

International Baccalaureate<sup>®</sup> Baccalauréat International Bachillerato Internacional



# MYP webinar series on eAssessment in the MYP



international Baccalaureate Baccalauréat International Bachillerato Internacional



# Lisa Nicholson April 2020



International Baccalaureate® Baccalauréat International Bachillerato Internacional

# Webinar series

- **#1 The eAssessment revolution**
- **#2 eAssessment and current research**
- #3 eAssessment and the backwash effect
- #4 eAssessment look and feel

# Webinar series objectives

- Inquire into IB assessment principles and practices
- Connect MYP eAssessment principles and practices to the classroom
- Explore how contemporary research supports MYP eAssessment
- Reflect and expand upon new ideas



<sup>©</sup> International Baccalaureate Organization 2020

# Do you have everything you need?

- Something to take notes with
- MYP Assessment ready nano PD (programme resource centre)
- Assessment principles and practices—Quality assessments in a digital age
- Chat box: send "to everyone"

**Note:** Some of the pictures used in this webinar series were taken by Gastón Seijas (IB student) and Mathieu Boudrias. The IB is grateful for their generosity.



<sup>©</sup> International Baccalaureate Organization 2020

# **Finding the** eAssessment resources on the programme resource centre



### **MYP** resources

Middle Years Programme (MYP) guides, teacher support material, eAssessment software and documentation, programme authorization and evaluation information, programme research and information for coordinators

Set as startpage

IMPLEMENTATION LEARNING AND TEACHING CURRICULUM MY RESOURCES NEWS



Language acquisition literature

Individuals and societies













TEACHING MATERIAL MYP EASSESSMENT

MYP on-screen examinations: IT requirements and

How to run on on-screen examination packages on a

On-screen exams-information for candidates - PDF

Rough/scratch paper for use in MYP on-screen

MYP eAssessment Q&A Sheet - May 2016 - PDF

school responsibilities - PDF

macOS Catalina device - PDF

examinations - PDF

### MYP eAssessment

MYP eAssessment demo: Individuals and societies (video) 🕞

Current session material

November session 2019

May session 2020

November session 2020 May session 2021

November session 2021

November session 2016

May session 2016

Subject reports



Arts

Resources in: English | 5 more languages ~

© International Baccalaureate Organization 2020

eAssessment demos and guidance

Specimen and past on-screen examinations-user instructions - PDF

Student response service - user instructions - PDF

Specimens, past session material and reports

On-screen examinations - Frequently Asked Questions - PDF

May session 2019

November session 2018

May session 2018

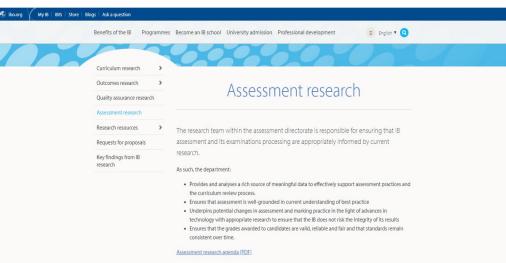
November session 2017

May session 2017





# Finding IB research in the IB webpage





IB Assessment research seeks to ensure that the design and development of IB assessments and assessment practices are underpinned by relevant research and data and that ensures the valid, reliable and manageable assessment of the IB programmes. For example, this is one of studies the you find within can the "Outcomes research" section of ibo.org. Comparative analysis of assessment in the International Baccalaureate Middle Years Programme and the General Certificate of Secondary Education.

> IB PROFESSIONAL DEVELOPMENT DEVELOPING LEADERS IN INTERNATIONAL EDUCATION



# eAssessment and research



International Baccalaureate® Baccalauréat International Bachillerato Internacional

# Objectives of this webinar

Join MYP practitioners from around the world in exploring **eAssessment and research** as you:

- inquire into playful assessment practices
- explore eAssessment in light of research
- reflect on how the IB continually uses contemporary research to inform assessment decisions.

WORLD

## **Traditional assessment to digital assessment**

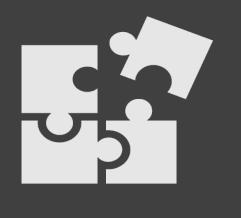
Traditional methods of assessment are often "too simplified, abstract, and decontextualized" to meet 2020 educational needs which should measure what students can actually do with their knowledge and skills (competencies).

Performance-based assessments are those that use the real world, thereby providing relevancy, but these are hard to craft.

"Digital learning environments can provide meaningful assessment environments by supplying students with scenarios that require the application of various competencies".



# Playful assessment





student-driven learning.



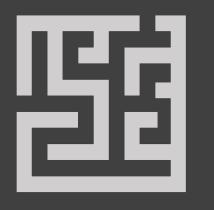


How young minds can give shape to their ideas, observe their surroundings and design solutions for the problems around them.

During gameplay, students naturally produce rich sequences of actions while performing complex tasks.



# Some types of playful assessments



- Game-based assessments (GBAs)
- Playful assessment goes beyond measuring outcomes of content knowledge to shed light on thought processes
- **Makerspaces** require constant interaction between learner and teacher
- Collaborative **spaces** where people gather to get creative, invent new things, and share ideas lend themselves to playful assessment



# Your turn!



What have you done in your classroom with playful assessment?

Type your thoughts in the chat box.



Contemporary research that supports eAssessment principles and design



We need to tap into how adolescents use gaming and how we need to consider this in supporting learning.

(See "Stealth Assessment: Measuring and Supporting Learning in Video Games" by MacArthur Foundation)



Borrowing ideas from game construction can help teachers with assessing student projects, supporting skill development and constructing rubrics. (See "A Look at Playful Assessment" on Edutopia website)



# **IB Assessment research agenda**

	Research in this area will seek to add to the growing body of literature surrounding computer-assisted assessment and position the IB on the cutting edge of these developments, focusing on the following questions.
	<ul> <li>How can the IB improve the validity and reliability of on-screen marking of externally assessed components while ensuring that standards are maintained?</li> </ul>
The impact of technology on assessment	<ul> <li>How can the IB best utilize item-level information on assessment to improve the quality of IB assessments?</li> </ul>
	<ul> <li>How can the IB use the move towards the electronic upload and moderation of internal assessment components to improve the reliability and manageability of the moderation process?</li> </ul>
	<ul> <li>How can the IB use digital technologies to change the way in which candidates are assessed in the Diploma Programme and Middle Years Programme?</li> </ul>

Source: Assessment research agenda [PDF]





# Our speaker...



International Baccalaureate® Baccalauréat International Bachillerato Internacional

### Introducing our guest for today



Dr Rebecca Hamer

IB Assessment principles and practice Assessment research and design

- Joined IB in 2012
- Involved in curriculum review of DP/CP and MYP
- Involved in MYP eAssessment development since 2013





## MYP eAssessment

Question 1:

How does eAssessment meet the criteria for 21st century learning with 16-year-old students?





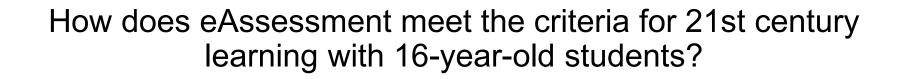
How does eAssessment meet the criteria for 21st century learning with 16-year-old students?

- Integrate technology-supported inquiry and problem-based learning
- Interdisciplinary themes across content areas
- Link school to outside community

Evidence that impacts students/schools





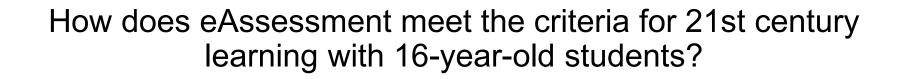


- Integrate technology-supported inquiry and problem based learning
- Interdisciplinary themes across content areas
- Link school to outside community
- ✓ Assess through a balance of:
  - classroom assessment (formative) with a focus on performance
  - technology-enhanced summative assessment.

Evidence that impacts students/schools







- Integrate technology supported inquiry and problem based learning
- Interdisciplinary themes across content areas
- Link school to outside community
- ✓ Assess through a balance of:
  - classroom assessment (formative) with a focus on performance
  - ✓ technology-enhanced summative assessment.

Performance demonstrated through skills

-enter the 21CS

Evidence that impacts students/schools





### How do 21st century skills (21CS) fit in the IB MYP?

- ✓ There is a lot of discussion on what they are.
- Most of the skills have been around for a while.
- ✓ 21CS should be transferable
- ✓ The only real 21CS:
  - ✓ information, media and IT literacy
  - ✓ awareness of privacy rights.



	21 <sup>st</sup> ce	ntury skills		Skill catogorios	
Co	onsensus 21CS set	Other 21CS	IB learner profile	Skill categories	
	Communication			Ways of working	
S	Collaboration			Ways of working	
4Cs	Creativity	Curiosity and imagination		Ways of thinking	
	Critical reflection			Ways of thinking	
	Information processing (i.e. information, media and IT literacy)			Tools for working and living in the world	
		Metacognition		Ways of thinking	
	Leadership	Initiative and self-direction		Ways of thinking	
	Lifelong learning			Ways of thinking	
	Problem solving			Ways of thinking	
	Thinking and reasoning			Ways of thinking	
	Social ethics and responsibility			Tools for working and living in the world	
		Global awareness		Tools for working and living in the world	
		Health and environmental literacy		Tools for working and living in the world	

	21st ce		Skill categories	
Consensus 21CS set		Other 21CS		
	Communication		Communication	Ways of working
S	Collaboration		Communication	Ways of working
4Cs	Creativity	Curiosity and imagination	Inquiry	Ways of thinking
	Critical reflection			Ways of thinking
	Information processing (i.e. information, media and IT literacy)		Reflective	Tools for working and living in the world
		Metacognition		Ways of thinking
	Leadership	Initiative and self- direction	Principled risk taking	Ways of thinking
	Lifelong learning		Knowledgeeble	Ways of thinking
	Problem solving		Knowledgeable	Ways of thinking
	Thinking and reasoning		Thinking	Ways of thinking
	Social ethics and responsibility		Caring	Tools for working and living in the world
		Global awareness	Open (Internationally minded	Tools for working and living in the world
		Health and environmental literacy	Balanced	Tools for working and living in the world



## MYP eAssessment

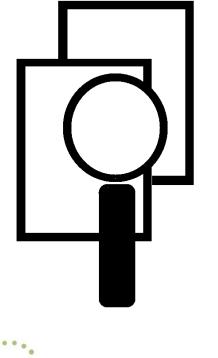
Question 2:

What types of research does the IB use to inform their ongoing assessment decisions? How are those decisions implemented?

# What types of research does the IB use to inform their ongoing assessment decisions? How are those decisions implemented?

- Trialling of new or changed assessments
- Improving IB processes
- Research assessment trends and methods
- ✓ Our own research

Research that impacts students/schools

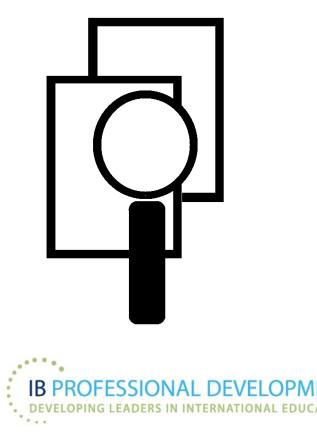




What types of research does the IB use to inform their ongoing assessment decisions? How are those decisions implemented?

- Trialling of new or changed assessments
- Improving IB processes
- Research assessment trends and methods
- ✓ Our own research
  - What do examiners look for in essay-type responses?
  - ✓ Improve best fit guidance
  - Develop a new framework for digital assessment

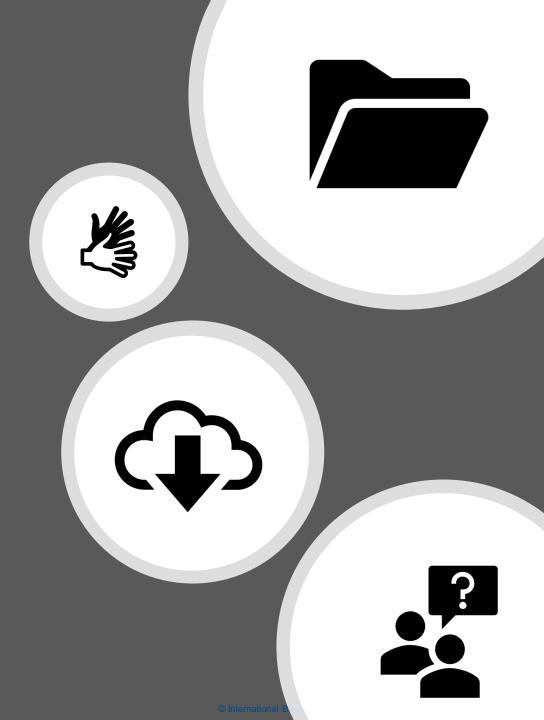
Research that impacts students/schools



## MYP eAssessment

Question 3:

Where does research say that the assessment world is heading?

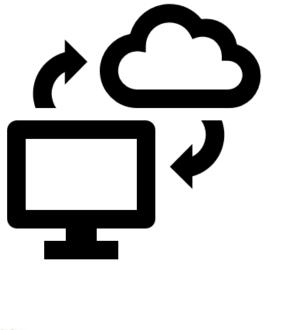




### ✓ E-Marking

- New ways of marking and grading
  - Comparative judgment
  - ✓ Automated essay scoring
- Digital and on-screen exams
  - Collaboration with Cito in developing a new framework of digital assessment
  - Linking item types to learning and assessment objectives

Everything going digital





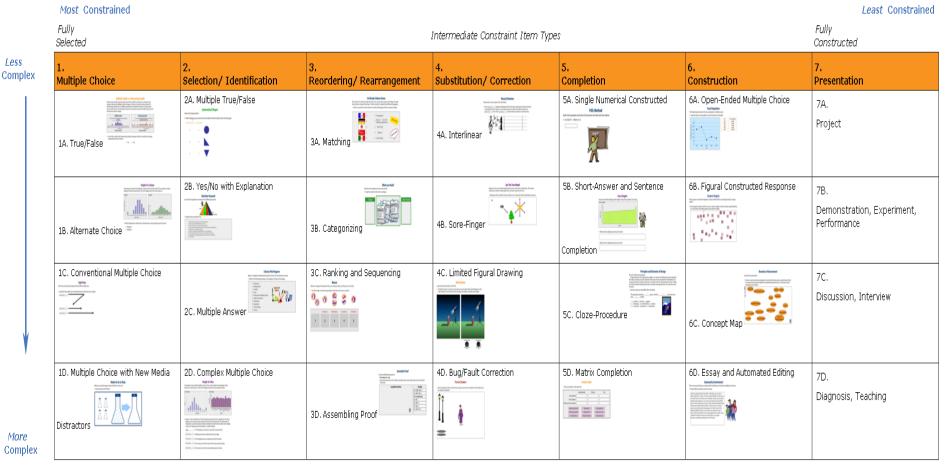
# Your turn!

What kind of digital assessment items do you already know?

Type your thoughts in the chat box.



## An overview by technology and response type

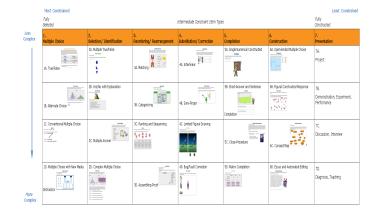


pages.uoregon.edu/kscalise/taxonomy/taxonomy.html/.(Scalise 2009)

IB PROFESSIONAL DEVELOPMENT DEVELOPING LEADERS IN INTERNATIONAL EDUCATION

### A new framework for digital assessment

- IB and Cito collaboration
- ✓ Ongoing research (2018 to today)
  - Update an overview of types of digital assessment options (from 2009 to 2020)

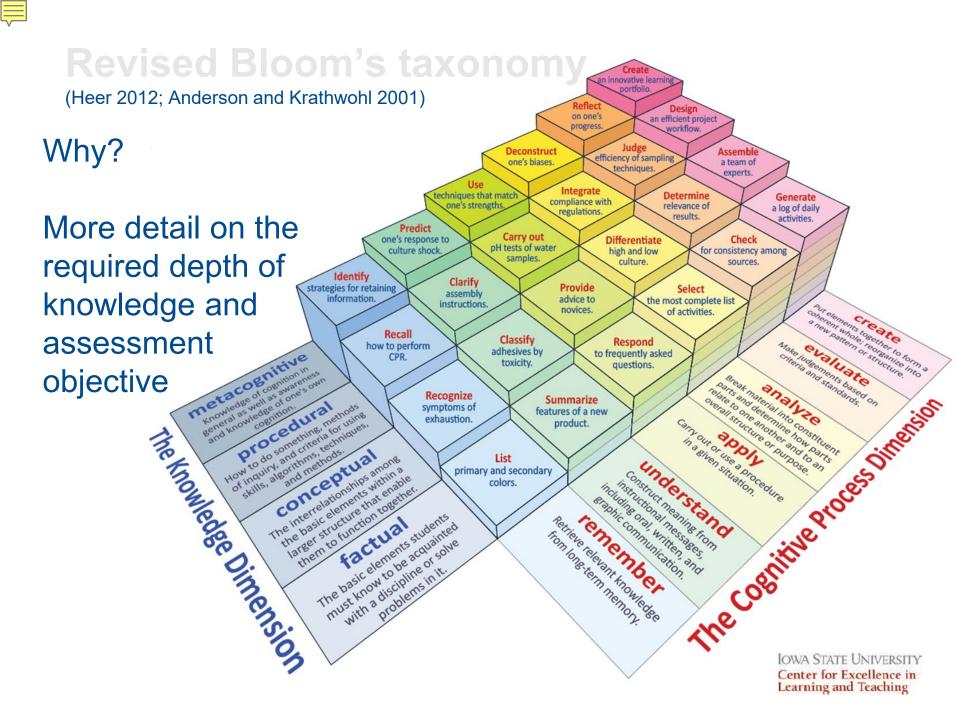




## A new framework for digital assessment

- IB and Cito collaboration
- ✓ Ongoing research (2018 today)
  - Update an overview of types of digital assessment options (from 2009 to 2020)
  - ✓ Update IB's use of Bloom's taxonomy (from 1956 to 2012)
  - Link item types to learning and assessment objectives





## A new framework

(Hamer and Jongkamp 2019, inspired by Scalise 2009)

Closed response					Open respo	onse
1. Choice	2. Match & order	3. Pre-structured completion	4. Custom interactive: Scaffolded/scripted	5. Free construction	6. Upload	7. Not yet allocate
A. Anternate choice True/False	2A. One-on-one matching Matching Open-Ended Multiple Choice	SA. Alphanumeric completion SingleNumerica Constructed The Numerical Completion The Numerical Completion	4A. Simulations & experiments	5A. Short response with chain of reasoning	6A. Demonstration Experiment/Exhibition	
B. Multiple choice	28. Categorizing Categorizing Matrix Completion	3B. Limited drawing	4B. Tailored tooling	SB. Scaffolded open response	68. Project report/ Paper	
C. Inline choice	Ranking and sequencing Ranking and Sequencing O O O O O O O O O O O O O O O O O O O	3C. Limited graphic completion Limited Figural Drawing	4C. Avatar interaction	SC. Essay response	6C. Audiovisual presentation; Performance;	
	2D. Structuring Essay and Automated Editing Control Co	3D. Construction using image menu/data	4D. Game-based assessment & collaborative work;	5D. Structured Oral	6D. Discussion, debate, open interview	
E. Composite choice	2E. Arrange and re-arrange Concept Map Constructed Response	3E. Drawing with image menu & drawing tool	4E. Augmented & virtual reality	SE. Construction free drawing tool, self generated data	6E. Teaching, coaching	

Most complex

IB PROFESSIONAL DEVELOPMENT DEVELOPING LEADERS IN INTERNATIONAL EDUCATION



(Hamer and Jongkamp, 2019, inspired by Scalise 2009)

CI	losed response					Open response	
	1. Choice	2. Match and order	3. Pre-structured completion	4. Custom interactive	5. Free construction	6. Upload	7. Not allocated
Least complex	1A Alternate choice	2A One-on-one match	3A Alphanumeric Completion	4A Simulations and experiments	5A Short response and chain of reasoning	6A Demonstration/ experiment/project	
lex	1B Multiple choice	2B Categorizing	3B Limited drawing	4B Tailored tooling	5B Scaffolded open response	6B Project report/ paper	
	1C Inline choice	2C Ranking and sequencing	3C Limited graphic completion	4C Avatar interaction	5C Essay response	6C Audiovisual presentation, performance	
Most intera	1D Multiple response	2D Structuring	3D Constructing with image menu/data	4D Educational gaming and collaborative work	5D Structured oral	6D Discussion	
Most complex interaction	1E Composite choice	2E Arrange and rearrange	3E Drawing with image menu/drawing tool	4E Augmented and virtual reality	5E Construction free drawing, self- generated data	6E Teaching/coaching	



## Making the link item types—knowing

(based mostly on IB MYP and DP past exams)

(Hamer and Jongkamp 2019, inspired by Scalise 2009)

Closed response Open response							
1. Choice	2. Match&Order	3. Pre-structured completion	4. Custom interactive	5. Free construction	6. Upload	7. Not allocated	
1A Alternate choice	2A One-on-one	3A Alphanumeric Fompletion	4A Simulations& experiments	C Short response of F	6A Demonstration/ experiment/project	F	
1B Multiple Choice F/ C	2B Categorizing	3B Limited drawing	4B Tailored tooling	5B Scaffolded open response	6B Project report/ paper		
1C Inline choice	2C Ranking and sequencing	3C Limited graphic completion	4C Avatar interaction	5C Essay response	6C Audiovisual presentation, performance		
1D Multiple response	2D Structuring	3D Constructing with image menu/data	4D Educational gaming and collaborative work	5D Structured oral	6D Discussion		
1E Composite choice	2E Arrange and rearrange	3E Drawing with image menu/drawing tool	4E Augmented and virtual reality	5E Construction free drawing, self generated data	6E Teaching/coaching		



### Making the link item types—understanding

(based mostly on IB MYP and DP past exams)

(Hamer and Jongkamp 2019, inspired by Scalise 2009)

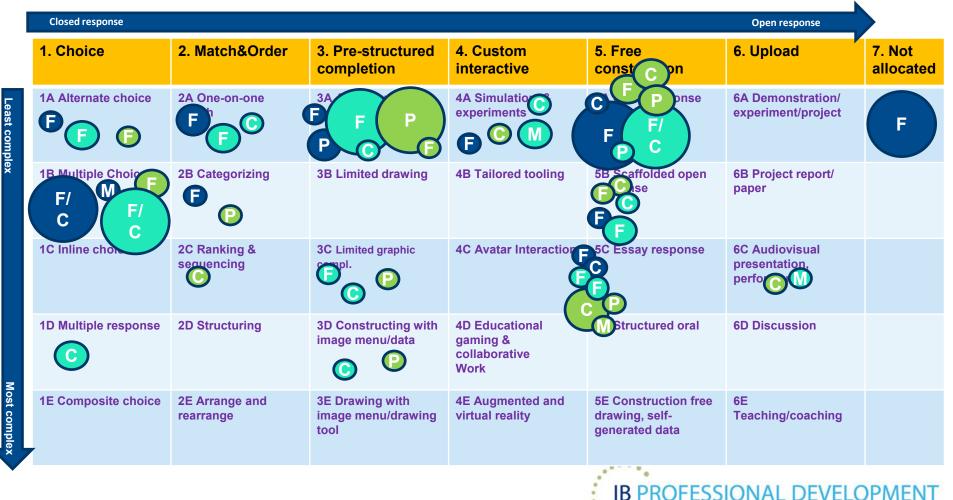
Closed response Open response							
1. Choice	2. Match&Order	3. Pre-structured completion	4. Custom interactive	5. Free construction	6. Upload	7. Not allocated	
1A Alternate choice	2A One-on-one	B F P C	4A Simulation experiments	F F C	6A Demonstration/ experiment/project	F	
F/ C	2B Categorizing	3B Limited drawing	4B Tailored tooling	5B Scaffolded open response	6B Project report/ paper		
1C Inline choice	2C Ranking and sequencing	3C Limited graphic	4C Avatar interaction	5C Essay response C	6C Audiovisual presentation, performat		
1D Multiple response	2D Structuring	3D Constructing with image menu/data	4D Educational gaming & collaborative Work	5D Structured oral	6D Discussion		
1E Composite choice	2E Arrange and rearrange	3E Drawing with image menu/drawing tool	4E Augmented and virtual reality	5E Construction free drawing, self- generated data	6E Teaching/coaching		

ERS IN INTERNATIONAL

## Making the link item types—applying

(based mostly on IB MYP and DP past exams)

(Hamer and Jongkamp, 2019, inspired by Scalise 2009)

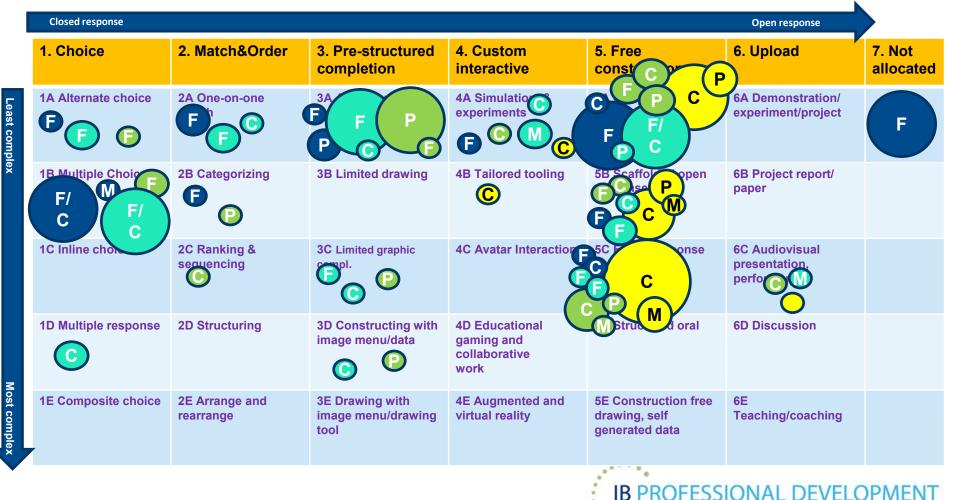


EVELOPING LEADERS IN INTERNATIONAL EDUCATION

## Making the link item types—analysing

(based mostly on IB MYP and DP past exams)

(Hamer and Jongkamp 2019, inspired by Scalise 2009)



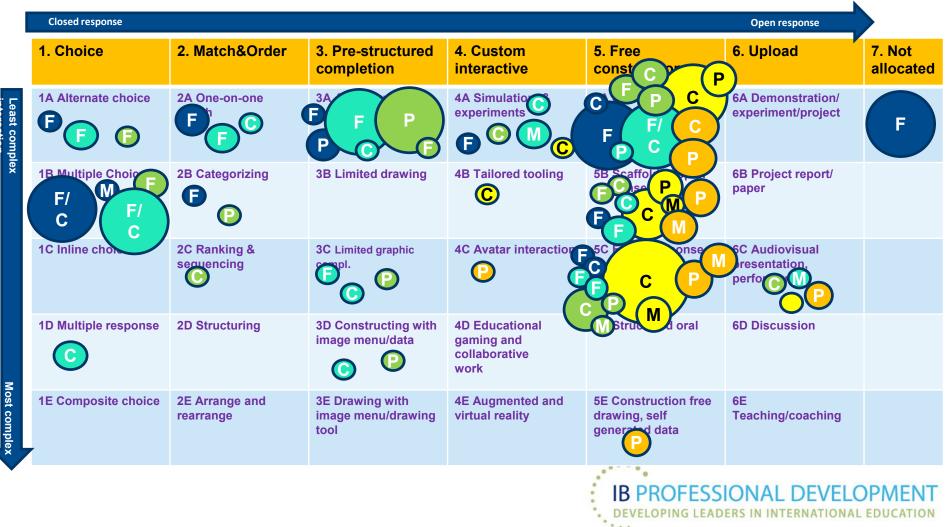
© International Baccalaureate Organization 2020

NG LEADERS IN INTERNATIONAL EDUCATION

### Making the link item types—evaluating

(based mostly on IB MYP and DP past exams)

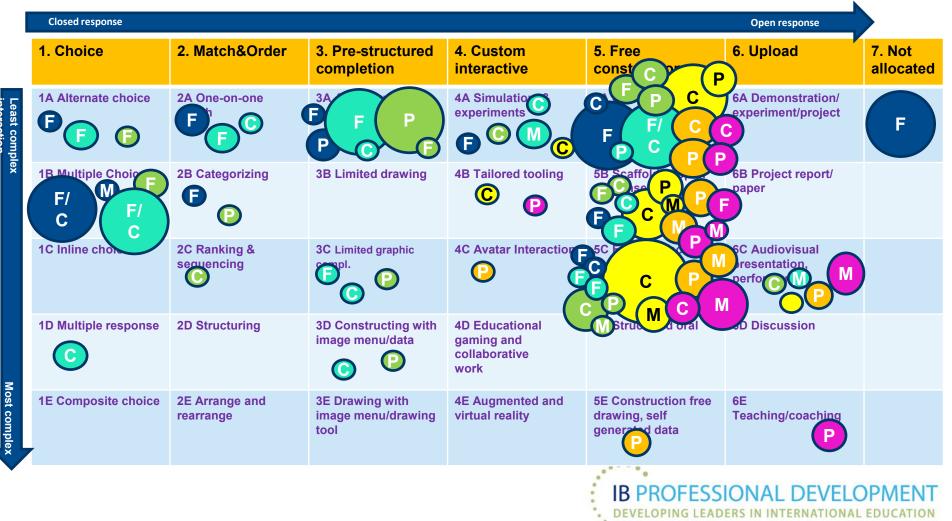
(Hamer and Jongkamp 2019, inspired by Scalise 2009)



### Making the link item types— creating

(based mostly on IB MYP and DP past exams)

(Hamer and Jongkamp, 2019, inspired by Scalise 2009)



## Your turn!

Has this changed your understanding of IB's MYP eAssessment?

Type your thoughts in the chat box.



## Your turn!

Any questions you'd like to ask our speaker?

Type your thoughts in the chat box.



# Before saying goodbye, share ...

In the chat box

SHARE how you have explored some type of digital assessment game-based tool in your classroom that might build student competencies for eAssessment in MYP year 5.







### **MOVING FORWARD**

To extend your learning, we invite you to try an *Assessment ready nano PD* which you will find on the programme resource centre



International Baccalaureate Baccalauréat International Bachillerato Internacional

© International Baccalaureate Organization 2013

International Baccalaureate<sup>®</sup> | Baccalauréat International<sup>®</sup> | Bachillerato Internacional<sup>®</sup>

eAssessment revolution (COMPLETED) eAssessment and current research (April) eAssessment and the backwash effect (May)

eAssessment look and feel (June)

Thank you! See you in the next webinar!