WHAT IS SPECIAL ABOUT SPECIAL EDUCATIONAL NEEDS IN MATHEMATICS?

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Starting point

Often when discussing special educational needs in mathematics (SEM)
and inclusion, students struggling to get access to the mathematics are in focus.

-Low achievers (Scherer, 2020)
-Students with mathematical learning difficulties (Scherer, Beswick, DeBlois, Healey & Opitz, 2016)
-Students with mathematics learning disabilities (Lewis & Fisher, 2016)

There are also to some extent research discussing special educational needs and inclusion in relation to excessive access to mathematics but need something other than the regular mathematics education to get access to learning.

- Gifted students, (Leikin, 2011),
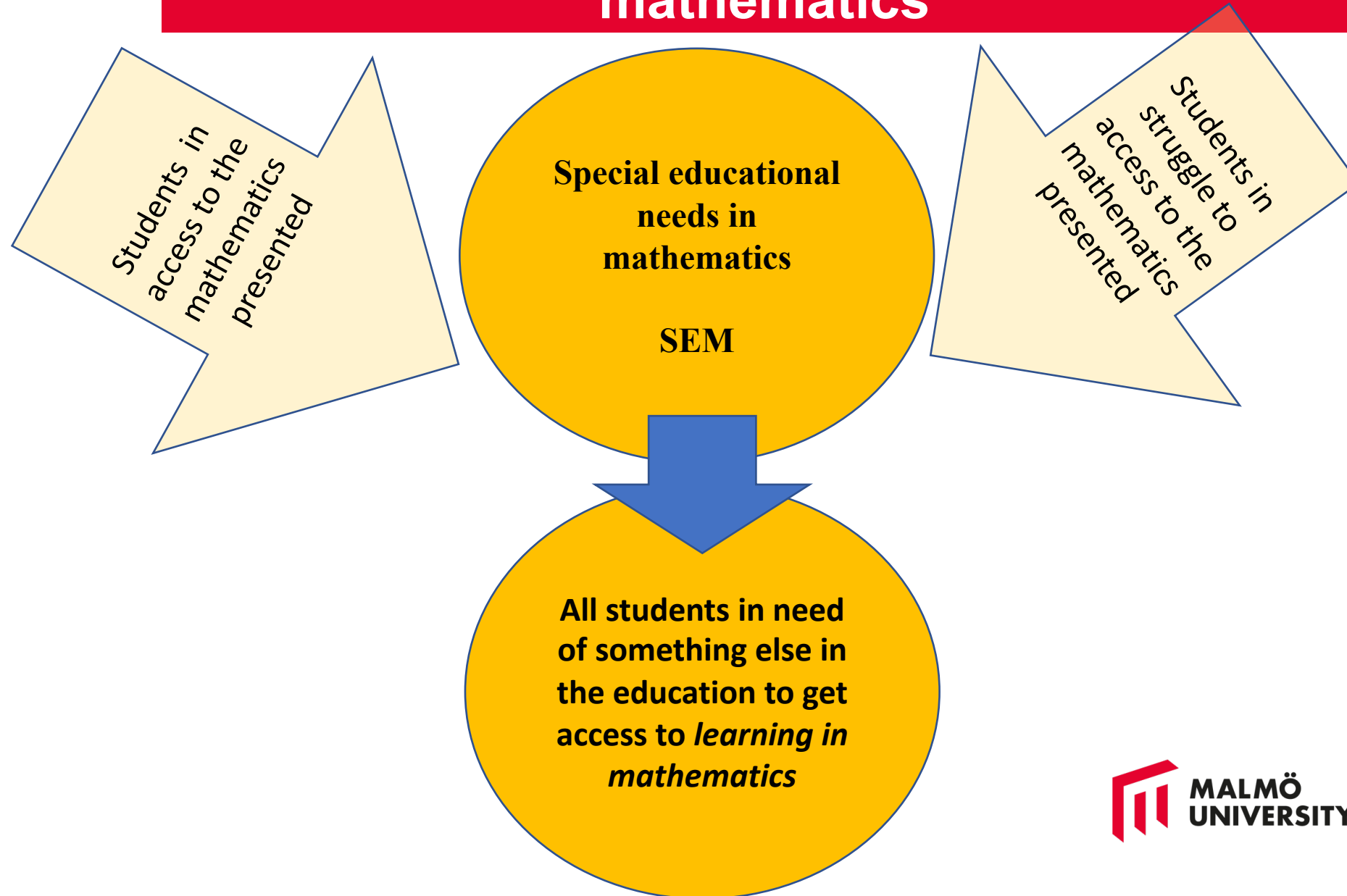- Mathematically talented students (Shayshon, Gal, Tesler & Ko, 2014).

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Difference in use of lables

Research has shown a difference in the use of labels depending on the epistemological research field where it is used (Bagger & Roos, 2015).

- The field of mathematics education tend to be more focused on relational aspects of SEM.

- The field of special education tend to be focused on more individual and categorical aspects.

Non of the fields focus on students that are in excessive access to mathematics, but need something other than the regular mathematics education to *get access to learning* when discussing inclusion and SEM.

SEM is about access to learning mathematics

Students in access to the mathematics presented

Special educational needs in mathematics

SEM

Students in struggle to access to the mathematics presented

All students in need of something else in the education to get access to *learning in mathematics*

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Inclusion in relation to SEM

Reflecting on the connection between SEM and inclusion helps to provide an education so that everybody has the possibility to "attain their maximum potential" (Oktaç, Fuentes & Rodriguez Andrade, 2011, p. 362).

Here, the notion of inclusion becomes both challenging and interesting, as it requires work in different directions, depending on the situation and the students, to cover the diversity of SEM in order to obtain access to learning for every student in an inclusive classroom.

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Then – What is special about SEM?

SEM highlights the need of taking *access to learning* mathematics education into consideration when planning and implementing inclusive mathematics teaching, both students who struggle to get access and student who are in access to the mathematics presented but *need something else to get access to learning*.

The special about SEM is that it is a notion situated in space and time focusing focuses the special need in the learning situation to provide *access to learning for every student.*

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