

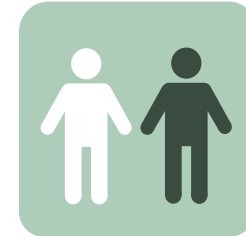
Children's Perceptions on Cancer: Digital Storytelling as Means of Education

New Perspectives in Science Education Firenze 2019

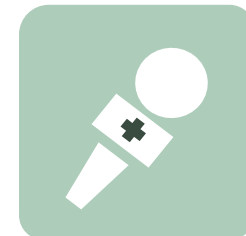
Helena Lima and Hernâni Zão Oliveira
University of Porto, Portugal

HEALTH LITERACY

61% of the population has a low or inadequate level of Health Literacy.



Scarce health specialization programs for journalists.



Excessive medical jargon in communication.



Doctors with little training in communication.





LACLIS

Portuguese Creative Lab for Health Literacy

U.PORTO
FACULDADE DE BELAS ARTES
UNIVERSIDADE DO PORTO

U.PORTO
FACULDADE DE PSICOLOGIA
E DE CIÊNCIAS DA EDUCAÇÃO
UNIVERSIDADE DO PORTO

U.PORTO
FACULDADE DE DESPORTO
UNIVERSIDADE DO PORTO

U.PORTO
FLUP FACULDADE DE LETRAS
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3s
INSTITUTO
DE INVESTIGAÇÃO
E INOVAÇÃO
EM SAÚDE
UNIVERSIDADE
DO PORTO

U.PORTO
FMUP FACULDADE DE MEDICINA
UNIVERSIDADE DO PORTO

INESC TEC
ASSOCIATE LABORATORY
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DA UNIVERSIDADE DO PORTO

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Strategic Areas Worked by the 8 Faculties and Research Centers



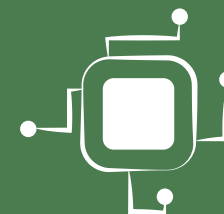
Health Journalism



Health Promotion



Clinical Communication



Technological Innovation



Psychology and Science
Education



Physical Activity and
Well-Being

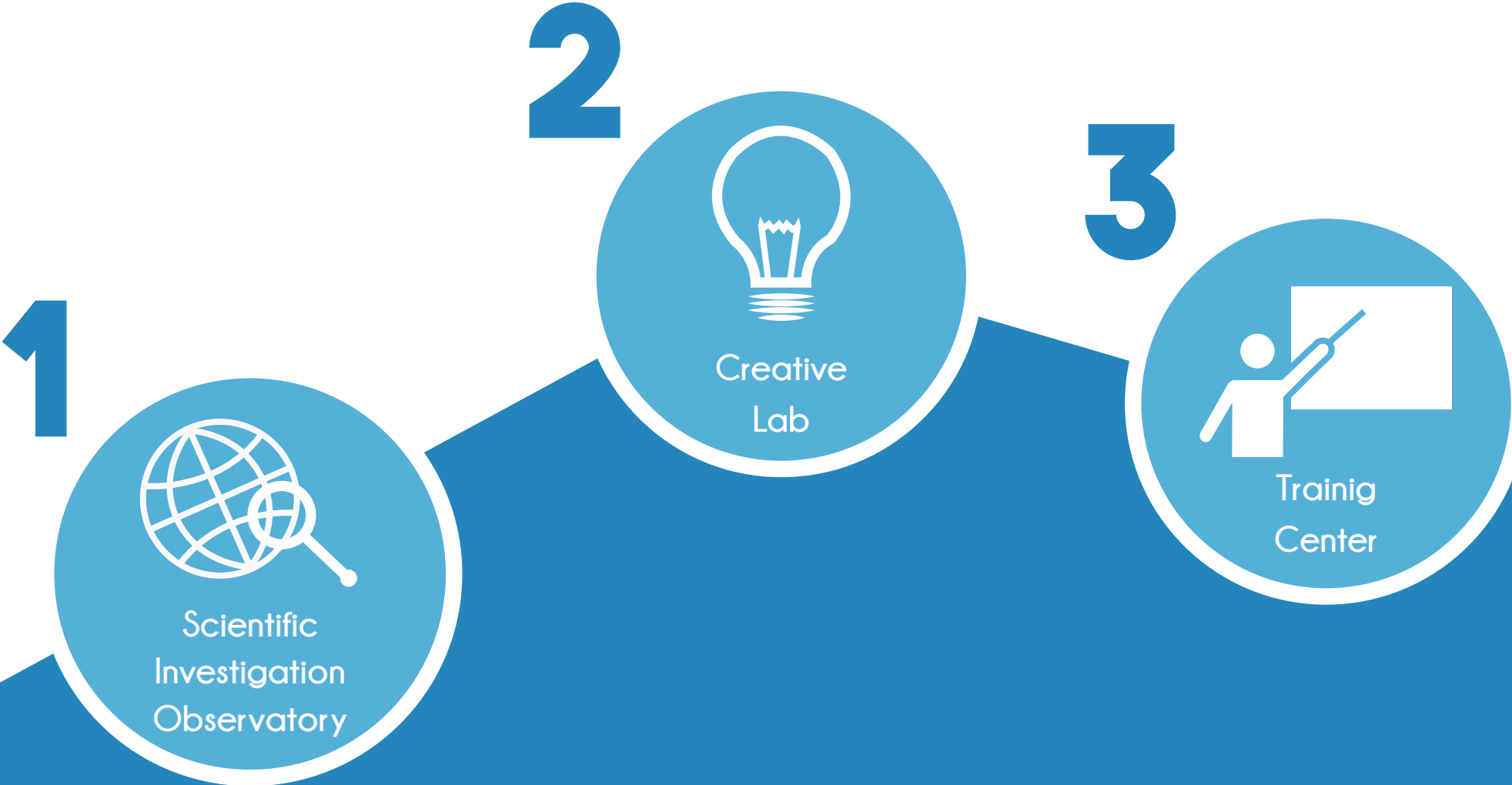


Design



Collaborative Knowledge
Networks

LITERACY CENTER WITH 3 MAIN FUNCTIONS



HOPE



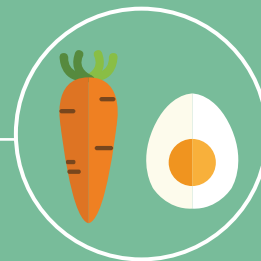
VIDEO GAME



PARENTS' APP



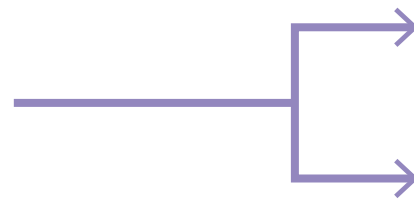
Medical procedures



Feeding adaptation at home



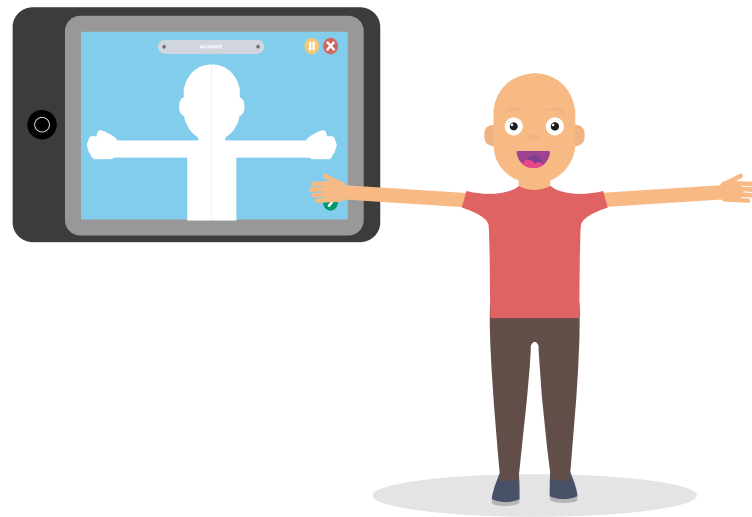
Hazards to the child at school



SERIOUS GAME: allows building a tool that goes beyond entertainment and has the goal to teach cancer subjects, increasing adherence to treatments

EXERGAMING TECHNOLOGY: seeks to encourage the practice of physical exercise, using the front camera of mobile devices

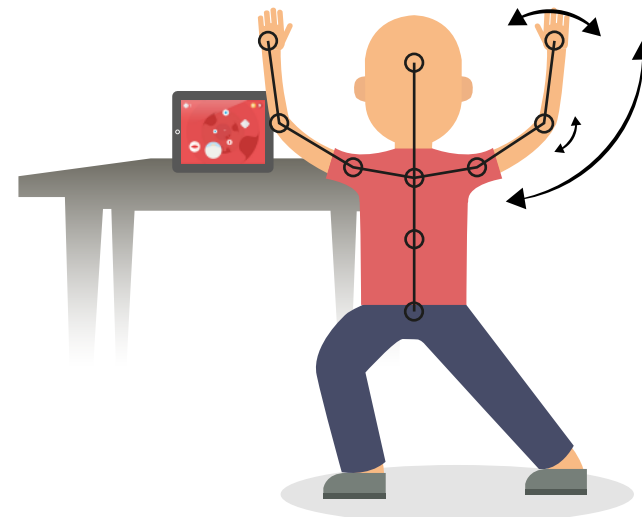
Some examples:



Radiography level

Teaches how child must proceed during a radiography

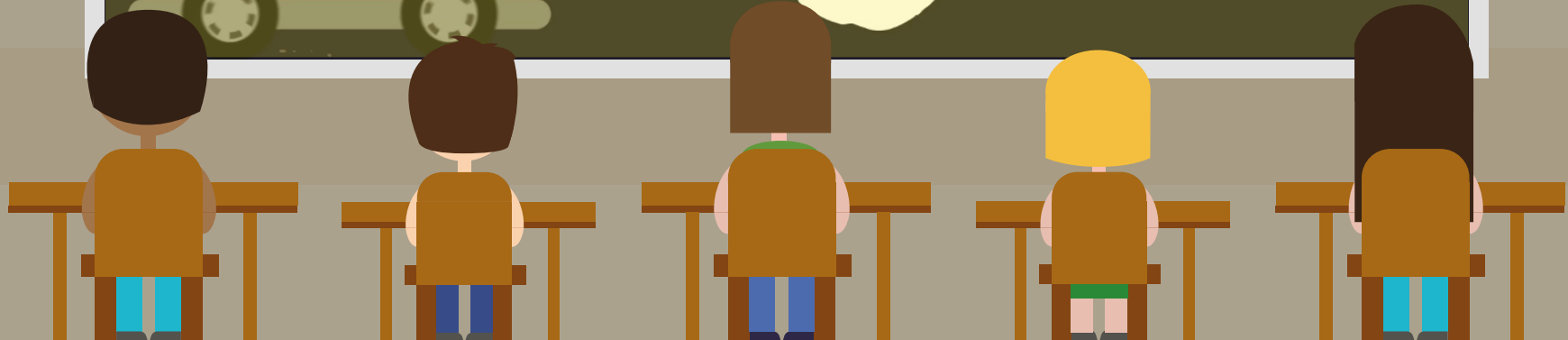
Prepares child's body to increase physical activity with stretching exercises



Chemotherapy level

Delivers information about the benefits of chemotherapy

The child exercises arms, legs and trunk in levels with increasing difficulty



Cancer Awareness Session Development

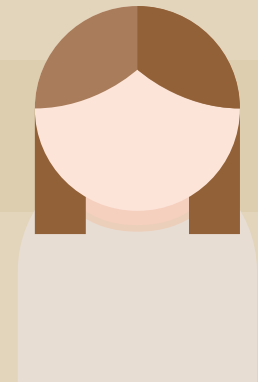
1. Assessment of students' perception about cancer through a questionnaire.

2. Development of an explanatory narrative with multimedia application.

3. Promotion of awareness actions with the contents created.

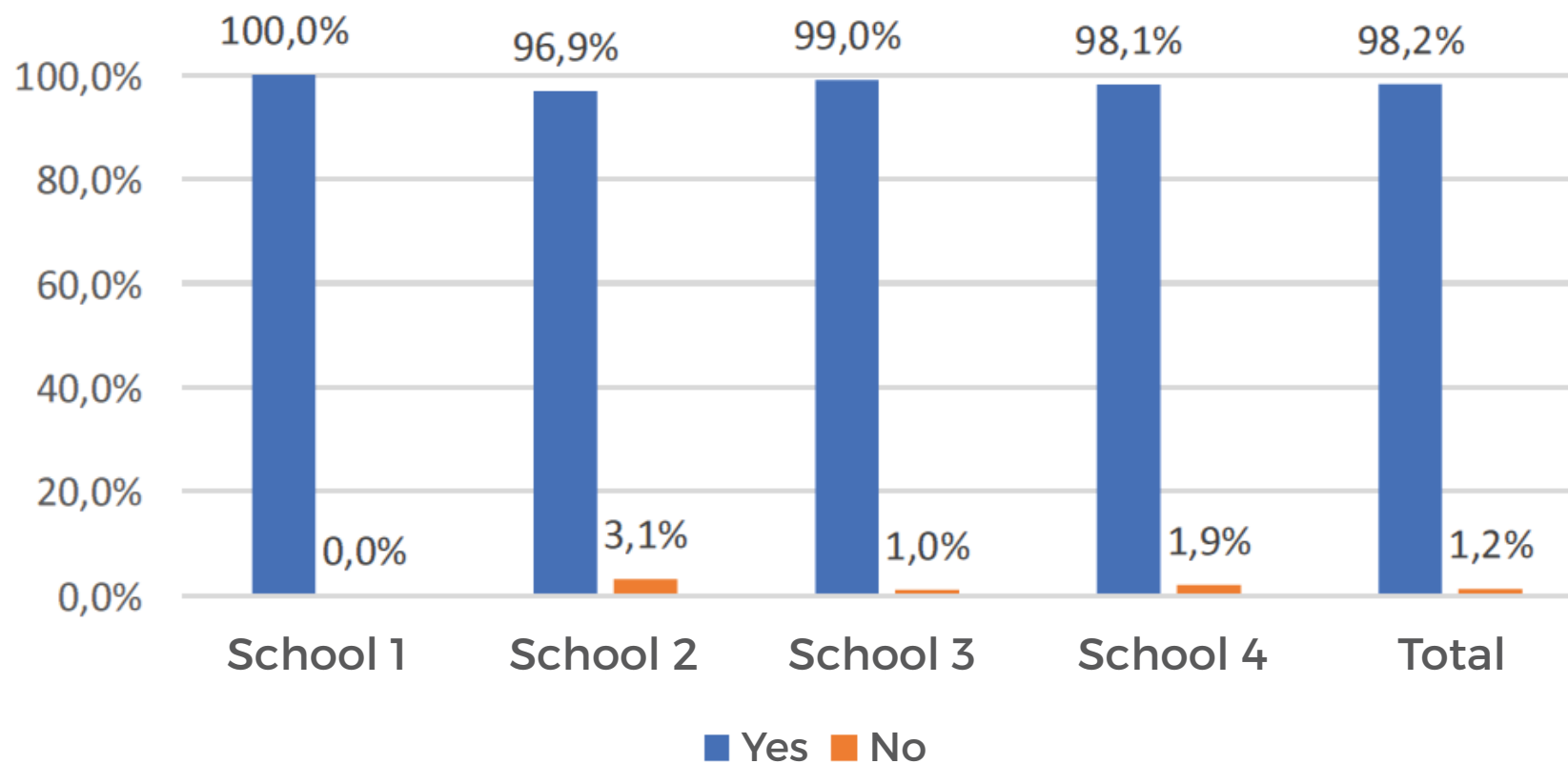


N total = 625; Female students = 49.8%; Male students = 50.2%; Average age = 10.92; Standard deviation = 3.61.



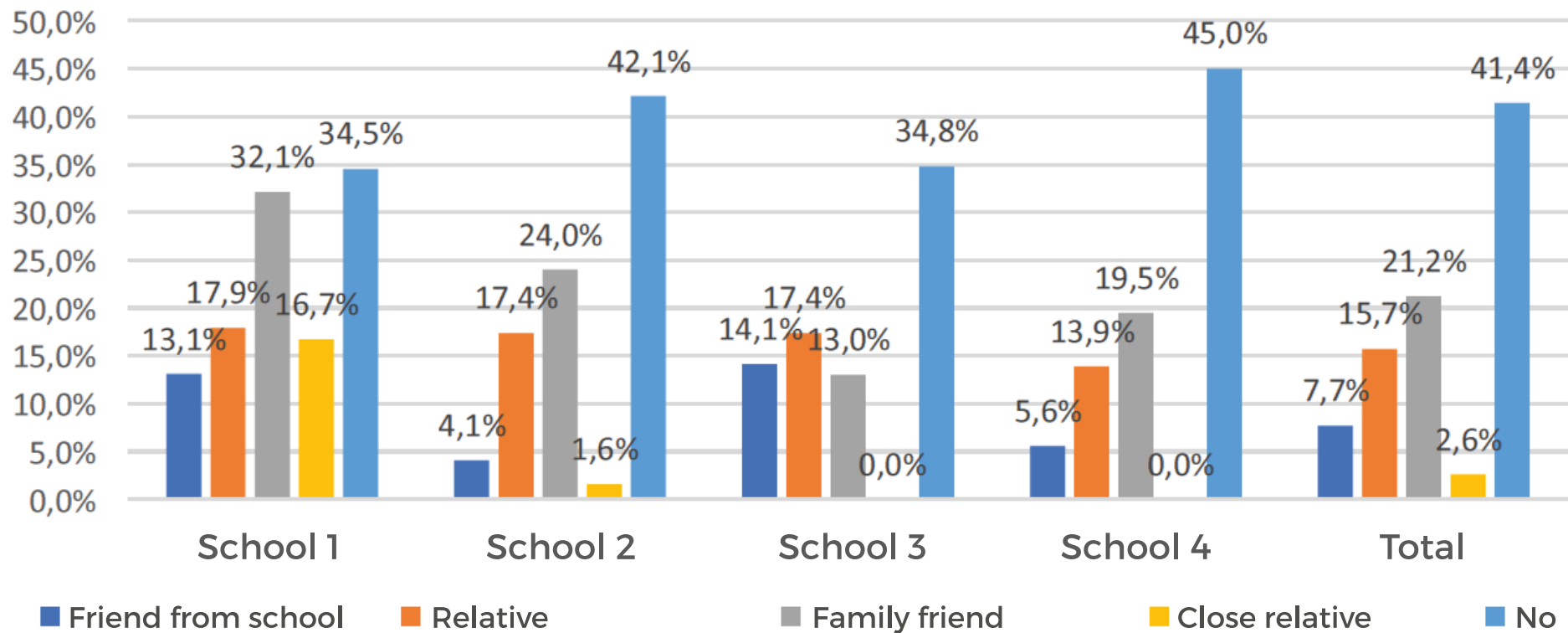
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Graph 1: Have you ever heard about cancer?



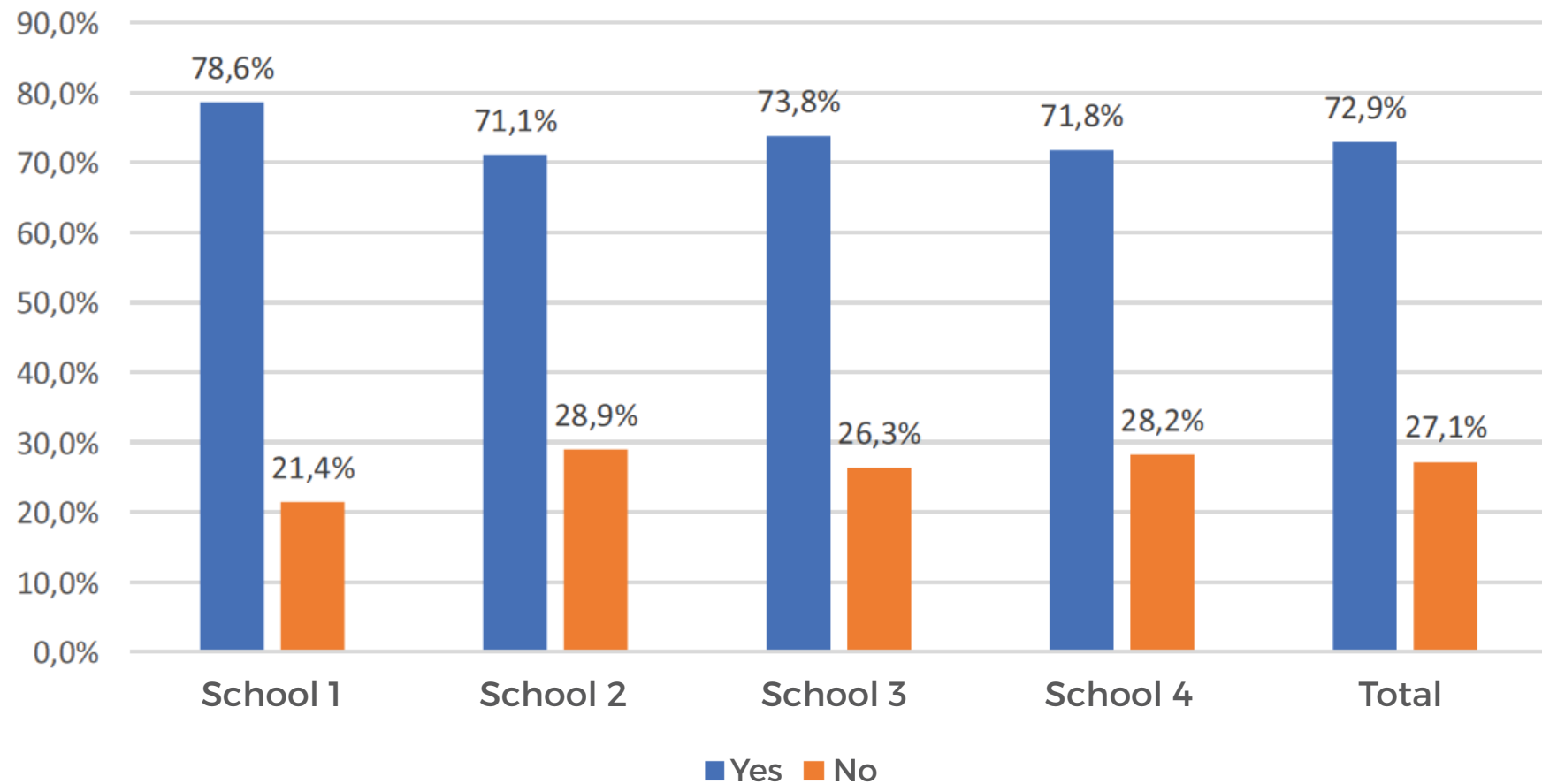
1. Assessment of students' perception about cancer through a questionnaire.

Graph 2: Do you know anyone who has or has had cancer?



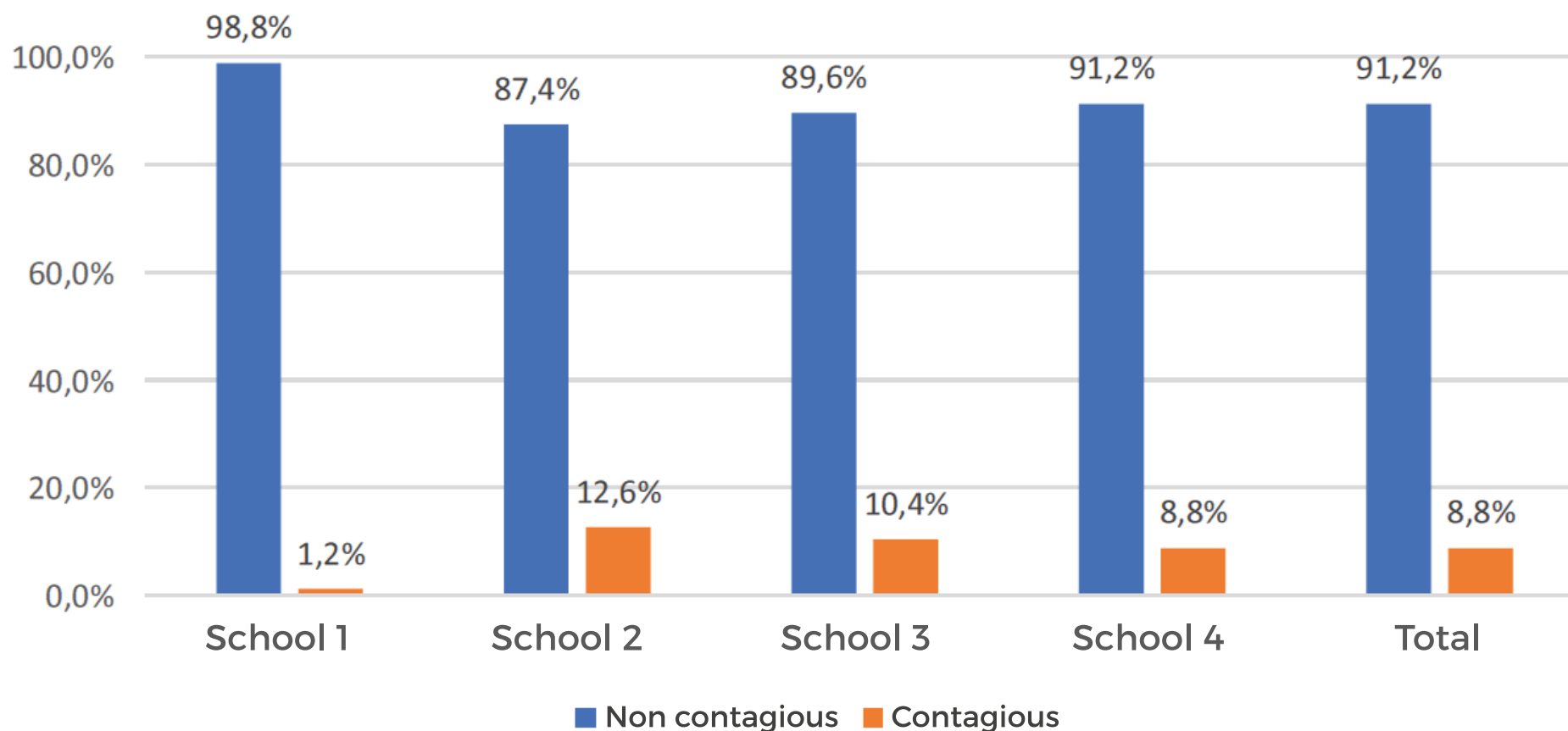
1. Assessment of students' perception about cancer through a questionnaire.

Graph 3: Correct identification of risk factors



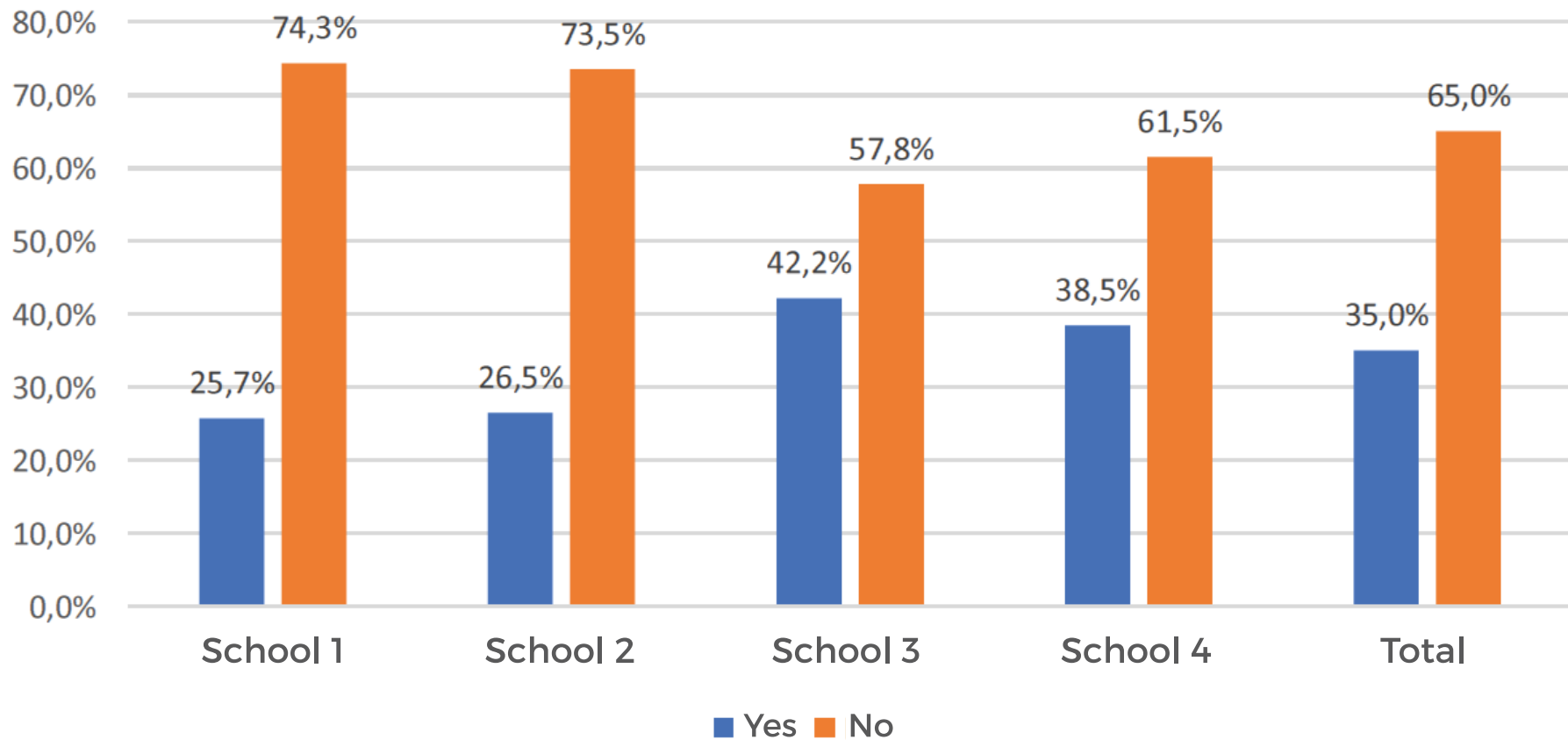
1. Assessment of students' perception about cancer through a questionnaire.

Graph 4: Perception of cancer as a contagious disease



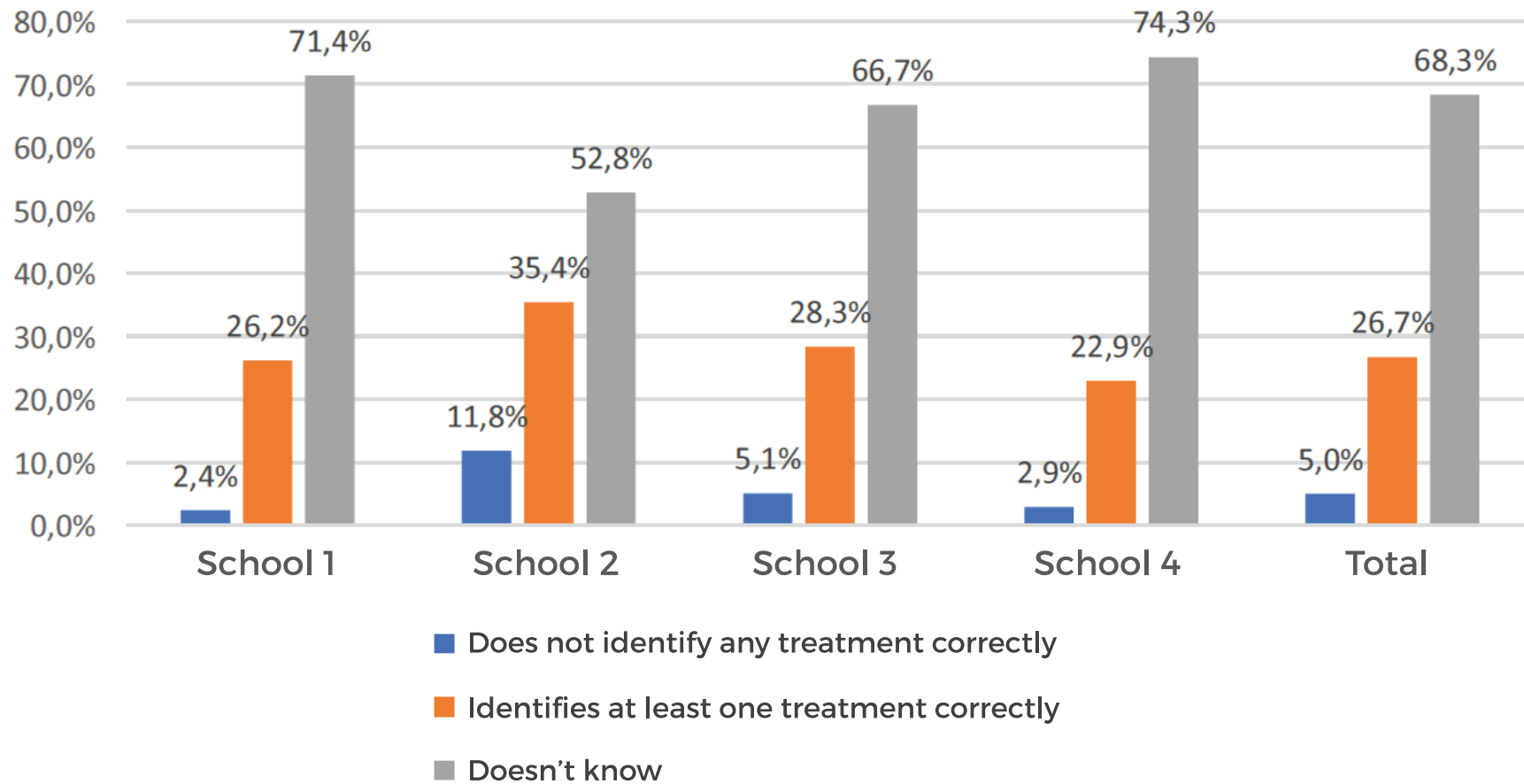
1. Assessment of students' perception about cancer through a questionnaire.

Graph 5: Can cancer be caused by a flu?



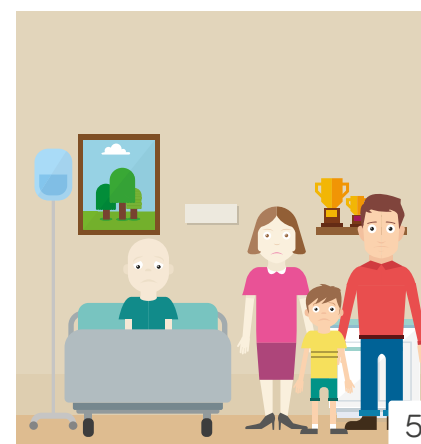
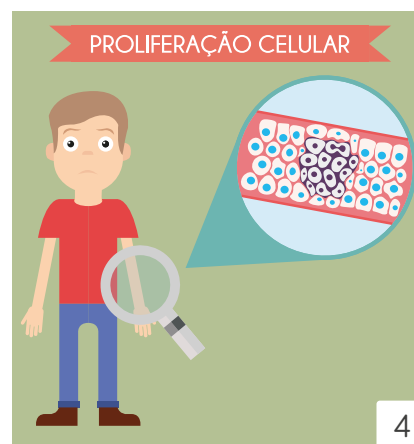
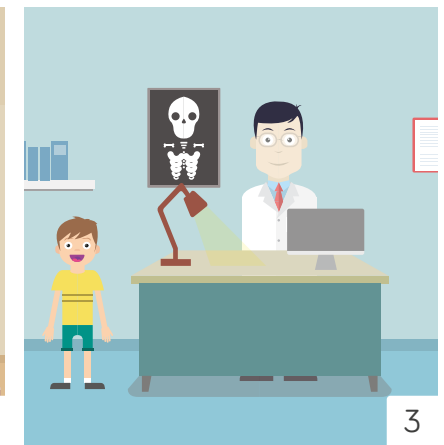
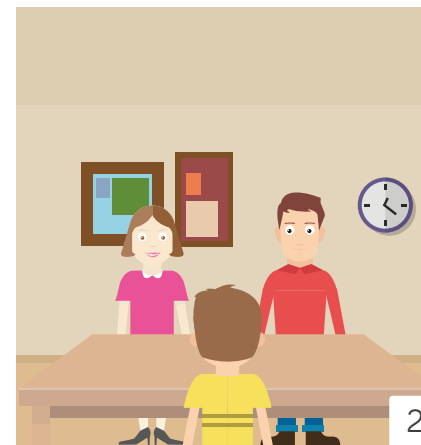
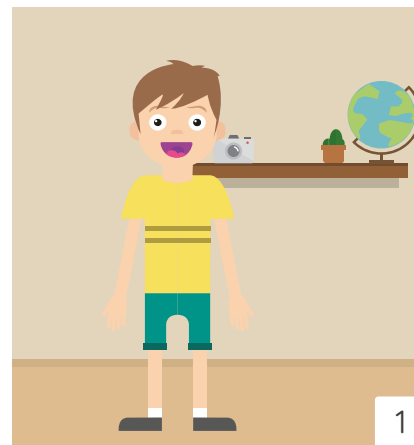
1. Assessment of students' perception about cancer through a questionnaire.

Graph 6: Identification of treatments against cancer



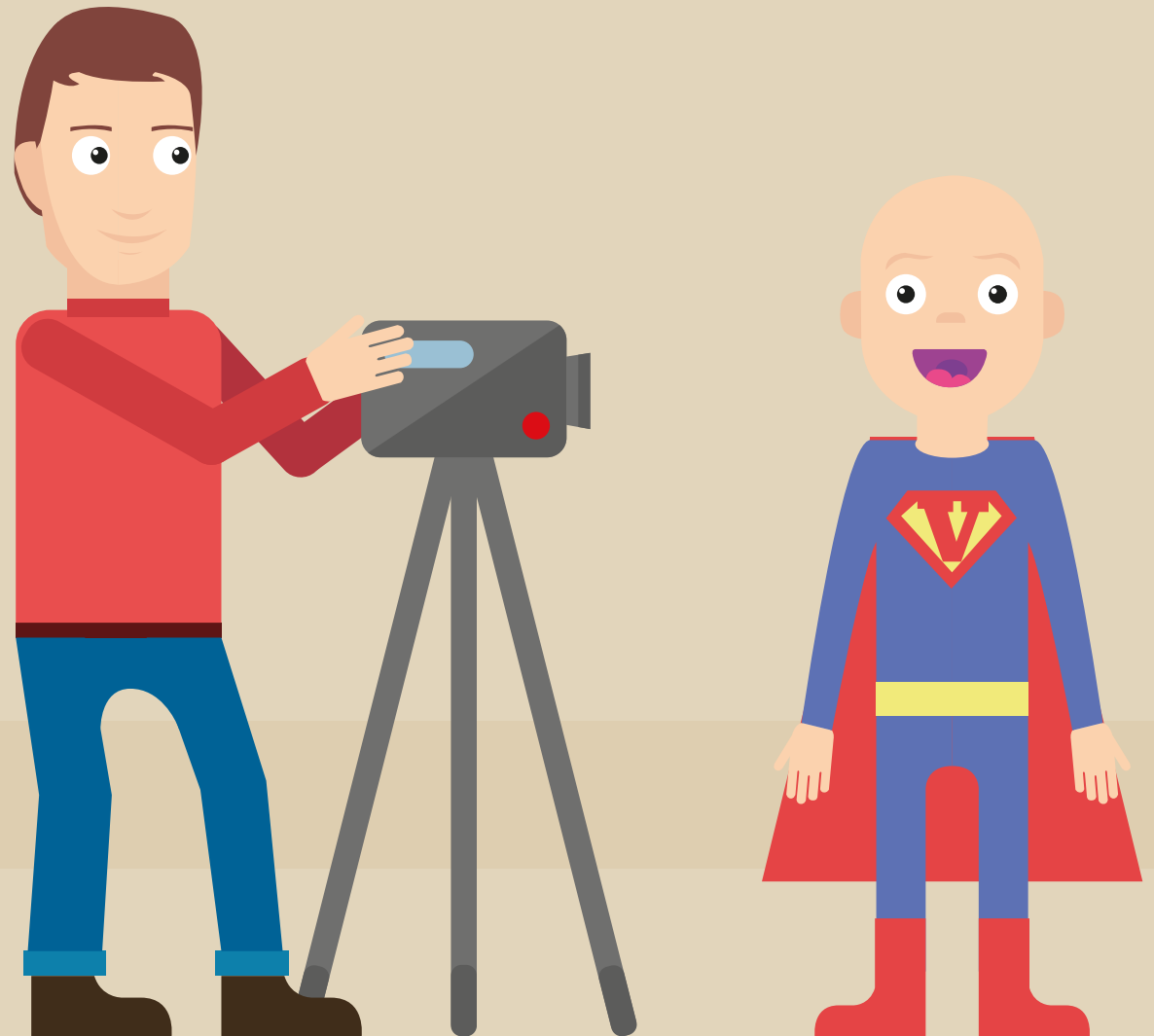
2. Development of an explanatory narrative with multimedia application, based on the 5th and 6th grades curricula.

2.1 The animated short movie tells a story of an 11-year-old boy trying to help his brother returning to school after being diagnosed with leukemia. "My Brother is a Superhero" was developed based on the explanation of scientific concepts and the identification of the most common misconceptions about cancer.

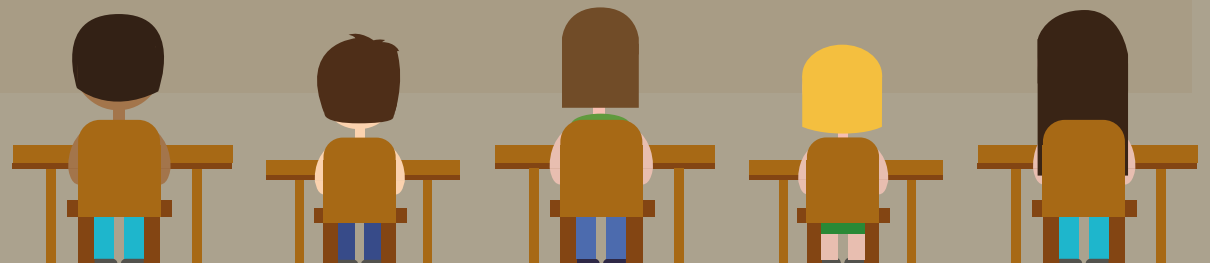
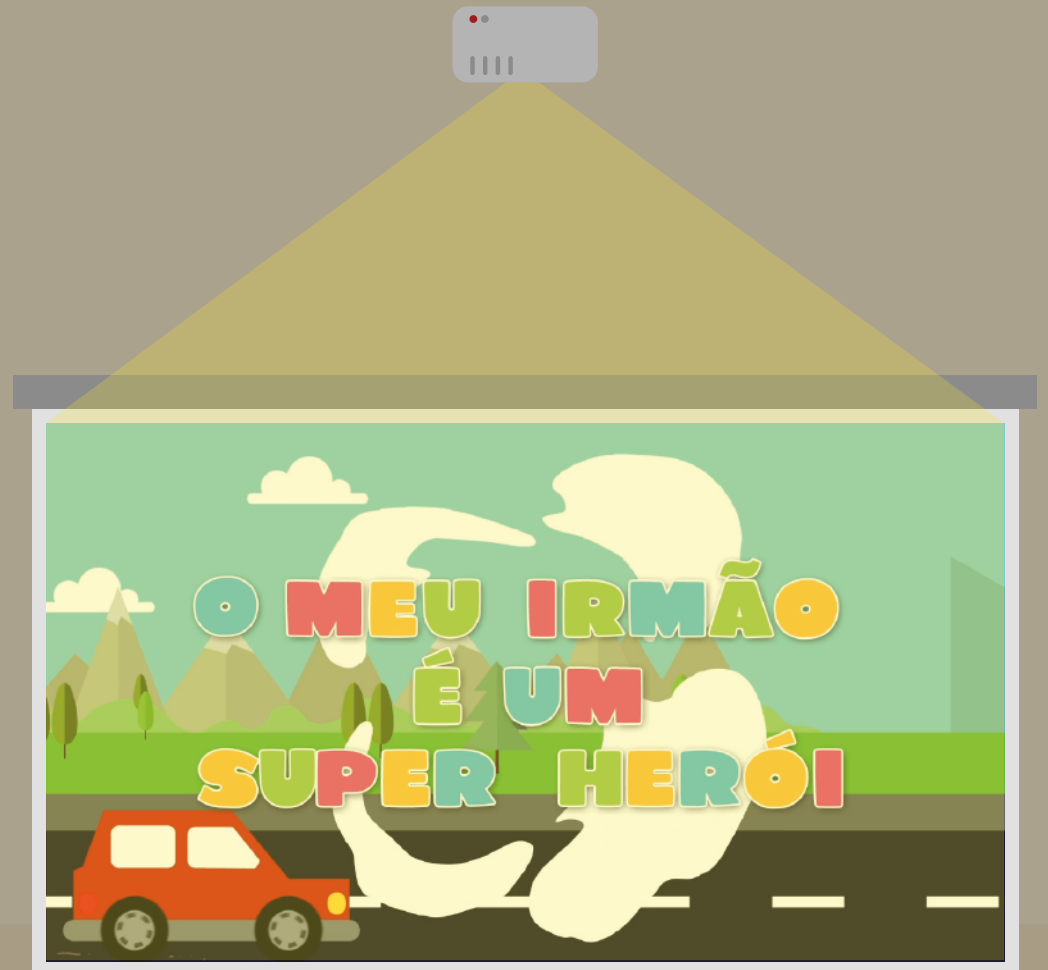
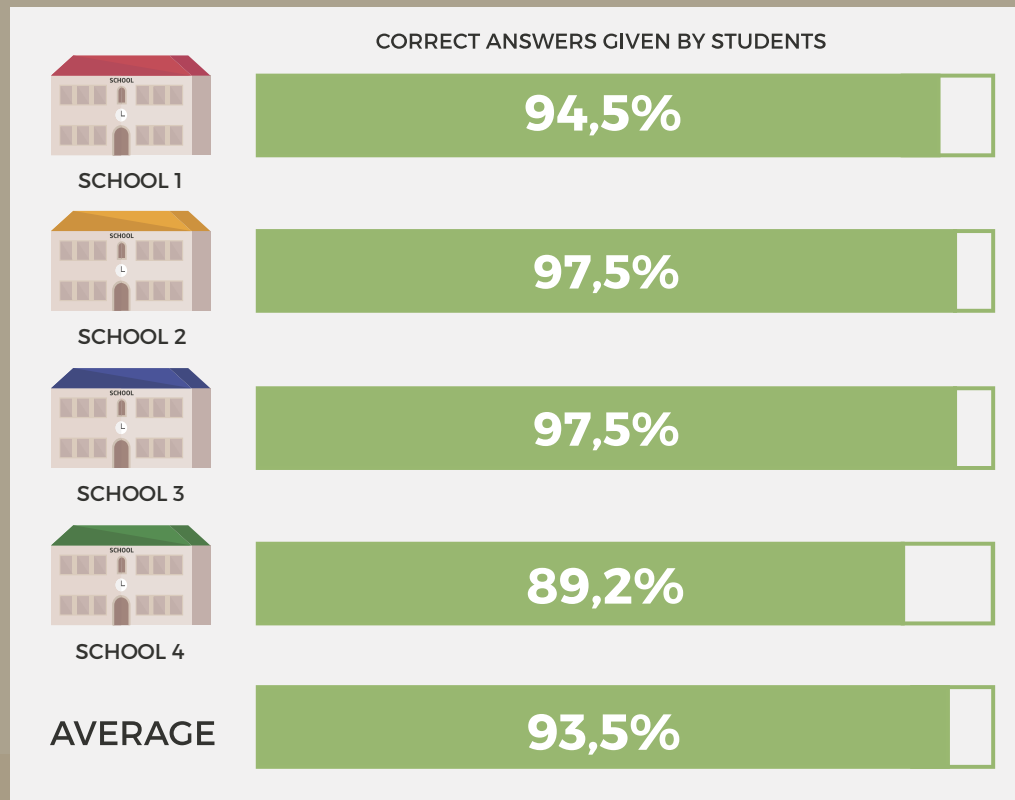


2. Development of an explanatory narrative with multimedia application, based on the 5th and 6th grades curricula.

2.2 The storyboard created uses metaphors that embraces a positive view of fighting cancer. "My Brother is a Superhero" is narrated by a leukemia survivor, to increase students' emotional attachment to the awareness campaign.

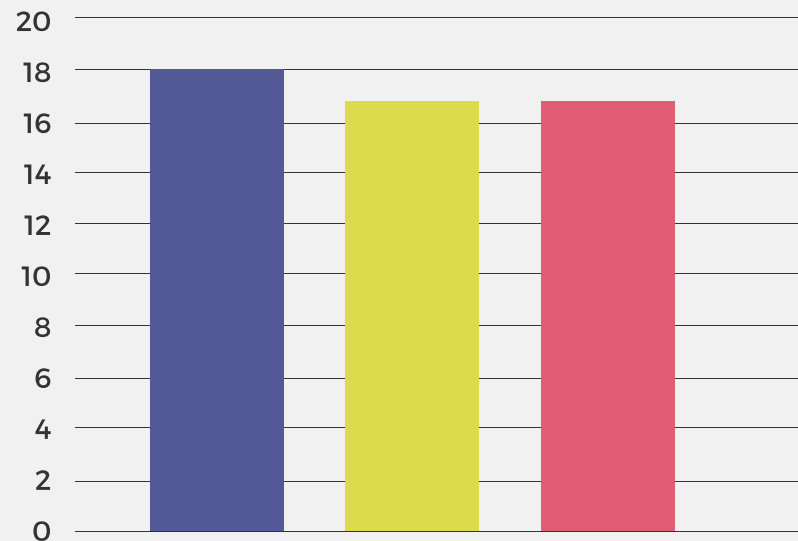


3. Promotion of awareness actions with the contents created and evaluation of impact on students



3. Promotion of awareness actions with the contents created and evaluation of impact on teachers

Evaluation of the Awareness Activities
by Teachers (N = 21)



■ Agrees that the thematic "Cancer" should be discussed in Schools

■ Considers that the contents were adequate to the student's age

■ Affirms that the awareness strategy was in general well achieved



**We are always
ready to talk!**

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