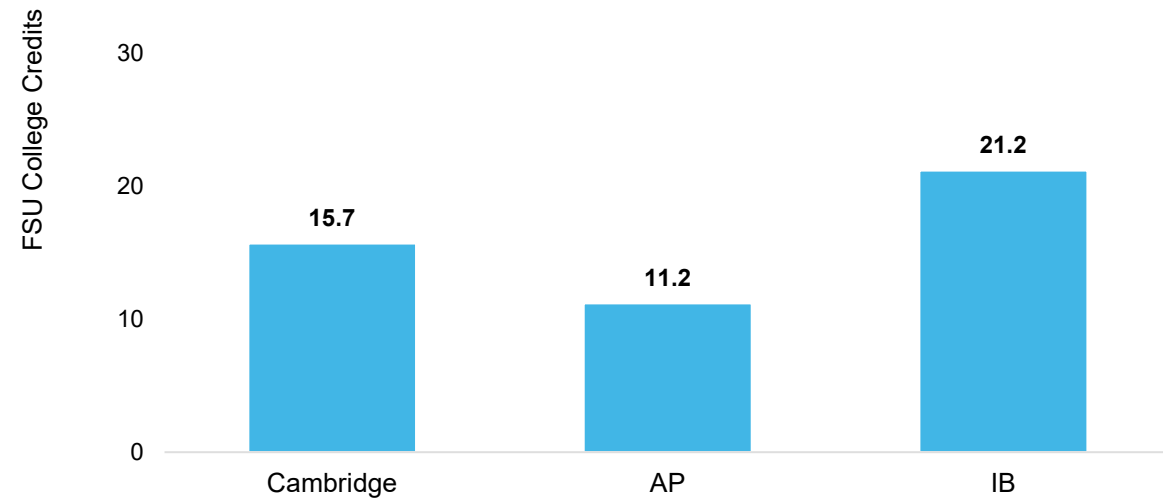
Cambridge students show successful post-secondary outcomes

Cambridge A/AS Level students earn an average of 16 credits at Florida State University and have a higher 4-year graduation rate compared to students from other programs

FSU Graduation Rate by Credit Program



Average Credits Earned by Program



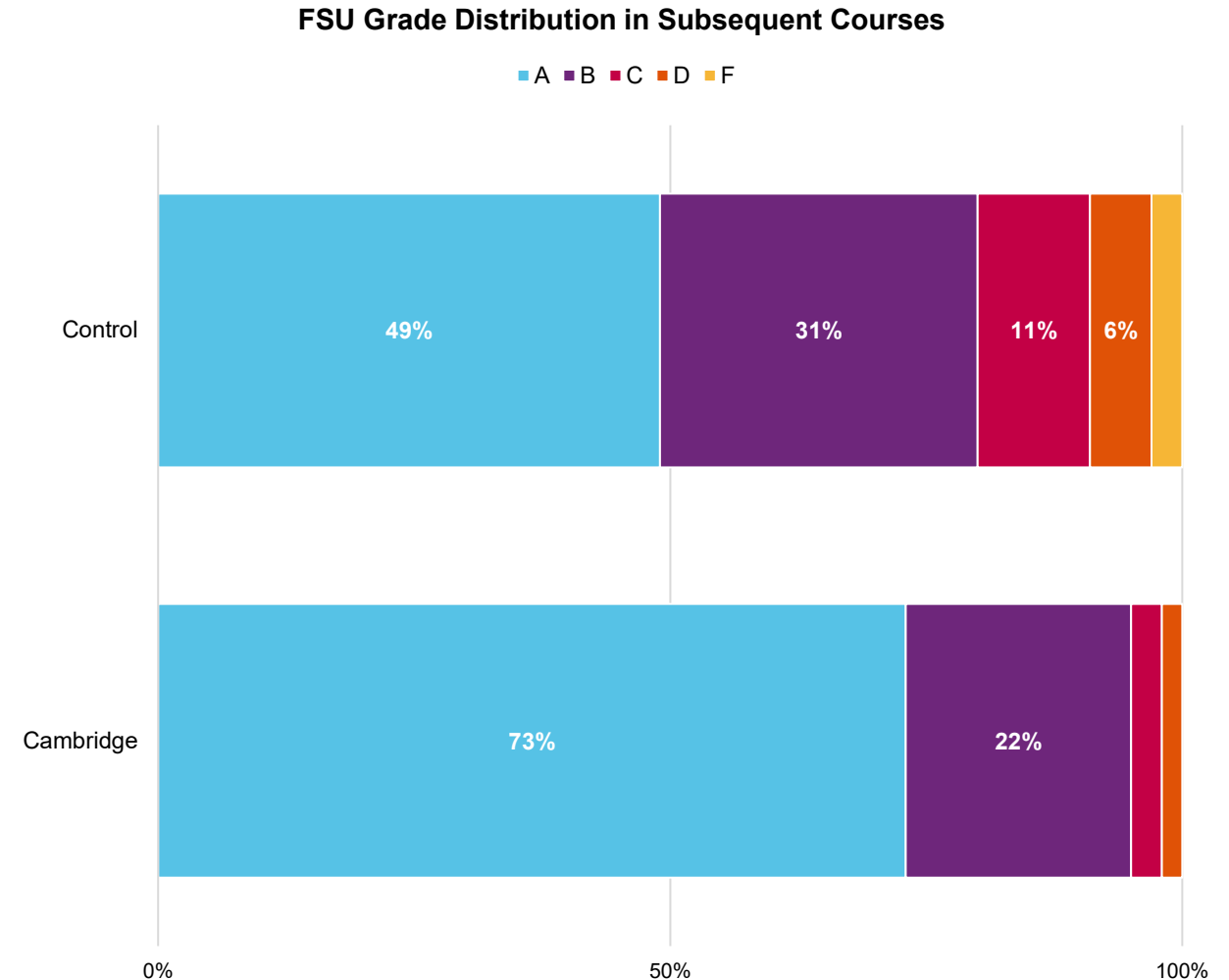
Subsequent course performance at FSU

After receiving credit for entry-level courses, Cambridge students went on to succeed in their subsequent college courses

Cambridge A/AS Level students have **higher pass rates in their subsequent courses** compared to the entire cohort at FSU.

Moreover, 92% of Cambridge students who achieved a grade of e/E on their A/AS Level went on to earn an A or B in their subsequent course.

The trend held true across 6 subject areas (Biology, Business, English, History, Mathematics, and Psychology).



Resources for Faculty Review

- Course Syllabi
- Sample Test Questions
- Rubrics
- Sample Candidate Responses

Cambridge Assessment International Education 11 SEP 2017

Syllabus
Cambridge
English
For examin

3
Answer one question.

You are advised to write an essay of 800–700 words. Use examples to support your arguments.

1 Evaluate the extent to which your country has achieved equality for all of its people. [30]

2 In most countries age restrictions on certain activities, products and services are imposed on

C. Example candidate response and examiner comments

The example answer has been typed and is presented on the left-hand side. The examiner comments are included on the right.

Level	Example answer	Examiner comments
5	<p><u>Can communities ever recover fully from serious natural disasters?</u></p> <p>1 Serious natural disasters such as tsunamis, earthquakes, hurricanes and floods immediately devastate communities whereas drought inflicts damage over time. However, the degree of recovery depends on the type and scale of the catastrophe, the speed at which local people, government and international organisations respond, population density, the affected country's resources, the quality of infrastructure and the loss of life and livelihoods. By examining such factors it should be possible to explore whether certain type of community can recover better than others leading to a conclusion as to whether it is ever possible to fully recover from such natural disasters.</p> <p>2 The scale of these disasters makes it very difficult to cope and recover in the aftermath as communities are left helpless with the impossible task of re-building lives and buildings. The Indian earthquake of 2004 created a massive tsunami which killed 250,000 in fourteen countries whereas the Nepalese earthquake of 2015 destroyed the capital city of Kathmandu and killed 4000. Whether such disasters are localised or wide spread recovery here was aided by a rapid international response: burying bodies in Aceh province to minimise the spread of disease or rescuing and re-building in Kathmandu. However, whereas well organised funding allowed the people of Aceh to recover after five years, people in</p>	<p>1 The first paragraph is a solid introduction focusing on the key words and meanings of the question. The final sentence adds a personal voice and clearly defines the scope of the argument. However, there is incomplete emphasis on the full range of factors that make a community e.g. social, cultural, economic, political and environmental.</p> <p>The candidate communicates clearly with a vocabulary range ('devastate', 'inflicts'), and a consistent and appropriate register. There is one grammar error (in red) and the list is a little cumbersome, as well as having slightly repetitive vocabulary at the end ('recover', 'whether').</p> <p>2 The second paragraph defines 'scale' as either widespread or localised and effectively exemplifies with details. The 'Indian earthquake' is slightly inaccurate, but does not impede the quality of the response. The candidate develops a comparison to support the argument that the relationship between local government and outside agencies is key to a successful recovery ('could it be that...?' suggests the candidate's voice).</p>
4		

The examiner used the de
example was awarded a L



For more information, visit
[Cambridge for US Higher Ed](#)

or email UShighered@cambridge.org