

Flipped Classroom – My Way

Univ.-Prof. Dipl.-Ing. Dr. Lothar Fickert

www.ifea.tugraz.at

Institute of Electrical Power Systems

University of Technology Graz

Motivation

Motivation

Instead of LECTURE → Seminar of understanding minds

Diverse access to education, master level (20 - 30 students)

More open knowledge sharing

More individual knowledge transfer with regard to learning speed

Sustainability

The joy of acting

**Courage: since 2 years ... each year 4 lectures as video,
since 2019 one lecture as MOOC**

Definition Curricular Position

Curricular Position

Guideline of the TU Graz

When using flipped classroom media (e.g. also videos) without further measures up to 20% educational discount

→ "simply do it" → i.e. with 15 real hours per semester course =
- 3 real hours possible.

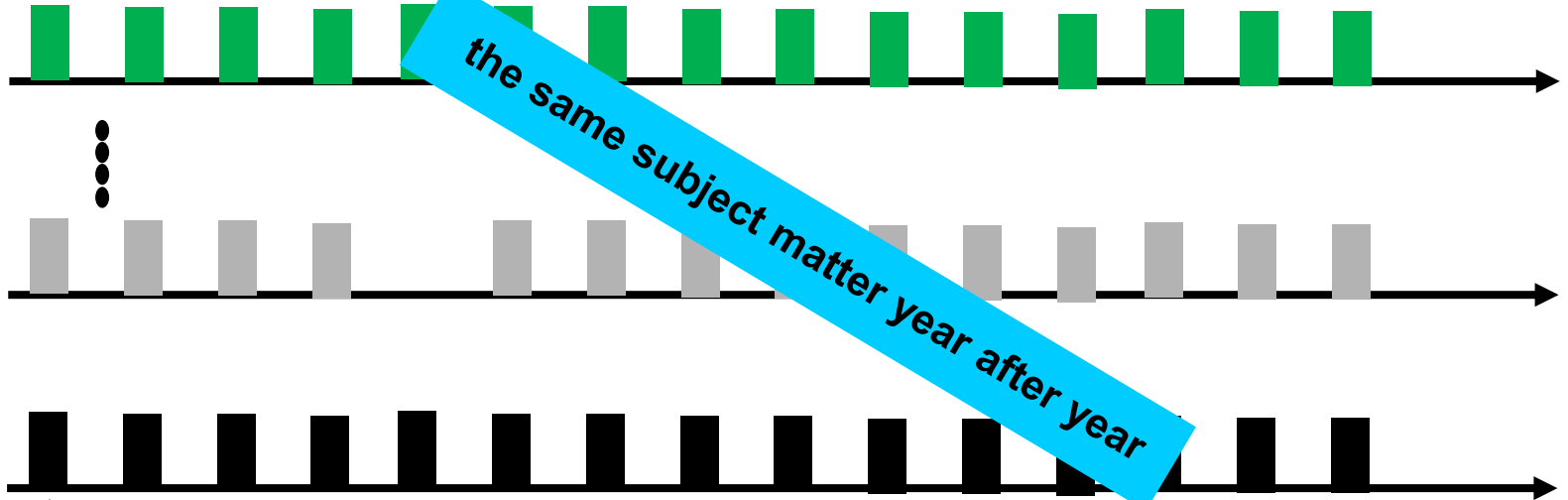
With "curricular anchoring", also more teaching discount.

Necessary:

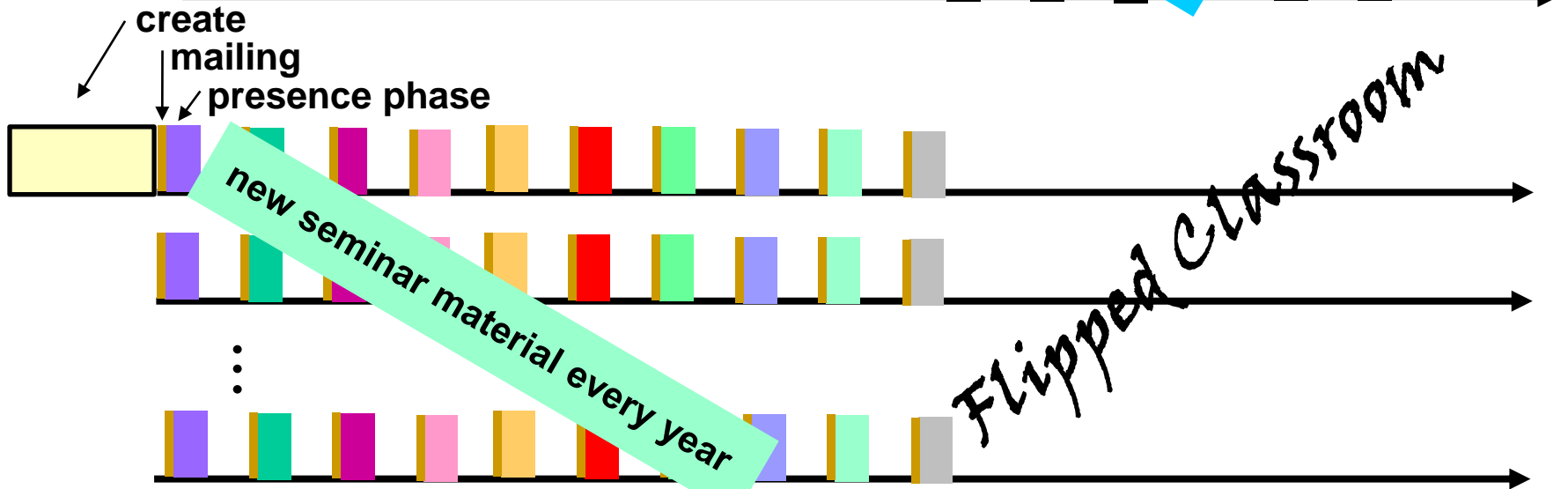
- Declaration as online event
- Report to the Dean of Studies with a request to enter this in the next curricula change.

Comparison

Classic



the same subject matter year after year



new seminar material every year

Flipped Classroom

My Methodology

(My) Methodology

The teaching material/script already exists. ✓

1 Lecture

= 14 weeks 2 hours a day

= 28 x 45 minutes

45 minutes = a 6 minute video ("Nugget")

28 Nuggets

1 Nugget

= approx. 6 pieces high quality basic powerpoints

1 basic Powerpoint ... by spreading each
= 5 build-up levels (results in a film-like sequence)

+ 1 recording session (shooting)

Optional (Later): Different target languages from the original/english

Autotranslate file

German,
Arabic,
Chinese,
Macedonian, ...

Effort

Effort

1 Nugget

= 1 basic powerpoint with 5 build-up levels

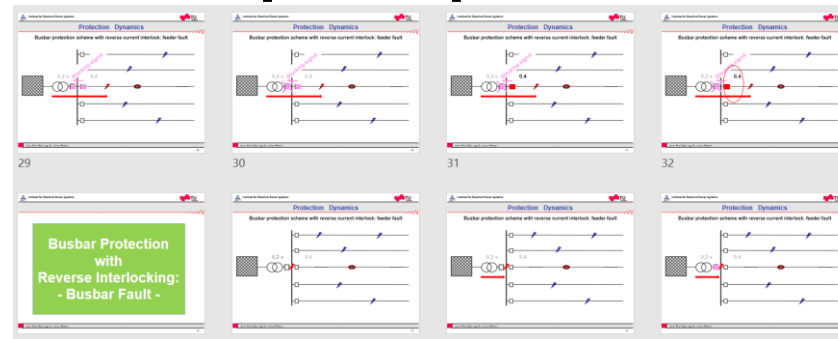


5 hours

Effort

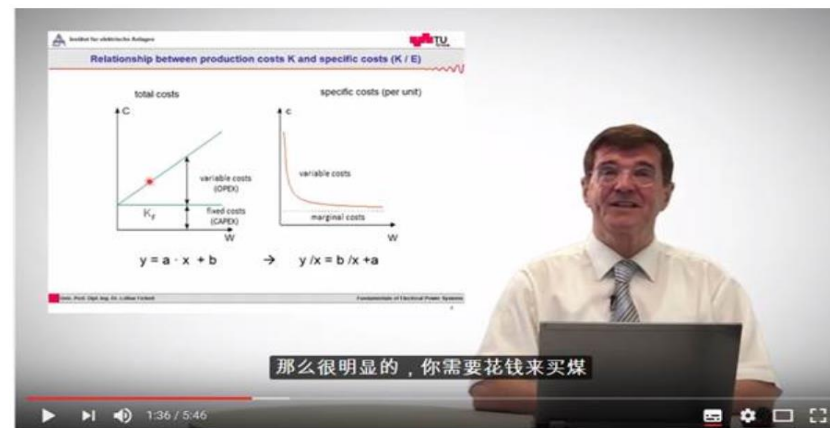
1 Nugget

= 1 basic powerpoint with 5 build-up levels



5 hours

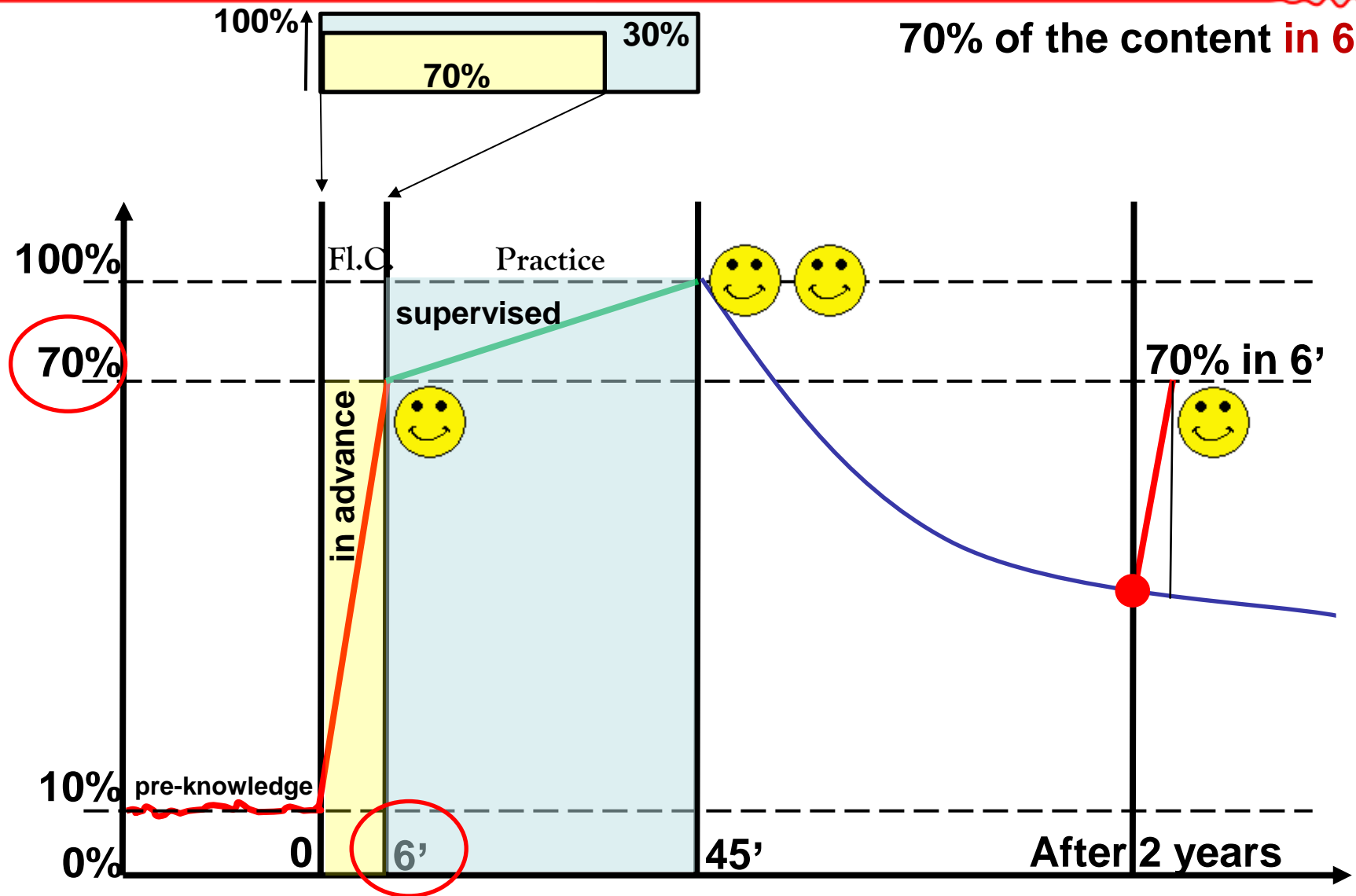
+ 1 recording session



2 hours

Benefits

Benefits



Experiences - Evaluation, Personal Impressions

Experiences - Evaluation

TUG Online

Videos well accessible / fully / conscientiously viewed

Where were the videos viewed?

at home

at home over coffee.

at home sitting at the PC

Uni and at home

at home and university

At home on the couch

at home.

Laptop/Mobile

PC

I would have liked shorter videos.

91% NO!

I would have liked longer videos.

80% NO!

I only watched the videos once.

0%.

The 'flipped classroom' concept was sufficiently explained in advance.

80% YES!

I already knew the 'flipped classroom' method.

90% NO!

Experiences - Evaluation

TUG Online

Meine Beteiligung/Interesse an der Lehrveranstaltung wurde durch die Videos erhöht.	
1:	0
2:	1 (9,09 %)
3:	1 (9,09 %)
4:	3 (27,27 %)
5:	6 (54,55 %)

Weitere Lehrveranstaltungen sollten mithilfe der ‚flipped classroom‘ Methode durchgeführt werden.	
1:	0
2:	0
3:	1 (9,09 %)
4:	4 (36,36 %)
5:	6 (54,55 %)

Ich werde die Videos weiterempfehlen	
ja:	11 (100,00 %)
nein:	0

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