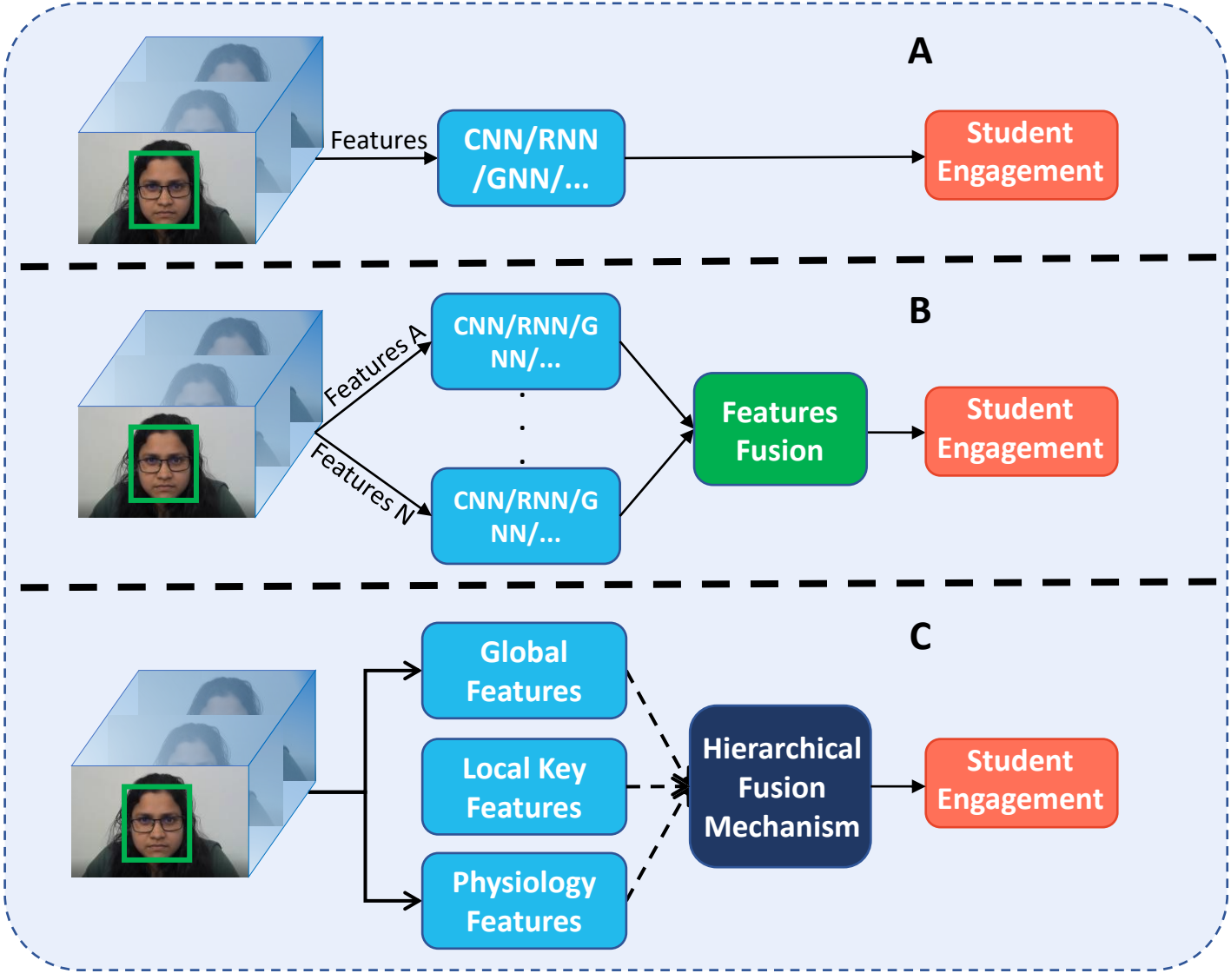
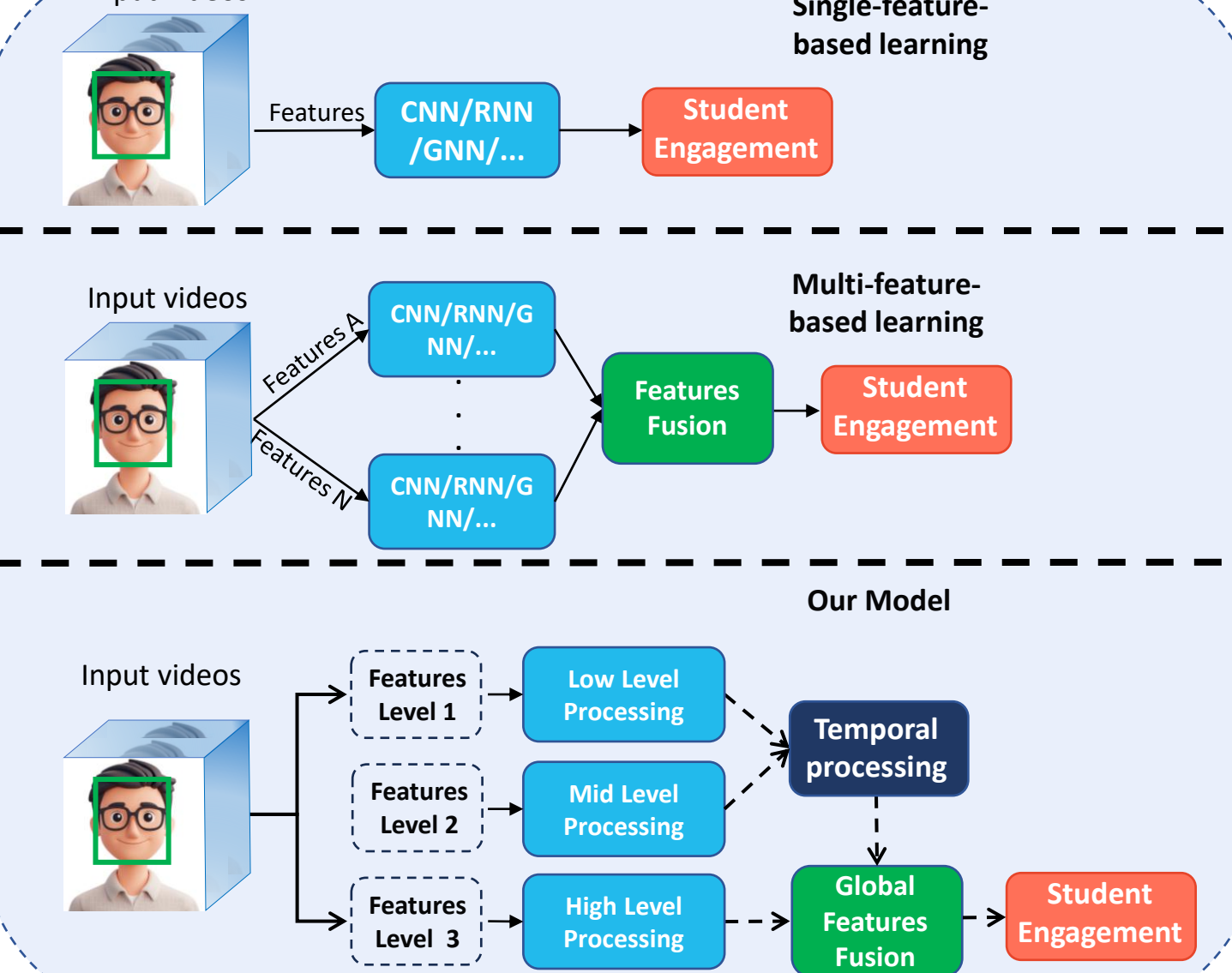

A
Features
CNN/RNN /GNN/...
Student Engagement
B
Features A
Features N
CNN/RNN/G NN/...
CNN/RNN/G NN/...
Features Fusion
Student Engagement
C
Global Features
Local Key Features
Physiology Features
Hierarchical Fusion Mechanism
Student Engagement


Single-feature-based learning
Features
CNN/RNN /GNN/...
Student Engagement
Input videos
Multi-feature-based learning
Features A
Features N
CNN/RNN/GNN/...
CNN/RNN/GNN/...
Features Fusion
Student Engagement
Our Model
Input videos
Features Level 1
Features Level 2
Features Level 3
Low Level Processing
Mid Level Processing
High Level Processing
Temporal processing
Global Features Fusion
Student Engagement