



# Dive: a serious game for diabetes education in children

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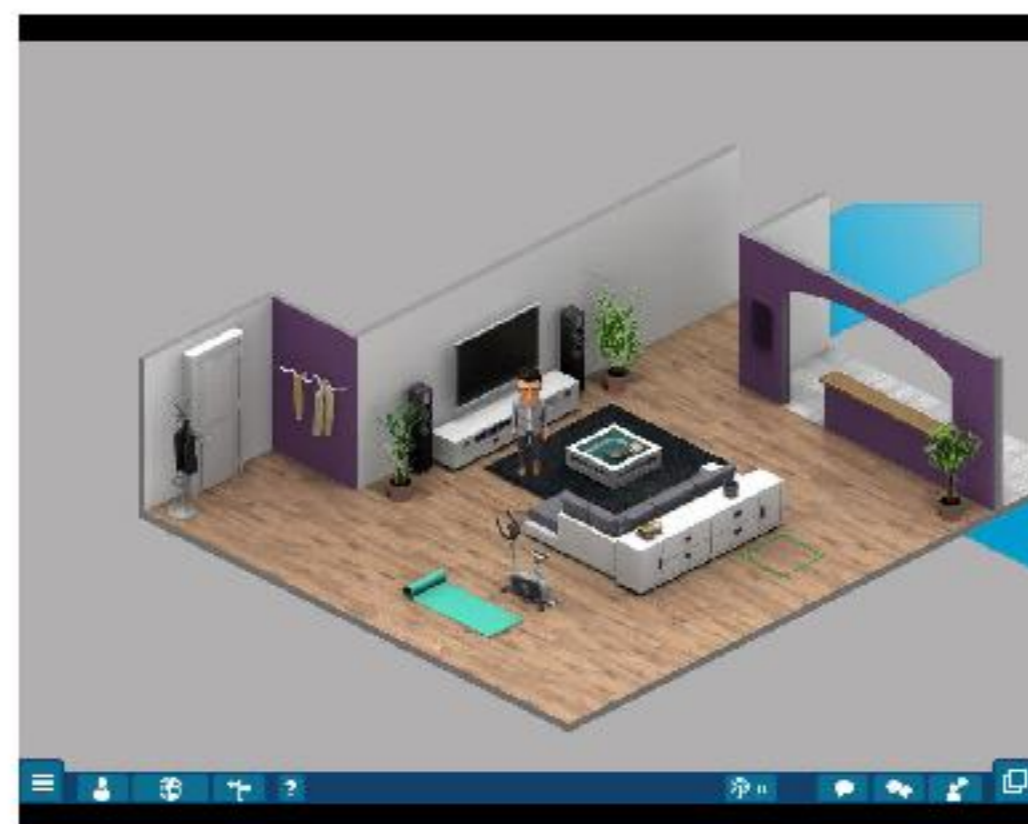
## Background and objective

In combination with insulin treatment, diabetes education is essential to improve care and prognosis. The use of video games as educational support appears suitable and innovative for learning in children, and interesting to respond to the increase in diabetes education needs in T1D and current economic constraints. We developed a serious game for diabetes education as a support for the patient during the first months after diagnosis. Our objective in this proof of concept (POC) was to validate the patients' interest for a serious game dedicated to diabetes education.

## Presentation of the serious game



A virtual environment reproducing patients life places



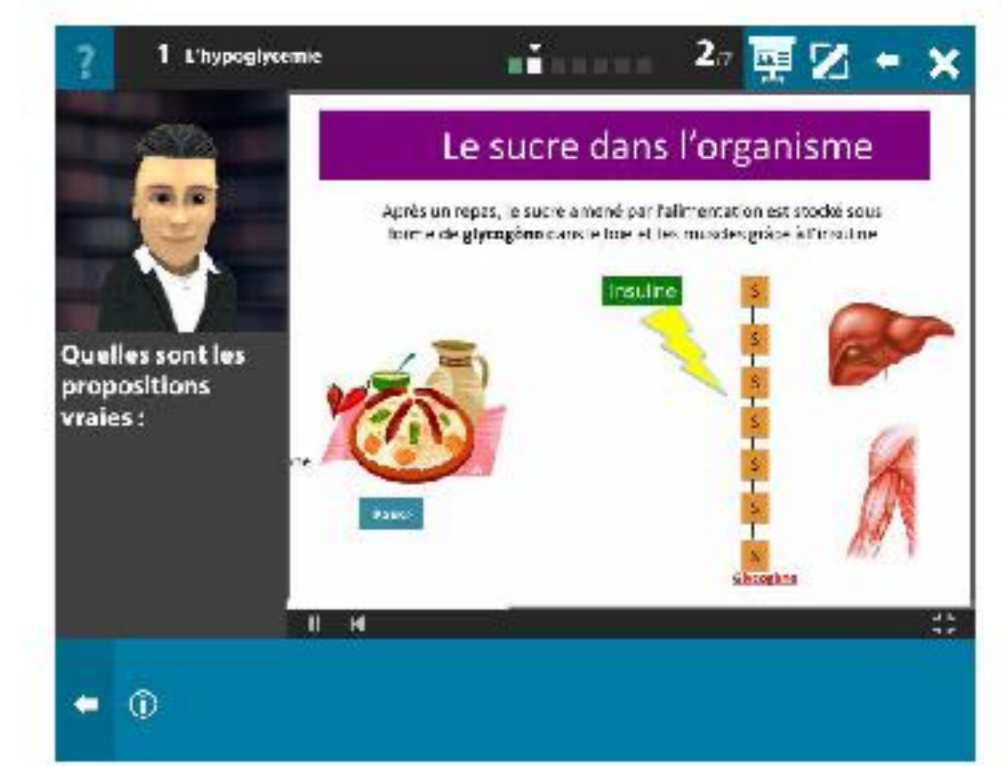
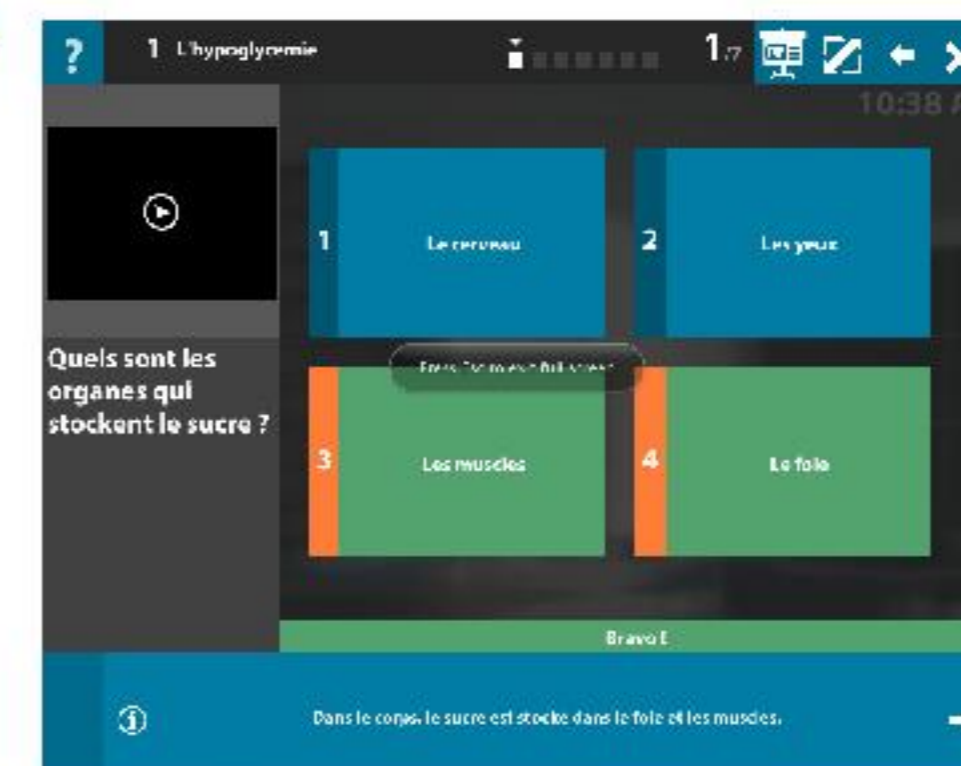
A personalized avatar



Theoretical content (videos, animations, quiz...)



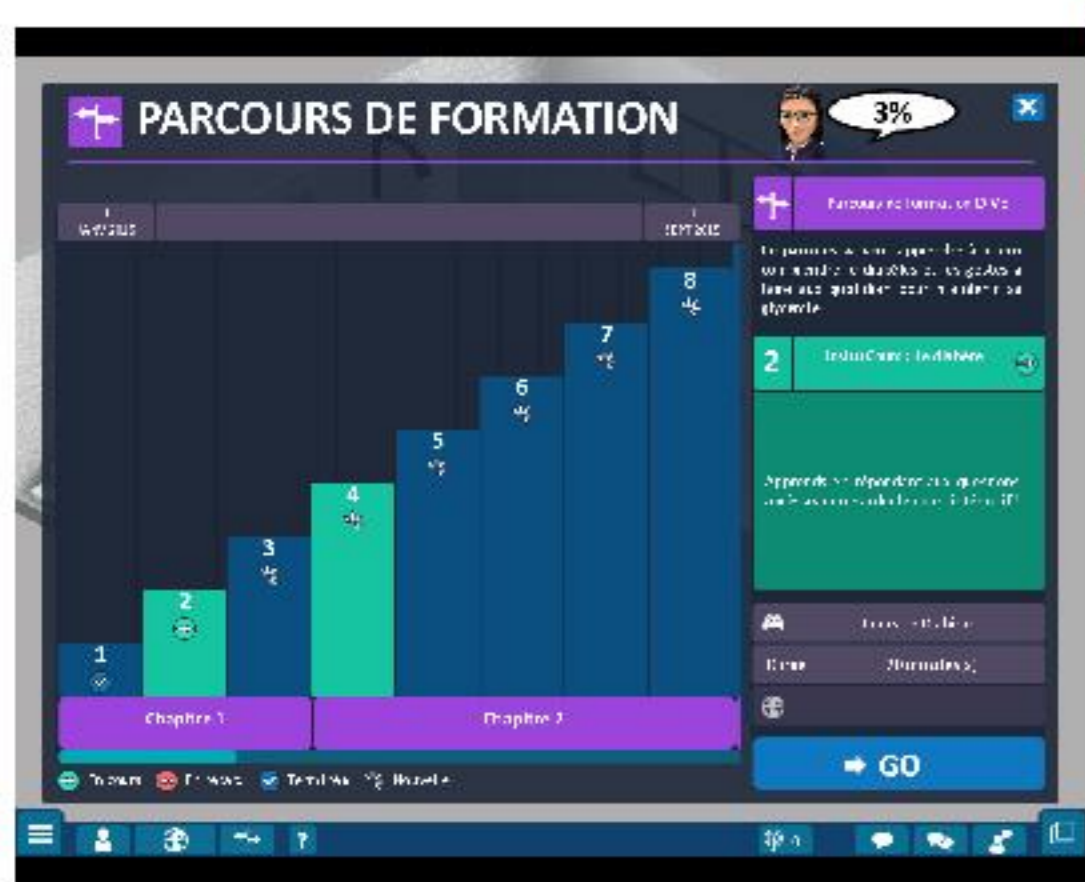
Practical tests in particular life situations



Forums and chats



Steps of the game follow recommendations of ISPAD about practice education



Learning points, trophies and access to the next level after each successful step



**Proof of Concept**  
Free access to the game for 9 children with 1-3 years of diabetes (aged 10-14 years old) during 10 days  
Feedback through an auto questionnaire

## Results

Number of connections confirmed patients' interest for this educative support and functionality of game interface.

The majority of children have completed 80% of stages and 31280 points and 12 trophies were collected in 4 days.

All participants reported having learned about diabetes.

Educational sequences were found interesting by children (100%).

Chat seems to be an asset of the game (83%), even if few children have used it.

## Conclusion

The POC confirms the interest of this serious game for diabetes education in children and its potential as a support for education in the first months after the diagnosis. It can be easily translated allowing a worldwide use. To confirm these results, a pilot study and a multicentric controlled randomized study are planned.