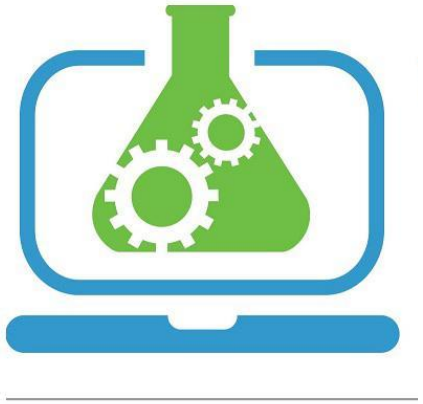
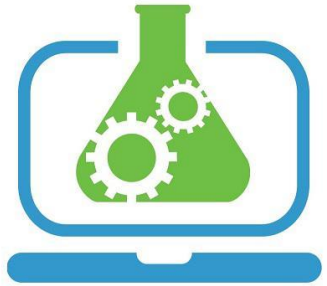


Pedagogical perspective of Virtual Labs

Virtual Labs as a Learning Tool



Virtual Labs

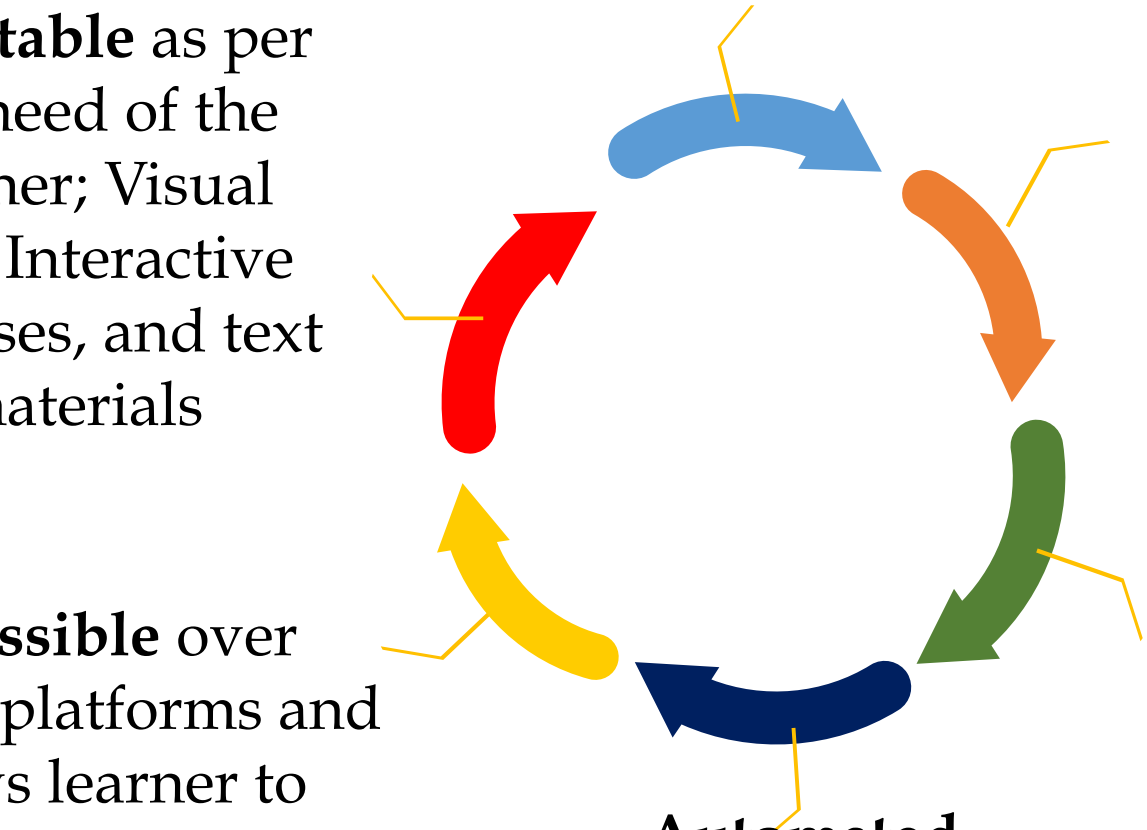
- Enhances actual laboratory experiences; Visualizing the concepts in a better manner
- Provides equal access to quality practicals & hands-on experience
- Perform and learn experiments - anywhere, anytime
- Individualized practice in all areas of experimentation

Recommendation of NEP 2020

Why Virtual Labs as a Learning Tool ?

Interactive: promote active learning and stimulated "Hands on experimentation'

Adaptable as per the need of the learner; Visual aids, Interactive exercises, and text materials



User-friendly interface; easy navigation, clear instructions & logical organization of content

Accessible over various platforms and allows learner to explore anytime & anywhere

Personalized & self-paced Learning

Automated assessments: Assessment tools for Learning

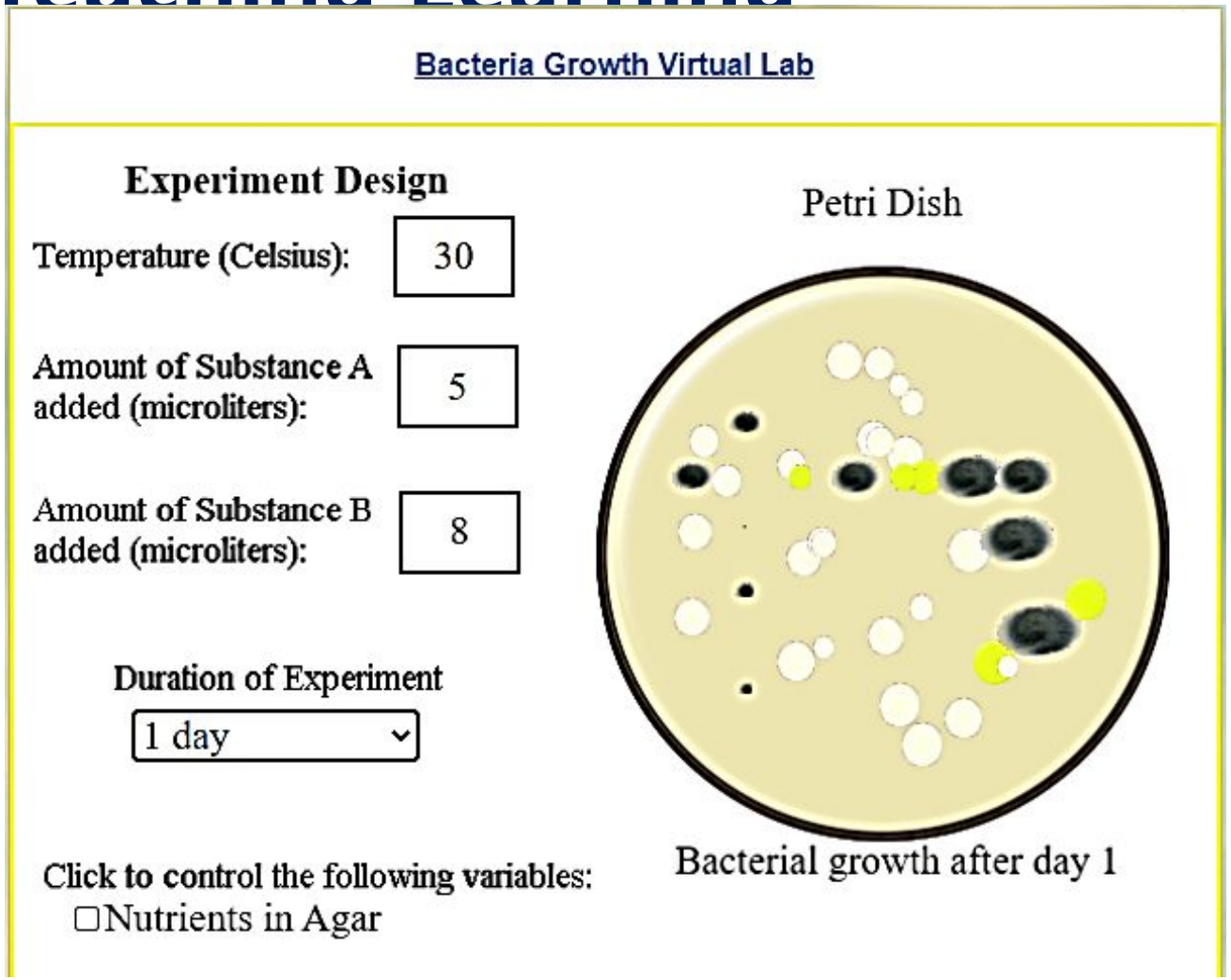
Integration of Virtual Labs in Teaching-Learning

Facilitating the actual laboratory experiences; **engaging in working with hands**

http://amrita.olabs.edu.in/?sub=73&brch=2&sim=70&cnt=4

Integration of Virtual Labs in Teaching-Learning

Promoting Guided Inquiry based learning;
Exploring Investigations for Learning

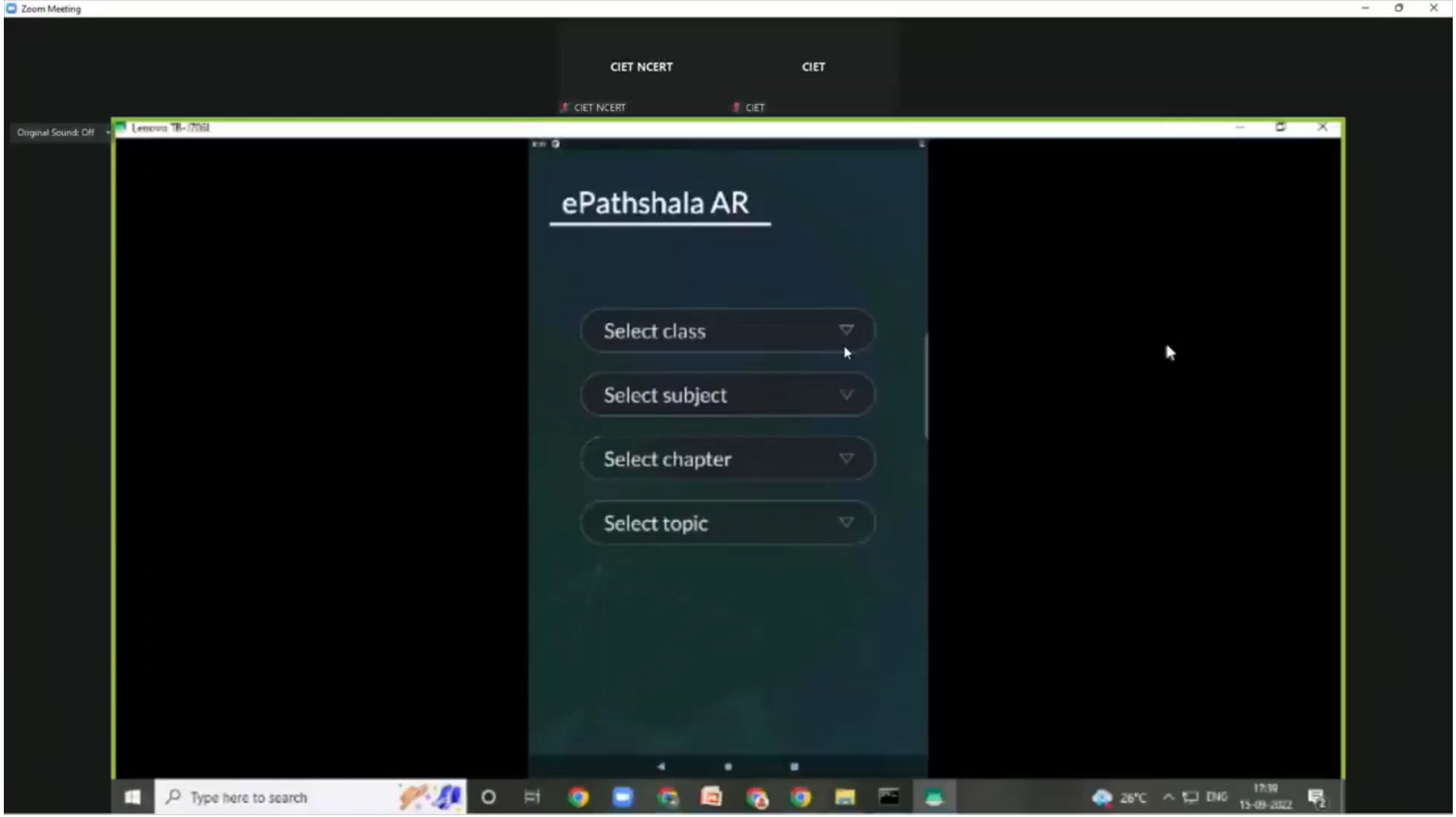


https://biomanbio.com/HTML5GamesandLabs/SciMethodGames/bacterialabpage.html

Integration of Virtual Labs in Teaching-Learning

Visualizing the Invisible phenomenon ; Promoting Critical thinking

Exploring AR based resources as Virtual Lab


Zoom Meeting
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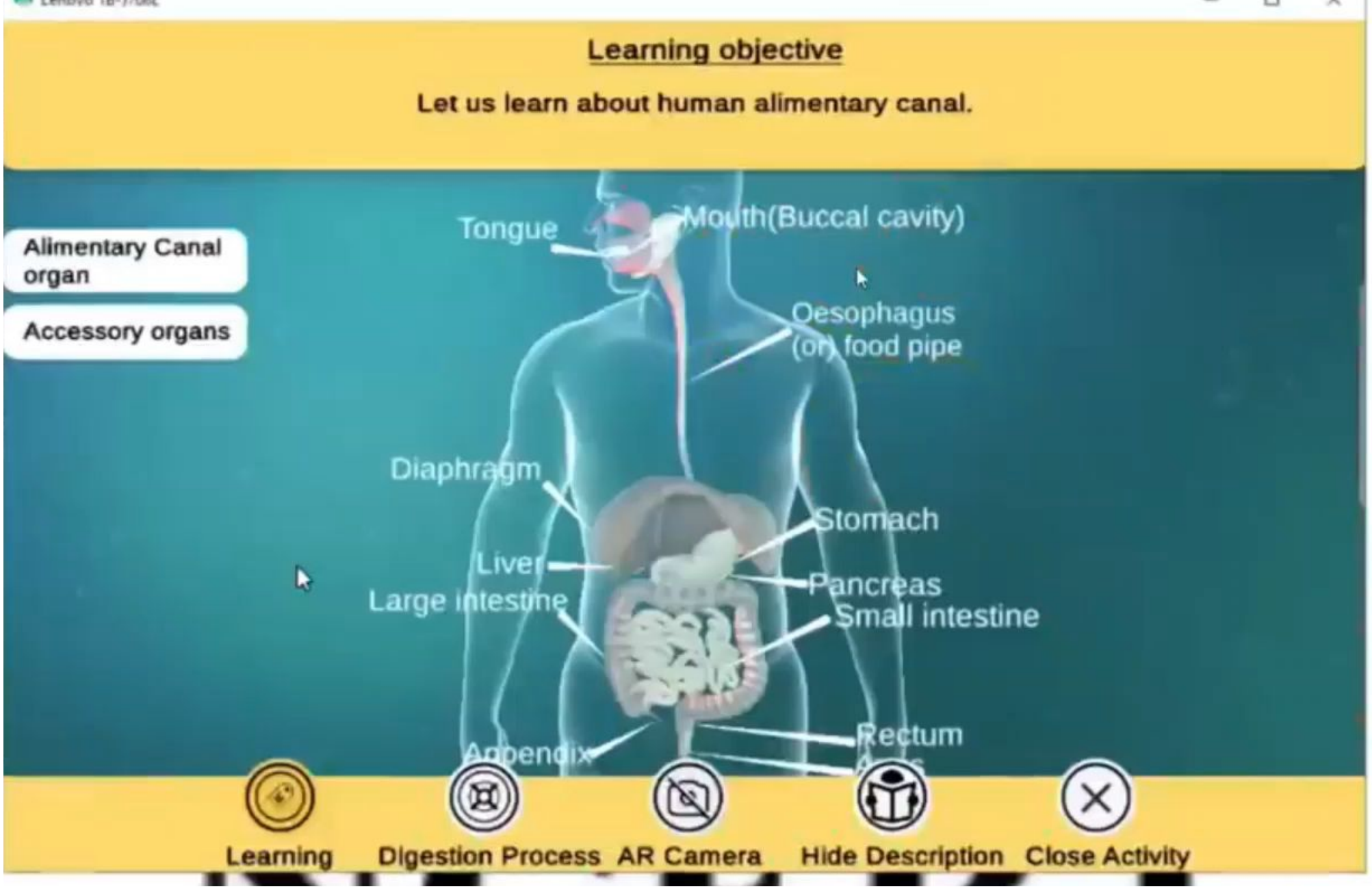
Exploring AR based resources as Virtual Lab



ePathshala AR

Integration of Virtual Labs in Teaching-Learning

Automated assessment: Assessment tools for Learning

https://cdac.olabs.edu.in/?sub=84&brch=23&sim=195&cnt=439

Thanks for your attention

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NCERT, New Delhi