

**REMOTE LEARNING AND ASSESSMENT
OF GREEK SIGN LANGUAGE
IN THE UNDERGRADUATE CURRICULUM IN COVID TIME**

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**EduLearn23: 15th Annual International Conference on Education
and New Learning Technologies**



Greek Sign Language (GSL) current situation



- Natural language
- Different lexical formation
- 3D grammar formation



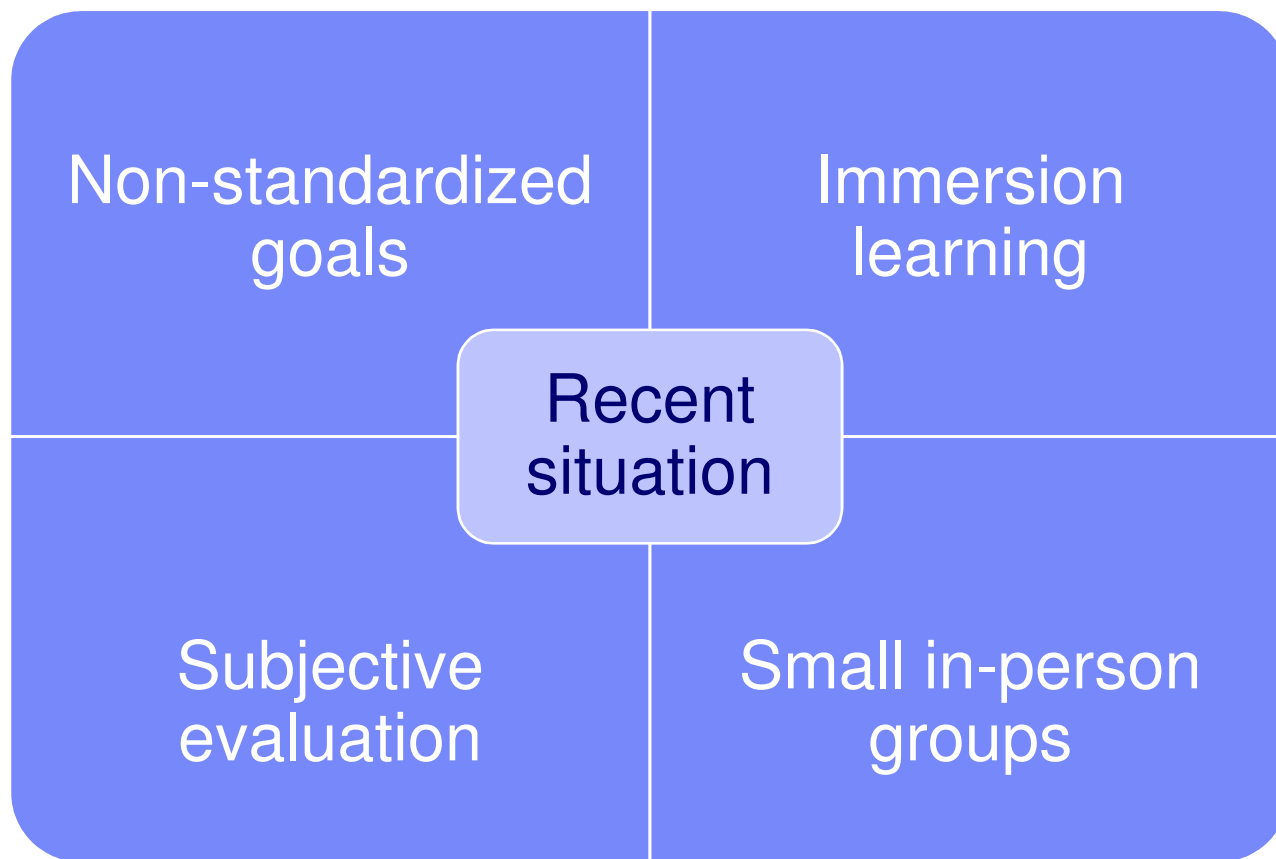
- Minority language
- Under-documented
- Inconsistent language policies



- Legally recognized (Law 2817/2000)
- Knowledge required in Education
- Increased numbers of L2 users



Teaching GSL as a second language





Conflicting generic prerequisites

Online learning



- Remotely and/or asynchronous
- Mask wearing
- Equipment- and technology- dependent
- Online standardized assessments
-

GSL learning



- Interactive sessions of small groups
-
- Face clearly visible for conveying linguistic information
-
- Highest quality of video required
- Communicative, hands-on assessments



GSL in tertiary education in covid time

Limited contact
time per group

Limited numbers
of students in
class

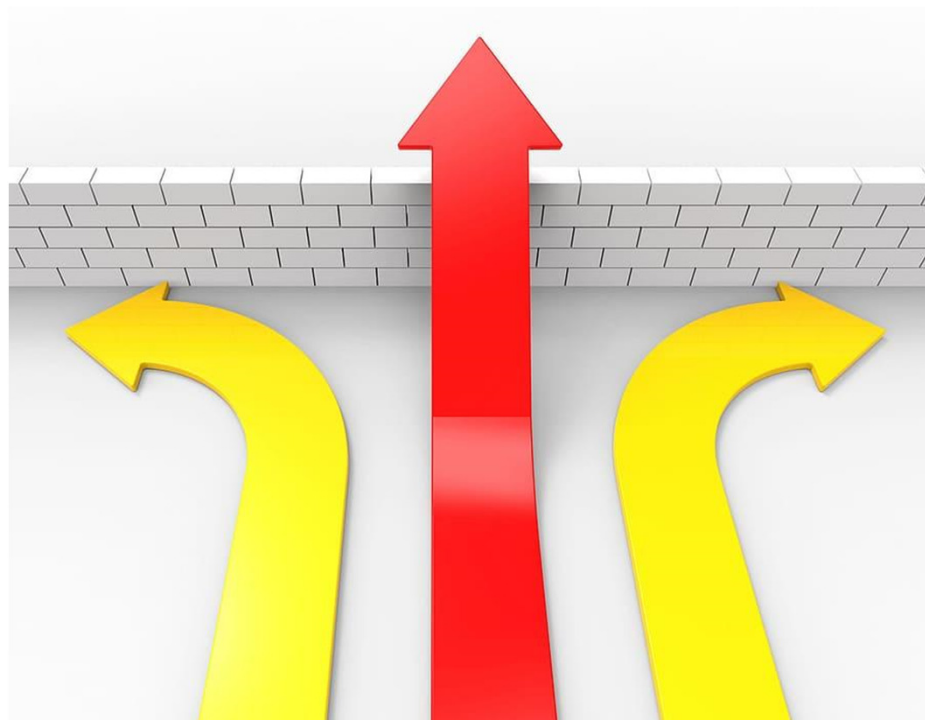
Risk of lower
learning
outcomes

Limited exposure
to facial
expression

Inconsistent
physical
attendance



SL ReDu platform providing change of direction





Features of the SL-ReDu platform for online learning of Greek Sign Language

Technical

- Easy-to-use on any personal computer
- Language perception through high quality of image and video
- Advanced movement detection technology for language production
- Objectivity of assessment
- Tutor-independent

Linguistic

- Up to A2 level covered in vocabulary
- A0-A1 L2 levels in communication
- Most common grammar phenomena
- Compliant with the visual-motor linguistic modality of GSL
- Facial expression recognition



Vocabulary and phrase content in the SL-ReDu platform

Categories	Sub-categories						
Numbers	Numbers 0-9	Tens	11-19	Hundreds	Thousands		Revision
Finger-spelling	Letters Α, Σ, Ε, Ο	Letters Γ, Δ, Φ, Ι	Letters Ζ, Η, Π	Letters Λ, Μ, Ν, Τ	Letters Β, Κ, Ρ, Υ, Ω	Letters Θ, Ξ, Ψ, Χ	Revision
Socializing	Everyday communication	Most common verbs	Describing appearances				
Colours	-						
Family	-						
Food	Main meals	Drinks & beverages	Cooking	General food-related			
House	House spaces	Furniture	Household items	General house-related			
Clothes	-						
Shopping	Shops	Money exchanges	General shopping				
Our world	Nature	Neighbourhood	Weather	Animals	General world		
Travel	Travel	Transport					
School	-						
Work	Work related buildings	General work-related					
Revision 1	Colours, Family, Food						
Revision 2	House, Clothes, Shopping						
Revision 3	Our world, Travel						
Revision 4	School, Work						



Grammar content in the SL-ReDu platform

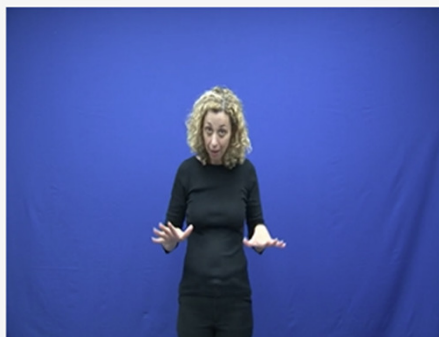
Grammar categories	Second level grammar categories	Third level grammar categories
Time	Lexical items	Grammar items
Functional Markers		
Question	Open questions	Closed questions
Negation		
Classifiers	Human entity	Standing, bending, laying, standing (plural)
	No dimension (point)	
	Single dimension (line)	Vertical lines, horizontal lines, vertical plurals, horizontal plurals
	Two dimensions (surface)	Non-bounded surface, bounded horizontal surface, bounded vertical surface
	Three dimensional objects	Non bounded volumes, bounded volumes, double-handed
	Outlines	Default outlines, circular outlines, small circular surfaces



Constructions of Time

Αρχή / Φράσεις // Φράσεις Γραμματικών Φαινομένων - Χρόνος

Ξύπνησες;



Αρχή / Θεματικό Λεξιλόγιο / Χρόνος / Γραμματικές λέξεις χρόνου

Πότε; (μέλλον)

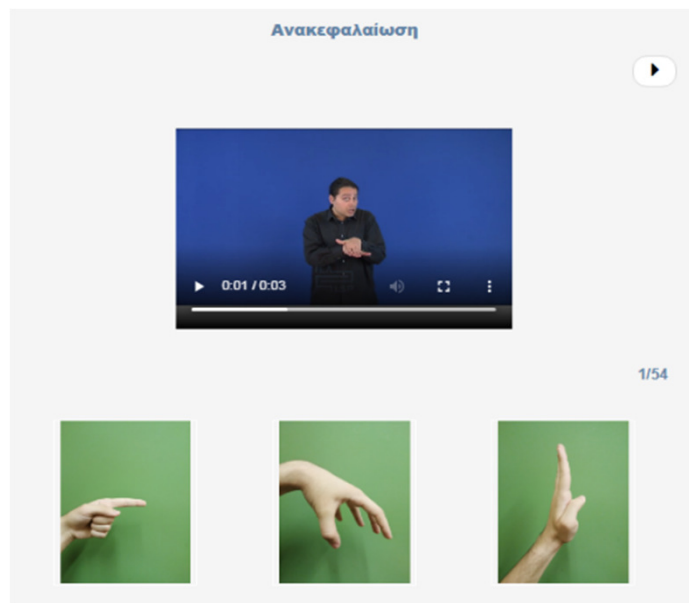


(a) 1x2 WAKE BEEN(q) = *Have you woken up?* (b) *WHEN* (for near future)

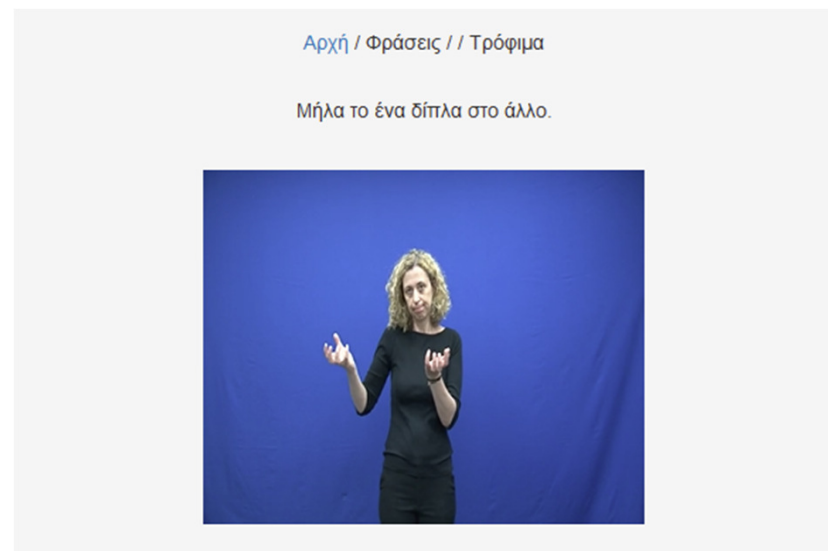
Linguistic organization of Time and temporal relations in GSL is very different to that of Greek. Perfectives (a) and timelines (b) are among the A-level lexical and phrasal temporals in the SL-ReDu platform.



Classifier constructions



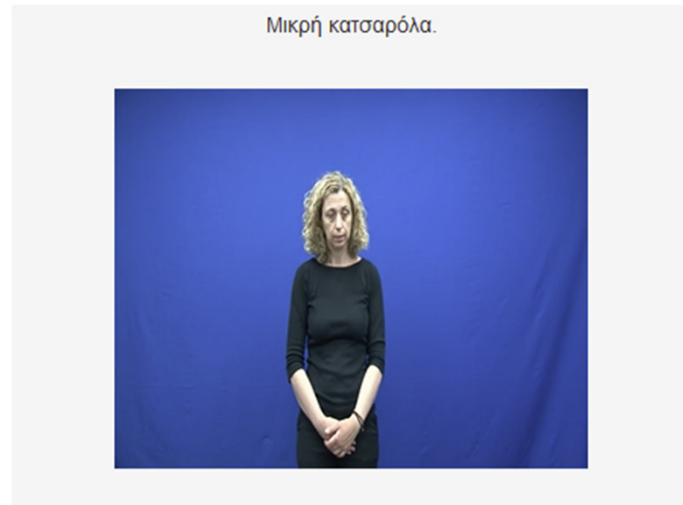
(a) “Choose classifier matching noun FISH”



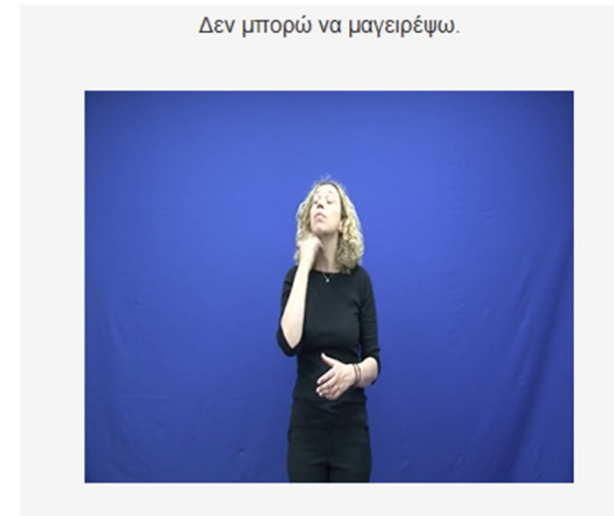
(b) APPLE cl (3dimensional, next to each other= APPLES

Various types of classifiers organize GSL words according to geometrical properties and mark them as to relative location and movement. Simple A-level phrases with classifiers (a) properties and (b) movement and position can be automatically recognized.

Order of constituents in phrases



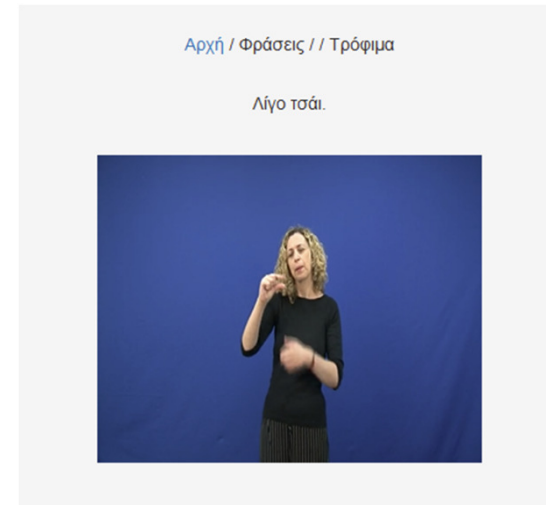
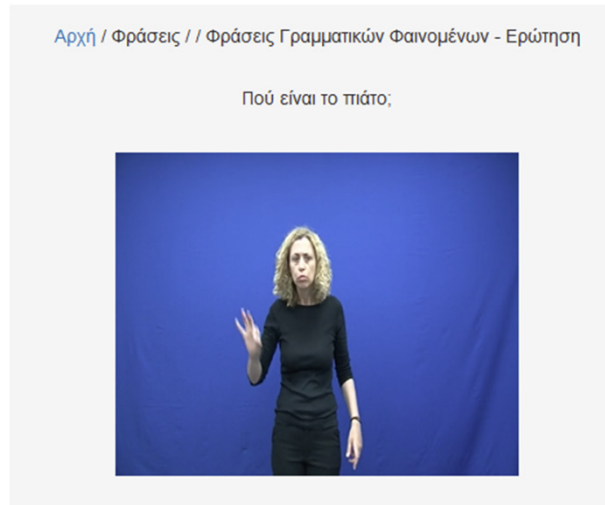
(a) *KETTLE SMALL* = *A small kettle*



(b) *ix1 COOK CANNOT* = *I can't cook*

Topic - comment constructions in GSL have been taken into account for short phrases such as (a) noun + adjective, or (b) verb + negation/question

Facial expression



(a) *PLATE WHERE?* =Where is the plate? (b) *TEA cl(vertical, small)* =A small quantity of tea

Facial expression conveys morphological information in GSL in areas such as questions (a) and quantifiers (b). Demonstration, drilling, and most importantly, recognition of appropriate facial expressions is incorporated in the linguistic content of the platform



Phrase comprehension activities (test)

4/12

Βαθμολογία: 1

Χρόνος
00:10:42
10%
ΔΙΑΚΟΠΗ

Test activity at phrase level, using a video prompt



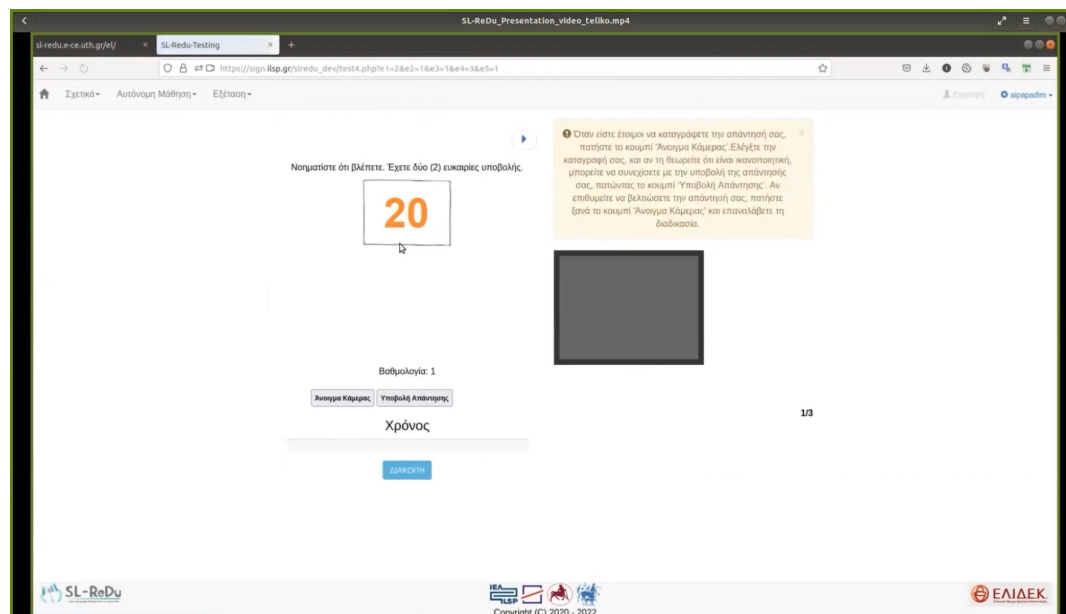
Educational features of the SL-ReDu platform for online learning of Greek Sign Language (2)

Educational features

- Limitless opportunities for autonomous learning, passive or active
- Drilling in front of a camera enhancing muscle memory
- Self-assessment of linguistic productions
- Additional tool for tutors to create and assign custom-made assessments



Unlimited drills for muscle memory enhancement



Process of linguistic production activity

In order to acquire the production motor-visual elements and structures asynchronously, the SL-ReDu platform provides the opportunity for the students to drill vocabulary and phrases in front of their web camera and receive feedback on the quality of their productions.



Tutor-led, custom made activities

Creating a new assessment

Εξέταση Αναγνώρισης Νοημάτων 21

vvideo	EL_expected	EN_expected	feedback_video
<input type="text"/>	<input type="text" value="Insert value"/>	<input type="text" value="Insert value"/>	<input type="text" value=""/> <input type="checkbox"/>
<input type="text"/>	<input type="text" value="Insert value"/>	<input type="text" value="Insert value"/>	<input type="text" value=""/> <input type="checkbox"/>
<input type="text"/>	<input type="text" value="Insert value"/>	<input type="text" value="Insert value"/>	<input type="text" value=""/> <input type="checkbox"/>
<input type="text"/>	<input type="text" value="Insert value"/>	<input type="text" value="Insert value"/>	<input type="text" value=""/> <input type="checkbox"/>
<input type="text"/>	<input type="text" value="Insert value"/>	<input type="text" value="Insert value"/>	<input type="text" value=""/> <input type="checkbox"/>

submit

Complementary to the autonomous learning, tutors can use the existing content and / or create custom activities drawing from the repository of image and video content, adjust the size of an exercise and decide over which thematic areas will be tested for any given student or group.



Tutor-led, custom made activities

Reviewing progress of students

Show 10 entries Search:

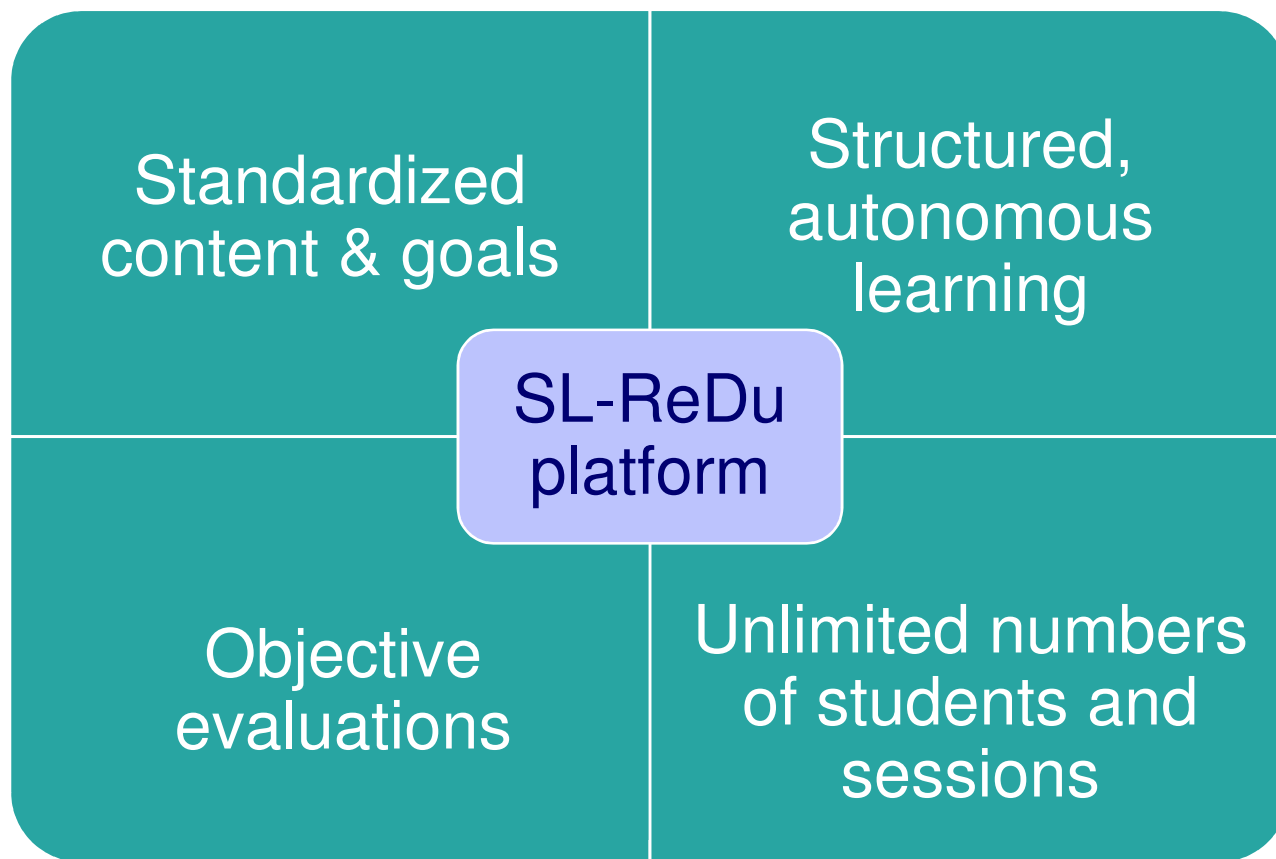
Όνομα Εξέτασης	Πεδίο εξέτασης	Συνολική βαθμολογία εξέτασης	Ημερομηνία δημιουργίας	Διαχείριση
test3	Αναγνώριση Αριθμών	3	30-11-2021 20:35:16	
test4	Αναγνώριση Αριθμών	3	30-11-2021 20:36:34	
activefstest7	Αναγνώριση ΔΑΚΤΥΛΟΣΥΛΛΑΒΙΣΜΟΥ	4	12-05-2023 03:15:18	
activefstest8	Αναγνώριση ΔΑΚΤΥΛΟΣΥΛΛΑΒΙΣΜΟΥ	4	12-05-2023 03:15:44	
activefstest9	Αναγνώριση ΔΑΚΤΥΛΟΣΥΛΛΑΒΙΣΜΟΥ	4	12-05-2023 03:16:11	
activefstest10	Αναγνώριση ΔΑΚΤΥΛΟΣΥΛΛΑΒΙΣΜΟΥ	4	12-05-2023 03:16:37	
test2	Αναγνώριση Αριθμών	5	30-11-2021 20:33:16	
testSignRecog7	Αναγνώριση Νοημάτων	5	09-05-2023 01:40:33	
testSignRecog8	Αναγνώριση Νοημάτων	5	09-05-2023 02:07:08	
testSignRecog9	Αναγνώριση Νοημάτων	5	09-05-2023 02:18:34	

Showing 1 to 10 of 59 entries Previous 1 2 3 4 5 6 Next

Besides students receiving personal feedback scores for their performances, tutors can have an objective overview of groups or individual users' grades, across activities or along learning timelines.



Revisiting GSL as a L2 teaching with the SL-ReDu platform





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THANK YOU!

Questions? Please contact:
gsapountz@uth.gr

Acknowledgments



H.F.R.I.
Hellenic Foundation for
Research & Innovation

The research work was supported by the Hellenic Foundation for Research and Innovation (H.F.R.I.) under the “First Call for H.F.R.I. Research Projects to support Faculty members and Researchers and the procurement of high-cost research equipment grant” (Project Number: 2456).