



# Online implementation of an integrated writing assessment

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- 1. MASK Project
- 2. Tools
- 3. Evaluation
- 4. Implications

# Project MASK - Modeling of integrated academiclanguage competences



- Main objective 
   Empirical foundation of the competence construct of integrated writing in a Lingua-Franca context (English).
- Key element → development and testing of valid criteria for evaluating integrated writing products.

Need for adaptation  $\rightarrow$  online delivery of the project



#### 





### Computer-based assessment tool

- Available free of charge for non-commercial projects
- Complex items/tasks without requiring any specific programming skills
  - Workshop participation is recommended
- Variety of items types (e.g., single/multiples choice, drag & drop, among others...)
- Log-data collection
- It has been used in several national and international projects (e.g., PISA)
- Constantly being improved





# CBA ItemBuilder: MASK application



lse your own words and do not copy passages from the text. Write a text of ou may use the grey space to take notes and you may also highlight a pass	300-3 age/v	50 words. You have up to ord from the reading text	<b>b 60 minutes</b> to fulfil the task. by selecting it with your mouse cu	sor.	TIONARY
Introduction: Defining Place ace is one of the two or three most important terms for my discipline – ography. If pushed, I would argue that it is the most important of them . Geography is about place and places. But place is not the property of ography – it is a concept that travels quite freely between disciplines of the study of place benefits from an interdisciplinary approach. Indeed, e philosopher Jeff Malpas (2010) has argued that "place is perhaps the y term for interdisciplinary research in the arts, humanities and social iences in the twenty-first century." () o what links these examples: a child's room, an urban garden, a market wn, New York City, Kosovo and the Earth? What makes them all places di not simply a room, a garden, a town, a world city, a new nation, and 	F	iores	Write your text here	ts write their texts	TONARY
ve made meaningful. They are all spaces people are attached to in one ay or another. This is the most straightforward and common definition of ace – a meaningful location. e political geographer John Agnew has outlined three fundamental pects of place as a "meaningful location" (Agnew 1987): location					
Incate sense of place cations have fixed objective coordinates on the Earth's surface (or in a Earth's case a specific location vis-à-vis other planets and the sun). wy York is "there" and Koswy is "there " Given the appropriate scale we			Total word count: 9 words.		/ii.

### Pilot and main study

- Integrated writing tasks and sociodemographic questionnaires
- 1. *Items*: input text, highlight, dictionary, word counter
- 2. Implementation: participants randomization and groups
- 3. Download data: written products, answers from questionnaires and log-data

Task instruction
 Button for completing the task
 Time elapsed (*min:seg*)

Source-text with highlighting option Note-taking tool
 Button for embedded dictionary
 Source text
 Word counter

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## Video conferencing platform

- Cloud-based peer-to-peer software platform
- Restricted free use, license from 139€ per year
- Safety measures: password-protected meetings, user authentication, waiting rooms, locked meetings, disabling participant screen sharing, randomly generated IDs, and the ability for the host to remove disruptive attendees

# **MASK** application:

- Think-aloud protocols (TAPs) test-takers and raters, interviews, focus group interviews with the raters: screen sharing, audio-visual recording
- Rater training screen sharing, breakout rooms, polls





### Learning management system

- Free software
- Used by the varieties of education institutions in Germany
- Different imbedded applications: e.g., DoIT, Forum, Files, Schedule, Zoom



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Seminar: 10-GS-1-02 How to evalua Overview Administration Blubber File	ite source-based text products – rater training in a research project es Schedule Participants <u>DoIT</u> Lehrevaluation Forum Zoom Raumbewertung More	•
How to evaluate source-based text	Themen und Aufgaben dieser Veranstaltung         Im Preparatory tasks (4 Aufgaben)	•
Übersicht Setup Results	<ul> <li>I. Please read and sign the confidentiality agreement and return it to us asap via email (Can be found under Files). (5 Participants)</li> <li>2. Please view the ppt "Preparation" under Files/Preparation, which provides you with the necessary background to the Seminar (2 Participants)</li> </ul>	•
Options Statistic Copy data Import / Export	3. Sorting the rating scale descriptors (8 Participants)	
Dateiliste Punkteverwaltung Plagiats-Check	A. Writing task (60 minutes) (13 Participants)	
	Rating of the first text products NEU (1 Participants)	
	Homework 2 (2 Aufgaben)         TASK 1 (1 Participants)	
	TASK 2 (1 Participants)	
	Homework 3 (2 Aufgaben)  Part 1 (1 Participants)	

ater training

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- Sharing of materials
- Communication
- Rating tasks





# File sync&share solution

- Open source
- High reliability, performance and productivity
- Accessible via App or Web browser
- Location on the University of Bremen Server for data protection

# MASK application: Rating phase

- Sharing rating materials
  - Restricted access, each rater had their folder with scripts

Main function:

Identification of textual borrowings in written products

- Designed for the context of the MASK project (in cooperation with Torsten Zesch)
  - Does not compare with internet corpora
- An online application where raters can upload a source text and a student script for comparison
- Accessible via link in a browser
- Not public/open source





# **MASK** Tool

### Rating phase



#### Source Text

Green marked passages are matches

While the Netherlands is a small country (some 34,000 km2), it is densely populated (some 460 inhabitants/km2) and has a large active economy. Geologically, the coastal zone mainly consists of a series of deltas and flood plains of the rivers Scheldt, Meuse,

Rhine, and Ems.<sup>[11]</sup> bordered by coastal barriers (in the north in the form of barrier islands), a large (former) lagoon, tidal inlets, and coastal plains. The total length of the Dutch coastline is more than 400 kilometres, which can be divided into three different parts: the tidal inlets and estuaries in the south (now mostly controlled by open or closed barriers); the uninterrupted duned Holland coast, and the Wadden Sea area (featuring a series of barrier islands) in the north. At present, almost one-third of the country is located below average sea level. A further third has to be protected against flooding by rivers in periods of high discharges (\_\_). Low-lying countries such as the Netherlands, because of their physical characteristics, are highly vulnerable to **The consequences** 

att<sup>23</sup>Lextreme climatic events such as storm surges and periods of extreme precipitation. As a consequence, sea level as an expression of climate change has been a dominant boundary condition for the existing land and its users for thousands of year. The 1953 storm surge disaster, which claimed 1835 lives and **ficoded**<sup>[8]</sup> 165,000 hectares **bill and** in the **Netherlands**<sup>[4]</sup> (GERRITSEN, 2005), triggered another huge hydraulic undertaking: the Delta Project (\_). The Verherlands that to be secured against similar extreme disasters. In the socioeconomic context of that time, the only feasible solution seemed to consist of the classure of **alisea inters**<sup>[4]</sup>. Because the entrance to **the Port of**<sup>[4]</sup> Batterdam and the<sup>[4]</sup> effective coasistice of **alisea inters**<sup>[4]</sup> except for the entrance to the Port of <sup>[4]</sup> Batterdam and the<sup>[4]</sup> effect has **and**<sup>[4]</sup>. The before **fields and**<sup>[4]</sup> have the solution section by the solution is the entrance of **alisea inters**<sup>[4]</sup> and work started to shorten the total length of the coastine<sup>[4]</sup>.

because the large of the set of t

Economically favourable conditions triggered a change in societal perception, which required the reconciliation of safety with environmental issues, and public pressure led to a revision <u>bit the Detail <sup>10</sup></u> plan. Accordingly, parliament decided (1979), preserve <u>the Eastern Schedt's tidal latif</u><sup>10</sup> and satimarshes with their abundant flora and rich fauna and the high-yield shellfish fishery. This resulted in the construction of <u>a scorm surge<sup>10</sup> barrier</u> in the mouth of <sup>10</sup>, the storm schedt's of <u>Detail latif</u><sup>10</sup> basin that can be closed when sform surges approach (SAELIS, 1982). This marked a second turning point in the history of Dutch water management. After a thousand years of adaptation and another thousand years of protections strategies, <u>the NetherInands</u>

would<sup>160</sup> how adopt a more integrated approach. The Eastern Scheidt case shows the first signs of an upcoming paradigm shift affecting all three components of the triangle: policy, management, and knowledge.

This paradigm shift in the approach of water and coastal management that is observable during the last decades represents a major challenge for the current century; the challenge to adopt an approach according to [<sup>200</sup>], the principles of working with nature in a transdisciplinary way. In a critical evaluation of the morphological, ecological, and socioeconomic effects of the Detail<sup>40</sup>. Project, SAELUS et al. (2004) advocate working with nature in any tuture flood protection project in estuarine and coastal environments. A number of their recommendations exemplify this (1) if there is still is a choice, leave untouched estuaries and deltas alone. (2) if there is already a history of human intervention, try to adopt the most flexible approaches to safety and development. (3) Reversible and local measures within the limits of the natural processes are preferable.

The recommendations of SAEUS<sup>(21)</sup> et al. (2004) regarding working with nature are in line with today's management policy to maintain the coastline with soft solutions. Nevertheless, implementing the recommendations appears to be complex. For instance, sea dikes may hampen **ratural processes**, but<sup>22</sup> from an economic viewpoint, let alone from a socioemotional

#### Learner Text

Red marked passages are matches

Because the Netherlands a mainly underneath sea-level the coast is the only 'protection' against floods. The Netherlands do a very large coastal zone and many big rivers (for instance thine and ems).<sup>(1)</sup>

In 1953 was a storm surge<sup>[2]</sup> disaster that took many lives and **flooded**<sup>[3]</sup> a lot of hectars of land in the Netherlands.<sup>[4]</sup>

The only feasable solution was to cloase all **sea Intex**<sup>(5)</sup> to get more protection. The only exceptions for that solutions were Nieuwe Waterweg for the port of <sup>[7]</sup> Rotterdam and the<sup>(6)</sup> <sup>[8]</sup> Westerschelde for the port of <sup>[7]</sup> <sup>[9]</sup> Antwerp.

Therefore in 1988 the<sup>100</sup> gevornment made the **Delta Act**<sup>111</sup> to protect the country more against floods. The impact <mark>of the Delta<sup>101</sup>Act was (<sup>13)</sup> that it shorten the length of the<sup>141</sup> coastine.<sup>143</sup> The main reason why this was so bad, was that this f would mean the **Netherlands** would<sup>10</sup> have bees coastal defense areain cases of war.</mark>

With the time the economics of Netherlands changed and got a bigger meaning in society. So the goernment decided to safe/preserve the Eastern Scheldts tidal flats.<sup>[14]</sup> saftmarshes and the shelfisch fischery. They wanted to master it by constructing a **atom aurge barrier** in the mouth of<sup>[14]</sup> Eastern Scheldt tidal<sup>[15]</sup> which is openable and closable.

This showed the challange to adopt an approach according to<sup>[20]</sup> not destroy nature.

Dikes became very important for the coastal safety of netherlands but they dont go within the recommendations of SAEUS<sup>[21]</sup> They for instance influence natural processes but<sup>100]</sup> removing them or getting rid of them would have a too large impact on the country and would not be justifiable.

Currently it is observable in the Dutch policy, that they try to mitigate the consequences at<sup>[29]</sup> floads instead of strengthening the<sup>[24]</sup> defense towards floads. But also they arguing to update the recommendations 1) to 3) of SAEUS because they are too add/not up to date.

#### **Features:**

**DIPF** 

• Keywords

Universität

Bremen

 Modification of the string length
 Mark borrowed segment





### Online questionnaire platform

- Free for non-commercial research; for commercial use starts at €49
- Intuitive interface to create online questionnaires with more than 30 questions types
  - Integration of audio, video and images
  - With the possibility to use own program code
  - Data export to SPSS, R, Stata and Excel
- Adheres to the strict requirements of German data privacy laws, fully encrypted







### Ratings phase

- Simple survey that raters accessed via link
- Restrictions for certain answers





### Online survey tool

- Restricted free use, license from 34€/month
- Variety of survey designs: own survey design (HTML, CSS, JS)
- Control of participation
  - Later continuation of the survey by participants
  - Prevent multiple participation
- Data export in different formats (e.g., SPSS, R, CSV, etc.)
- By default not encrypted
  - Own configuration for responses and participants data





#### Skills

Please answer the following questions based on your experience during the previous semester (summer semester 2021).

\*7. Looking back on the beginning of your studies, how good was your English regarding the academic demands?

@ Please choose the appropriate response for each item:

	1 (not good at all)	2	3	4 (very good)
Was your English good enough to cope with the aca- demic demands?				

\*8. Were you experiencing any difficulties in the classes that were taught in English?

#### O Please choose the appropriate response for each item:

	1 (none at all)	2	3	4 (a lot)
Difficulties				

\*9. During the last summer semester 2021, how well did you get on with regard to your English language skills? Please rate the following aspects on a scale from 1 (not well at all) to 4 (very well)

#### OPlease choose the appropriate response for each item:

	1 (not well at all)	2	3	4 (very well)	Did not use English
Listening to lectures, seminars, or tutorials					
Tabing notes during lastures, cominars or tutorials					

# Participants' follow-up survey

- Sending invitation to participate
- Monitoring participation
- Reminders
- Download data

# Evaluation



ΤοοΙ	Availability	Usability	Data Protection	Pros	Cons
CBA ItemBuilder	Free for non-commercial	Training required	Very good	<ul> <li>Innovative items / flexibility</li> <li>Log-data</li> </ul>	<ul><li>Time</li><li>Skills needed</li></ul>
Zoom	License needed	User-friendly	Measures required	<ul><li>Familiar</li><li>Multifunctionality</li></ul>	<ul><li>Data protection issues</li><li>Price</li></ul>
StudIP	Free, but hosting needed	User-friendly	Very good	<ul><li>Multifunctionality</li><li>Monitoring</li></ul>	Access needed
SeaFile	Open source, hosting possible	User-friendly	Very good	Good data protection	Rather unknown
Anti- plagiarism tool	Not public	User-friendly	Very good	<ul><li>Easy to use</li><li>Adjustment possible</li></ul>	<ul><li>Limited access</li><li>Basic verbatim identification</li></ul>
SoSci Survey	Free for non- commercial	Requires some time to familiarize	Very good	<ul><li>Research oriented</li><li>Good data protection</li></ul>	Overcomplicated for simple surveys
LimeSurvey	License needed	User-friendly	Measures required	<ul> <li>Modern interface</li> <li>Monitoring of the participation</li> </ul>	<ul><li>Lower data protection standards</li><li>Price</li></ul>

# Implications for online assessment





# Implications for online assessment



- Choosing tools according to different online assessment contexts, purposes and resources
- Important to consider for each tool
  - Availability
  - Usability
  - Data protection
- Be flexible
- Stay updated about new features



# Thank you for your attention!

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