

# A test to assess claims about treatment effects for Spanish primary school children: the development and validation of the interactive CLAIM Test

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## Background

The main objective of the Informed Health Choices (IHC) project is to teach people to assess treatment claims and make informed health choices. For this purpose, the Claim Evaluation Tools item bank was developed to measure people's ability to apply the IHC key concepts (concepts that people need to use to assess treatment claims and make informed health choices).

## Objectives

- To develop and validate the interactive CLAIM Test (iCLAIM Test), an online interactive test in Spanish, with questions from the Claim Evaluation Tools item bank.
- To measure the ability of Spanish primary school children to assess treatment claims and make informed health choices.

## Methods

We followed a multistep process to develop the iCLAIM Test, including:

1. Determining the scope of the test
2. Selection of the questions from the Claim Evaluation Tools item bank
3. Translation process (forward translation, reconciliation, backward translation, final revision)
4. Design of the interactive test in an online teaching platform
5. External review with experts
6. User-test with children
7. Validation survey
8. Adjustment of the test

## Results

Two researchers selected 24 multiple-choice questions [MCQ], which addressed the 12 IHC Key concepts included in the IHC primary school resources. Three Spanish researchers, a Spanish translator, and an English translator completed the translation process of the questions into Spanish. One web developer and two researchers designed the online interactive test. Twelve experts (7 researchers, 4 teachers from primary schools, and one designer) reviewed the test, and 11 children participated in the user-testing.

During 2023, we will survey a sample of approximately 300 children from Spanish primary schools to validate the test. Finally, we will adjust the test according to the validation findings.



Image 1: Homepage of the iCLAIM Test which includes descriptive variables of the participants, a brief explanation of the study and acceptance of participation, and the terms and conditions for using the service.



Image 2: A student while user-testing the iCLAIM Test.

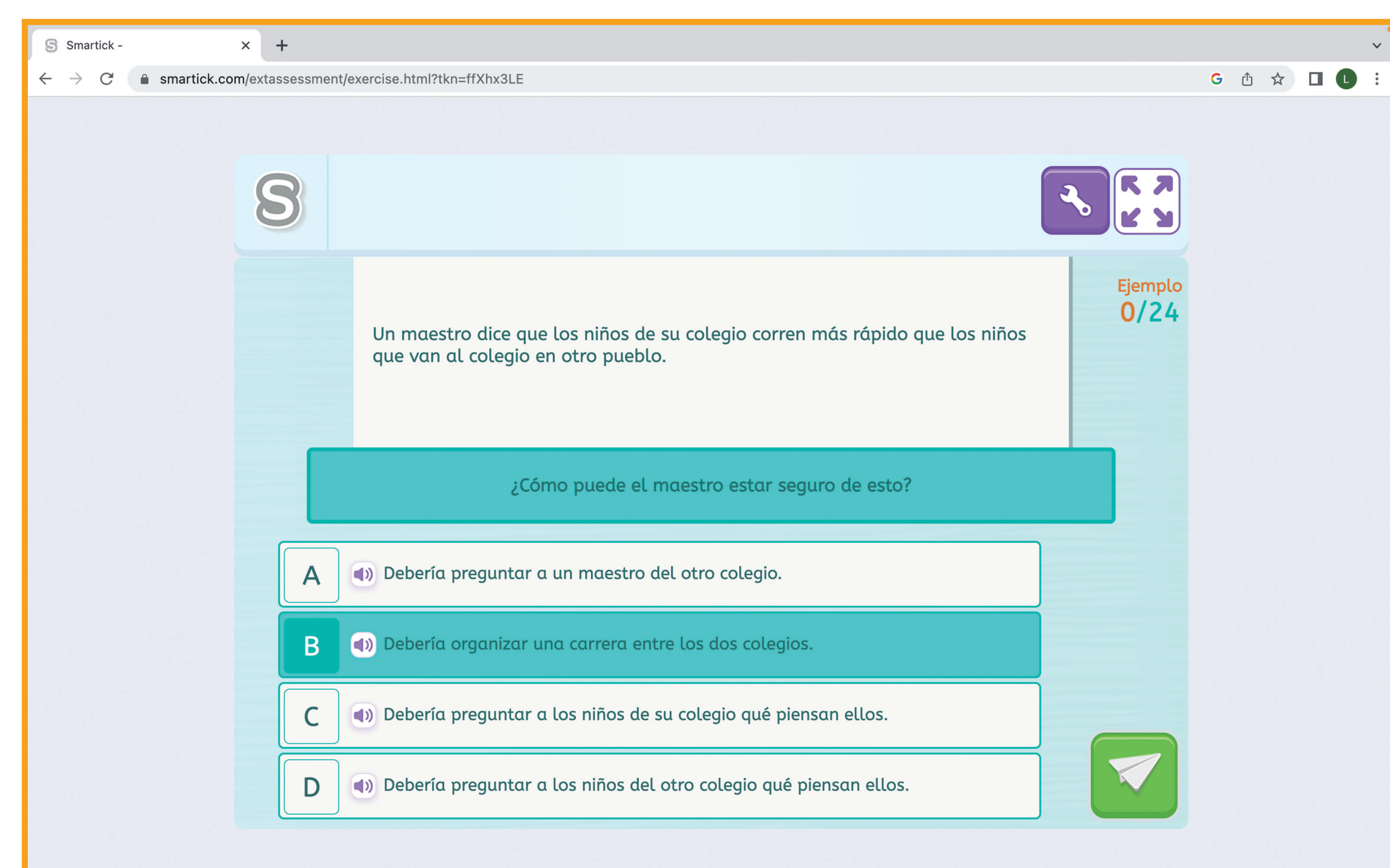
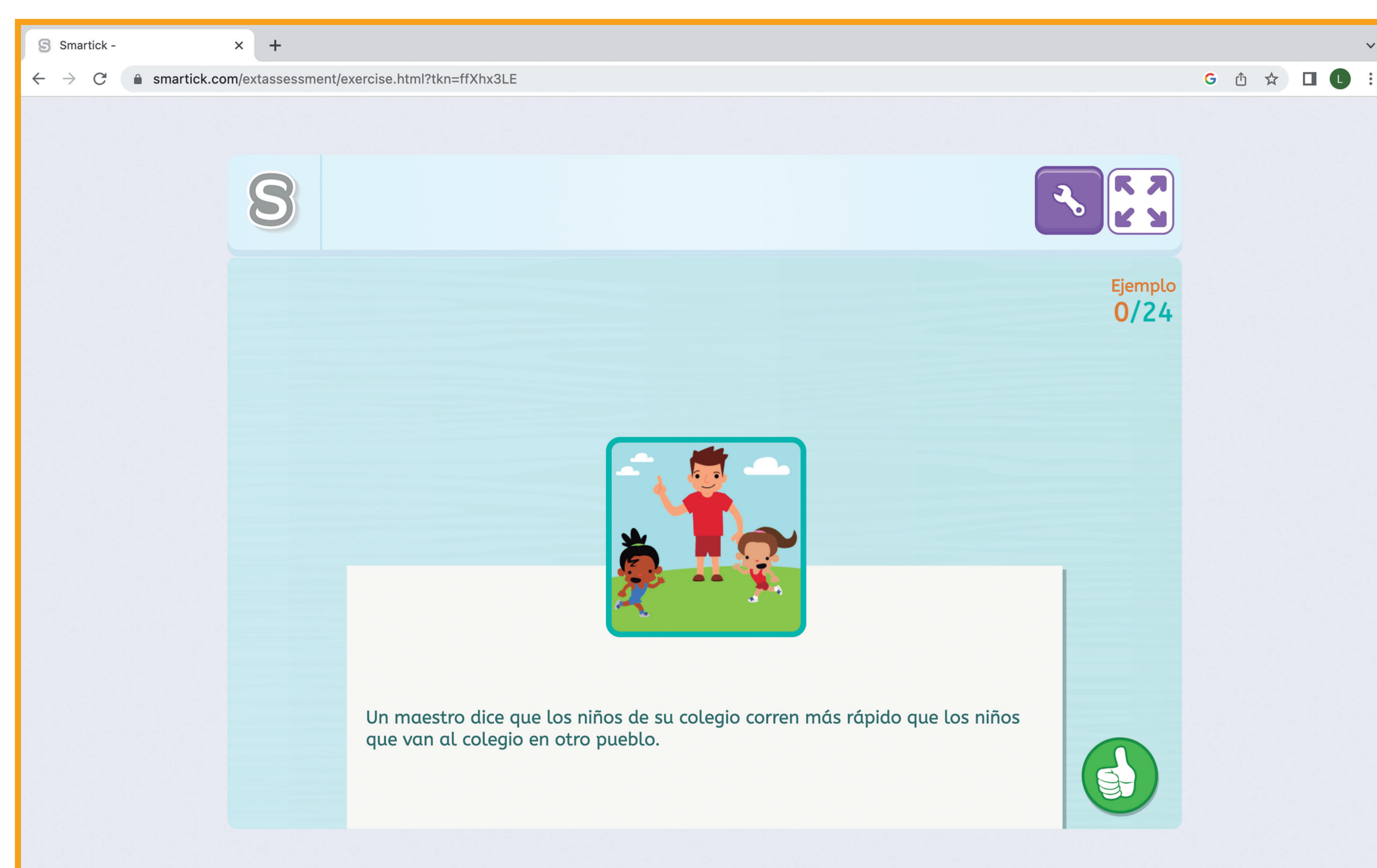


Image 3 and 4: Sample test question featuring a short story with a representative picture, a question and four answer options.

## Conclusions

- We expect to obtain a validated, online, and interactive test in Spanish to measure the ability of primary school children to assess treatment claims and make informed health choices.
- After that, we can use the iCLAIM Test to evaluate the effect of health education interventions in primary schools, such as using the IHC resources.



Image 5: Access the iCLAIM Test.