





#### Educational context in Sweden

- a ten-year compulsory school (preschool-class year 9)
- after that, the young students can apply for a three-year upper secondary education
- upper secondary education consists of two tracks: vocational program and higher education preparatory program
- to be able to apply for upper secondary school, a passing grade in mathematics, Swedish and English is required
- √86% of the students in year 9 are qualified for upper secondary school (2020)

# A final diploma from upper secondary school is a key to success

 Without a full diploma young people risk ending up in unemployment, poverty, exclusion, bad helath...

# A final diploma from upper secondary school is a key to success

- 15 000 swedish students (19,6 %) fail to obtain a final diploma
- For vocational students the mathematics course (Ma1a) is the biggest obstacle

Semistructed interviews among Mathematics teachers & Special teachers, School nurses & School counselors, Principals

Analyzed by thematic content analyse

#### **Overarching purpose:**

to contribute knowledge about what affects vocational students' goal achievement in mathematics

#### Purpose of this study:

to compare three different staff groups' views of mathematics difficulties at vocational programs in order to detect differences.

### school fatigue

Students have general school fatigue Students are tired
due to excessive
workload due to
bad organization of
special educational
support

Students are tired of mathematics because they struggled so hard in Year 9

Mathematics teachers & Special teachers

School nurses & School counsellors

Principals

self confidence

Students
want to bee
seen
They are
afraid to fail

Students want to be seen by the teacher but not made public in class
They are afraid of being perceived as stupid

Weak self-image manifests in low motivation, low interest and laziness

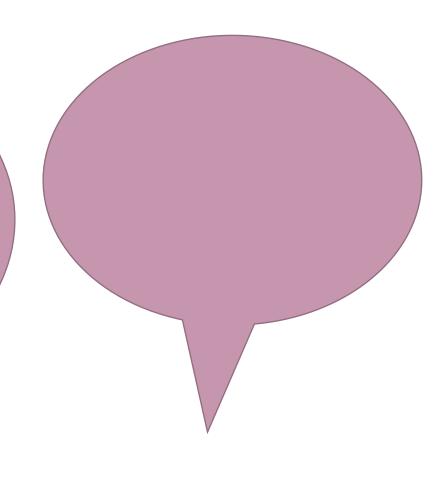
Mathematics teachers & Special teachers School nurses & School counsellors

Principals

test situations

Students have difficulties concentrating during the test situation

Students show great stress **before** and **after** a test They feel uncomfortable having test in a big aula



Mathematics teachers & Special teachers

School nurses & School counsellors

**Principals** 

#### To conclude...

- Staff who do not connect directly to mathematics teaching have important information to give regarding mathematics difficulties
- The perspective of school nurses and school counsellors was in many ways a complement to the teachers' picture
- Different professions look at mathematics difficulties from different perspectives
- Support is likely to have different appearances depending on whose view that is governing
- Joint discussions with representatives from different professions may provide new perspectives that can develop the support for students in risk

### Thank you for listening!

#### References

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