A Comparative Study of the Visual Strategies of Trainers and Futur Teachers
with eyetracking method.

CONTEXT

- Training programme for secondary school teachers, based on Derobertamsure (2012) and Bocquillon (2020), at the University of Mons
- Practical teaching skills development course with simulation format of microteaching

"Microteaching typically involves student-teachers delivering (mini) lessons to a small group of students (often in a laboratory setting), and then engaging in post-teaching discussions. They are usually videotaped for later analysis and provide an intense 'under the microscope' view of their teaching' (Hattie, 2009; p.112).

- At the debriefing: the future teacher chooses a video clip and watches it with a trainer to discuss the elements in the picture (freeze frame).

Question 1:
Do trainers (T) and futur teachers (FE) look at the same objects in a classroom scene?

Question 2:
Do trainers (T) and futur teachers (FE) use the same visual strategies?

METHODOLOGY

Sampling

16 FT	6 T
• Average age: 29 • 16 FE without experience of teaching or less than 6 month	• Average âge: 36 • Training experience from 8 to 26 years old • 4 have a PhD in Education

Verification of data by
a) number of complete data sets (at least 70% according to Chaudhuri et al. 2021),
b) number of gaze exits (within + or - 1.5 standard deviations of the mean)
c) blink occurrences (within + or - 1.5 standard deviations of the mean).

Materiel and metrics indicator for analyse

FIXATION
SACCADE
REVISIT
FIRST VIEW

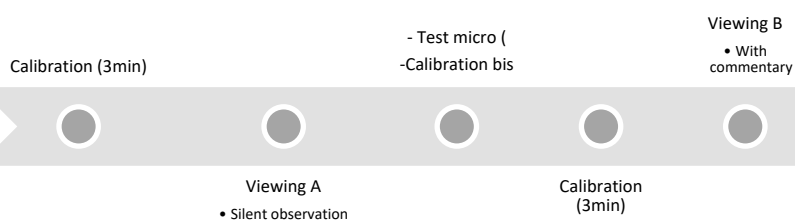In several types of AOI including groups of pupils and pupils in and out of tasks

GazePoint GP3HD

Support vidéo

Pupils in task
Teacher
Pupils out of task
Duration: 7min

EXPERIMENT DESCRIPTION

Steps

Calibration (3min)

Viewing A
• Silent observation

- Test micro (
-Calibration bis

Calibration (3min)

Viewing B
• With commentary

RESULTS

Question 1: Object of gaze
- FT and T look more at teacher and group 1 (front left of screen)
- FT looks more often at the hyperparticipative pupil
- T's looking at students off task
-> Result in line with Shinoda et al. (2021)

Question 2: Visual strategies
Compared to FTs, Ts use "look" strategies with more frequent revisits
-> Result in line with Wolff et al., 2016 ; Stürmer et al., 2017 ; Kosel et al. 2023 ; Yamamoto & Imai-Matsumura, 2013 .

LIMITS AND PERSPECTIVES

- No significant difference according to experience

- Presentation of oculometric results in conjunction with verbal analysis
- Examine scanpaths as e.g. Huang et al. (2018)
- Compare for View B with those for View A

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