

Solving the problem of tertiary mathematics: A team effort

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#### **Introductions**

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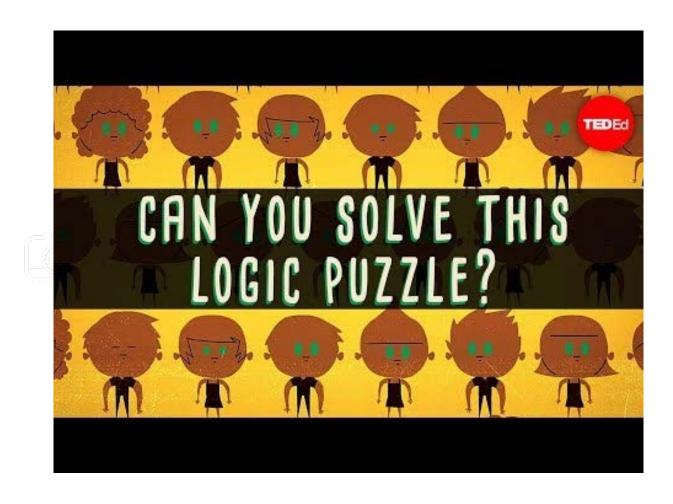
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#### Ice breaker





#### Can you solve this logic puzzle?

- 100 prisoners, all have green eyes; they have never seen the colour of their own eyes.
- Any prisoners can approach the guard and ask to leave. If they have green eyes, they can leave, else they will be toss into the volcanoes.
- You tell them: "At least one of you have green eyes."
- 100 days later, all the prisoners have gone, each asked to leave the night before.





#### **Outcomes**

At the end of this workshop each attendee should have:

An improved understanding of the problem and challenges of tertiary maths (more "common knowledge");

More and new ideas for interventions within your area of involvement; and

The ability to make a judgement on the feasibility of new ideas in your institution.





#### Ground rules



Everyone should participate
There will be a working tea
We are here to collectively engage around
this puzzle
Sharing is caring!



# Explaining the Quasi-Jig saw process







## Phase 1a: There are 2 groupings

- Home group (institutionally/regionally "matched"), we have n groups
- Please name your group (mathematically?)
- Group members (multiples of 4) brainstorm around the theme "Solving the problems of tertiary mathematics: A team effort".
- Share your perspectives to bring the issues to the fore
- Consider all role players in the "team effort" at your institution
- Duration 25 min.





#### Phase 1b: Four areas of interest

- We have identified four facets to illuminate further in the interest groups during the workshop, they are:
  - Student advising (SA) (Blue)
  - Professional development for staff (PD) (Green)
  - Mapping the learning path (LP) (Purple)
  - Data driven decisions (DD) (Red).





# Phase 1b: Home groups for the last 15 min

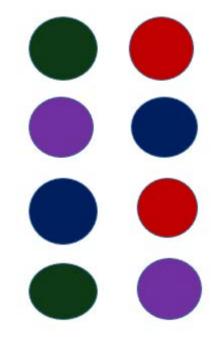
- Share and discuss what is known and done in all four the "facets" at your institution.
- Organise your brainstorming in a way that works for you
- Plan your time to discuss all four facets/interests
- Each person select a colour card indicating a chosen interest.

## Phase 2: The interest groups

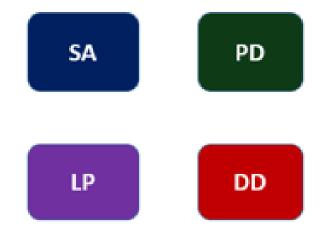
- Move to your chosen group
- Student advising (SA) (Blue)
- Professional development for staff (PD)
   (Green)
- Mapping the learning path (LP) (Purple)
- Data driven decisions (DD) (Red)

Each home group will have representation in all interest groups





A home group

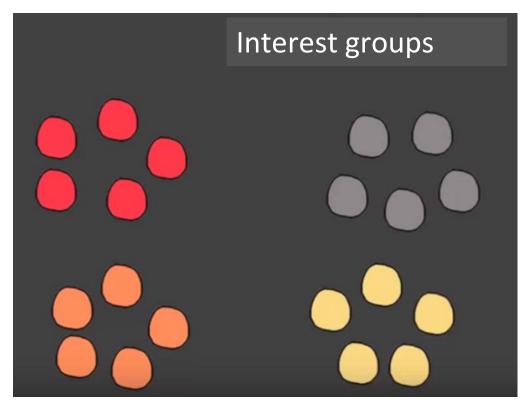


The four facets each becoming an interest group



## Phase 2: The interest group

- Members from the home group join the chosen interest group and engage around the topic
- Develop insights in the problem (guiding questions)
- Discuss possible interventions
- Collate feedback for home group
- Duration 40 min.



#### Phase 3 – Back to "home"

- All four representatives from the interest groups are back, share what was learned
- Formulate what you as a "home group" take away from this session
- Share areas where you will strengthen your current practice
- Decide on a presenter
- Duration 40 min.





# Phase 4 – Feedback to plenary group

 A representative from each home group share their insights and ideas with the plenary group.

Duration 30 min.



# Wrapping up & Feedback





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## 1 min paper

Please give us your impression about the workshop. Indicate if you found it valueble (or not) and justify your answer.

Thank you!

