

Classroom Disruptions & Classroom Management in Learning Factory Settings at Vocational Schools

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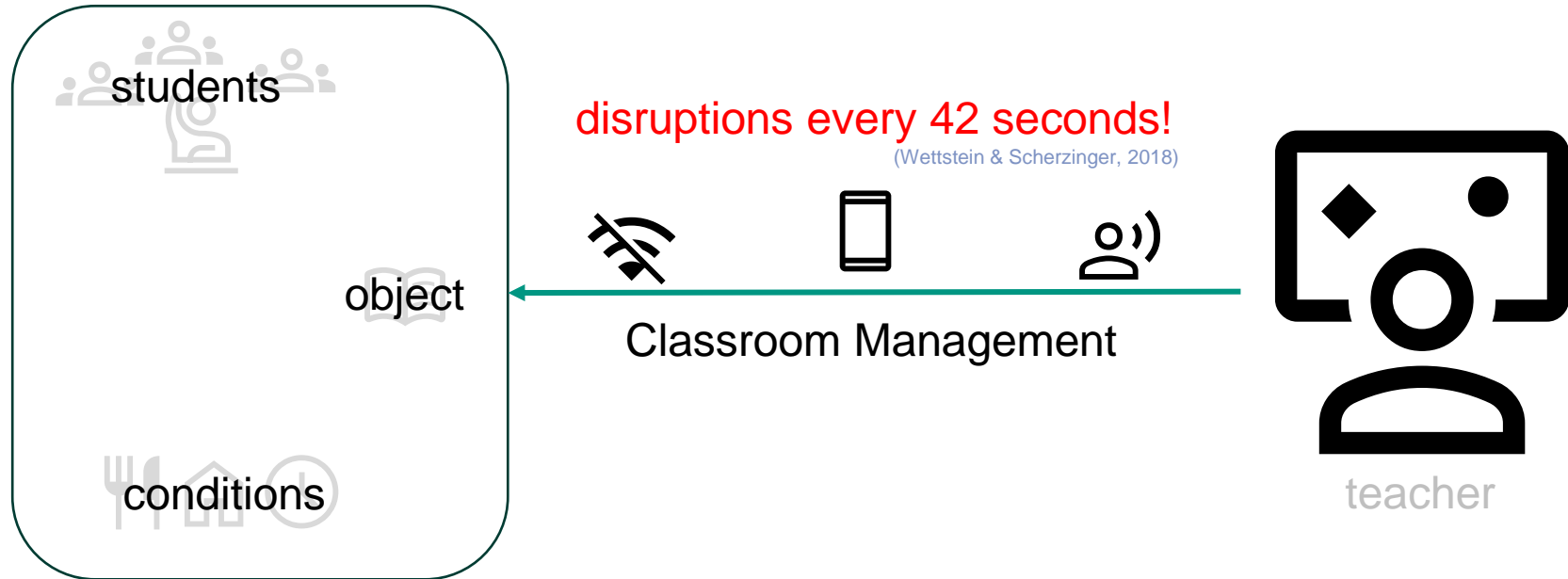


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Classroom Disruptions



Framework

Method

Findings

Discussion

Future Directions

References

Classroom Disruptions

- “Behavior a reasonable person would view as being likely to substantially or repeatedly interfere with conduct of a class”

(Stockton University, 2001, p. 1)



- Biggest risk for teachers' health

(Ho, 2004; Kokkinos 2007; Little, 2005, Lohmann, 2011; Marquez et al., 2016; Shernoff et al., 2018)



- Good classroom management

- less disruptions
- more learning time
- more student success

(Marquez et al., 2016)



Framework

Method

Findings

Discussion

Future Directions

References

Classroom Disruptions

1
2
3

Systemizations that weight severance

(Meinokat & Wagner, subm.)

- Low to high level

(Cogswell et al., 2020)

- Impairment to conduct disorders

(Rattay et al., 2018)

- Nonaggressive to aggressive

(Scherzinger & Wettstein, 2019)

Systemizations that separate categories

△
□ ○

(Meinokat & Wagner, subm.)

- Non-digital settings

- Biller (1979)

- Lohmann (2011)

- Winkel (2011)

- Digital settings

- Li & Titsworth (2015)

Framework

Method

Findings

Discussion

Future Directions

References

Learning Factories

- "A learning environment specified by processes that are authentic, include multiple stations, and comprise technical as well as organizational aspects"

(Abele, 2019, p. 1027)



photo: wbk

- Creating a closer link between school and work

(Bonnes & Hochholdinger, 2020)



Learning Factories

- Learning Factories (LFs) create opportunities for excellent learning
- Excellent classroom management required
- For the setting of learning factories, research is alarmingly lacking

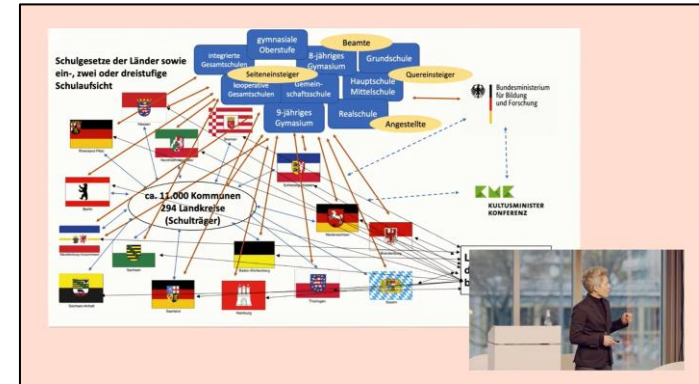


(Abele et al., 2015; Scheid, 2018)



Vocational Schools

- post-secondary education
- accompanying first years of work



(Borggräfe, 2022)

Framework

Method

Findings

Discussion

Future Directions

References

Research Questions

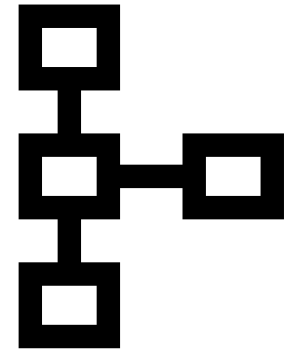
- RQ1: What **types of classroom disruptions** occur in learning factories?
- RQ2: What **preventive and interventive measures** do teachers use to deal with classroom disruptions in learning factories?

Method

- Expert interviews with teachers
 - Semi-structured
 - Guideline-based
 - Partly held online and face-to-face

- $n = 7$

- Qualitative content analysis using MAXQDA 2022



(Mayring, 2019)

Framework

Method

Findings

Discussion

Future Directions

References

Findings - RQ1: Types of disruptions

Technical disruptions

- Wear and tear
 - Happens over time
 - Depends on the frequency of use
- Minor failures
- Unknown (total) failures
 - Suddenly
 - Not instantly repairable

A school year has now gone by and now there are disruptions, which are actually not because of the lesson itself, but rather by technical problems when there were many colleagues involved.

(Teacher G)

If it [the LF] just fails completely, then you just stand in front of the class and then nothing works.

(Teacher F)

I've also had some total failures.

(Teacher F)

Framework

Method

Findings

Discussion

Future Directions

References

Findings - RQ1: Types of disruptions

“when they play, when they bend [parts with] their fingers all over the place, just for fun, and at some point, this part breaks off”

“If only one person just sits there and doesn't do anything, ok. This can also be interpreted as a disruption”

“Then maybe some little games start again with the neighboring table, so that you annoy them, pull a plug somewhere again or press a reset button on a computer or all sorts of things.”

Of course, they are often missing and don't come for weeks or something like that, for example. That's difficult, yes.

Nevertheless, some do it, but they know exactly - it's also in the school and house rules - that it's strictly forbidden.

(Teacher C)

Student disruptions

- (Un)Intentional improper use
- Non-participation
- Joking around
- Deflection
- Unpunctuality
- Absence
- Rule breaking

Framework

Method

Findings

Discussion

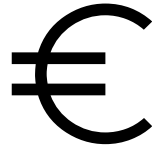
Future Directions

References

Findings - RQ1: Types of disruptions

- Classroom disruptions seem to occur less in learning factories

- High (monetary) value



- Relationship of trust



- Motivational learning environment

- Students age



Framework

Method

Findings

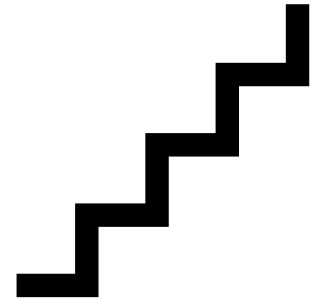
Discussion

Future Directions

References

Findings - RQ2: preventive and interventive measures

- Teachers feel well prepared
- Prevention > intervention
- Teachers compose their groups with care
- Good planning: learning in LFs is heavily group orientated
 - Disruptions, if noticed, are addressed individually
- Escalation process



Discussion

■ RQ1:

- Disruptions found can be sorted by systemizations for disruptions in digital teaching:
 - Aggressiveness
 - Internet slacking
 - Lack of communication
 - Seeking unallowed assistance

- Illicit social behavior
- Operation errors
- Technical errors

(Li & Titsworth, 2015)

(Meinokat & Wagner, subm.)

Framework

Method

Findings

Discussion

Future Directions

References

Discussion

■ RQ1:

- Only few students can participate in a learning factory setting
→ missing disruptions?

- Research is teacher focused



(Meinokat & Wagner, 2022)

Framework

Method

Findings

Discussion

Future Directions

References

Discussion

■ RQ2:

- Teachers view equal's research

(e.g. Kounin, 2006; Fauth et al., 2018)

- Teachers use existing strategies and barely have to adapt them → similar to computer science classes

(Deryakulu & Akbaba-Altun, 2014)

- Lower escalation tolerance

- Methodological options limit the teachers' room for measures

Framework

Method

Findings

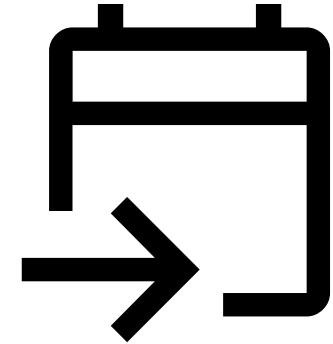
Discussion

Future Directions

References

Future Directions

- More research needed
 - Students' point of view
 - Greater numbers of interviewees
 - Differentiation of learning factories
- Long term effects of good classes in learning factories
- Transferability of the results to and from other areas



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Framework

Method

Findings

Discussion

Future Directions

References

References

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