

# Maths in Prison: ALM Topic Group

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What?



So What?



Now  
What?

(Rolfe, 2001)

# What?

- ▶ Maths in Prison grew from ALM series of Virtual Seminars (VS) during Covid-19.
- ▶ Speakers from Maths in prison contexts presented at two events and stimulated discussion.
- ▶ ALM chair and trustees suggested a Topic Group.



## What we did...

- Circulated invitation to
  - ALM membership
  - Virtual Seminar participants
  - Local networks (education and prison)
- Set date
- Sent Jamboard link

## Questions we asked participants



- ▶ What is your name?
- ▶ What is your workplace? Where is it located? What is your specific interest in Mathematics teaching?
- ▶ What is your students' profile?
- ▶ What are your students' goals?
- ▶ What are your goals for the future of MiP?
- ▶ What are your optimal times to meet?
- ▶ What dilemmas and challenges do you meet in your work?
- ▶ What words would you include in our community glossary?

## Purpose of questions

- ▶ To connect.
- ▶ To find out type of institutions, for example, secure or open.
- ▶ To find geographical context and possibly form local clusters.
- ▶ To see age and nationality profile
- ▶ To understand motivations
- ▶ To help plan.
- ▶ To plan a calendar and rotate times for different time zones.
- ▶ To understand ethical and moral issues relevant to the work.
- ▶ Suggestion: include terms for students, staff, Mathematics.



# Our Students

Minors and adults:  
< 18 ≥ 70.

People in their countries  
of birth and those born  
outside.

Nationalities include:  
UK, Ireland, South and  
Central America, Asia,  
Central Europe,  
Indigenous (Gypsy,  
Traveller, Roma).

Duration: short- and long-  
term prisoners.

Men and women.

Divisions: Gang and  
political affiliation.

All Maths levels.

Certification:  
Mostly none.

Childhood Trauma.

Mental health, Addiction.

Specific Learning Needs:  
Diagnosed and  
Undiagnosed.

# So What?

As the students vary in every way - age, culture, life experiences - all they they have in common is....

- ▶ They are here now to learn Maths.

## Some of Our Students' Goals

- ▶ To prepare for release - and further education.
- ▶ To understand their children's Maths homework.
- ▶ To start up their own business.
- ▶ To keep the brain active.
- ▶ To get a qualification.
- ▶ To get a better paying job.
- ▶ To learn the Maths they did not learn yet:
  - ▶ e.g. Fractions, Algebra, negative numbers

# Our Dilemmas and Challenges

- ▶ **Infrastructural:**

- ▶ Very limited computer access
- ▶ Limited or no internet, so advance planning needed.
- ▶ Low digital skills in students.
- ▶ Restrictions on teaching materials (calculators, geometry sets...).
- ▶ A paper based system works and teaches good habits.

- ▶ **Moral:**

- ▶ How to challenge yet protect vulnerable students.
- ▶ How to handle crime related activity in class:
  - ▶ Maths skills and concepts have been learnt from illegal activities.
  - ▶ Conversations.

# Our Specific interests in Maths education

- ▶ Teaching Methodology for .....
  - ▶ Arithmetic, +, -, x, ÷, %, fractions, decimals. money conversion, algebra. Language / literacy. Connecting to real life Maths skills.
- ▶ Maths Resilience and Attachment Theory.....
  - ▶ Growth, anxiety, comfort. Forming bonds.
- ▶ Students Lifeworlds....
  - ▶ Fields of knowledge, e.g. social group, family, work, community.
- ▶ Inquiry Based Learning ...
  - ▶ Help students to be their own "gatekeepers" to lifelong learning.

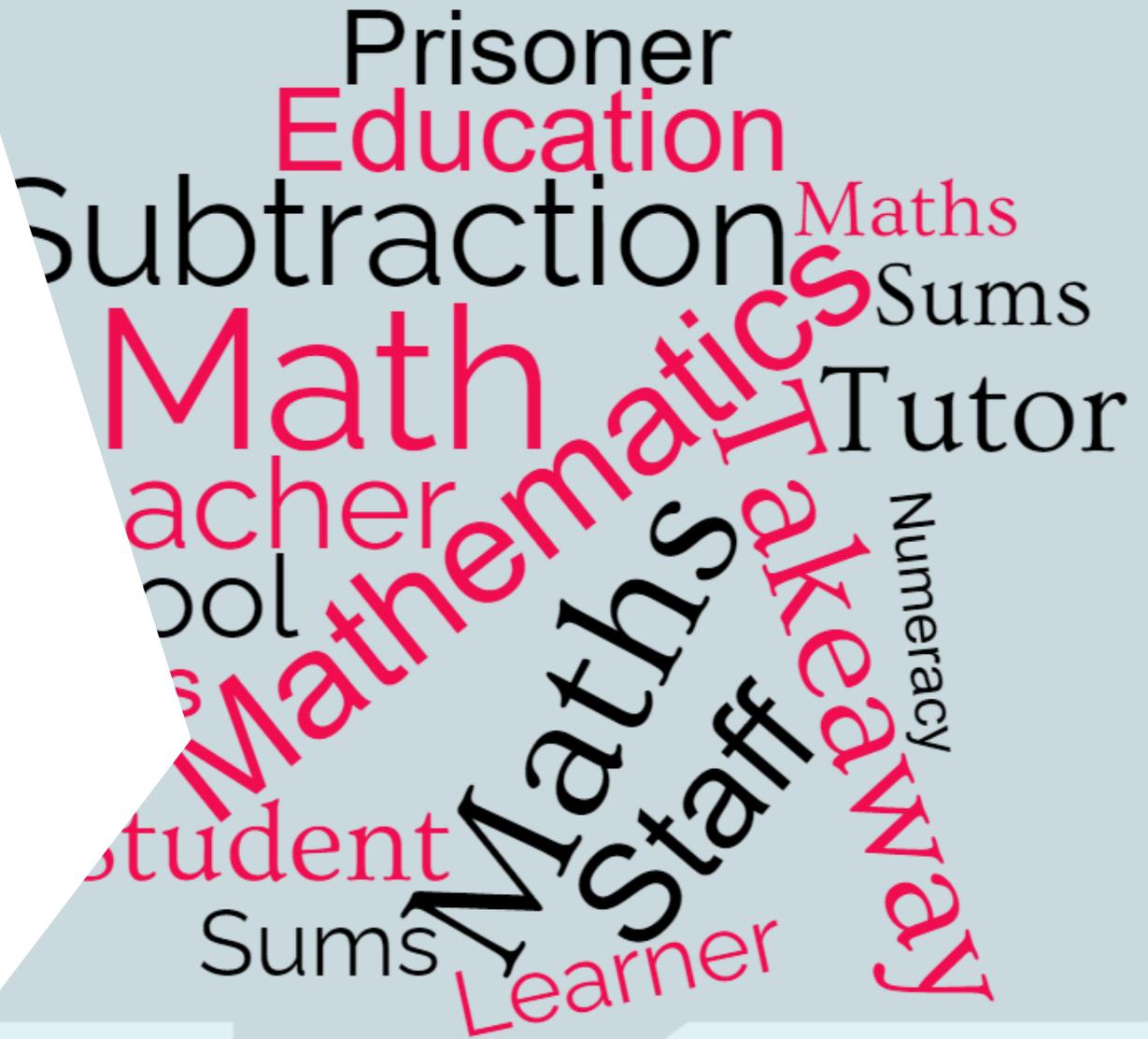
# MiP Group Goals

- ▶ To investigate qualifications available, including trades / apprenticeships:
  - ▶ What accreditation is there, and what do we to do to develop this?
- ▶ To share lesson plans on shared learning objectives:
  - ▶ e.g. subtracting negative numbers, fractions.
- ▶ Share experiences on teaching Maths in prison, and how it differs from teaching Maths in other contexts:
  - ▶ Social/emotional purpose, Maths competency, life-long learning, for getting a job, further education.
  - ▶ What are the differences, are they unique to prison or can all students benefit from these insights?
- ▶ Share relevant research:
  - ▶ Book or film club.

# Now What?

- ▶ Gather hard evidence on the value of education for prisoners.
- ▶ Invite more universities to work with prisons - with students and teachers.
- ▶ Share knowledge (e.g. Swedish computer system.)
- ▶ Investigate the role of emotions - for students and teachers.
- ▶ Consider Maths as a gateway subject.
- ▶ Investigate training and Continuing Professional Development (CPD) for teachers.
- ▶ Develop links to other groups and countries.
- ▶ Develop ways to communicate about the group.

# Develop Community Glossary



A word cloud of math-related terms. The words are in various sizes, colors (black and red), and orientations. The most prominent words are 'Mathematics' (diagonal, red), 'Math' (horizontal, red), 'Subtraction' (horizontal, black), 'Prisoner Education' (horizontal, black), 'Maths' (horizontal, black), 'Teacher' (horizontal, red), 'Student' (horizontal, red), 'Sums' (horizontal, black), 'Tutor' (horizontal, black), 'Maths Staff' (diagonal, black), 'Learner' (diagonal, red), 'Numeracy' (vertical, black), and 'Takeaway' (diagonal, red).

Prisoner  
Education  
Subtraction  
Maths  
Math  
Teacher  
School  
Mathematics  
Student  
Sums  
Tutor  
Maths Staff  
Learner  
Numeracy  
Takeaway



Thank You!

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