e-assessment community

https://flip-plus.org/

FLIP+ 2020
3rd annual "sharing" event

Let's talk e-assessment

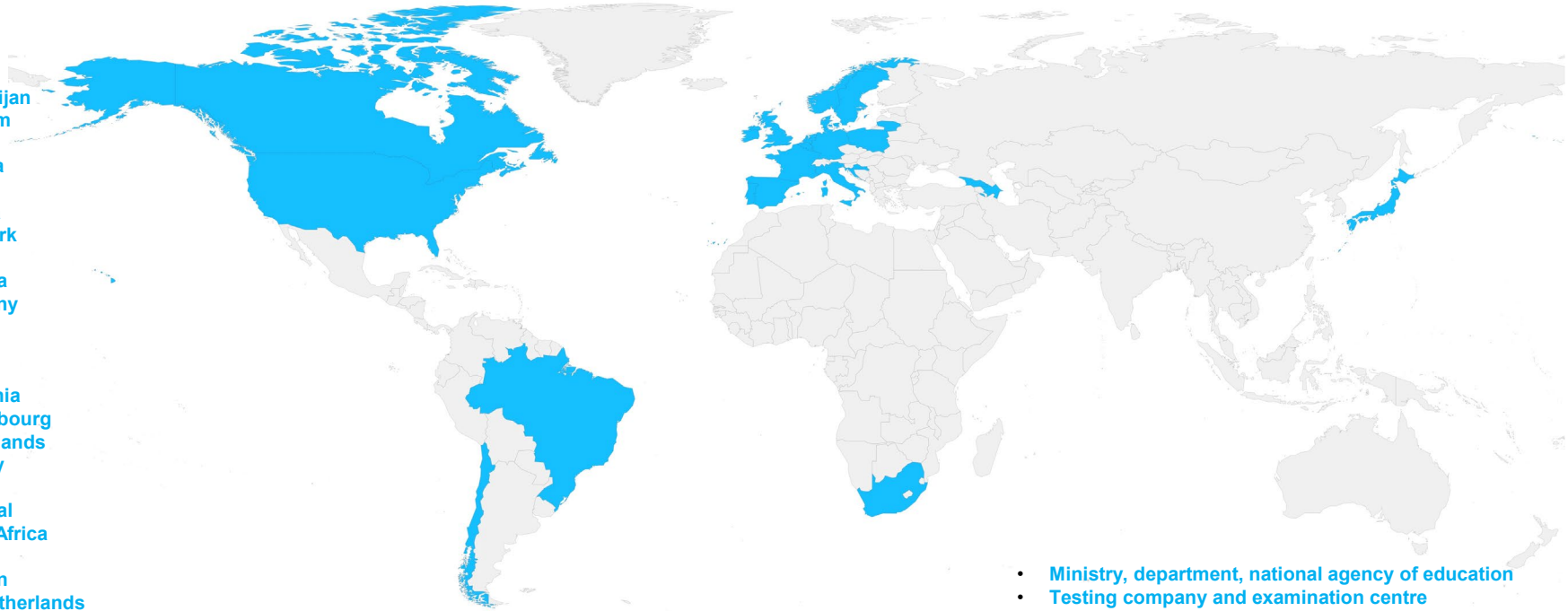
Online event
11-12th June 2020

Facilitator: Amina AFIF (Luxembourg)

Word from the President

- **WELCOME EVERYONE!**
- 3rd annual event and 1st event with association members!
- Importance of remote learning and its link with e-assessment,
- Continuing on our journey of sharing experiences …

FLIP+ 3rd annual event, 2020
Participants from across the globe



Azerbaijan
Belgium
Brazil
Canada
Chile
Croatia
Denmark
France
Georgia
Germany
Ireland
Italy
Japan
Lithuania
Luxembourg
Netherlands
Norway
Poland
Portugal
South Africa
Spain
Sweden
The Netherlands
United Kingdom
United States

103 participants from **50** institutions in **24** countries

- Ministry, department, national agency of education
- Testing company and examination centre
- University or research centre
- Technology company
- International educational organisation

FLIP+ Our journey

FLIP+ MEMBERS :Current

DEPP	FRA
SCRIPT	LUX
INVALSI	ITA
Helder de Sousa	POR
CAEd	BRA
Educational Research Centre	IRL
National Foundation for Educational Research	ENG
National Assessment & Exam Centre	GEO
National Centre for School Research, Arhus University	DEN

UNESCO Institute for Statistics (UIS)	CAN
CITO Foundation	NED
IEA	NED
ICT Connect 21	JAP
Norwegian Directorate for Education and Training	NOR
DIPF - Leibniz Institute for Research	DE
Steve Dept – cApStAn	BEL
Marc Oswald - OAT	LUX
Bryan Maddox - Assessment MicroAnalytics™	ENG

FLIP+ MEMBERS: Membership in process

International Baccalaureate Organization	NED
Flemish Department for Education and Training	BEL
Ricardo Primi - Universidade São Francisco	BRA

FLIP+ Association: governance

Steering Committee

- **President**: Roberto Ricci, INVALSI, Italy
- **Vice-President**: Helder Sousa, Portugal
- **Vice-President**: Manuel Palacios, CAED, Brazil
- **Secretary**: Amina Afif, SCRIPT, Luxembourg
- **Treasurer**: Thierry Rocher, DEPP, France

Board

- **Steering Committee member**: Jude Cosgrove, ERC, Ireland
- **Steering Committee member**: Marthe Akelsen, NDET, Norway

FLIP+ and YOU in this annual event

“SHARING”

- knowledge and experiences
- technology development
- digital content

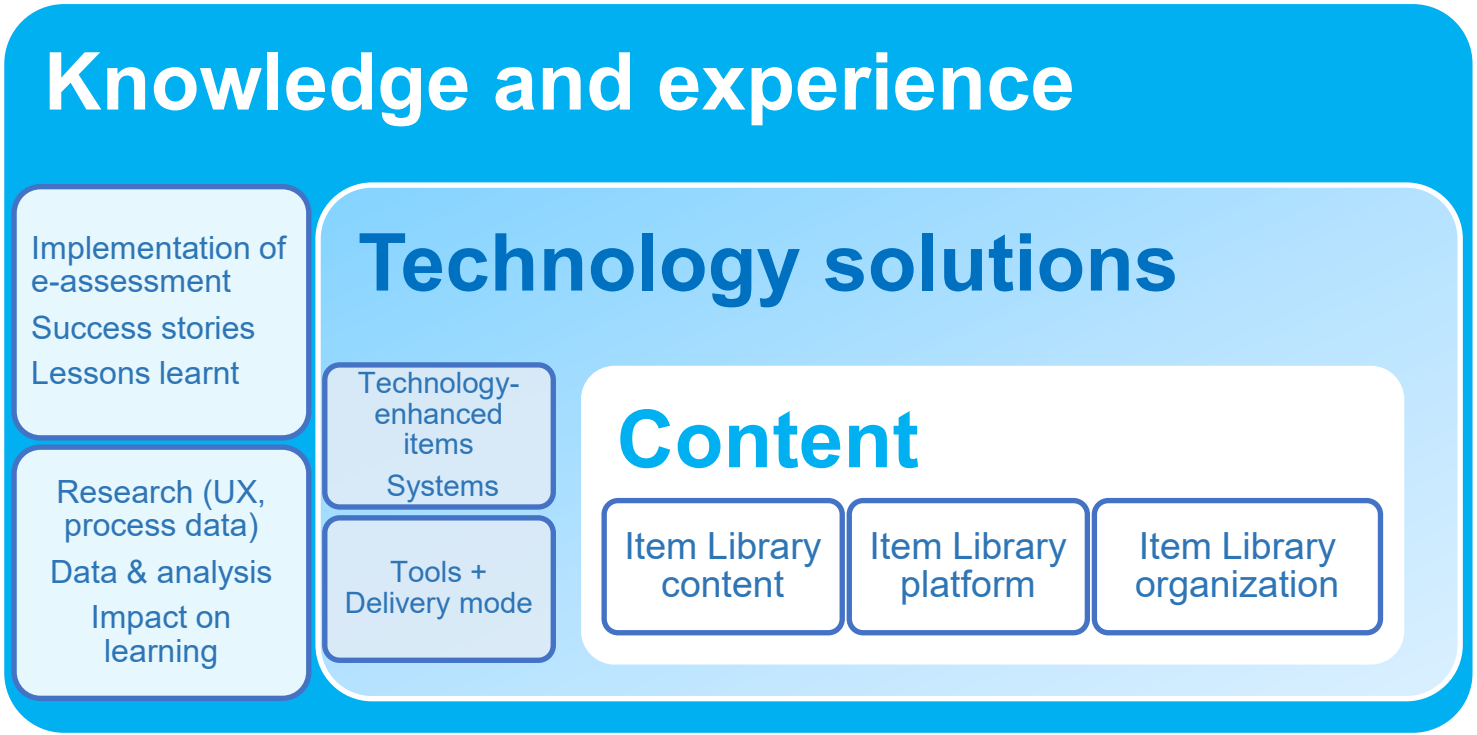
Agenda Day 1

DAY 1: Thu 11th June	
11:45	Welcome Day 1
12:00	15’ country experiences: Denmark, Georgia, Lithuania, Norway
13:00	*Break*
13:30	5’ member updates (main e-assessment developments)
14:30	*End of meeting*

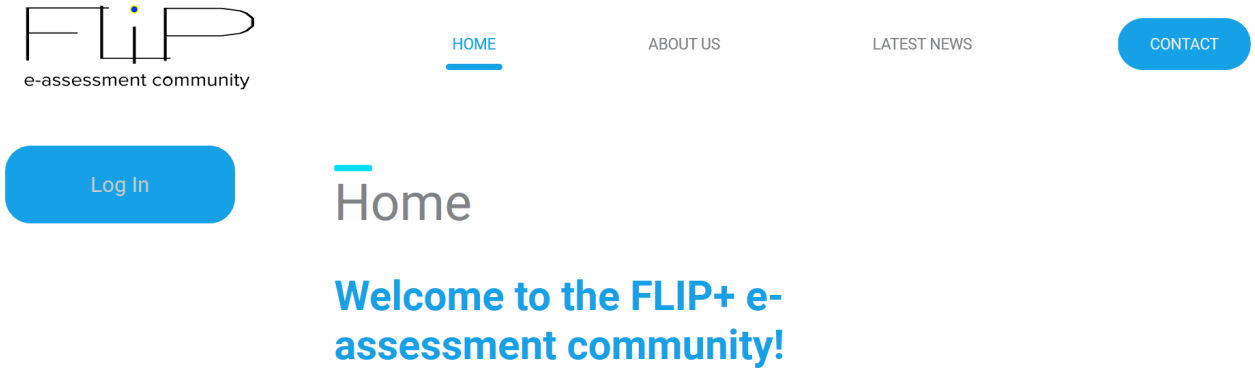
Agenda Day 2

DAY 2: Fri 12th June	
11:45	Welcome Day 2
12:00	30'- 45' update on work on Item library (content and technology solution)
13:00	*Break*
13:30	30'- 45' session on FLIP+ Platform development (new tools & features, ...)
14:30	*End of meeting*

FLIP+ Sharing & key takeaways



The FLIP+ website



https://flip -plus.org/

To access Member's Area: info@flip-plus.org

LET'S START SHARING!

info@flip-plus.org

THANK YOU!

FLiP
e-assessment community

https://flip-plus.org/

e-assessment community

https://flip-plus.org/

FLIP+

Country experiences

3rd FLIP+ online event
11th June 2020

15 Minute Country Experiences: Norway

Third FLIP+ Event June 11-12 2020

Utdannings-
direktoratet

Ingunn Kjøl Wiig
Øyvind Barkald Aas

Norwegian Directorate for Education and Training

Abstract: Digitalising of exams in Norway

In this presentation we will show how Norway **have digitalised exams since 2007** using a system based on distribution of PDFs. **From 2020** we will start truly digitalising exams using the TAO testing platform. We will here outline some of our perspectives in this transformation.

How do we engage students and teachers as well as exam authors in developing new digital exams, to ensure the human perspective in digital transformation? We will point out some **challenges of digitalisation of exams in different subjects** . How do we construct exams that utilize the possibilities in our new digital platform and still maintain the traditions of the subjects and reflect the goals of the new curriculum?

To us, maintaining the qualities of our current exams and ensuring a quality increase on relevant areas such as psychometrics and analytic assessment is crucial and must be reflected in the design of the new framework for exam creation that we are developing.

Our current exams

- Based on PDFs
- Often one essay or case task together with a few smaller items
- No field testing of items in advance
- Exams are constructed by teachers with no formal training in psychometrics
- Double blind grading in rotated pairs of trained teachers
- Holistic assessment – no data on single items or assessment criteria
- No systematic control of reliability
- A long tradition for emphasizing on validity of exams
- High trust in the population and in the education sector
- High participation of teachers as graders

Digitalisation of exams in Norway from 2007

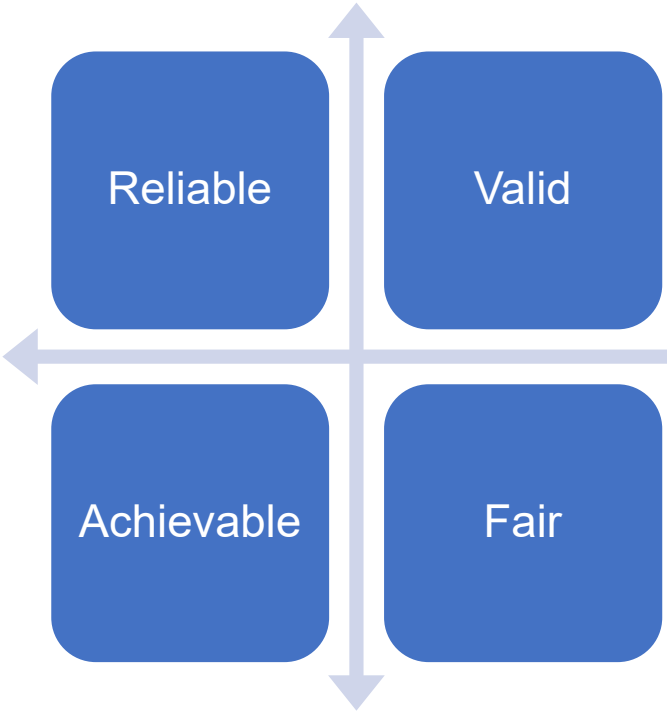
- Until 2007 all exams responses were written by hand by the students
- In 2007 a proprietary solution distributing PDFs to and from the students was established. This allowed the students to write their response on a computer and convert it into PDFs.
  - No digital interactions
  - No automatic scoring of single items
- In 2019 close to 100 percent of all student responses were written digitally*

Digitalisation of exams in Norway from 2020

- From 2020 we will start using TAO as our delivery system.
- Our goals for the digitalisation project is
  1. Compliance with accessibility regulations
  2. Having a platform for adaptive testing
  3. Having a solution that enables us to measure competence in more ways than today
  4. All national tests are administered in TAO for all students
  5. All exams are digitalised and uses new possibilities in TAO
  6. Increased use of automatic scoring of exam items to increase reliability and make more psychometric analysis possible
- The new curriculum requires new exams
  - First exams in the new system is English and mathematics in 11th grade

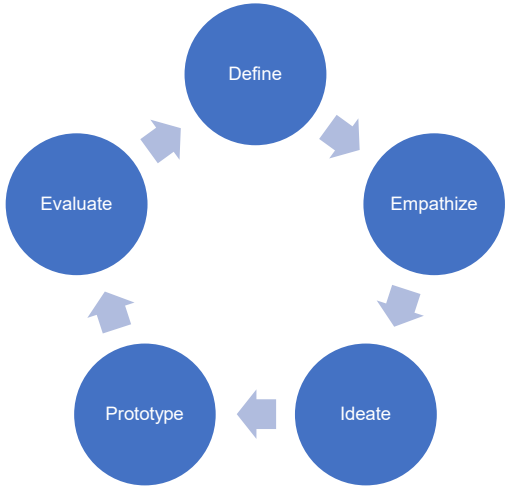
How do we build acceptance for change?

- "If you talk about it, it's more likely to happen"
- Transparency is key
- We need to emphasize why change is necessary:
- Increased reliability
- Increased validity
- It must be fair
- It must be achievable



How do we engage students and teachers in the development of exams?

- Many teachers are already involved in writing today's exams
- Students are traditionally on the receiving end only
- Borrowing elements from the Design Thinking methodology
- Formal and informal hearings
- Targeted audience
- Social media

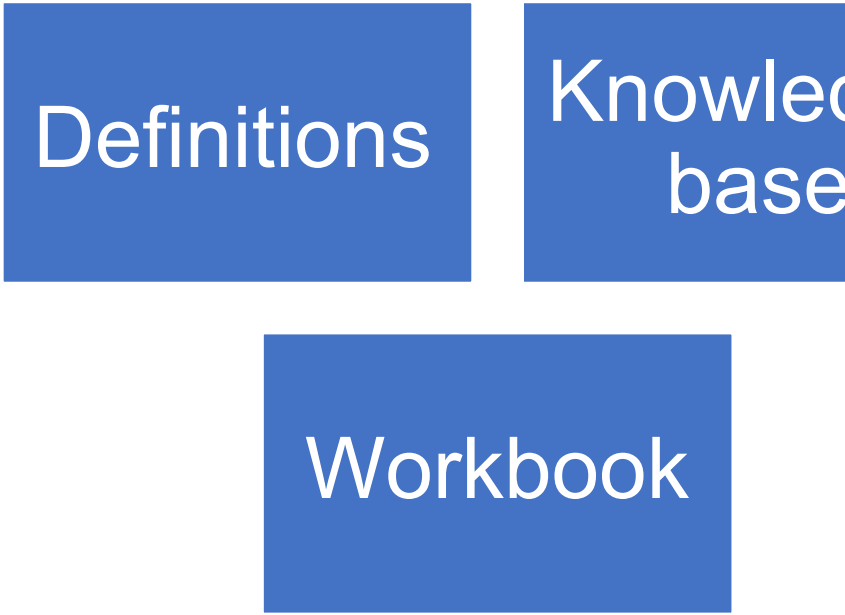


How to utilize new possibilities whilst maintaining the traditions of exams?

- The notion of a good exam versus the research of a good exam
- New curriculum and new exams
- How much can we change from year to year and still maintain face validity?
- What is the nature of the subjects and does it stand in the ways of change?
  - New item types
  - Assessment in a new way: Manual and automatic scoring
  - New processes: Field testing, psychometric analysis, data from previous exams, assessment of items vs holistic assessment

Enhancing the quality of exams, a framework for quality

- Our new framework defines:
  - The purpose of exams
  - Definition of the construct of the exams
  - Validity requirements
  - Reliability requirements
  - The process of writing items and assessment criteria (a workbook)
  - The assessment process
  - Requirements for reporting of psychometric quality
  - Exam administration
  - Exam blueprints



Sum up

- We have looked at digitalisation of exams in Norway
  - The current state
  - The first wave of digitalisation
  - Our new project for digitalisation
  - How we build acceptance in the education sector
  - How we engage students and teachers
  - The balance between new possibilities and the traditions of the exam system
  - The new framework and guidelines for exam development

LET’S START SHARING!

info@flip-plus.org

THANK YOU!

FLiP
e-assessment community

https://flip-plus.org/

e-assessment community

https://flip-plus.org/

FLIP+ Georgia

Assessment for Development

3rd FLIP+ online event
11th June 2020

Sophia Gorgodze
National Assessment and Examinations Centre

Key takeaways

- Assessment that can guide educational decision-making :
  - identify student's strengths and weaknesses and plan teaching and learning accordingly
  - base the school development strategy on the assessment data
  - use technologies to best leverage the use of assessment data for the improvement of teaching and learning

Context

- K-12 – about 530 000 students,
- 2 300 schools (public and private)
- National Assessment and Examinations Center, founded in 2003 under the Min of Education & Science, to administer
  - university entrance exams – paper & computer
  - national assessment programs - paper
  - school graduation exams - CAT
  - international assessment programs – paper & computer

Strategy of Assessment for Development

- Census-based assessment is used for formative purposes:
  - Assesses student performance in the 4th, 6th, 10th grades
  - Monitors the academic progress during the three transitional periods during school
  - Assesses two principal subjects: literacy and numeracy

Strategy for technical solutions
Fully online assessment

- Design and implementation of E-assessment platform, consisting of:
  - E-bank and e-test delivery – TAOtesting platform
  - Human scoring – in-house built module
  - E-reporting – in-house built module
  - Proctoring – *looking for the solutions*
  - e-library for crowd-sourced items – *looking for the solutions*

E-reporting to support different stakeholders

- Students: to monitor where they stand; what are the strengths and weaknesses and plan learning process accordingly
- Teachers: to observe individual student's progress and their barriers in the learning process; identify teaching and learning trends on the classroom level; plan intervention on a student- and classroom-level based on the data
- Parents: to be involved in the process and observe the learning process of their children
- Schools: with the data to develop the school strategy
- Policymakers: to develop the national/regional strategies and action plans based on the data

Action Plan

- Assessment framework and content, TAO set-up on local premises – in 2019
- Project pilot in 2020
  - Try out the items and TAOtesting delivery system – February
  - Test human scoring and e-reporting system – October
  - Refine the assessment framework-ongoing
- Step-by-step implementation from 2021
  - School digital infrastructure: computers and internet connection

Project pilot

- 6000 students from 60 schools around the country
- Assessment performed for the 4th and 6th grades
  - Edit items based on psychometric analysis
  - Compare results for the paper- and computer-based tests
  - Edit TAO items based on the comparison analysis

Next steps

- Prepare October pilot for 300 schools
- Integrate human scoring and e-reporting modules to TAOtesting
- Look for the proctoring and e-item library solutions

LET’S START SHARING!

info@flip-plus.org

THANK YOU!

FLiP
e-assessment community

https://flip-plus.org/

e-assessment community

https://flip-plus.org/

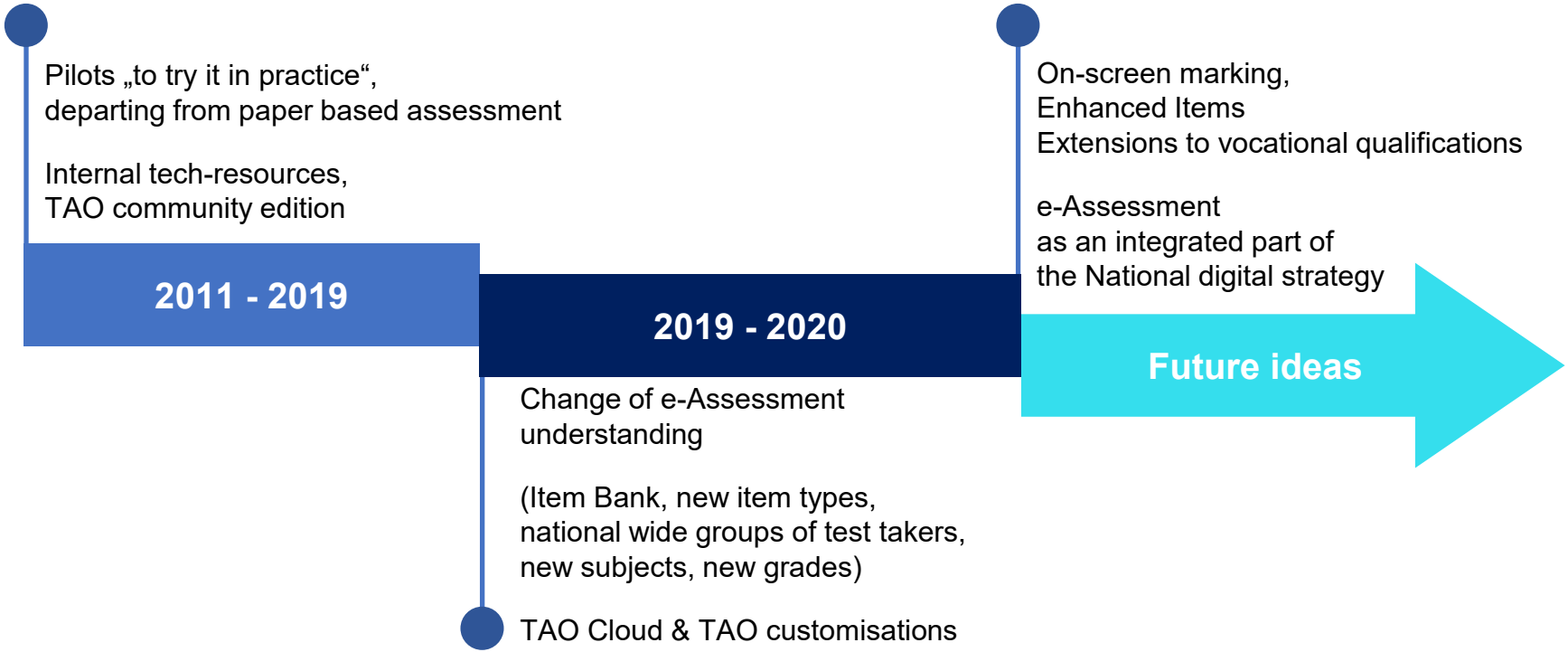
FLIP+ Lithuania experience

Transition to e-Assessment: a tool to strengthen e-Literacy

3rd FLIP+ online event
11th June 2020

Asta Ranonyte, Gediminas Trakas
National Agency for Education,

e-Assessment experience in Lithuania



Lithuanian case: Context

- Myths influenced by **traditions of paper based assessment**
  - e-Assessment is mainly about IT, for IT and because of IT
  - e-Assessment is low cost by definition
  - It is limited to Multiple Choice Items
  - Teacher community is resistant to tech innovations

Lithuanian case: Context

- Demand of a **universal tool**
  - e-Assessment from 4th (Primary Ed) to 12th grade (Matura Exams)
  - Several subjects with specific assessment content: Math, Physical and Social Sciences, Foreign Languages, Mother tongue, Art education
  - National level of assessment campaigns to involve the whole population of each tested grade
  - Not to reduce the assessment content and assessed skills coverage: use MCQ and open ended questions

Lithuanian case: Strategy

- **Shift of focus** from super-technical problems to the relevant digital assessment content development
  - Do not try to invent a bicycle, use what is mature and available in the market
  - Focus on the solutions that help to break barriers of acceptance
  - Build the capacity to develop and maintain an agile e-assessment process, able to adopt to changes
  - Investment in HR skills and use externally available technical Cloud infrastructure

Lithuanian case:

- There are different levels of involved stakeholders, but the interest stays the same – *reliable and rich context data* about educational achievement:
  - National level – where are we and are we successful with the National curriculum
  - Municipality and regions – how we are comparable within the National context
  - Schools – where we have to strengthen our means and to be able to offer better opportunities for our students,
  - Students (and Parents) – individual progress and shaping the path for career

Lithuanian case: Summary in Numbers

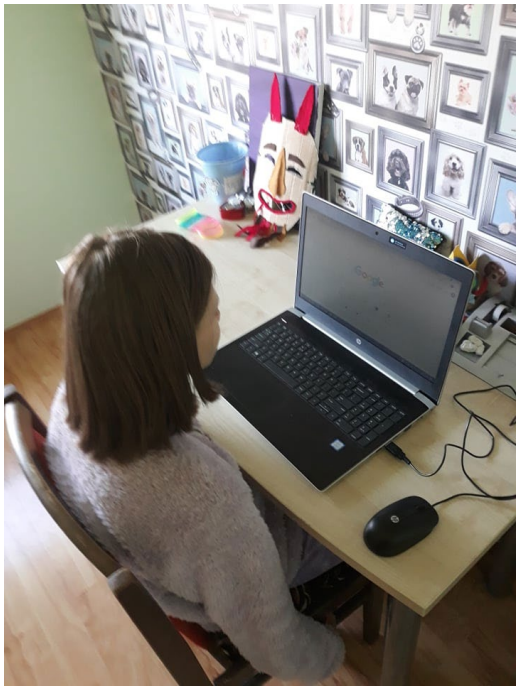
- **Planned and completed in 2019-2020**
  - 7 National Assessment campaigns for subjects: math, mother tongue, foreign languages, arts, physical and social sciences, high order skills competition in grades 4, 8, and 10
  - Participation rates: 20 to 400 schools and 200 to 22 000 students per subject
  - More than 100 different tests, 30 days of testing + one month to prepare for each campaign

Issues and Challenges

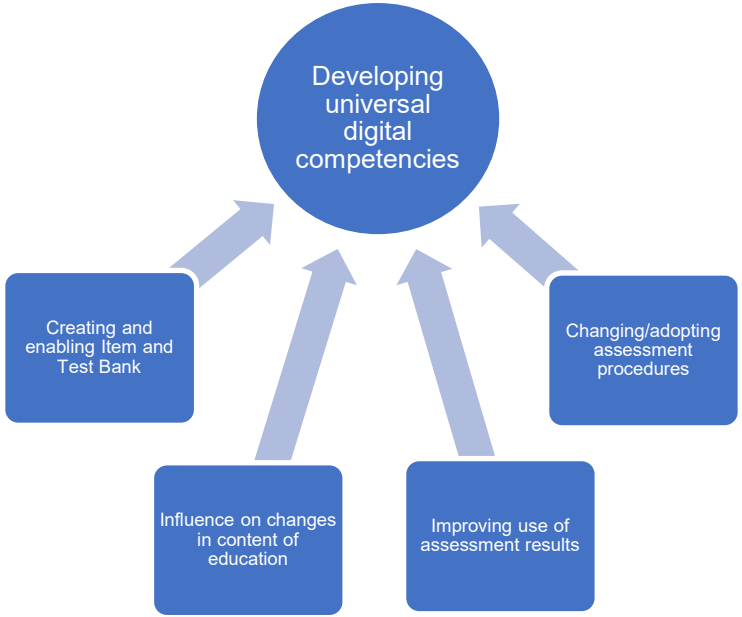
- “9.00am” challenge – every online application system afraids of the very first logon wave
- Test time planning – test takers still need to learn test taking strategies and plan the limited time efficiently
- Local support in the school – diverse digital literacy level in schools does not allow to expect that school will provide equal and professional support to individual students during the testing, so the file of support is taken by the national level

Special case: e-Assessment during lockdown

- Closed doors to the buildings opened accelerated *switch* to digital learning
  - Opportunities of lockdown
  - National assessment goes to student‘s home
  - 10th grade (math and mother tongue)
  - 14 thousands of students (about a half of the cohort)
  - Ready to remote assessment – as a self-assessment procedure



Next steps: the plan for 2021-2023



- Build as a part of the National digital strategy
- Cover the whole population of 4/8/10/11 grades in different subjects and competencies
- Use of international item library outcomes
- Ensure the quality of the procedure cycle

LET’S START SHARING!

info@flip-plus.org

THANK YOU!

FLiP
e-assessment community

https://flip-plus.org/

FLIP+ Assessment of Design Thinking

Innovative 21 Century Skills Test Design

https://flip-plus.org/

3rd FLIP+ online event
11th June 2020

Jeppe Bundsgaard
Danish School of Education, Aarhus University

Key takeways

- Advanced (21 Century) skills are measurable
- TAO can accommodate innovative testing formats
- Available at GitHub:
  - New PCI's: OpenPCI
  - R scripts for automatic analysis/coding: OpenPCIAnalysis

Introduction

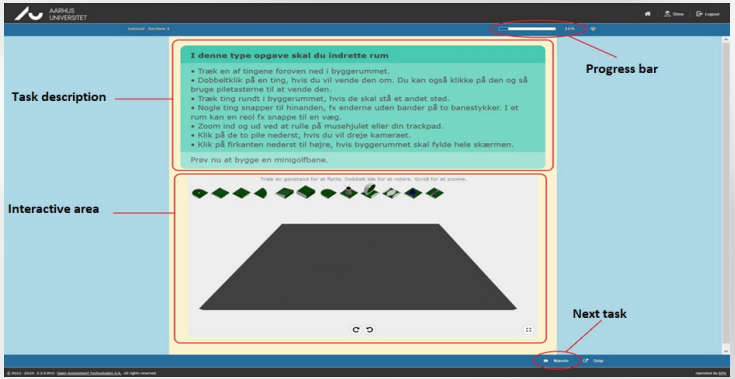
- Two on-going Danish research projects:
  - Game-Based Learning in the 21st Century (40 schools)
  - Community Drive (2 schools)
- Both projects have constructed teaching units building on the principles of design thinking, which they propose as an approach to tackling problems and thereby gaining so-called 21st century skills
  - 5th-7th grade students from more than 20 schools participate in the interventions during 2019-2020
- The joint assessment tool will serve to estimate an effect of the interventions on the students' proficiency in design thinking

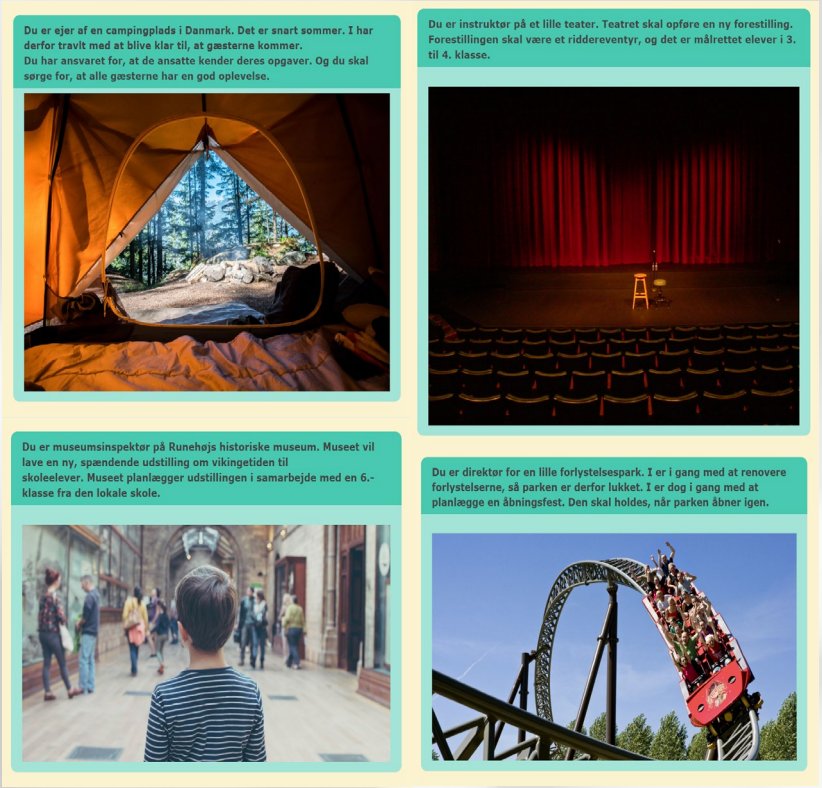
Design Thinking

- EMPATHY
  - The ability to understand the needs and perceptions of others – end users as well as peer collaborators
- IDEATION
  - The ability to draw on past experience to come up with many, different ideas
- MODELLING
  - The ability to understand, construct and critique representations of ideas and information
- PROCESS MANAGEMENT
  - The ability to prioritize as well as determine temporal order, duration and simultaneity of tasks and activities in order to inform design decisions

Test interface and Modules

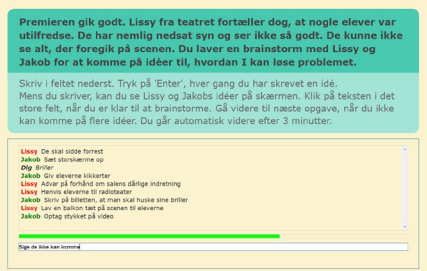
- Four Modules
  - Campsite
  - Theatre
  - Amusement Park
  - Museum

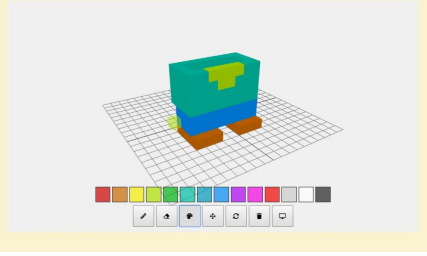


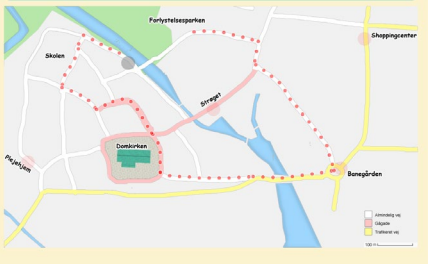


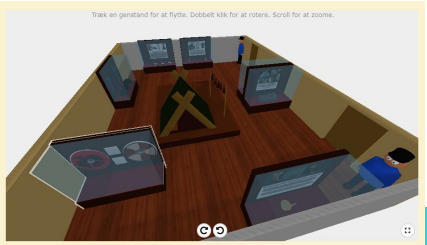
Types of Tasks

- Existing types of tasks:
  - Open response
  - Multiple choice
  - Order interaction
  - Text gap match
- New types of tasks:
  - Brainstorm
  - Cube
  - Route
  - Room
  - Gantt









github.com/openPCI/open-tao-pcis

Gantt: Auto-scoring example

```
sankthans<-makeGantt(gantt =
responses$campingplads$X16..Lav.et.program.for.
Sankt.Hans.RESPONSE, names =
c("tale","buffet","optaending","slukkes","vaeddeloe
b","snobroed","faellessang"),timespan =
30,time.format = "%d/%m %H:%M")
```

Chronology:

```
baalSidst <-  isAfter(gantt = sankthans,          a =
"slukkes", b = "optaending",  which.a = "first",
which.b = "first")
```

Duration:

```
buffetVarighed<-(numSlots(gantt = sankthans, a =
"buffet") %in% seq(2:4))
```

Simultaneity:

```
faellessangAlene<-noOverlap(gantt = sankthans, a
= "faellessang",b =
c("buffet","slukkes","vaeddeloeb","tale","snobroed"))
```

I skal fejre Sankt Hans på campingpladsen med et stort bål. I har allerede besluttet jer for, hvilke aktiviteter I gerne vil lave. Der mangler bare at blive lavet et program.

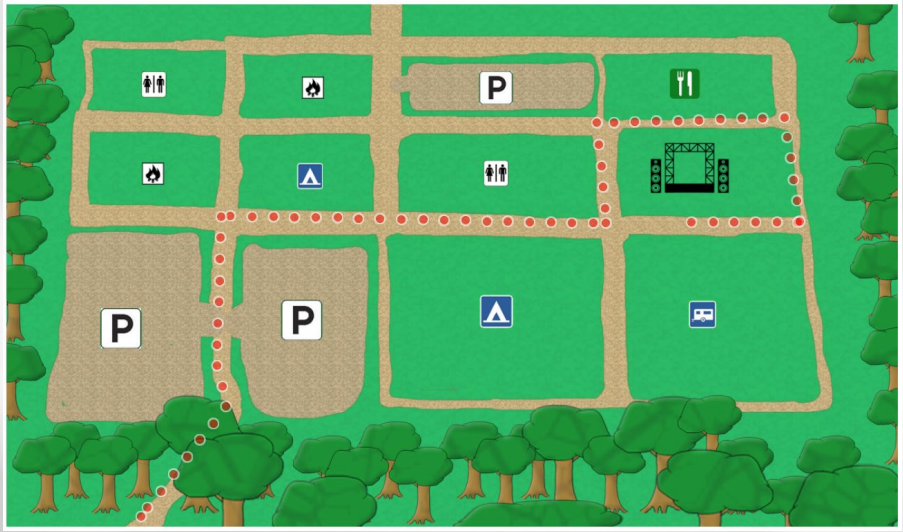
Lav programmet for Sankt Hans ved at klikke på firkanterne ud for hver aktivitet. Hver firkant svarer til en halv time. Du skal tænke over, hvilken rækkefølge aktiviteterne skal ske i, hvor lang tid de enkelte aktiviteter skal tage, og hvilke aktiviteter der kan foregå på samme tid.

	17:00-17:30	17:30-18:00	18:00-18:30	18:30-19:00	19:00-19:30	19:30-20:00	20:00-20:30	20:30-21:00
Borgmesteren holder båltale								
Aftensmadsbuffet								
Bålet tændes								
Bålet slukkes								
Sækkevæddeløb for børn								
Snobrødsbagning for børn								
Fællessang								

github.com/openPCI/OpenScoring

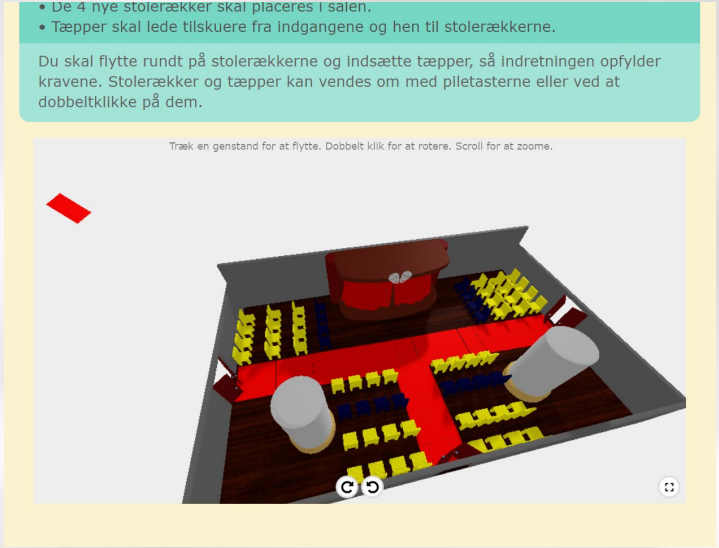
Draw a route on a map: Auto-scoring

```
function score(path){
  var stier = [1,10,186, 48,46];
  var camping = [92,94,68,74,77,80,160,148,88,83,80,73,128];
  var campingvogne = [160,195,163,190,171,187];
  var spisesteder = [217,227];
  var scene =
[234,233,232,231,230,229,214,213,212,211,210,209,208,207,228,204,203,202,201,200,198,197,
196,195,194,193,192,191,190];

  var stier_visited = 1;
  var camping_visited = 1;
  var campingvogne_visited = 1;
  var spisesteder_visited = 1;
  var slutter_ved_scene = scene.indexOf(path[path.length-1]) > -1 ? 1 : 0;
  path.forEach(function(i){
    if(stier.indexOf(i) > -1) stier_visited = 0;
    if(camping.indexOf(i) > -1) camping_visited = 0;
    if(campingvogne.indexOf(i) > -1) campingvogne_visited = 0;
    if(spisesteder.indexOf(i) > -1) spisesteder_visited = 0;
  });

  return {
    "slutter_ved_scene" : slutter_ved_scene,
    "undgik_campingvognspladser" : campingvogne_visited,
    "undgik_campingpladser" : camping_visited,
    "undgik_stier" : stier_visited,
    "undgik_spisesteder" : spisesteder_visited
  }
}
```



Design of room:
Auto-scoring example

```
function score(scoring){
 var seats = Scoring.find('seat').length;
 return {
 alle_stole_placeret: seats == 16 ? 1 : 0,
 taepper_til_stole: Scoring.objZoneTest('seat','carpet','rug') == seats ? 1 : 0,
 taeppe_afstand: Scoring.closestDistance('rug','rug') <= 4 ? 1 : 0,
 taeppe_til_dore: Scoring.areaTest('door','rug') == 3 ? 1 : 0,
 stole_fri_front: Scoring.objZoneTest('seat','front','seat', true) == 0 ? 1 : 0,
 dore_ikke_blokeret: Scoring.areaTest('door','seat') == 0 ? 1 : 0,
 udsyn: Scoring.lineOfSight('seat', new THREE.Vector3(2.4727312061784747, 0,
0.3590116360462292)) == seats ? 1 : 0,
 stole_rotation: Scoring.zoneRotationCheck('front','seat',0) +
Scoring.zoneRotationCheck('left','seat',4.71238898038469) +
Scoring.zoneRotationCheck('right','seat',1.5707963267948966) == 0 ? 1 : 0
 };
}
```



Modeling: Human scoring example

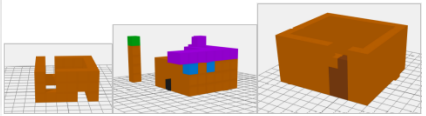
Extract from Scoring Guide:

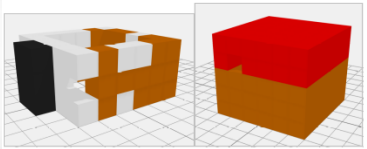
ITEMS:

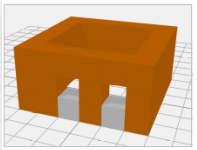
1. vinduer (0-2)

1 point for hul i muren eller farvet klods i muren (dvs. erstatter brun klods, ikke vinduer uden på muren) over grundplan.
Hul/farve må gerne gå helt op til slutningen af væggen eller placeres i tagklodser.
Skal være firkantede/symmetriske?
2 point for mere end ét vindue

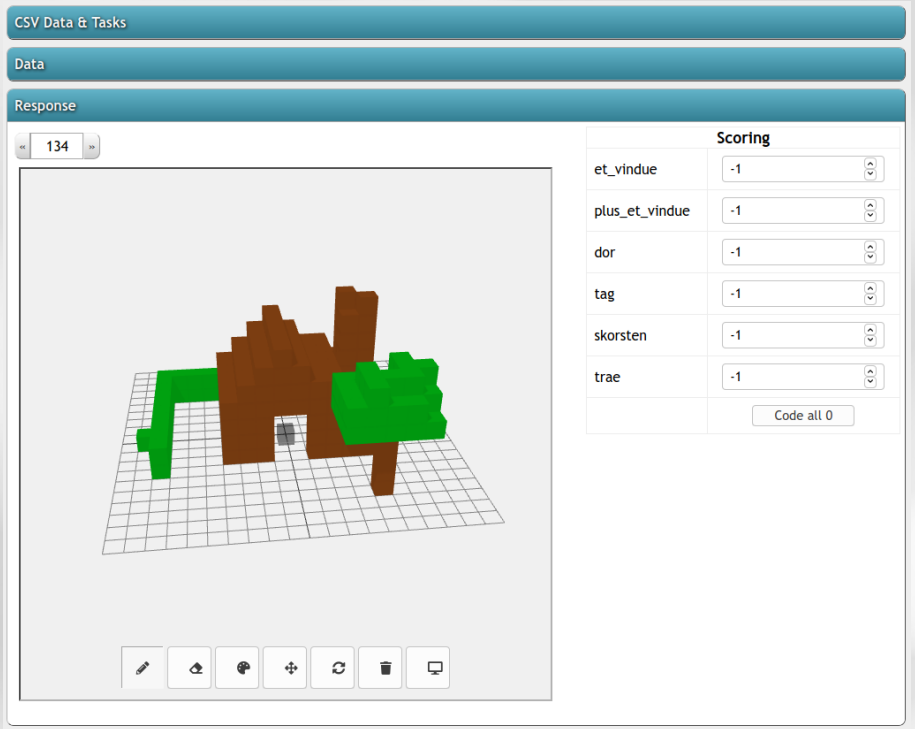
SCORE=1-2



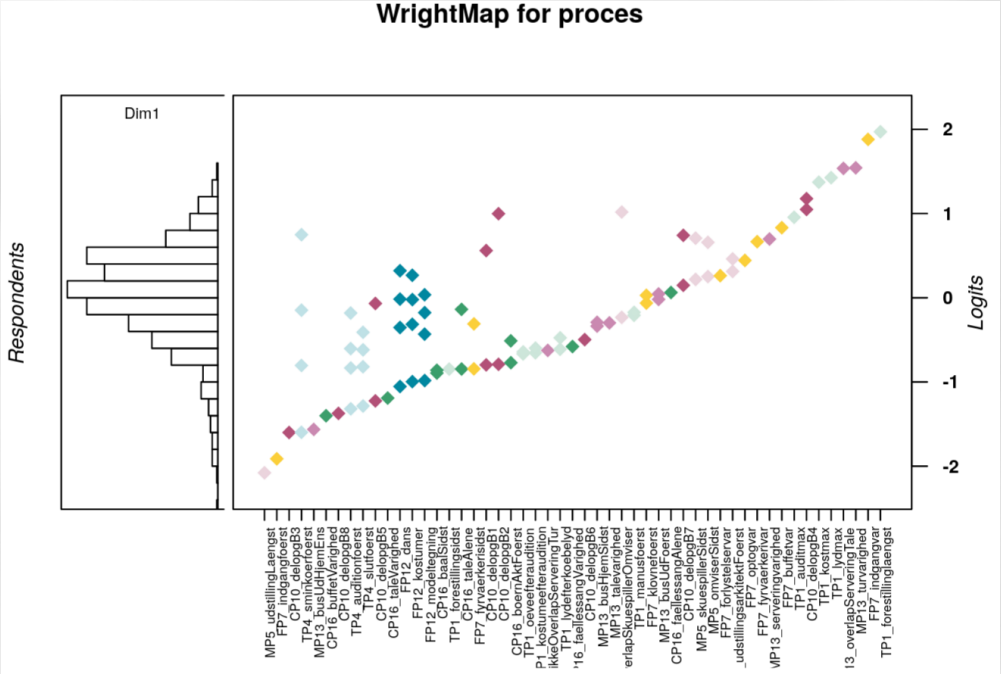




Både hul og grå klods kan indikere vindue, men siden forskellige er brugt, antager vi at kun hul er vindue – derfor går vinduet ikke ned til grundplan, og det tæller som vindue.



Rasch analysis shows good fit and targeting to the population



Your experience

- Assessment of Design Thinking is possible.
- Modern standards for development of tests are well-developed
- Using TAO for development is extremely flexible.
- TAO problems
  - Honestly, I find TAO too slow – I think it is due to the design of the database (almost like a simple key-value store). With 3000 students, and a complex design with rotation of tests, the variable_storage table has 1.2 million records, and the statements table 200.000. Each time anything needs to be fetched, joins of these two tables are involved.
  - If you have more than a few test takers, the point-and-click-interface is not feasible, and the (documentation of) import/export options too narrow (and error-prone).

Next steps

- Work on Rasch Analyses continues. Post test next year.
- More advanced system to support human coding under development

LET’S START SHARING!

info@flip-plus.org

THANK YOU!

FLiP
e-assessment community

https://flip-plus.org/

e-assessment community

https://flip-plus.org/

FLIP+ Member Update

INVALSI – Italy

National Institute for the Educational Evaluation of Instruction and Training

FLIP+ Online event
11th June 2020

Presenter: Roberto Ricci
Institution: INVALSI

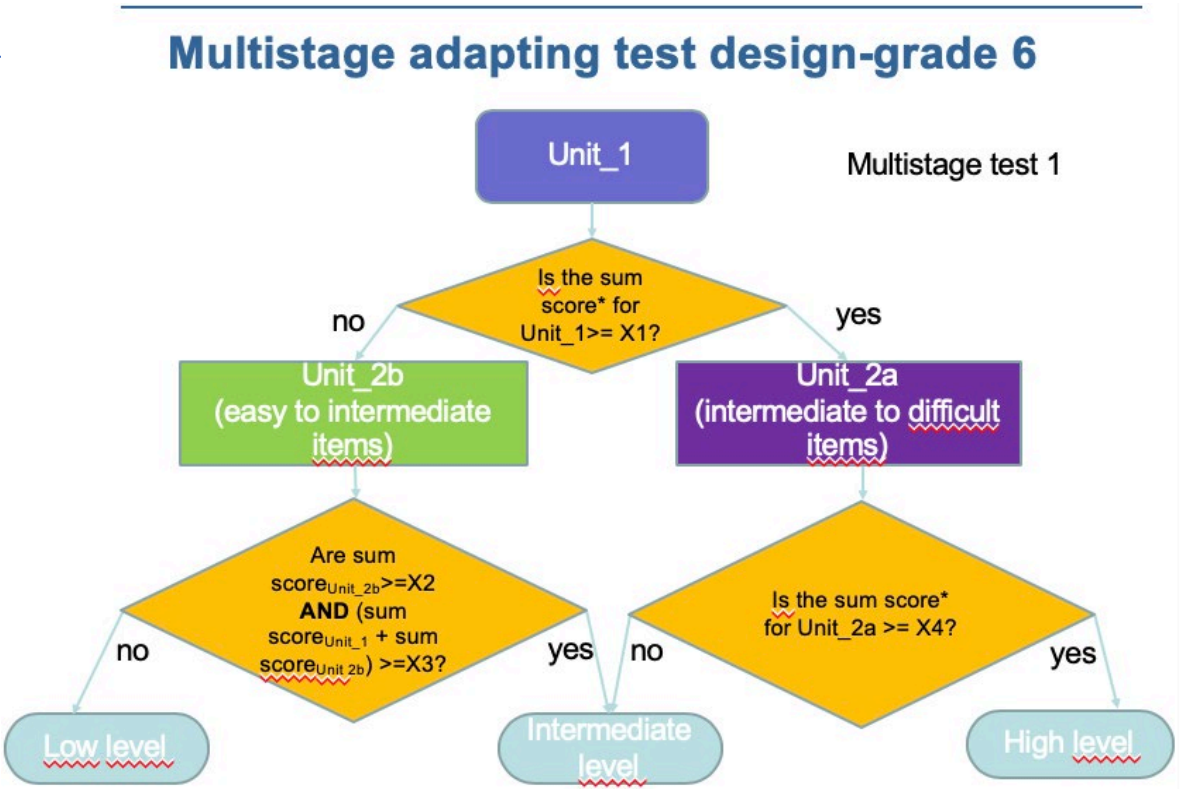
What's going on…

- The **start of the 2020-21** school year will be very different from the previous ones. For the first time, for more than 75 years, all the students of the Italian school will start the classes as they did not have the possibility to attend in presence the last three (or even more) months in 2019-20.
- **Distance learning (DaD)** has been (will be?) a fundamental resource to deal with the crisis, but also raises new questions that potentially exacerbate endemic problems in Italian schools (very heterogeneous levels of learning, equity, implicit school dropout, etc.).
- **The FORMATIVE TESTING (FT)** project offers schools tools for the diagnostic (initial) and ongoing assessment of the skills achievement and content targets set for the previous school grade.

Involved grades

SUBJECT	GRADE				
	3	6	9	11	13
READING COMPREHENSION	P&P	CBT	CBT	CBT	NA
MATH	P&P	CBT	CBT	CBT	NA
ENGLISH	NA	CBT	CBT	CBT (B1)	CBT

Technological innovations



LET'S START SHARING!

info@flip-plus.org

THANK YOU!

FLiP
e-assessment community

https://flip-plus.org/

e-assessment community

FLIP+ Member Update

DEPP, Ministry of Education, France

https://flip-plus.org/

FLIP+ Online event
11th June 2020

Presenter: Dr. Thierry Rocher
Institution: DEPP

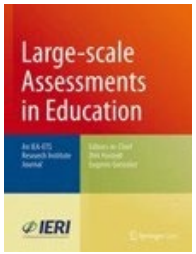
Current and planned e-assessment activities

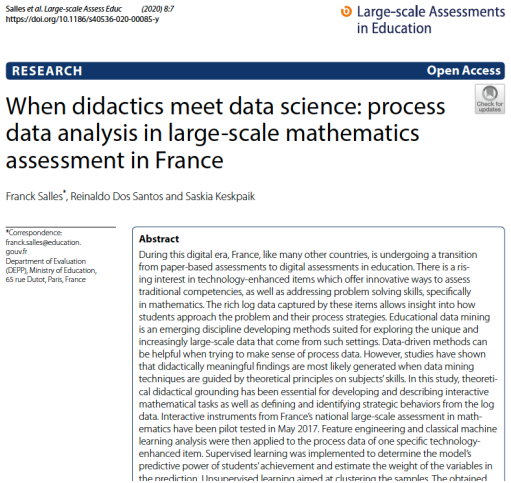
- Recall: DEPP is responsible for 3 types of assessments:
  - Nationwide exhaustive assessments – very large-scale
  - National sample-based large scale assessments
  - International assessment studies

- Activities within the spirit of sharing in FLIP+ :
  - Knowledge & experiences: studies
  - Technology: developments
  - Content: item library

Knowledge and experience: Process data studies

- **Article published** in




Salles et al. Large-scale Assess Educ (2020) 8:7
https://doi.org/10.1186/s40536-020-00085-y

Large-scale Assessments in Education

RESEARCH Open Access

When didactics meet data science: process data analysis in large-scale mathematics assessment in France

Franck Salles*, Reinaldo Dos Santos and Saskia Keskpaik

*Correspondence: franck.salles@education.gouv.fr
Department of Evaluation (DEPP), Ministry of Education, 65 rue Dutot, Paris, France

Abstract

During this digital era, France, like many other countries, is undergoing a transition from paper-based assessments to digital assessments in education. There is a rising interest in technology-enhanced items which offer innovative ways to assess traditional competencies, as well as addressing problem solving skills, specifically in mathematics. The rich log data captured by these items allows insight into how students approach the problem and their process strategies. Educational data mining is an emerging discipline developing methods suited for exploring the unique and increasingly large-scale data that come from such settings. Data-driven methods can be helpful when trying to make sense of process data. However, studies have shown that didactically meaningful findings are most likely generated when data mining techniques are guided by theoretical principles on subjects' skills. In this study, theoretical didactical grounding has been essential for developing and describing interactive mathematical tasks as well as defining and identifying strategic behaviors from the log data. Interactive instruments from France's national large-scale assessment in mathematics have been pilot tested in May 2017. Feature engineering and classical machine learning analysis were then applied to the process data of one specific technology-enhanced item. Supervised learning was implemented to determine the model's predictive power of students' achievement and estimate the weight of the variables in the prediction. Unsupervised learning aimed at clustering the samples. The obtained

- **Planned next**: **collaboration with Cito** on process data analysis based on large-scale assessment of math interactive items in France

Knowledge and experience: User eXperience studies

- Collaboration with Bryan Maddox (Assessment MicroAnalytics, University of East Anglia)
  - First trials with grade 9 students and interactive math items
- Collaboration with Florence LEHNERT (University of Luxembourg)
  - First trials with grade 1 and 2 students and tablet-based assessments
- **Both collaborations** will continued **next year**

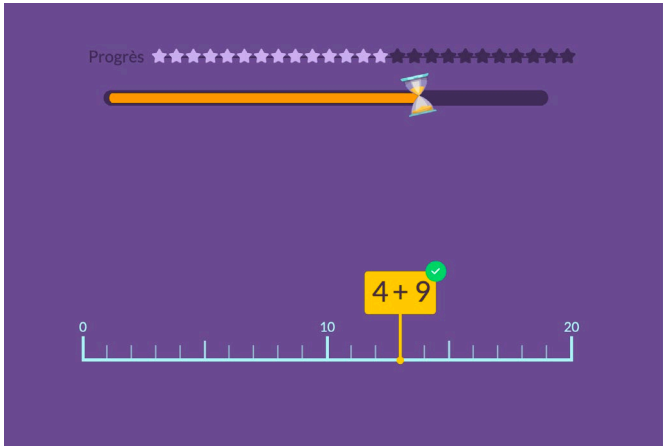
Knowledge and experience: Bridge studies

- Comparison between paper-based tests and digitalised tests in the context of national large-scale assessment programmes:
- Mode-effect studies in science and math (*in progress*)

- **Planned next** : mode-effect studies in French and foreign languages

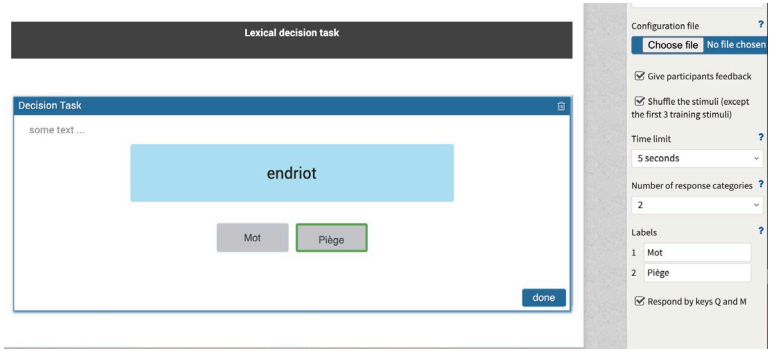
Technology-Enhanced Items

Number line (with Vretta)



- Already developed
- Implementation in Sept. 2020

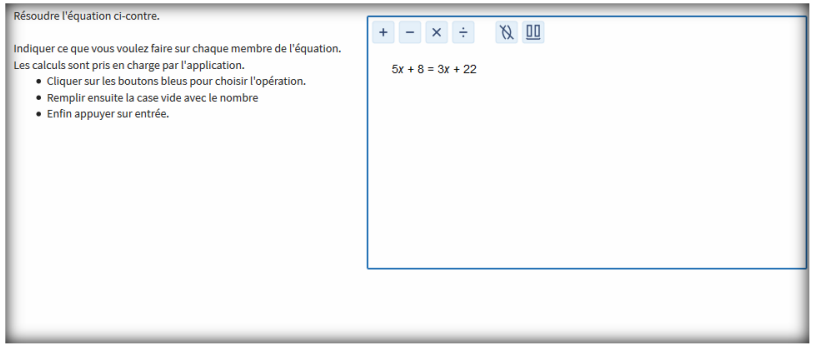
Lexical decision task (speed test)



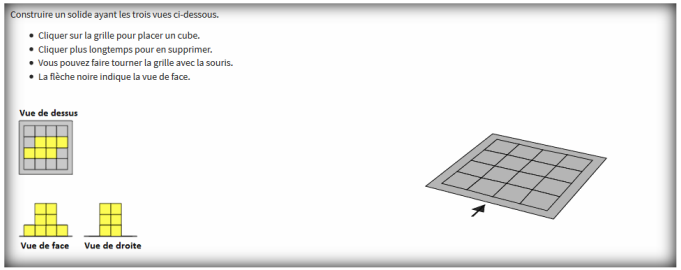
Simulation (with Vretta)

Technology-Enhanced Items: maths tools

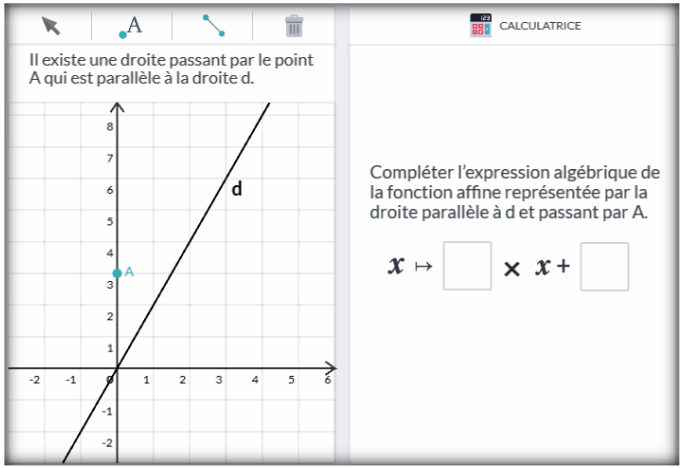
Solving equations tool (with Numworx)



Cube building tool (with Numworx)



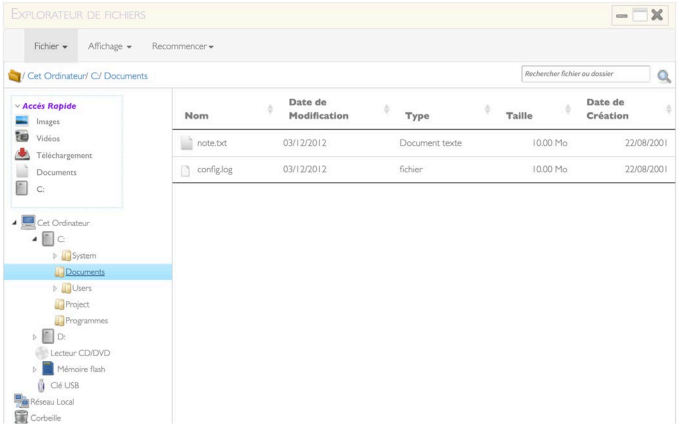
Space and shape tools (with Vretta)



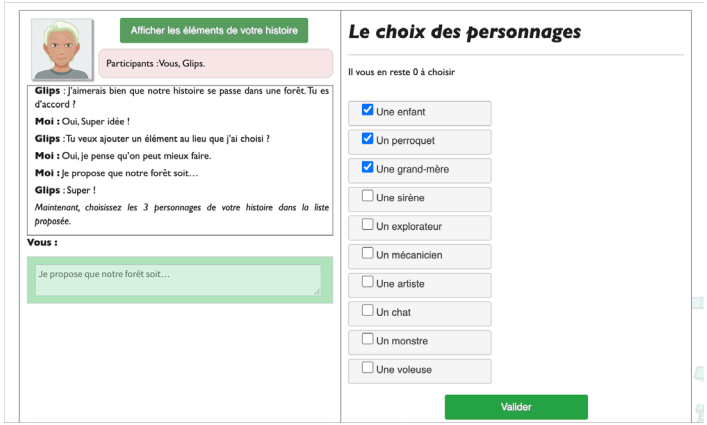
- Already developed
- Implementation in Sept. 2020

Technology-Enhanced Items: 4C tools

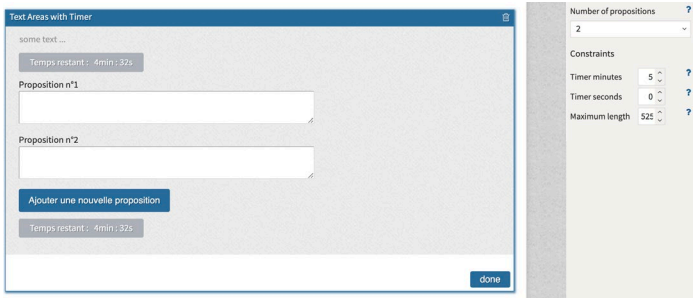
File explorer simulator (with Wiquid)



Chatbot (with Wiquid)



Text timer

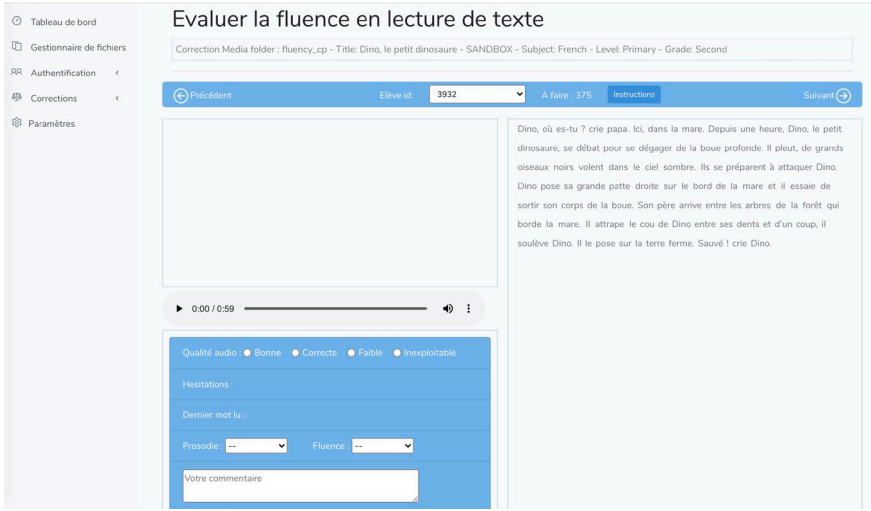


- Implemented
- To be further developed

Technology: Fluency test

- So-called « One-minute test »
- Record voices (15,000 students)
- Alignment voices and words
- Based on AI engines

Marking system



- Voices recorded and scored
- Algorithm development - ongoing

Content: Item Library

- Active contribution to the FLIP+ item library
- More details in the FLIP+ Dev team presentation on Day 2!

LET'S START SHARING!

info@flip-plus.org

THANK YOU!

FLiP
e-assessment community

https://flip-plus.org/

e-assessment community

FLIP+ Member Update

CAEd - Brazil

https://flip-plus.org/

FLIP+ Online event
11th June 2020

Presenter: Daniel Correa
Institution: CAEd - Brazil

Current e-assessment activities, 2019 -20

- **Some examples of e-assessment solutions using the CAEd platform**
  - Formative assessment
  - For pupils: activities in the form of exercise booklets
    - Teacher-pupil interaction for question review
  - Dashboard for all stakeholders
    - Education indicators (some real-time)

Veja os seus resultados nas avaliações dos períodos já encerrados ou acesse a correção do período atual.
Acompanhe os seus conhecimentos e compare com outros estudantes!

Avaliações concluídas | Avaliação atual

Sua pontuação

753

Média da sua escola
670

Seu desempenho
Avançado

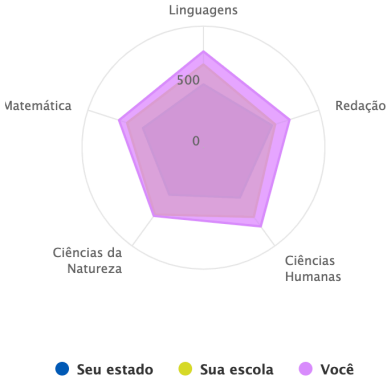
Tempo
Há 2 meses

Seus conhecimentos

Linguagens	792
Redação	745
Ciências Humanas	802
Ciências da Natureza	695
Matemática	731

Radar de desempenho

Compare os seus resultados nas últimas avaliações com as médias alcançadas pelos alunos de sua escola e por todos estudantes do seu Estado.



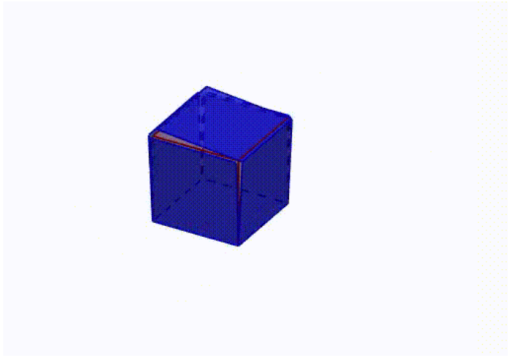
SAEP

ATIVIDADE

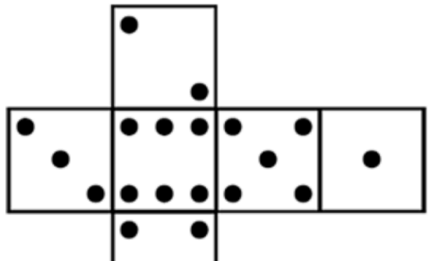
Joyce Morena

Um dado em forma de cubo possui marcações em suas faces de modo que a soma da quantidade de marcações em cada par de faces opostas seja 7.

Observe na animação abaixo a planificação de um cubo.



A partir dessas informações, qual das planificações abaixo apresenta uma possível disposição das marcações desse dado?



Planned e-assessment activities, 2020 -21

- Migrate the CaEd Item Workflow to the TAO platform (to be developed by OAT)
- Develop our own offline app for e-assessment
- Design an architecture to hold a capacity of a maximum of 300,000 simultaneous users

LET'S START SHARING!

info@flip-plus.org

THANK YOU!

FLiP
e-assessment community

https://flip-plus.org/

e-assessment community

FLIP+ Member Update

Educational Research Centre (ERC), Ireland

https://flip-plus.org/

Presenter: Adrian O'Flaherty
Institution: Educational Research Centre

FLIP+ Online event
11th June 2020

Current e-assessment activities, 2019 -20

- Cancellation of standardised testing in primary schools due to COVID 19
  - Normally, schools assess children in reading and mathematics in Spring at Grades 1-6 (both paper & online versions available)
- Procurement of new online assessment platform Q4 2019-Q2 2020
  - Preceded by pre-market consultation
  - E2E solution – purchase of test credits, school and class admin, item and test authoring, reporting
  - Our learning: pre-market activity and multiple perspectives essential - guided by procurement manager and technical consultant with legal input at each step

Planned e-assessment activities, 2020 -21

- New platform in place Q1 2021
  - data migration, user acceptance testing, piloting, on-boarding and communications to take place during Q3-4 2020
- Strategic review of ERC's current assessments, both paper and online Q3-4 2021, e.g.
  - Should some paper based tests be online and vice versa?
  - Need to review Irish language assessments
  - Need to consider alignments with revisions to primary curriculum

LET'S START SHARING!

info@flip-plus.org

THANK YOU!

FLiP
e-assessment community

https://flip-plus.org/

e-assessment community

FLIP+ Member Update

Cito Foundation
(in Dutch: Stichting Cito)

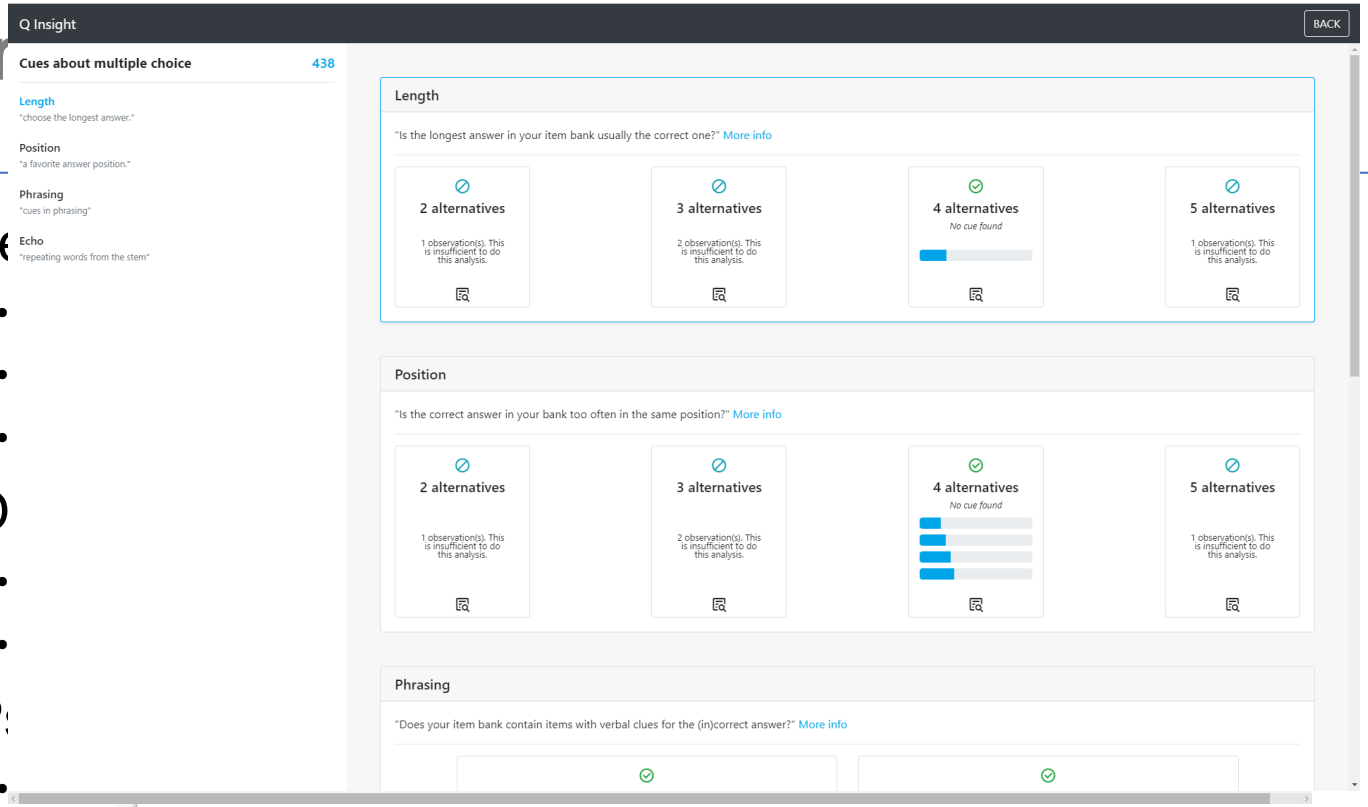
https://flip-plus.org/

FLIP+ Online event
11th June 2020

Presenter: Saskia Wools
Institution: Stichting Cito

Curr

- Ite
  -
  -
  -
- O
  -
  -
- P
  -
  -



- Research on CAT & Multistagetesting

Planned e-assessment activities, 2020 -21

- Items & Tests
  - Adopting IMS-QTI 3 format
  - Developing TEI (PCI)
- Open source software for test development & analysis
  - Additions to our R package (Dexter)
  - Prototype of “Smart Selection Tool”
- Psychometric analysis
  - Research on process data (continued)
  - Research on response times
  - …

LET'S START SHARING!

info@flip-plus.org

THANK YOU!

FLiP
e-assessment community

https://flip-plus.org/

e-assessment community

FLIP+ Member Update

International Baccalaureate

https://flip-plus.org/

FLIP+ Online event
11th June 2020

Presenter: Rebecca Hamer & Gareth Hagerty
Institution: IB

Current e-assessment activities, 2019 -20

- Research on digital assessment
  - Updating a taxonomy of digital assessment item types (with Cito)
  - Working towards a link between item type and assessment objective
- COVID-19: upload and e-marking of all May 2020 course work
- Vendor research for IB Diploma Programme onscreen
  - System design (integrate authoring, delivery and marking)
- Exploring item-banking & effects on authoring process

Planned e-assessment activities, 2020 -21

- Research on digital assessment
  - Publish/present the updated taxonomy and initial results from the workshops (with Cito)
  - Seek other test developers using various types of digital item types to expand on the work linking item types to assessment objectives
- Continue explore DP onscreen implementation
  - Exploring technology options for improving efficiency of e - authoring

LET'S START SHARING!

info@flip-plus.org

THANK YOU!

FLiP
e-assessment community

https://flip-plus.org/