Framing online teacher video: How to conceptualise it

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Symposium
*Understanding teachers' professional competencies –
Measuring and developing teachers' professional competencies
by using videos*

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Context

"Teacher video" is booming,
offline as well as online:

- mentoring and professional development
- electronic learning environments
- performance assessment
- video platforms

But:

- What is there to be seen in the first place?
- What are valid representations of teaching?

Video as semiotic practice

www.Leraar24.nl hopes to make available anytime anywhere:

> *"a tool kit full of practical solutions and examples that you can apply directly in your daily teaching ... Each theme is elaborated in the form of rich dossiers consisting of informative video clips and ... dependable background information"*

- Video production and video viewing are not neutral.
- They are semiotic practices, which create meaning (Tochon 1991; 2013).
- "Professional vision" comes about in three collegial activities: coding, highlighting and graphically representing relevant aspects (Goodwin, 1994).

Research questions

- In which respects are the Leraar24 video clips more vs. less suitable for supporting teachers' professional development?
- What visual language does Leraar24 use and what messages does it transmit?
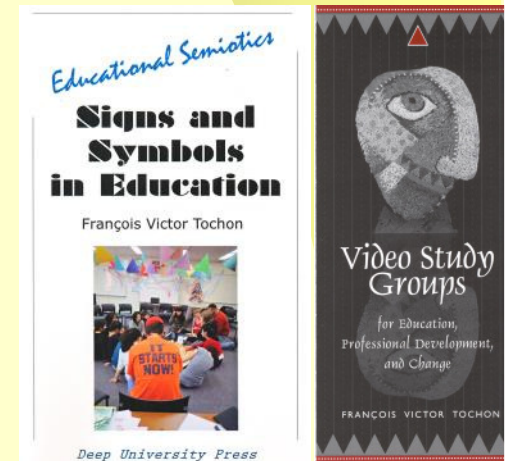
Theoretical framework

I. Clip features

Genres defined as different combinations of clip features

CAPTURE

- Authentic vs. scripted setting
- Participants:
  - teacher(s)
  - colleague(s)
  - learner(s)
  - school leader(s)
  - parent(s)
- Whole-class, subgroup and/or individual interaction
- Focus on learning content and activities
- (Variation = frequency, speed and duration of) panning and zooming: long, medium, close-up shots

EDITING

- Selection of scenes/episodes
- Duration of scenes/episodes
- Linear vs. non-linear
- Voiceovers
- (Sub)titles and captions
- Music

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Theoretical framework

II. Framing

CONTEXT INFORMATION

- Availability, amount and type of:
  - lesson plans
  - teaching materials / artifacts
  - interviews with learners and/or teachers

PERSPECTIVES

- General instructional or subject-specific
- Resources (viewing guides; literature)
- Expert and/or craft language
- Taking into account teachers' personal and/or shared practical experiences, concerns and learning needs

Theoretical framework

III. What is portrayed as good teaching

- Explicit and implicit messages about evaluation criteria:
  - learning processes and/or outcomes
  - theory and/or empirical evidence about effective teaching
  - practical experience
  - ideological assumptions

IV. Viewing situations

- Other-viewing or self-viewing
  - typical practice and/or best practice cases
  - familiar and/or unfamiliar cases
- Individual and/or in peer collaboration
- Repeated viewing: from exploratory to analytic
- Training in and facilitation during giving and receiving feedback
- Connection with lesson planning

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User research into Leraar24

Demographics

- 503 teachers, 51% men and 49% women

- - aged 48 and employed 4 days per week on average
  - 289 teachers (57.4%) acquainted with Leraar24
  - those unacquainted significantly older, longer employed and less skilled in IT use

- - 46.4% visited Leraar24 sometimes, 29% once or twice, 21% often and 4% never.
  - Most visitors found what they searched for, 57.8% sometimes and 31% mostly.

Evaluation

- Visitors evaluated Leraar24 with 7.05 on a ten-point scale, about equally for different aspects:
  - layout
  - navigation
  - quantity and quality of video clips and dossiers.

- Usability for professional learning was rated
  - negligible by 19.9%
  - low by 45.8%
  - high by 34.3%

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Intended and actual use

	Not Intended	Intended	
No use	A1 63 = 21.8%	A2 29 = 10 %	92 = 31.8%
No regular use	B1 70 = 24.2%	B2 92 = 31.8%	162 = 56 %
Regular use	C1 13 = 4.5%	C2 22 = 7.6%	35 = 12.1%
	146 = 50.5%	143 = 49.4%	N=289

Two interesting **contrasts**:

- **More teachers used** Leraar24 **than** had **intended** to do so
  (percentages in cells B1, C1, B2 and C2 sum to 68.1,
  while those in cells A2, B2 and C2 sum to 49.4) >
  As a **medium**, Leraar24 appears to be **attractive**.

- **Quite a few teachers intended** to use Leraar24, **but did not** actually do so, at least
  regularly (percentages in cells A2, B2 and C2 sum to 49.4,
  while those in cells A2 and B2 sum to 41.8%) >
  indications for **suboptimal use** of Leraar24

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School context

Of the 289 teachers acquainted with the web site,

- almost one third (32.5%) discussed Leraar24 with colleagues
- slightly more than one third (35.6%) reported that in their schools, Leraar24 was considered useful
- 13.1% preferred Leraar24 as a form of professional development over other forms
- 5.2% reported that in their schools, a group of colleagues engaged themselves with Leraar24
- 3.5% participated in such a group.

Teachers' suggestions for improvement

Of the 277 web site visitors, 29.6% offered a total of 82 suggestions for improvement.
Four themes and typical suggestions:

- Navigability (29.2%)
- Specificity of content(15.9%) for:
  - sectors (general, occupational, special)
  - school subjects and domains
  "*Please refer to subject-specific resources*"
- Practical relevance (19.6%):
  direct applicability
  "*More examples*"
  "*More good practice*"
- Quality of content (35.3%):
  more up-to-date, more innovative,
  higher level, more knowledge-based
  "*Web site contains more talk than discussion*"
  "*Please give teaching professionals access to scientific research*"
  "*Follow and assess innovations critically*"
  "*Select content more strictly*"
  "*Avoid promotion activities by vague commercial providers*"

User research – summary

- Leraar24 is in principle a medium with potential for professional development. It is well-known among teachers and they evaluate it mostly positively. Even so, they
  - use it less than intended and
  - rate its actual usability less favourably.

- A gap is apparent between the promise perceived in Leraar24 and the operational benefit teachers actually draw form it. There is clearly room for improvement.

- Prevailing school conditions do not offer many opportunities for studying video clips about teaching in-depth and engaging in collaborative analysis.

- Leraar24 can improve by grounding video material and related background information more strongly in theory and research.

What visual language does Leraar24 use and what messages does it transmit?
"Misconceptions about inflation" – positive example

www.leraar24.nl/video/187

What visual language does Leraar24 use and what messages does it transmit?
"Snoezelen" - negative example

www.leraar24.nl/video/1712

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Misconceptions about inflation

"Snoezelen"

- Interaction between teacher, learner and content is shown
- Why & how of learning activities are shown and explained
- Subject-specific background information is provided
- Some indications of learning effects are visible
- Learners' voices are heard 1:27 out of 8:18 minutes = 17.5 % of time

- Purpose and content of learning / development are vague
- Learning effects are claimed in teacher attributions, not shown
- Quasi-professional language
- One learner's voice is heard 0:01 out of 7:11 minutes = .23 % of time
- Soothing music dulls viewer's critical attention

Can other teachers do the same and why should they??

- Repeated viewing is necessary for better understanding
- "Talking heads" syndrome

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Perception is crucial

THINKING,
FAST AND SLOW

DANIEL
KAHNEMAN

- Video as "vicarious experience" (Laurillard, 1993) makes us "think fast" (Kahneman, 2011)

- and forget about
error sources in observation
(Evertson & Green 1986, p. 183):
- making logical errors based on theoretical, experiential or commitment-based assumptions
- generalization of unique behavior
- failure to consider the perspective of the observed
- poor design, i.e. lack of theoretical foundation
- lack of consideration for the speed and simultaneity of relevant action and of the goal-directed nature of human activity
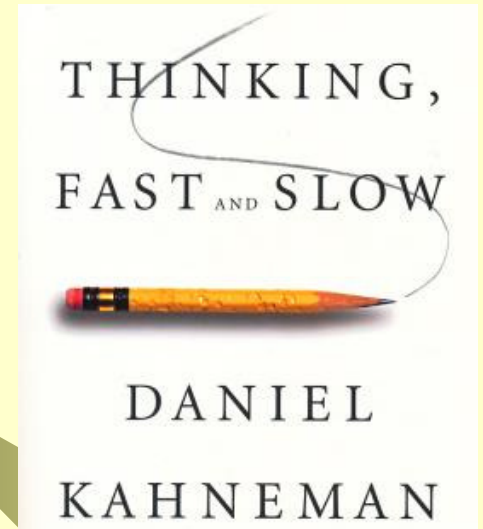
Recommendations

I. **CLIP FEATURES** promoting visual teacher learning:

a.   Show interaction between learner, subject-matter content and teacher

b.   Retain the chronological sequence of the lesson

c.   Show the instruction by the teacher

d.   Show different perspectives of different actors

e.   Give context information (using voiceovers, subtitles, interviews and the like)

f.   Take into account conventions in visual language (duration, image composition, viewing direction, zoom & pan etc.)

g.   Not only images, but also text make meaning and direct attention

In general: heed Richard Mayer's redundancy principle in multimedia learning. "Less is more".

Recommendations

II. FRAMING

- Provide context information such as:
  - lesson plans
  - teaching materials and artifacts
  - interviews with learners and teachers

- Produce more subject-specific hypermedia dossiers

- Support teacher collaboration: viewing, analysis and discussion with viewing guides

- Merge the language of educational research with teachers' craft language

- Take applicability more seriously and pay special attention to teachers' practical concerns: how to translate thought into action

Ulrich Riegel, Klaas Macha (Hrsg.)

Videobasierte Kompetenzforschung in den Fachdidaktiken

WAXMANN

4 FACHDIDAKTISCHE FORSCHUNGEN

Recommendations

III. WHAT IS PORTRAYED AS GOOD TEACHING

- Make implicit evaluation criteria explicit:
    - learning processes and/or outcomes
    - (ground content in) theory and research evidence
    - practical experience
    - ideological assumptions

- Contrast different perspectives

Recommendations

IV. **VIEWING SITUATIONS**

Schools, please:
- Promote collegial consultation
- Practice both other-viewing and self-viewing
- Encourage moving from exploratory towards analytic viewing
- Encourage discovering the unfamiliar >> intercultural comparison
- Organise training in and provide facilitation during giving and receiving focused feedback
- Pay attention to lesson planning

Thank you for your attention

Online sources:
http://onderzoek.kennisnet.nl/onderzoeken-totaal/equippingteachersvisually

http://academic.csuohio.edu/yuskob/aera2009.htm

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Visual Teacher Learning Model

CHANGE ENVIRONMENT

Entry charact eristics

Biogra-phy

Goals

Perception
- Framing
- Self-viewing
- Other-viewing

Feedback
- Peer
- Self
- Learner
- Facilitator

Interpretation
- Examining
- Valueing

Reflection

Enactment

Ongoing developm ent of teaching compe- tence & profes- sional motivat- ion

TEACHERS' LEARNING ACTIVITIES