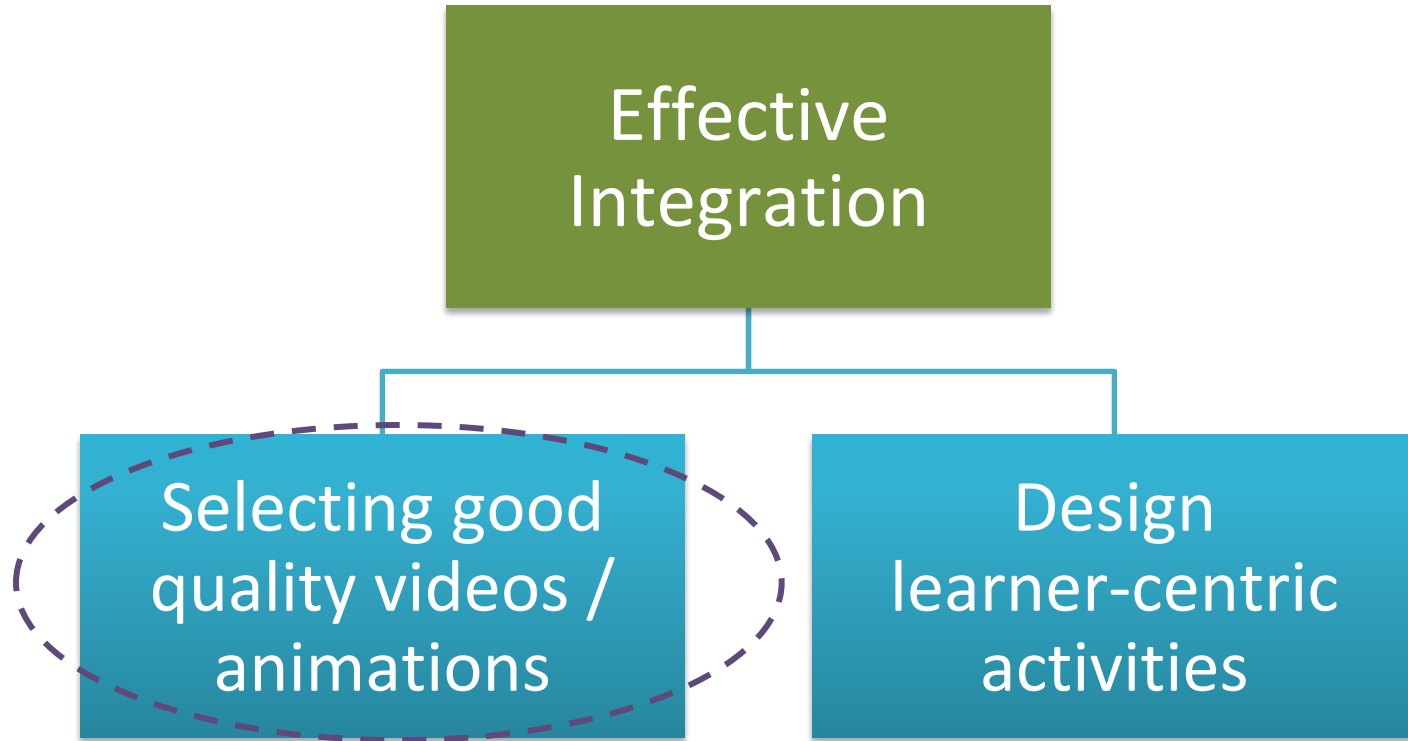


How to select “good quality”  
technology-based resources?

# Selecting good quality animation/videos



# Think Phase

What you have to do :

*Think phase (individually): Time – 2 mins.*

- I am going to play 2 animations from <https://www.learnnext.com/cbse/class-7.htm>
- As you watch them, pick one
- Think & write down any 1 point you look for to decide if this video/animation is good for your students

# Pair Phase

What you have to do :

*Pair phase (group): Time – 2 mins.*

- Turn to your neighbour
- Discuss the points you have come up with &
- Together come up with 3 points

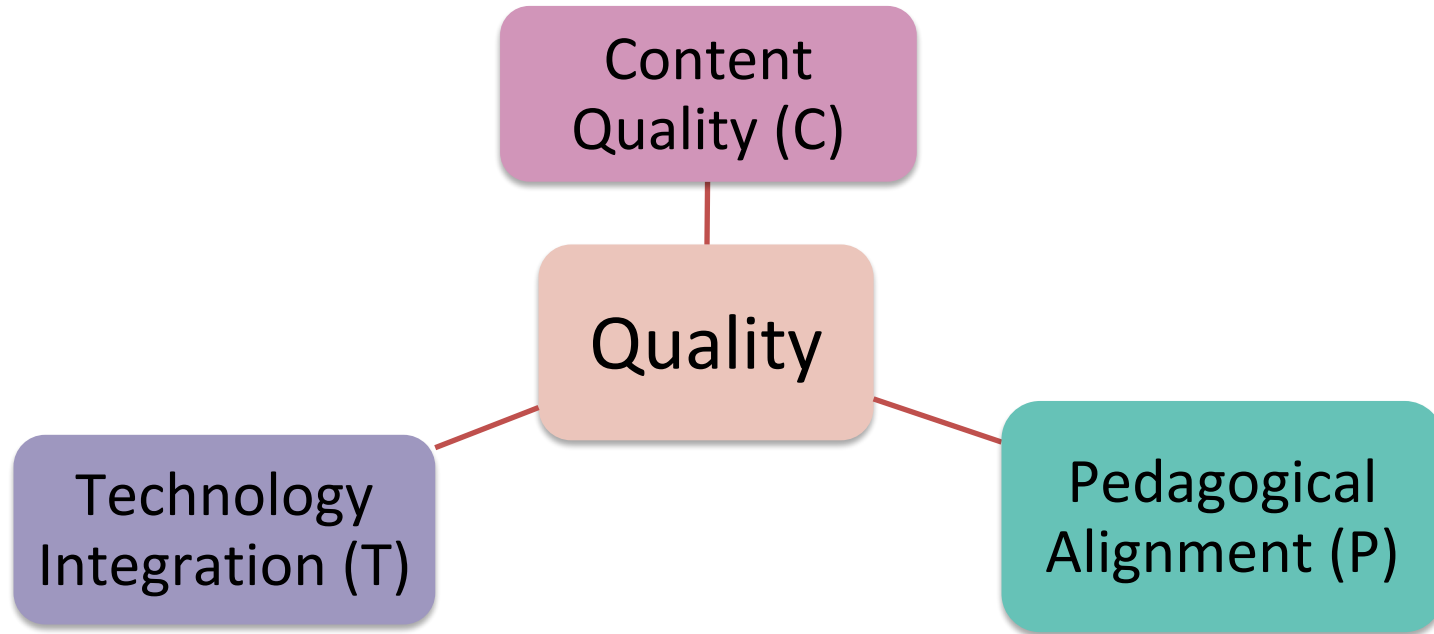
# Share Phase

What you have to do :

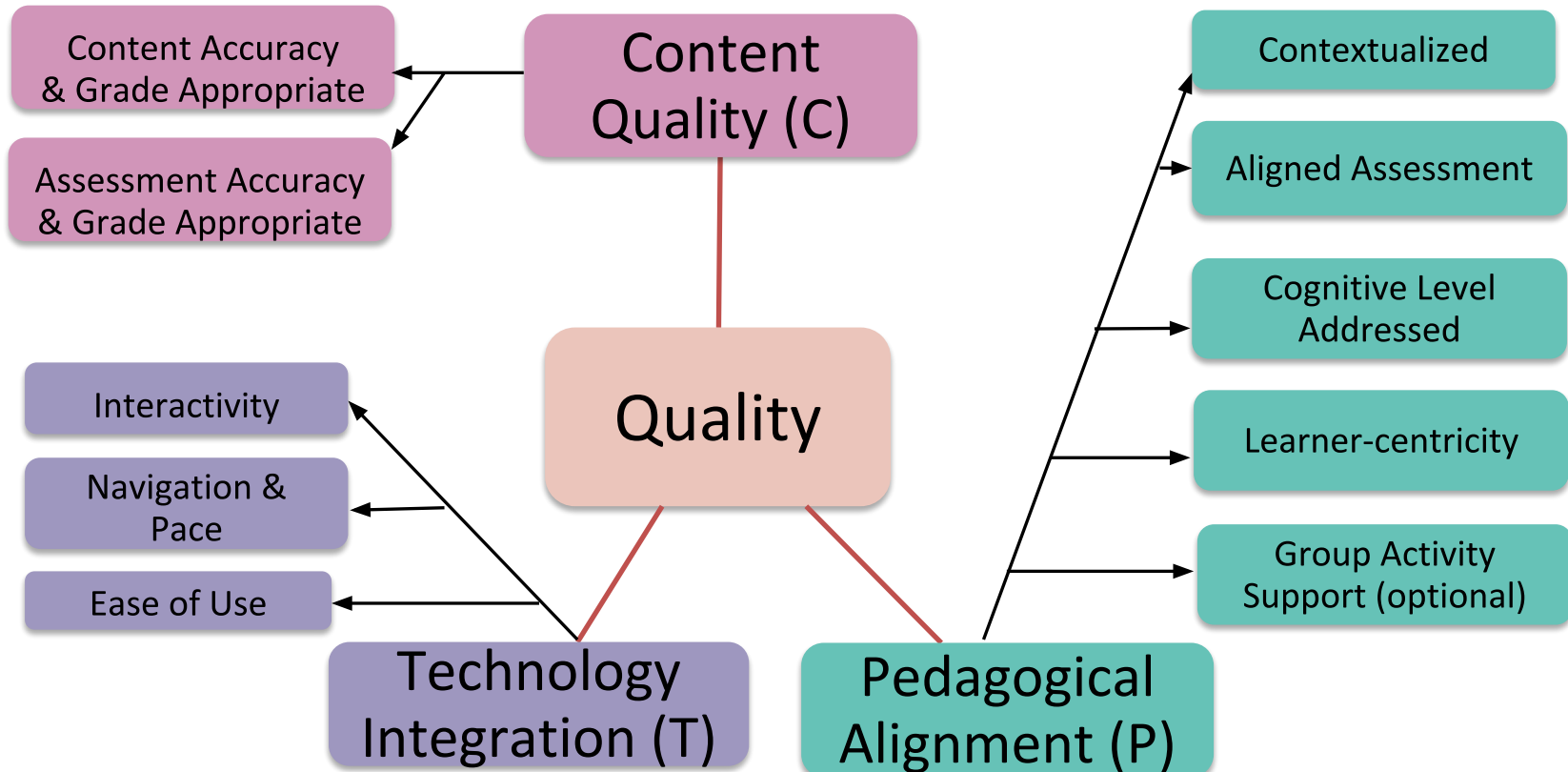
*Share phase (whole group): Time – 5 mins.*

- Share your points with all of us

# Quality Evaluation Constructs



# Quality Evaluation : Constructs & Criteria



# LOBE\_LITE : Learning Object Evaluation Instrument

## LOBE\_LITE: Learning Object Evaluation Instrument (Abridged Version)

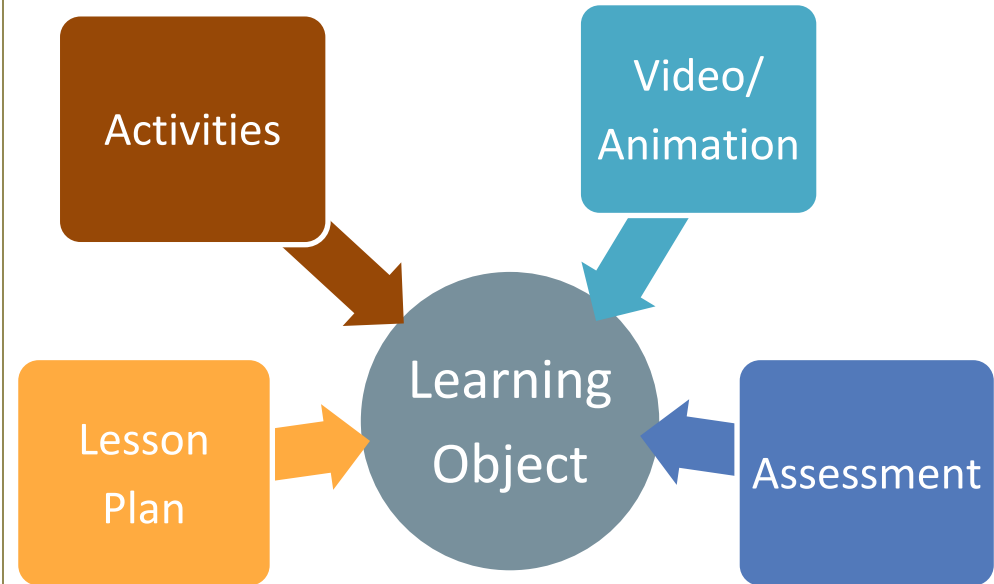
LOBE\_LITE is a 4-scale (Missing, Inadequate, Almost, Target) theory-informed checklist for quality evaluation of learning objects. A learning object is a multimedia learning resource that contains dynamic visualizations (i.e. animations/simulations/videos) as its core component and either all or a subset of the following associated components – i) set of assessment questions, ii) learning activities, iii) solved examples.

*Note: Please read the user manual from the webpage for a thorough understanding of how to use LOBE\_LITE.*

Content Quality (C)						
Questions	Score	0 (Missing)	1 (Inadequate)	2 (Almost)	3 (Target)	Remarks
C1. Is the content <i>accurate and grade appropriate</i> ?						
C2. Are the assessment questions in the learning object and their solutions correct, clear, unambiguous and <i>grade appropriate</i> ?						

Pedagogical alignment (P)						
Questions	Score	0 (Missing)	1 (Inadequate)	2 (Almost)	3 (Target)	Remarks
P1. Does the content and the assessment questions contain appropriate context?						
P2. Are the assessment questions in the learning object aligned to the stated learning objectives?						
P3. Has both higher order thinking skills (HOTS) and lower order thinking skills (LOTS) been sufficiently addressed in the learning object?						
P4. Does the learning object present						

<http://www.et.iitb.ac.in/labs/lobe.php>





# LOBE\_LITE : Learning Object Evaluation Instrument

## LOBE\_LITE: Learning Object Evaluation Instrument (Abridged Version)

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P2. Are the assessment questions in the learning object aligned to the stated learning objectives?						
P3. Has both higher order thinking skills (HOTS) and lower order thinking skills (LOTS) been sufficiently addressed in the learning object?						
P4. Does the learning object promote						

Target Audience:  
Principals, HODs, Teachers

<http://www.et.iitb.ac.in/labs/lobe.php>

# LOBE\_LITE : User Manual

Content Quality Questions	What does 'this term' mean?	Which components to consider?	What is 'Target' for this question?
C1. Is the content <b>accurate and grade appropriate</b> ?	'Grade appropriate content' means - the content is appropriate for that grade. For example, introducing the 5 states of matter is grade appropriate for Grade 9 but not for Grade 5.	Consider the content across all components of the learning object like dynamic visualization, learning activities, examples, graphs if any etc. and score on the overall content accuracy.	The content contains correct facts, explanations, examples or graphical representations. The content presentation is unlikely to cause any misconception for the learner.

# LOBE\_LITE : How to Apply

What you have to do : *Individual activity*

- Take 2 criteria (P1 & P4) from LOBE\_LITE &
- Observe demo for the explanation of their Target levels
- Watch the previous animation on 'Operations on Integers'
- As you watch, score it on P1 & P4
- Share your scores

# How to apply LOBE\_LITE : Activity

Pedagogical Alignment Questions	What does 'this' term mean?	Which components to consider?	What is 'Target' for this question?	Note before scoring
<p><b>P1. Does the content and the assessment questions contain appropriate context?</b></p>		<p>Consider the content in the following components of the learning object -</p>	<p>Context in content: The context should motivate the learner to care about the topic. For example, a motivational introductory scenario or a real life example or application of the topic.</p>	<ul style="list-style-type: none"> <li>• Score on the overall quality of context provided. If you find contextualization completely missing in either one of content or assessment question, please mark as Inadequate.</li> <li>• Context is not required in all assessment questions. However, there should be sufficient questions containing a relevant and meaningful context.</li> </ul>

The screenshot shows the LearnNext adaptive test interface. At the top, it says "LearnNext™ The next way to Learn™" and "Adaptive Test" with a "NEW" badge. Navigation options include "Explore", "Trial", "Buy", and "Get App". The main content area features three panels: a bar chart showing "Sodium Fluoride = 0.243g", a "Nutrition Facts (Approximately)" table, and a speedometer showing "Distance Covered: 5.9 km".

Nutrients	Per 100 gm
Protein	11.73 gm
Carbohydrate	76.89 gm
Fat	6.07 gm
Fatty Acid	Nil
Saturated Fatty Acid	0.96 gm

Distance Covered: 5.9 km

Welcome to the lesson on  
**Multiplication and Division of Decimals**

# How to apply LOBE\_LITE : Activity

Pedagogical Alignment Questions	What does 'this' term mean?	Which components to consider?	What is 'Target' for this question?	Note before scoring
P4. Does the learning object promote learner-centric learning?		Consider the content in the	The dynamic visualization and learning activities should allow learners to construct understanding of the topic	Give overall score on learner-centricity of the learning object.

The screenshot shows the LearnNext adaptive test interface. At the top, the LearnNext logo is on the left, and navigation links for 'Adaptive Test', 'Explore', 'Trial', 'Buy', and 'Get App' are on the right. The main content area features a math problem: 'The cost of a bike is Rs 50,000 and that of a cycle is Rs 10,000. The ratio of the cost of the cycle to that of the bike is \_\_\_\_.' Below the text is a basketball hoop with a ball in the air, and the words 'SLAM DUNK!' are written in large, yellow, bubbly letters. To the right of the hoop are four basketball icons, each with a ratio: 1:5, 5:1, 2:1, and 1:2. A 'HELP' button is located at the bottom left of the interface.

# LOBE\_LITE : Demo of How to Apply

## Pedagogical Alignment Question


## What is 'Target' for this question?

P1. Does the content and the assessment questions **contain appropriate context**?

Context in content: The context should **motivate** the learner to care about the topic. For example, a **motivational introductory scenario** or a **real life example** or application of the topic.

<http://www.et.iitb.ac.in/labs/lobe.php>

# LOBE\_LITE : Demo of How to Apply

Pedagogical Alignment Question	0 (Missing)	1 (Inadequate)	2 (Almost)	3 (Target)
P1. Does the content and the assessment questions contain appropriate context?				

# LOBE\_LITE : Demo of How to Apply

## Pedagogical Alignment Qs.


## What is 'Target' for this question?

P4. Does the learning object promote learner-centric learning?

Animation/Video allow learners to **construct understanding of the topic on their own** by connecting the content to what they already know, organizing and making sense of the content, testing and revising their understanding, applying the content and so on. This can be promoted by providing **sufficient relevant activities** where learners are required to do the above. Such activities are essential in getting **learners engaged with the content** and for effective learning.



# LOBE\_LITE : Demo of How to Apply


Pedagogical Alignment Question	0 (Missing)	1 (Inadequate)	2 (Almost)	3 (Target)
P4. Does the learning object promote learner-centric learning?				

# LOBE\_LITE : How to Apply


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- Observe demo for the explanation of their Target levels
- Watch the previous animation on 'Operations on Integers'
- As you watch, score it on P1 & P4
- *Share your scores*

# LOBE\_LITE : Operations on Integers

Pedagogical Alignment Question	0 (Missing)	1 (Inadequate)	2 (Almost)	3 (Target)
P1. Does the content and the assessment questions contain appropriate context?				

# LOBE\_LITE : Operations on Integers

Pedagogical Alignment Question	0 (Missing)	1 (Inadequate)	2 (Almost)	3 (Target)
P4. Does the learning object promote learner-centric learning?				

# LOBE\_LITE : Learning Object Evaluation Instrument

<http://www.et.iitb.ac.in/labs/lobe.php>

**LOBE\_LITE: Learning Object Evaluation Instrument (Abridged Version)**




LOBE\_LITE is a 4-scale (Missing, Inadequate, Almost, Target) theory-informed checklist for quality evaluation of learning objects. A learning object is a multimedia learning resource that contains dynamic visualizations (i.e. animations/simulations/videos) as its core component and either all or a subset of the following associated components – i) set of assessment questions, ii) learning activities, iii) solved examples.

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P2. Are the assessment questions in the learning object aligned to the stated learning objectives?						
P3. Has both higher order thinking skills (HOTS) and lower order thinking skills (LOTS) been sufficiently addressed in the learning object?						
P4. Does the content include appropriate						

**Introducing LOBE**

Target User

Download LOBE


User Manual

Development Process

Robustness Testing

**Download LOBE**

Click on the list below to download the version of LOBE you want to use.

Name	Image	About Version	Download	Download Count
LOBE_LITE		<ul style="list-style-type: none"> <li>LOBE_LITE is an abridged version of LOBE_PREMIUM consisting of 09-10 questions.</li> <li>It is a 4-scale (Missing, Inadequate, Almost, Target) theory-informed checklist for quality evaluation of learning objects.</li> <li>Use LOBE_LITE when you want to do a quick evaluation of the quality of the selected learning object.</li> <li>The robustness of the instrument cannot be vouched for. For thorough evaluation, use LOBE_PREMIUM (38 questions) that has been tested for validity &amp; reliability.</li> </ul>	<a href="#">User Manual</a>	24
		<ul style="list-style-type: none"> <li>LOBE_PREMIUM is a 38-question rubric covering four dimensions.</li> </ul>	<a href="#">Rubric</a>	16

## Some Animation Repositories :

- LearnNext : <https://www.learnnext.com/>
- PhET : <https://phet.colorado.edu/>
- Wisconsin online : <https://www.wisc-online.com/learn>
- Visualgo : <https://visualgo.net/en>

# Thank you

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[www.et.iitb.ac.in](http://www.et.iitb.ac.in)