



## Pedagogical process for teaching science in India (Grades 6 to 9)

<b>Suggested pedagogical process for teaching science from Grades 6 to 8</b>	
<b>Role of the teacher</b>	<b>Approach/Activities</b>
Encourage students to explore their surroundings, natural processes, or phenomena.	Students are encouraged to use senses such as seeing, touching, tasting, smelling, and hearing for these activities
Encourage to pose questions and find answers through various activities	reflection, discussion, designing and performing appropriate activities, role plays, debates,
Ask/help students to record their activities during any experiment, survey, or field trips	Data collection
Encourage students to analyze the recorded data, interpret the findings and make meaning of the data. Students should also be asked to share the findings with the class	Interpretation, data analysis, sharing/presenting the findings
Create opportunities for students to present new ideas	Creativity, design, improvisation
Encourage teamwork	Cooperation, collaboration

National council of educational research and teaching. (2017). *Learning outcomes at the elementary stage*. Chrome extension://efaidnbmnnnibpcajpcgclefindmkaj/https://ncert.nic.in/pdf/publication/otherpublications/tilops101.pdf

<b>Suggested pedagogical process for teaching science for grade 9</b>	
<b>Role of the teacher</b>	<b>Approach/Activities</b>
Observe various materials and group them or classify them based on their properties. Students with visual impairments should be able to use other senses such as touching to be able to perform the activity. Follow-up discussions are encouraged.	Observe, discuss
Organize activities/sports such as tug of war so that students can better understand balanced and unbalanced forces.	Sports
Encourage them to find the science students learn in classrooms in their everyday life	Experiments, measure, compare, relate
Encourage students to collect data through surveys related to their school lessons to acquire more knowledge about a certain topic	Research, data collection, creating reports
Collect and analyze and interpret a wide variety of graphs from secondary sources such as newspapers, internet	Analysis, interpretation, correlations
Share research findings through role play and other modes of presentation such as flow charts/ concept maps/ graphs and ICT tools	Presentation, sharing, multimodality
Come up with various projects such as waste management kits, water filtration based on their understanding of the classroom lessons, research projects and other activities	Creativity, design, improvisation
Discuss views on taboos, superstitions, myths	Open ended debate
Organize awareness campaign	Sharing knowledge, giving back to the society

National council of educational research and teaching. (2019). *Learning outcomes at the secondary stage*. [chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://ncert.nic.in/pdf/publication/otherpublications/learning\\_outcomes.pdf](https://ncert.nic.in/pdf/publication/otherpublications/learning_outcomes.pdf)