

# EdTech: Comproved Evaluation

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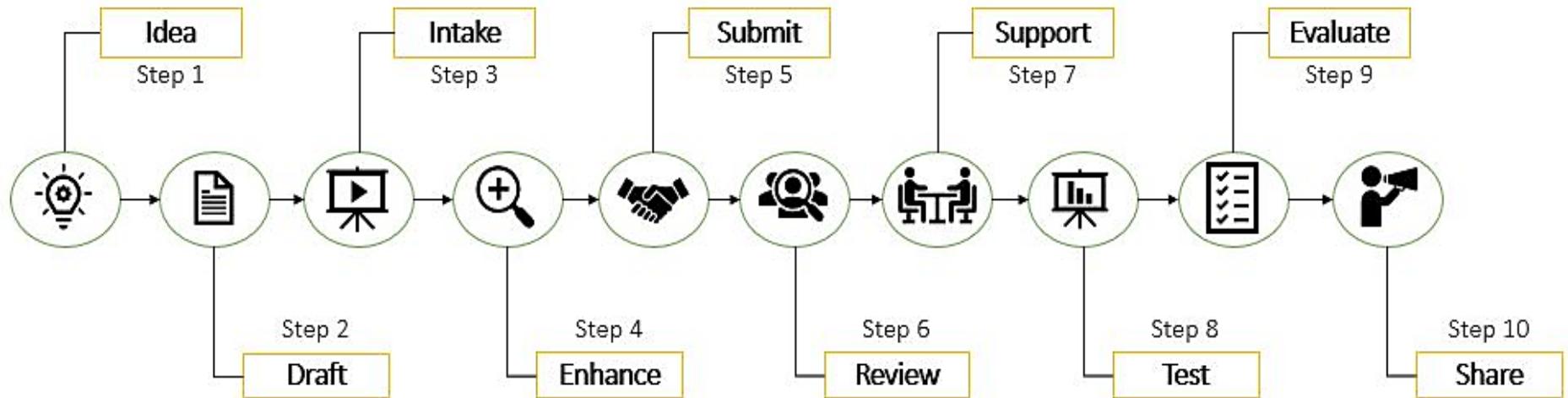
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# EdTech Community

- Supporting teachers who experiment with new EdTech tools in education
- Enhancing quality of education at WUR with EdTech tools



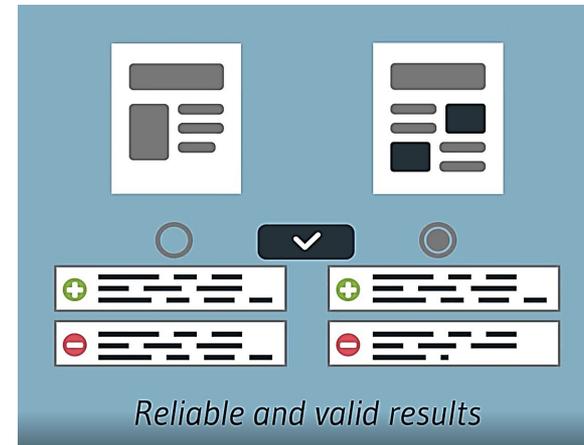
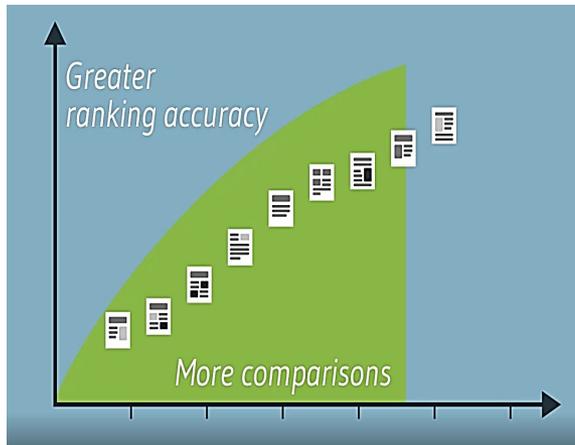


# Overview of Comproved



# Overview of Comproved

- An assessment tool based on comparative judgements
- Goals of Comproved:
  - Reduce workload of teachers
  - Improve quality of assessment





# Methodology

## Course detail

### Chair Group:

- ELS

### Language of Instruction:

- English, Dutch

### Credit:

- 1 ECTS

### Contact hours:

- 12

## Why this course?

### • High workload

- ✓ 1050 students each year
- ✓ So many reflection reports

### • Replacement for student assistants for assessment

## Periods offered

### • Period 2

- ✓ (Comproved-Tested, 2020-2021)
- ✓ Students: 188
- ✓ Teachers: 5
- ✓ Student assistants: 10
- ✓ Extra trainer: 10
- ✓ Extra student assistants: 3

### • Period 5

### • Period 6

### Grading:

- The presentations (50%)
- The reflection assignment (50%)



# Data collection



Course

## Students' Experiences

- PACE
- Focus group discussion (N=5)



## Teachers' Experiences

- Focus group discussion (N=6)



**Note:** Participated students in the focus group discussion have received both types of feedback (traditional feedback and feedback from Comproved).



# Data collection

## ■ Focus group discussion questions for teachers:

1. To what extent Comproved was mandatory or optional to be used by teachers and students?
2. Are you generally satisfied with using Comproved? Why No/Yes? Rate from 1 to 10.
3. To what extent Comproved was successful in attainment of goals?
4. Has Comproved added any other values for students' self-practice/skill developments?
5. How would you explain ease of use of Comproved? Was it user friendly?
6. From your point of view, what were the weaknesses and strengths of Comproved?
7. Do you have any suggestions for further improvements of Comproved?
8. Would you recommend using Comproved for other courses? Why no/Yes?



# Data collection

## ■ Focus group discussion questions for students:

1. Are you generally satisfied with using Comproved? Why No/Yes? Rate from 1 to 10.
2. To what extent Comproved was successful in attainment of goals?
3. Has Comproved added any other values for your self-practice/skill developments?
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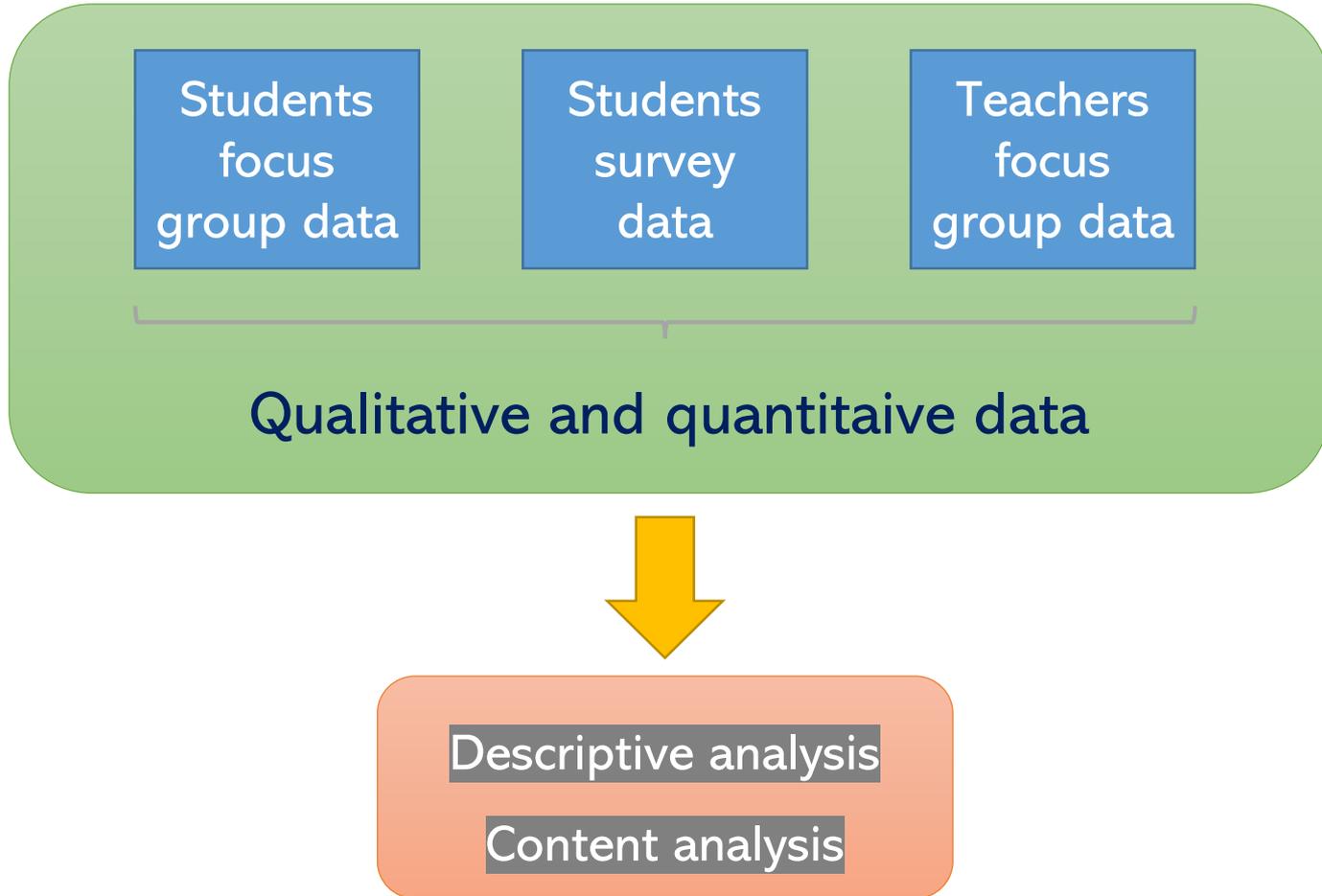
# Data collection

- PACE questions for students:

1. How do you rate quality of the feedback you received from Comproved on your submitted reflection report? (Please rate from 1 to 10)
2. Which aspect(s) of the feedback do you regard to be useful/ not useful for your future learning?



# Data analysis





# Findings

## Teachers



## Satisfaction (teachers)

- Teachers' satisfaction rate was 5.8 out of 10 [N = 6].
- Feedback via Comproved was general and superficial
  - *"...Now [in Comproved] it's more general and superficial [feedback]."*
  - *"I do like the concept of Comproved but I am not really happy with it. Feedback was not so much in-depth in Comproved."*
  - *"I think when I evaluated reports with the rubric, that was much more in-depth evaluation than now in Comproved."*
- Workload increased
  - *"Things worked out towards the opposite as we expected: the time needed to use Comproved in a valid way, doubled our old method."*
  - *"It turned out that each teacher and tutor should assess hundred comparisons, which was more than one day work."*



# Attaining goals (teachers)

## ■ Reversed effect on workload of teachers

- *"...This workload goal wasn't reached. It just took way more time than we expected."*
- *"It [Comproved] quite increased the time we needed for grading reports"*
- *"...We could decrease it to 53 comparisons for each assessor and still that was not bearable."*

## ■ Quality of assessment decreased

- *"We had to find a way to make comparisons [in Comproved] manageable so that was starting point and also one of the reasons why we restricted report [number of words to 2000]. This strict format sort of declined the quality of feedback."*
- *"Due to strict format of report, there was less room to add personal reflections which made comparisons very difficult. Because, students had more or less the same story over and over again."*
- *"You do not assess the report, you compare the reports. It does not feel like an assessment. You say the one is better than the other, but maybe the better one still is really worse."*
- *"Comparison is not really an assessment."*



## Added values (teachers)

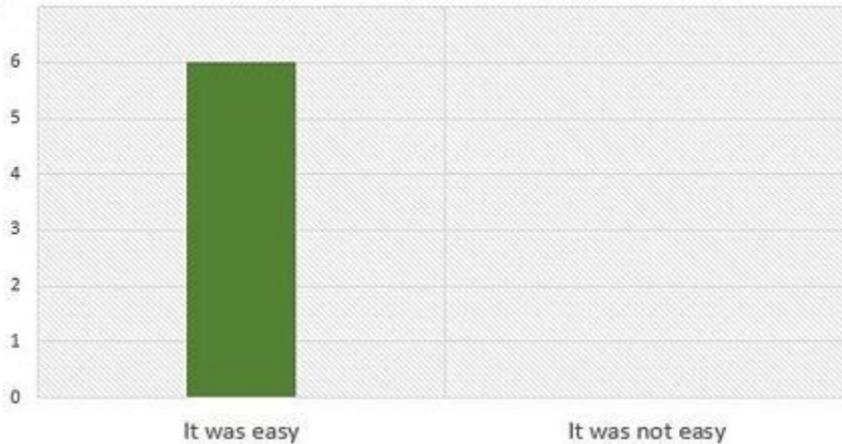
- Less biased assessment

- *“I think the only effect that could be noticed by students is to take away the specific biases that one of the teachers has because now the document is judged by multiple reviewers.”*
- *“...Each report was seen 15 times by different teachers and tutors. So it was not depended on one assessor.”*

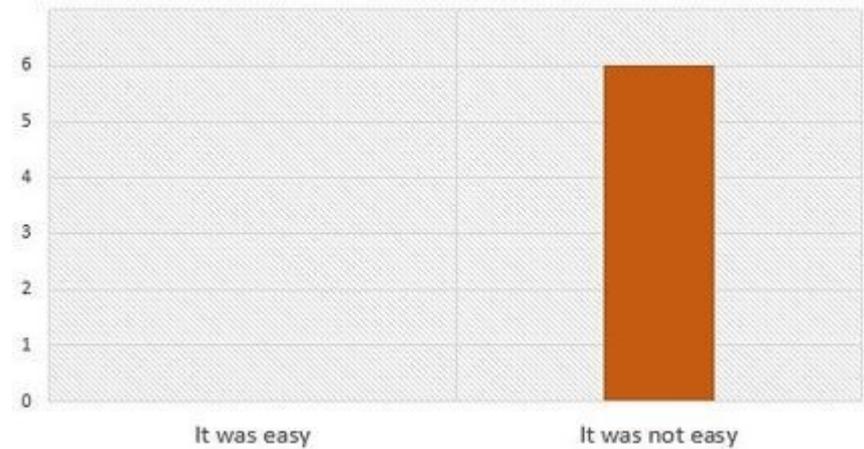


## Ease of the use (teachers)

### Technically



### Emotionally



- *“It is not user friendly [emotionally] because it really makes me depressed to use this way of grading and not being able to leave feedback the way I want to.”*
- *“I got many messages from teachers, like oh I am on half way [name of the teacher] help me please.”*



# Suggestions for improvement (teachers)

- Being able to immediately insert feedback in the report
  - *“I really want the option, during scrolling through these reports, I want to be able to leave immediate feedback in the document and also in the sideline.”*
  - *“I really want some quick comments, because some of my feedback is generic but still applies ...”*
  - *“I also want to be able to put comments in every report that I see.”*
- Use it with a regular teacher team
  - *“Well, a practical thing now is that we need almost 30 assessors to get this job done. So if we would ever use it again there should be a way to do it with a regular teacher team.”*



## Recommendations for use (teachers)

- Maybe valuable for other (more open and complex?) assignments
  - *“Maybe it can be used for assessing more academic work like essays where there is more academic criteria and it is not very restricted format but also open. So, the essays are not the same and it can be compared. I can imagine for those cases, the tool could serve a bit better.”*
  - *“I still think for some other assignments it can be very valuable but then there should be some criteria, like the focus should be on the grade instead of feedback.”*



# Findings

## Students



## Satisfaction (students)

- Students' satisfaction rate was 6.2 out of 10 [N = 5].
- Similar/repetitive feedback
  - *"...My feedback [from different assessors] was a lot the same. It was like four times the same feedback."*
  - *"Teachers' feedback to me was the same and they all gave me the same feedback."*
- Not much feedback
  - *"The amount of feedback with Comproved at least for me was significantly lower than the amount of feedback with the rubric."*
  - *"I only got 6 points of improvements [from Comproved] while with the rubric I got a lot more feedback."*
- Difficulty to interpret given points with the system
  - *"...In rubric you can actually see how much points are awarded for each thing. While with Comproved you just got a plus point or a minus point. You don't really see how much it matters."*



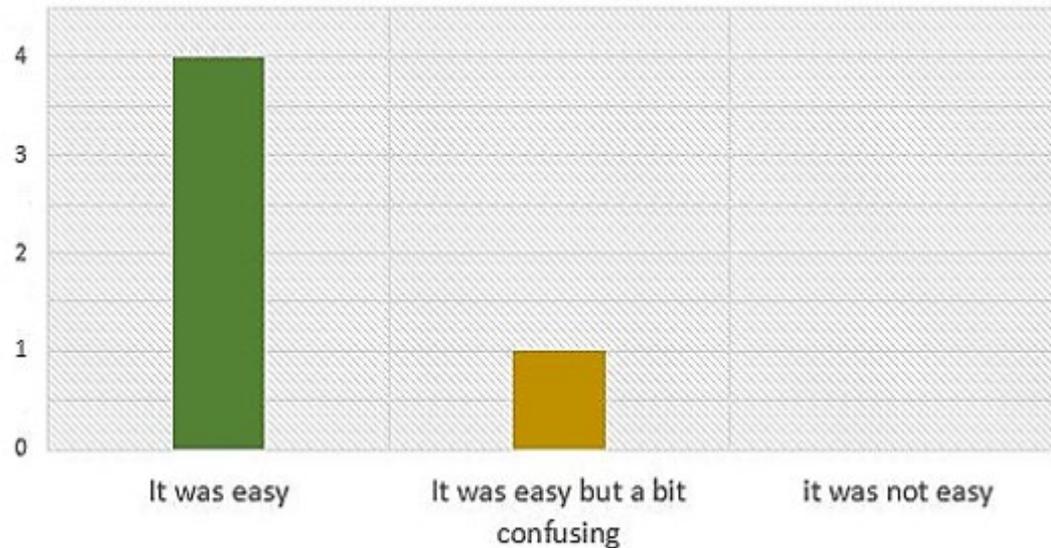
## Added value (students)

- More reliable (less biased) assessment!
  - *“I do like the fact we get feedback from different teachers, because it becomes more valid.”*
  - *“I think the strength is that multiple teachers can give a feedback. So it means more reliable feedback.”*
  - *“You can get feedbacks from more teachers so it is more reliable. Yeah that’s all.”*
  - *“...It becomes more valid when you get more feedback.”*

**Note:** Students mentioned that they have received similar feedback from different teachers which could be a kind of implication for the reliability of the assessment by Comproved.



## Ease of the use (students)



- *"...There was a little bit confusion between students about what writing [points] was about."*
- *"Maybe we could have a bit more explanation about this before, because...like I have 0.2 and what's this point about and maybe that could have been explained better."*

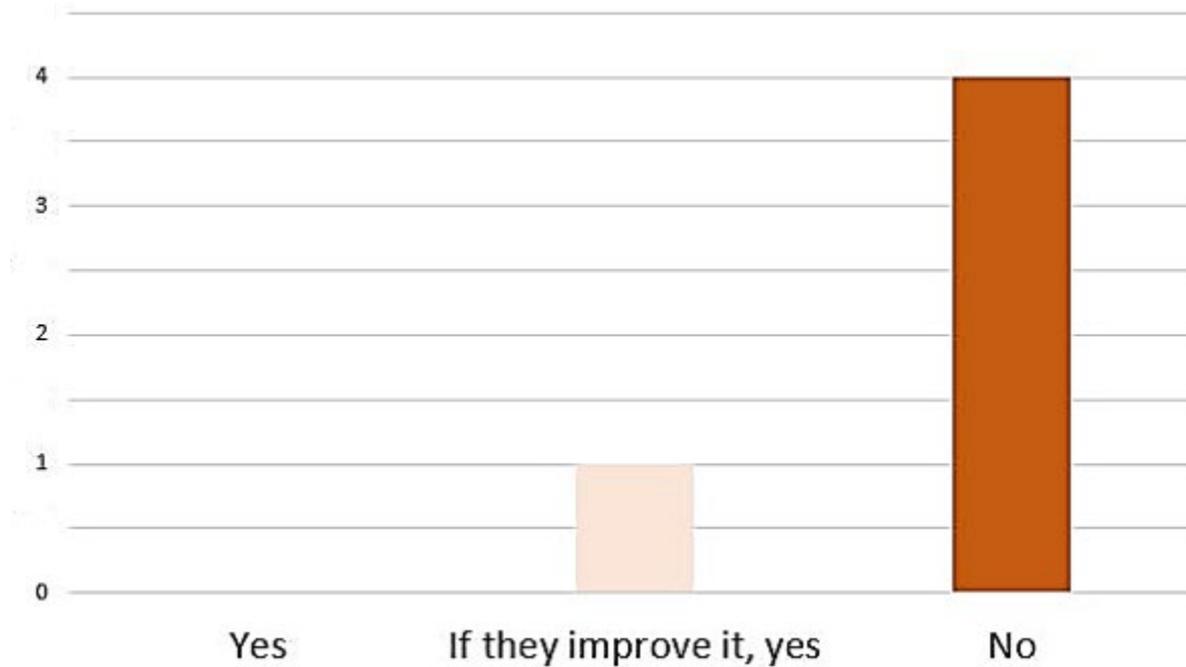


# Suggestions (students)

- Make feedback more in-depth and personalized
  - *“...Maybe they could add like some personal feedback from every teacher, because now it is just general feedback.”*
  - *“We need more deeper details on our essay, because now my feedback was mostly the same.”*
- Provide instructions and explanations for points given
  - *“You can’t see any marks [in Comproved] and that wasn’t what we expected. So that was a bit confusing. If they could have communicated with us that could have made it more clear for us.”*
  - *“Maybe we could have a bit more explanation about points... .”*
  - *“ Maybe that could have been explained better.”*



## Recommendations for use (students)

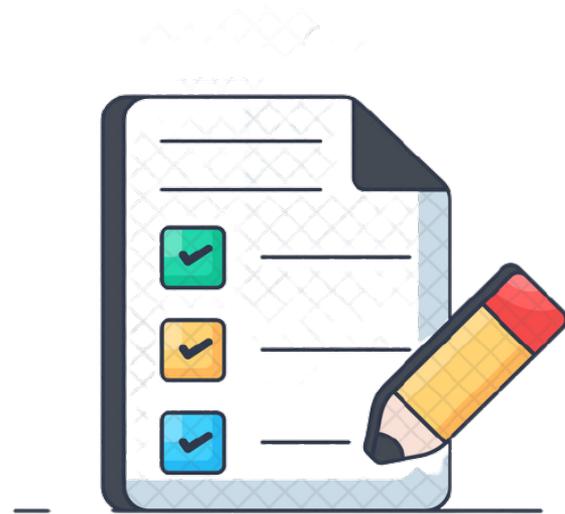


- *“At the moment I wouldn’t [say] yes. But [if] there was a little points of improvements, I would say it’s a better alternative. But at the moment not.”*
- *“No.”*



## PACE results (students)

- Perceived usefulness of feedback received from Comproved (N=22):
  - 5.81 out of 10
  - *“2000 words were not a lot and I did not have enough words left to write a lot about external sources I used.”*
  - *“Almost all feedback was illustrated with examples, which was useful! a few were quite short, like this student could have elaborated a bit more.”*
  - *“Only a few points for improvement were reported.”*
  - *“Feedback was a bit vague.”*
  - *“The feedback from my reflection report did not contain useful things for future presentations.”*
  - *“The tips and tops were good, but the grades were pretty low and that wasn't really explained why.”*



# Conclusion



## Conclusion

- Assessment is more valid (different teachers) and less biased (+)
- Comproved is technically easy to use by teachers, but not pleasant emotionally (+) (-)
- Teachers and students were dissatisfied with Comproved (-)
- Feedback in Comproved is more general and not in-depth (-)
- Comproved increased the workload and time of teacher (-)
- Comproved is not highly successful in attaining its goals (-)

# Recommendation

for improvements of Comproved

# Recommendation for improvements

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- Instructions on how Comproved works (both for teachers and students)
- Decrease the workload (assessment with regular teacher team)
- Enable to deliver in-text feedback for each section of the report
- Having a function of leaving quick and generic pre-defined comments on the report
- Maybe it can be used for quick grading and formative assessment and not for tasks which detailed feedback for improvement is crucial



Thoughts/Questions?

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