

Coaching for learning

PHASE 1: FINDING THE OBSTACLE

You can go through the steps in this phase in an iterative way

1. Explore the students' understanding: **ask open and probing questions**
Option to open the conversation: *'What are you working on [for this project]?'
'Can you describe the steps you do understand / you tried so far / you are happy with?'
'What can you tell me about ...'
'What did you try so far?'*
2. Let the students talk: **encourage**
 - a. Humming / nodding / open posture / eye-contact
 - b. Repeat keywords
3. Check if you understand the students correctly: **check and summarize** what they understand and where they get stuck
*'Do I understand correctly that ...'
'Can I summarize that you understand ... but that ... is still difficult?'*

Optional: discuss with the group if they first want to discuss among themselves. Mention that you will come back later to check in with them. Then you do a short phase 1 and proceed with phase 2.

PHASE 2: FINDING THE NEXT STEP

1. Choose one or all of the following **interventions**:
Questions leave more room for students to reflect on their learning than feedback and hints
 - Ask guiding **questions** to help the students with their thought process
*'Up until what point did you understand ...?'
'What is the key purpose of this?'
'How do you think you can solve this problem?'
'How do you make sure that you will follow this plan?'
'What knowledge and skills from other projects can you use for this project?'*
 - Give **feedback**
*'That is true, you use model X when solving these equations'
'You have looked up methods that you were unfamiliar with, so that you could fully answer the question. That is a good approach to take'
'Good to hear that you incorporate ethics in your solution'
'This expert can indeed help you to better understand the needs for your final product'*
 - Give **hints**
*'The best way to approach this, is to brainstorm with your group'
'You first need to evaluate which design method is the most appropriate'
'You can look at the lecture slides to ...'
'Have you tried/considered/thought about ...'*
2. Check if the students know their next step(s): **ask questions that elicit a demonstration** like an explanation or an elaboration
*'What are your next steps?'
'Can you tell me what you are going to do now?'*

TU/e

**EINDHOVEN
UNIVERSITY OF
TECHNOLOGY**