

Figure 10.6: Illustration of teacher forcing. Teacher forcing is a training technique that is applicable to RNNs that have connections from their output to their hidden states at the next time step. (Left)At train time, we feed the correct output  $\mathbf{y}^{(t)}$  drawn from the train set as input to  $\mathbf{h}^{(t+1)}$ . (Right)When the model is deployed, the true output is generally not known. In this case, we approximate the correct output  $\mathbf{y}^{(t)}$  with the model's output  $\mathbf{o}^{(t)}$ , and feed the output back into the model.