

# VIDEO ANALYSIS FOR TEACHING & LEARNING

## Use cases and best practices

- Recap & questions (of prepared video)
- Live demonstration of new features & Hands-On
- Selected additional use cases
- Group work: Discuss & share ideas

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# The annotation tool

## → Main features:

- Free text annotations (with autopause)
- Categories: Easy to create and set
- Select an annotation → video jumps to the selected section
- Access & comment public annotations of other students

00:03:24

00:00 00:05 00:10 00:15

Default David ... Private

Bez Beziel Re

mod modeling Fr

fad fading Re

Reset zoom < + - > Other annotations + Add track

Annotate on Default David Graf

Write a free text annotation. Use »shift + return« keys to create a new line.

Pause video during writing Insert

All Public Mine  Edit mode

Diskutieren	Lernbegleitung	Lehrvortrag	Unterrichtsg ...
++	mod	Bez	LGe
-	coa	Inh	KFw
?	sca	Str	FDe
	fad	Spr	AGS
	beo	nve	
	fbk		

Items visibility -

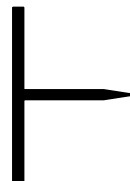
- > 00:00:52 00:03:35 Bez
- > 00:01:02 Referent beginnt zu sprechen
- > 00:04:12 00:08:21 mod
- > 00:06:37 Frage aus dem Plenum
- > 00:08:33 00:09:56 Spr
- > 00:10:08 00:13:30 fad
- > 00:12:21 Rekapitulation der Meldung aus dem Plenum

# Scenarios

1. Enrich videos for teaching and learning
  2. Theory based analysis of video material (e.g., case based learning)
  3. Video-based self-reflection
  4. Video-based peer-coaching
- 
1. In research projects (analysing/rating of video data)

# 1. Enrich / Enhance videos

- ✓ Lectures
- ✓ Educational videos
- ✓ Tutorials



either by students or teachers

The screenshot displays a video player interface with two main panels. The left panel shows a video player with a slide titled "Theoretische Grundlage Personenwahrnehmung". The slide content is as follows:

**Theoretische Grundlage  
Personenwahrnehmung**

• Modell der Personenwahrnehmung (Warr & Knapper, 1968)

```

    graph TD
      A[Momentane Personennformation] --> C[Input Selektor]
      B[Kontext-information] --> C
      D[Gespeicherte Personennformation] --> C
      C --> E[Aktueller Zustand]
      C --> F[Stabile Eigenschaften]
      E --> G[Verarbeitungszentrum]
      F --> G
      G --> H[Affektive Reaktionen]
      G --> I[Attributive Reaktionen]
      G --> J[Erwartungen]
  
```

The right panel shows an annotation tool interface. It includes a text input field, a "Pause video during writing" checkbox, and a table of annotations:

Sozialform	Got it?
EA	Ja
PA	zT
GA	NEI
PL	

Below the table, a timeline shows an annotation at 00:00:04 with the text "Was bedeute".

## 2. Theory based analysis of video material

Benefits of CBL

- ✓ Vivid & authentic
- ✓ Connects theory with practice
- ✓ Develop new action strategies



The screenshot displays a video player interface. On the left, a video frame shows two men sitting at a table in an office setting. On the right, an annotation tool is active, showing a text input field with the placeholder "Write a free text annotation. Use =>shift+return=> keys to create a new line." Below this is a "Pause video during writing" checkbox and an "Insert" button. A filter menu is open, showing three tabs: "All", "Public", and "Mine". The "Public" tab is selected, displaying a table of annotations:

Verhalten	Frageform	Zuhören
++	OFF	ZUH
+	GES	PAR
o	W-F	VER
-	ZUS	
--		

### 3. Video-based self-reflection scenarios

Enables...

- ... analysis with hindsight
- ... taking an other perspective (from the outside)
- ... a systematic repetition of analysis → different perspectives

→ Active and in depth examination of its own action!



Annotate on Default David Graf

Write a free text annotation. Use +shift+ +return+ keys to create a new line.

Pause video during writing

All	Public	Mine		
Diskussion	Lernbegleitung	Lehrvortrag	Unterrichtsg...	
++	mod	Bez	UGE	
-	cca	Inh.	RFW	
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	Rx			

Items visibility

00:03:24

00:00 00:05 00:10 00:15

Default David ...

Bez Bead

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Rx

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Reset zoom

Other annotations

Add track

00:00:52 00:01:28 Bez

00:01:02 Referent beginnt zu sprechen

00:04:12 00:08:11 mod

00:08:37 Frage aus dem Plenum

00:09:13 00:09:14 Spr

00:10:08 00:13:32 fad

00:12:21 Rekapitulation der Meldung aus dem Plenum

# 4. Video-based peer-coaching



Annotations on Default David Graf

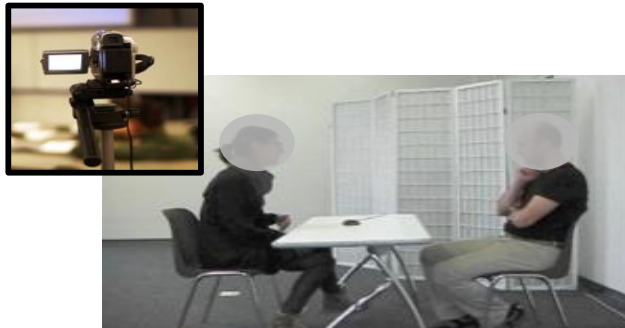
Write a free text annotation. Use **shift** + **return** keys to create a new line.

Pause video during writing

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Diskussion	Lehrbegleitung	Lehrvortrag	Unterrichtsg...	
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-	coa	Inh	KFW	
?	sca	Str	FDe	
	fad	Spr	AGS	
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QUESTIONS?



# «Conversation management and interview techniques» 200P

Dr. Eva Schürch, Institute of Psychology



Aktiv Zuhören	Fragen stellen	Verhalten Th...
ZUH	OFF	++
PAR	GES	+
VER	W-F	-
	ZUS	--

**Task:** *«Mark sequences in the video where the therapist uses one of the following interventions or where her behaviour is good/bad.»*

a) active listening    b) type of questions

**In Class:** Deeper analysis of selected scenes (much deeper than in 2016) & clarifying the theory based on selected scenes

# «Church Service – Seminar» 12P

Dr. Katrin Kusmierz, Institute for Practical Theology



Before class: Videotape, upload the video and analyse their own service, mark certain parts > set it to publish

In class: Review marked scenes, discuss them with other students and tutor

# The Annotation Tool from SWITCHcast

[www.switch.ch/cast/](http://www.switch.ch/cast/)

## → Recent and brand new features:

- Flexibel window arrangement
- Sharing option: «Shared with administrator»
- Filter options: By category & text annotations
- Reply to a comment
- New timeline (incl. bug fixes)

## → Some planned features: Interest to fund?

- For admins: «Show track to all users»
- Sharing option: «Share track»
- Category: Linked to single video or all videos of a series
- Timeline: Clustering & grouping of annotations
- Look & feel: Automatic saving, active annotations better visible, modern UI, keyboard shortcuts (Cmd/Strg + Z), mark annotations as public/private

# Hands-On

[tinyurl.com/ilias-videoanalysis](https://tinyurl.com/ilias-videoanalysis)

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## Sport Science:

Analyse tactical & technical playing behavior



## Psychology:

Interview technique with self-reflection & peer-coaching



## Medicine:

Communication trainings with self-reflection & peer-coaching



## Geography:

Content analysis of a documentary film

# «Basics of sport games», 50P

Dr. Lukas Magnaguagno, Institute of Sport Science



Liste von Annotationen		Sichtbarkeit	
>	00:00:00	Defense: In der Verteidigung ...	1
>	00:00:05	Nicht gelungene defensive Ak...	
>	00:03:06	Gelungene offensive Aktion: ...	

**Team:** Play Streetball (3:3) and videotape 10' sequence

**Individual:** Choose 3' & analyse own playing behavior (tactical & technical)

- Overall conclusion: Good/bad? Possible improvements?
- Specification: 2 situations (+ & -)  
incl. effects on attack/defence & exercises to train this aspect

**Two runs:** 1st: Pass/fail with feedback of teacher  
2nd: Graded (incl. considering improvements)

# «Conversation management, interview technique and behavioral observation», 200P

Dr. Eva Schürch, Institute of Psychology



All	Public	Mine	
Team	Peers	aktives Zuhören	Verbesserungsv ...
STA	STA	VE+	VE-
STO	STO	PA+	PA-

- Team task:** Videotape a conversation (e.g. job interview, coaching) with a third person
- Before class:** Upload video 1 week before meeting > analyse own video (i.e., mark 3 parts: +, -, ?) & video of another team (mark 2 parts: +, -) > set public > study received feedback
- In class:** 5 teams & tutor (11P): Review & discuss marked scenes
- After class:** Write feedback for the other team > upload it to ILIAS > comment on utility of received feedback

# «Communication trainings», 300P

Ulrich Woermann, Kay Schnabel, Nick Lüthi et al.; Faculty of Medicine



- Task:** Complete 2 of 4 communication trainings (2 as observer) & get videotaped (incl. immediate FB by observer and actor)
- Before class:** Analyse own video & video of partner: Identify scenes as *successfull* or *improve* & elaborate them (describe situation, own impression, explain why marked as +/-)
- In class (3h):**
- 0-1h (4P): Scan annotations with fellow students & select scenes
  - 1-3h (8P): Present selected scences and discuss them with other students and tutor



# «Sustainable Regional Development», 55P

Dr. Susan Thieme, Institute of Geography



vulnera...

TEM

SPA

POL

CUL

0:00:26 SPA spatial 1

spatial

Kommentare

Kommentar von am 07.03.2019

She is apart of her family which makes her vulnerable.

**In class task:** Practice content analysis of a documentary film (5' sequence)

**Individual:** 1) Set labels (e.g., «vulnerabilities» for migration) & note thoughts in comments

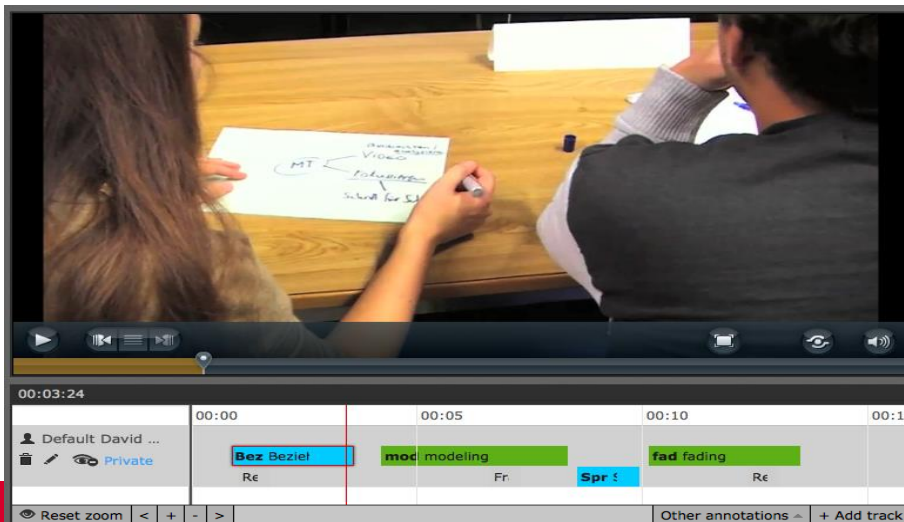
2) Be ready to present your results:

Important findings? Patterns? Challenges, benefits & limitations of this approach?

**Plenum:** 3) Presentation of results incl. discussion

# Share ideas and thoughts (15')

- How do you/could you use the tool in your teaching?
- What are the benefits of this tool or scenario (for you & your students)?
- What are the possible disadvantages/obstacles of video analysis in teaching?



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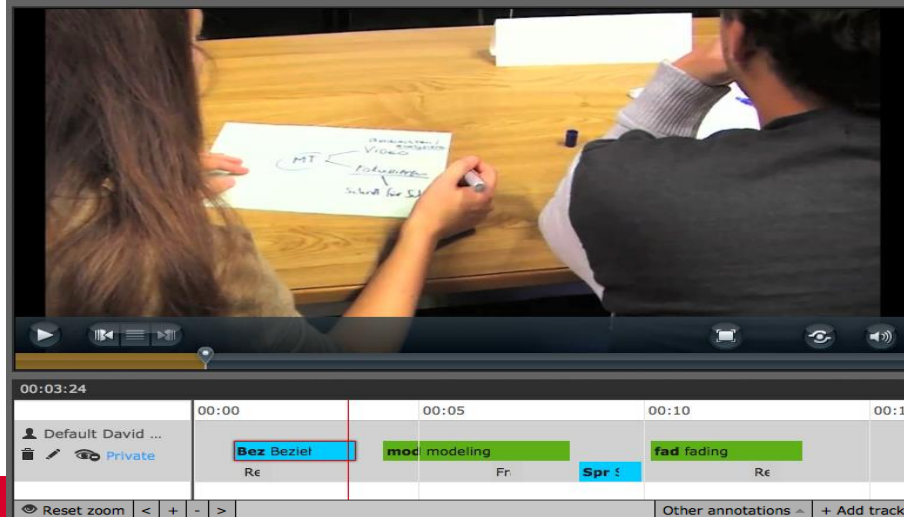
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# Share scenarios (5')

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# Questions?

HOMework EATEN?

LEARN ONLINE.  
WITH VIDEOS & ILIAS.

