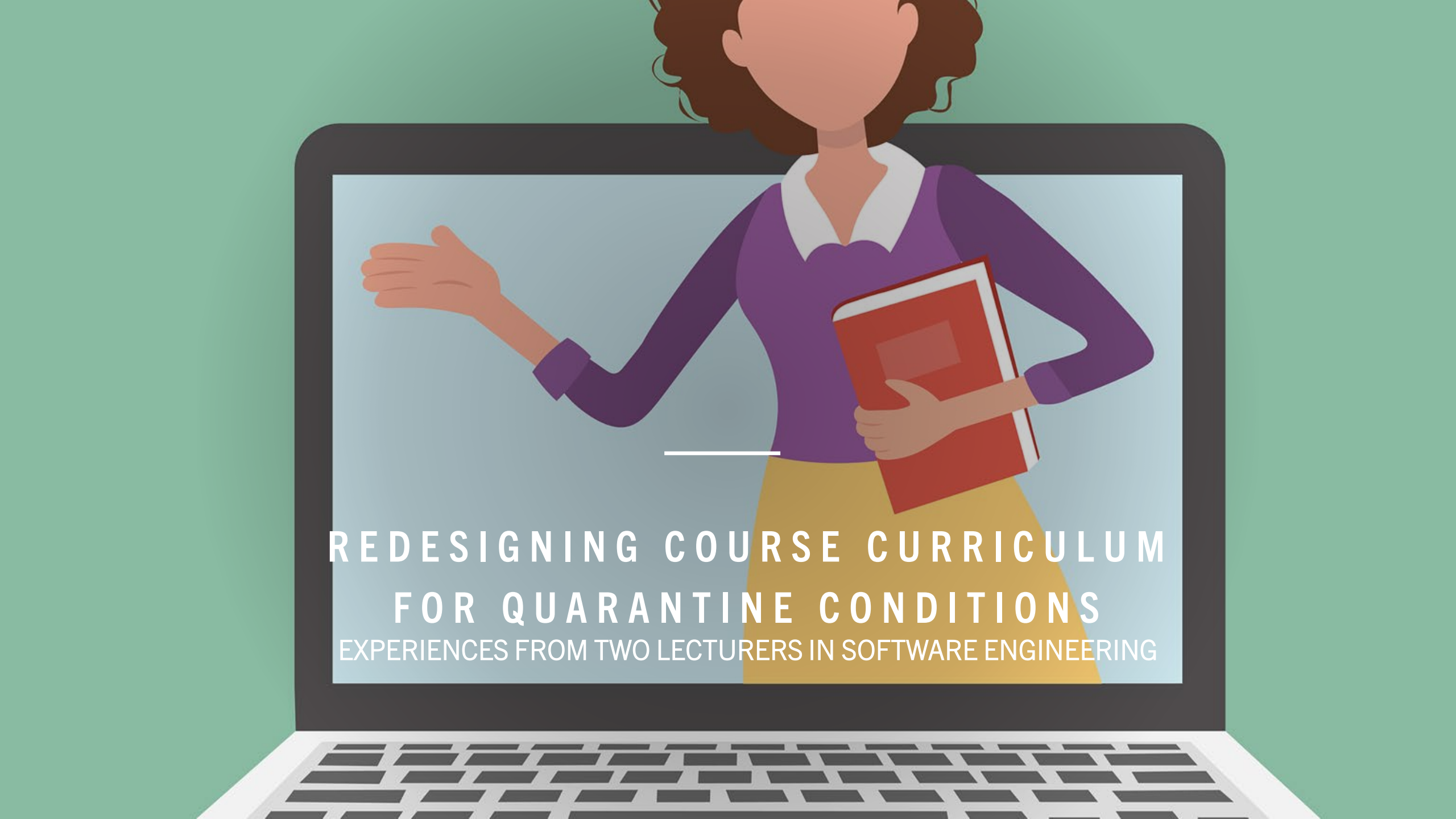


REDESIGNING COURSE CURRICULUM FOR QUARANTINE CONDITIONS

EXPERIENCES FROM TWO LECTURERS IN SOFTWARE ENGINEERING

The ice is melting at the poules.

WHAT CAN WE DO TO...

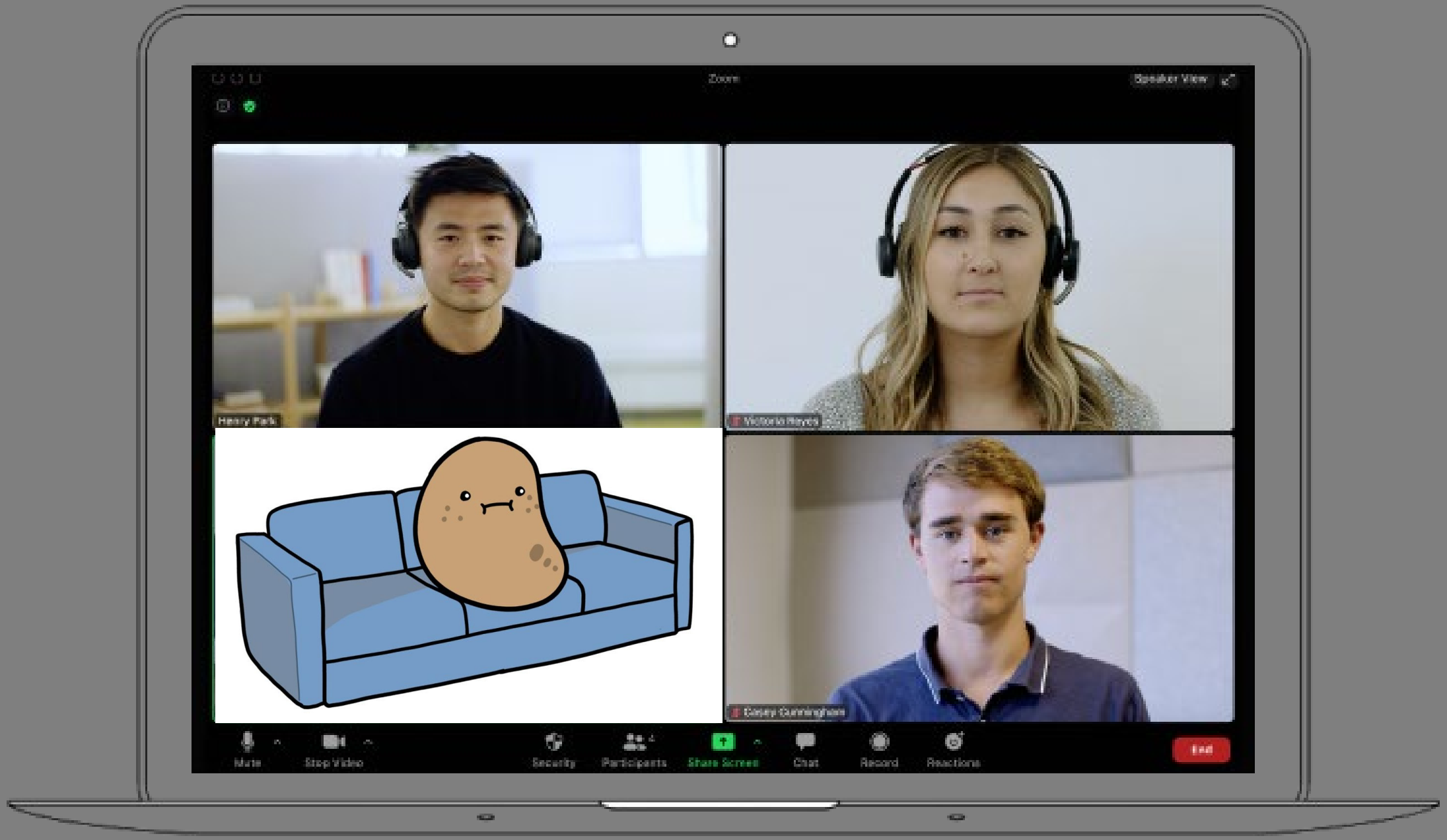
Make the students more active?

Avoid zoom black out scenario?

Give the students more feedback?

Have more time with students in small groups?

...while future-proofing our efforts?

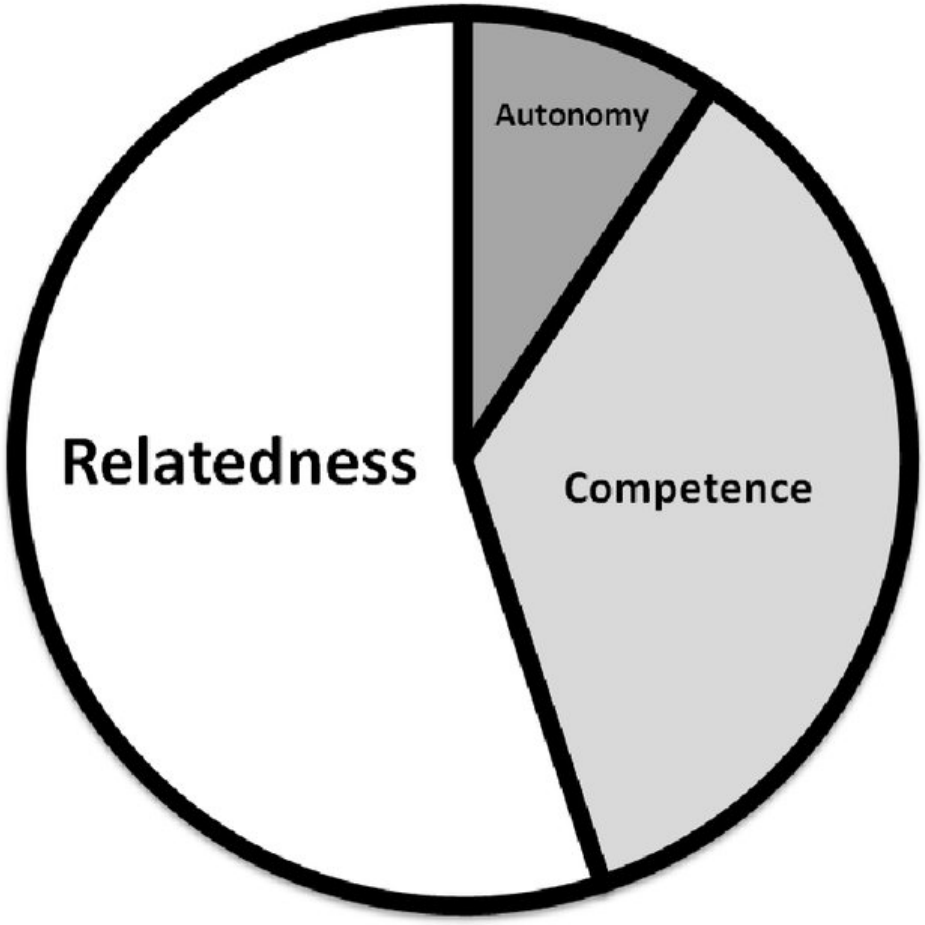

Zoom
Speaker View
Henry Park
Victoria Reyes
Casey Cunningham
Mute
Stop Video
Security
Participants
Share Screen
Chat
Record
Reactions
End

STUDENTS NEEDS

- Motivation needs (Ryan & Deci): Autonomy, Relatedness, Competence
- Feedback needs (EVA)

  - Students learn from GIVING feedback
- Structured guidance

  - **Perhaps even more online?** (Salmon)



Course Design: DAI

For each assignment: You have to provide peer feedback to a partner group from the opposite track

Track A

4 assignments to be handed in. Source system is AdventureWorks. Assignments are closely linked to work done in the main track.

Hand In #1 — Hand In #2 — Hand In #3 — Hand In #4

Main Track

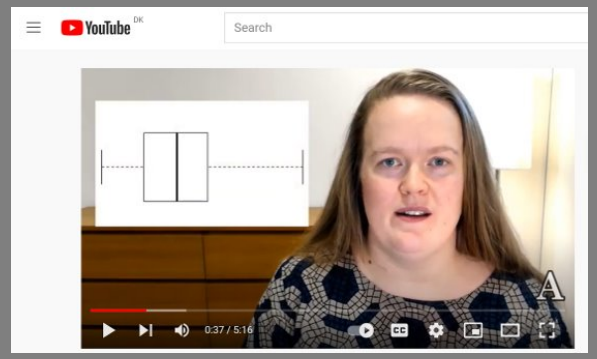
We cover all the topics in the course plan and use the main track database (NorthWind) to design a datawarehouse solution.

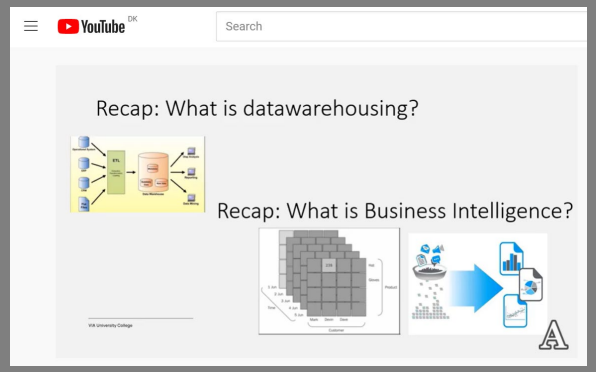
Dimensional Design ... ETL design ... Visualizing Data ... ETL revisited ...

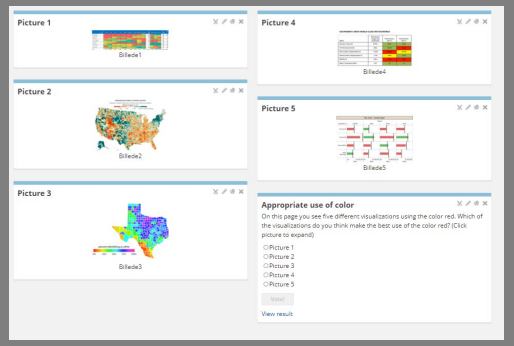
Track B

4 assignments to be handed in. Source system is WorldWideImporters. Assignments are closely linked to work done in the main track.

Hand In #1 — Hand In #2 — Hand In #3 — Hand In #4

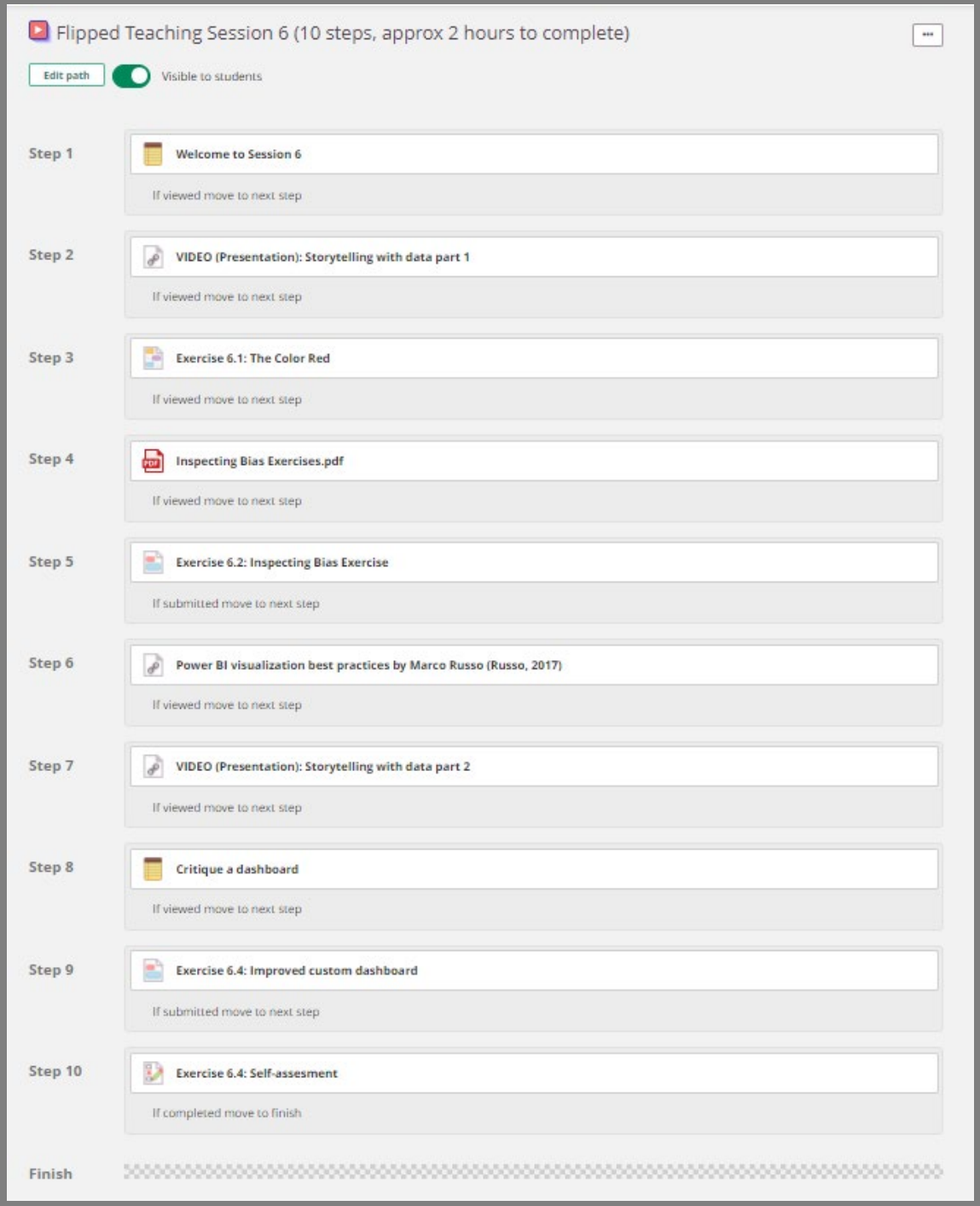




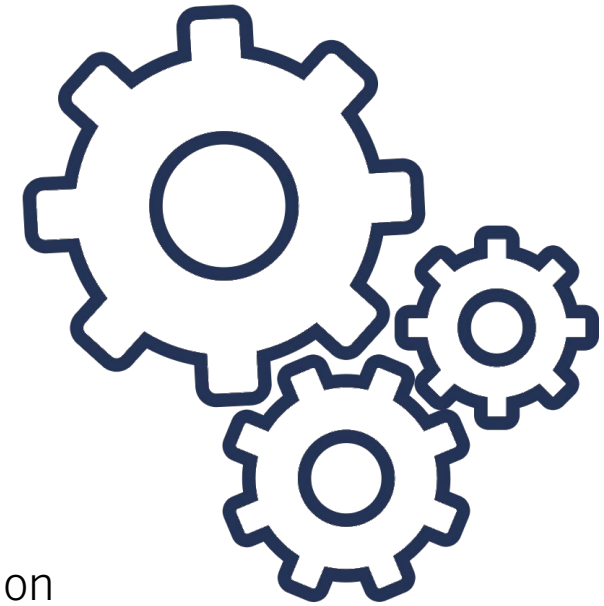


Hand in #1.pdf

Peer Review Correction Sheet #1.docx



TYPICAL SESSION STRUCTURE



- Before class
- Read
- Watch videos
- Theory + coding examples
- Individual exercises

- During class
- Questions in relation to preperation
- Group work on track project

RESULTSI

Students needs for autonomy and relatedness met

Engagement with learning paths during semester

Video views indicate that student revisit materials closer to the exam

No correlation between:

- time spent and grade at the final exam
- number of visits to course platform and grade at the final exam

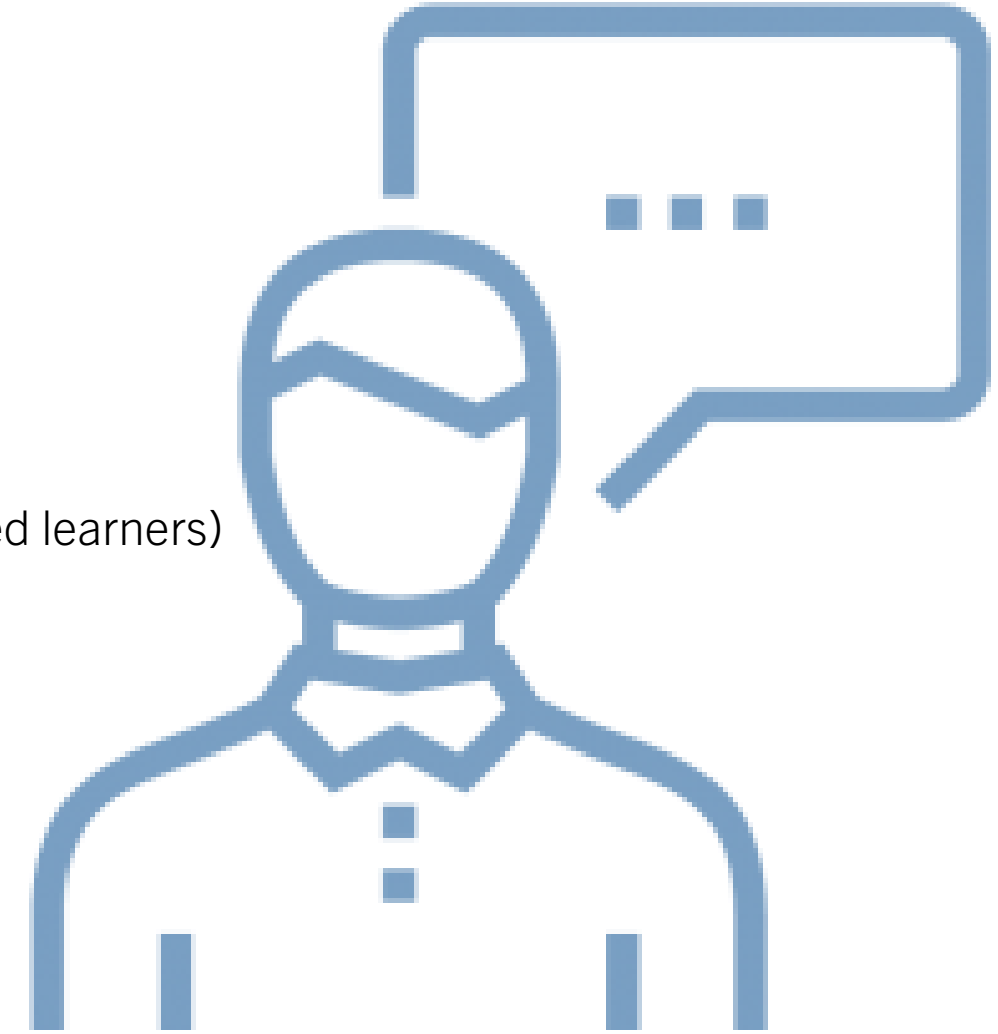
RESULTSII

Students appreciated the group work

Peer review divided the students

Course structure divided the students (typology of blended learners)

Not a lot of students read the book



PRACTICAL RECOMMENDATIONS

Collaborate with other educators to minimize overtime

Ensure management support

Start with low hanging fruits

Prepare the students for change in format

Modularize your material/videos

PHYSICAL PRESENCE: PRELIMINARY EXPERIENCES 1

This semester (Fall 2021) the course is on-campus.

The following preliminary experiences are based on

- A midterm questionnaire
- Personal observations (!)

PHYSICAL PRESENCE: PRELIMINARY EXPERIENCES 2

- More interaction between teacher and students in class, mostly in groups
- Questions asked suggest that the topics have been discussed in the group beforehand
- Most students report that they benefit from online material (videos, texts,exercises, ..)
- Most students report that they benefit from the group work
- More activity/usage on online material
- Attendance better than online (but declining throughout the semester)

PHYSICAL PRESENCE: PRELIMINARY EXPERIENCES 3

- 20% report that they did not read the book (no change there …)
- The peer review exercises divide students – 40% consider them not helpful

PHYSICAL PRESENCE: PRELIMINARY EXPERIENCES 4

Some opinions:

What worked well?

- “I think having the videos and exercises always on itslearning so when you want to review something you have it on-hand ….”
- “… the freedom to prepare for the course at own pace …”
- “The track group project is the good part”
- “…the practical examples on how to do stuff…”

PHYSICAL PRESENCE: PRELIMINARY EXPERIENCES 5

Some opinions:

Suggestions for improvement:

- “More guided exercices in class and not only learning paths”
- “Also have the teacher review the theory in class and do some exercises in class.”
- “Although it's nice to have all the lectures in online format, I missed the in-person lectures”
- “Because the motivation level of each group in regards to this course differs, the peer review feedback is not always relevant. Maybe a more in-depth feedback from the teacher will be more meaningful.”

QUESTIONS FOR REFLECTION

What (if anything) should we do to adapt the format to a physical in-class setting?

How can we spot the “adverse student reaction” ahead of time?

- and what can we do to help them?