

Reflections on 'open' for the CGE Cultivator meeting

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Thursday, 20 August, 5-6:30

<https://opendeved.net>



Open Development

Acting Together: Open Development and SDG4

The “Global Learning Crisis”

Many more children are now in school,
but are often not learning the basics.

More effective teacher education
is an important way to address this.

Programmes & Resources

OER4Schools Zambia

www.oer4schools.org



Programmes & Resources: OER4Schools

5 unit teacher curriculum

28 two-hour sessions

Can be used with/without technology


Video materials to support reflection

Developed in:
Zambia, South Africa

Further developed in:
Kenya, Rwanda, Sierra Leone



1.1.1 Introduction and ice breakers [\[edit | edit source \]](#)

 **Whole class dialogue** (30 min): *Introduction to the programme.*

Educator note

It is imperative that you read the text of this session and the following sessions very carefully, and clarify any issues. You should make the learning intentions and the success criteria for the sessions explicit to the participants, perhaps by writing them on the board or printing them out separately. These should be referred to when appropriate as you proceed through the session/s.

Welcome to the first workshop of the [OER4Schools](#) programme. The facilitator will now guide you through some introductory activities.

Educator note

As a facilitator, you should have read the introductory material to the programme very carefully, including "[how to use this resource](#)" and "[how to run workshops](#)".

You now start the session with an ice breaker, and then make essential arrangements.





OER4Schools Workflow

Collaborative editing mediawiki (c.f. wikipedia)

Hosted on <http://oer.educ.cam.ac.uk>

From wiki, export to PDF for print

From wiki, export to ZIM for offline app use (c.f. Medical dictionary)

Programmes & Resources

T-TEL Ghana

<http://oer.t-tel.org>



Programmes & Resources: T-TEL

Transforming Teacher Education and Learning
(T-TEL), Ghana (DFID/UKAID)

40 government Colleges of Education across Ghana
(1,800 tutors, ~ 40,000 students)

Multi-stranded:

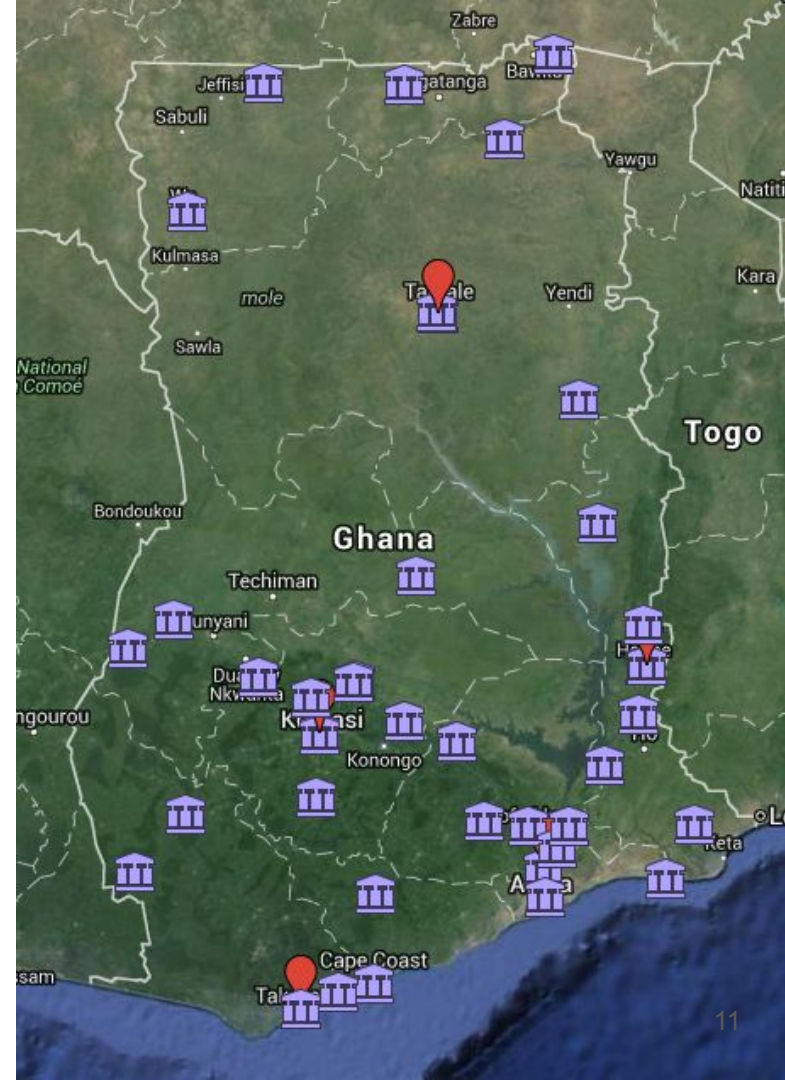
- Tutor Professional Development

- Leadership

- Systemic and institutional change

- Curriculum

- Gender



Programmes & Resources: T-TEL

Tutor Professional Development programme

Weekly PD sessions in all Colleges of Education

Peer facilitated by “Professional Development Coordinators”

TPD framework with 12 Themes, and 5 “teaching strategies” per theme

3 years = 6 semesters; 2 Themes per semester = 10 sessions per semester

Support available from 5 coaches (2 visits to each CoE per semester)

Induction workshops for college-based “Professional Development Coordinators”

Tutor PD curriculum:

- 12 Themes,
- 5 “teaching strategies”
per theme (equivalent
to one session each)

<http://oer.t-tel.org>



I told the student teachers: *The statements written on the board describe some real life and maths situations. Read these and decide whether these would be proportional or not, and under what conditions. Provide your reasons. First think about these yourself, then discuss these with your neighbour. I will ask you later to then talk to another pair to see whether you have the same opinions. Be critical!*

I noticed that all student teachers talked happily to their neighbour in the 'Think-Pair-Share' activity and once working in groups of four, the female student teachers seemed to keep that confidence. Managing the Talk for Learning group work seemed to work like this. Next time I will try the same approach, but with mixed gender 'Think-Pair-Share' (at least for as much as possible). I am curious to see whether it is the working in same gender pairs that gives the confidence, or whether it is just the 'Think-Pair-Share' activity.

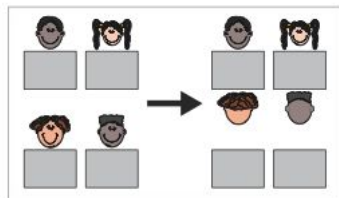


Figure 21. Changing desks arrangements for group work

Do the following have any proportional properties?

- Enlarging a photograph.
- Cutting slices of bread to make a sandwich.
- The equation of a linear equation in one variable ($ax + b = 0$).
- The work done by some number of people in a given time frame.
- The amount of money spent by a number of people to watch a particular movie at a particular cinema.
- Dividing a line segment into a number of equal parts.
- The height of The Flagstaff House (see Figure).
- The circumference of a circle.
- The volume of a cone.
- A tro-tro fare.

The list written by Ms Gertrude on the whiteboard.



Figure 22. The Flagstaff house, Accra

Tutor Discussion



Do the same 'Think-Pair-Share' activity for any three statement of the maths activity above. Then share your ideas with another pair. Limit your time to five minutes in total, just so you have some idea of what ideas your student teachers could come up with.

Discuss afterwards:

- Did this approach make you Talk for Learning about proportion?
- How did doing the 'Think-Pair-Share' before talking in a group of four support you in your learning?
- Would you change anything if you were doing this in your classroom?

PDC Notes

Commentary

The activity asks the student teachers to explore whether and when the examples are proportional (direct or indirect proportionality). Proportional reasoning involves multiplication or division (not addition or subtraction). For example, enlarging a photograph involves multiplying the existing size by a scale factor; the circumference of circle is proportional to its diameter because of its formula; you would expect a tro-tro fare to be proportional to distance traveled but that is not always the case!

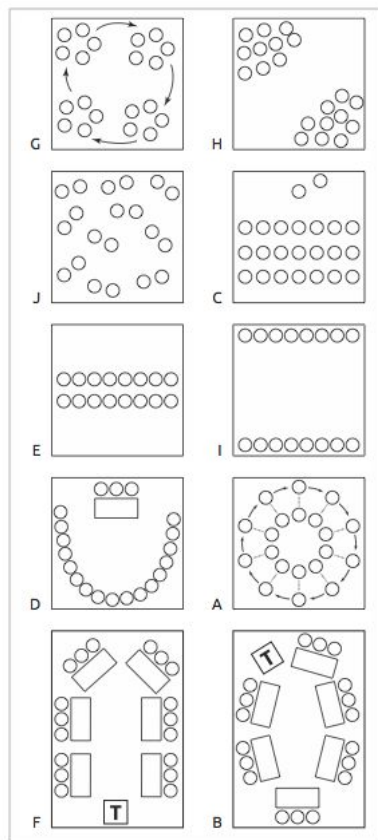


Figure 19. Seating arrangements for interactive teaching and learning

Tutor Discussion



1. In trying to manage Talk for Learning in her class, what class arrangements would you consider appropriate for Ms Amina to use?
2. Why do you think such arrangements are appropriate and necessary?
3. How would such arrangements support Talk for Learning in Ms Amina's class?
4. Would you encourage such arrangements in your class? Why?

More questions specific to English:

- Why might a 'circle' or a 'horseshoe' work arrangement be more effective for language teaching than straight rows?
- What difference does it make if the tutor sits in a circle with the student teachers rather than standing in front of them?

PDC Notes

T3-3 A 2 Plan and Practise Together



Managing Talk for Learning Across the Curriculum

We are now going to plan our own Talk for Learning activity by thinking about the management of the activity and specifically the seating arrangements. If the above examples fit what you are teaching, you can use them. However, you may well be teaching something else, so here are some more ideas from various subjects that lend themselves to Talk for Learning activities with different seating arrangements.

Have a look back at the 'Tips for Work Arrangements and Seating Arrangements' in the introduction to this teaching strategy to help you with your planning.

Philosophy and History of Performing Arts Education in Ghana (Music and Dance - PRA 211)

Plan a lesson on how you would arrange your class to talk more about the philosophy and history of performing arts. Think about how you would arrange your class to encourage and maximise Talk for Learning.



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IN EVERLASTING MEMORY
OF THE ANGUISH OF OUR ANCESTORS
MAY THOSE WHO DIED REST IN PEACE
MAY THOSE WHO RETURN FIND THEIR ROOTS
MAY HUMANITY NEVER AGAIN PERPETRATE
SUCH INJUSTICE AGAINST HUMANITY

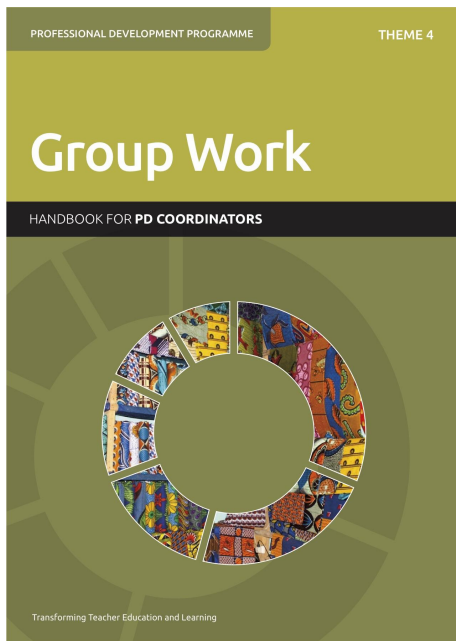


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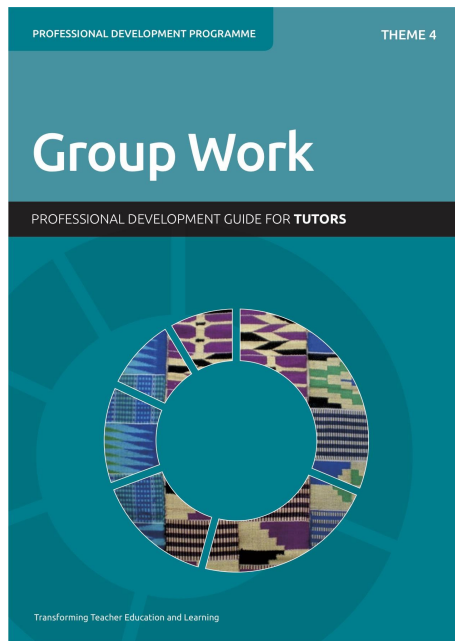
12 themes
12 books



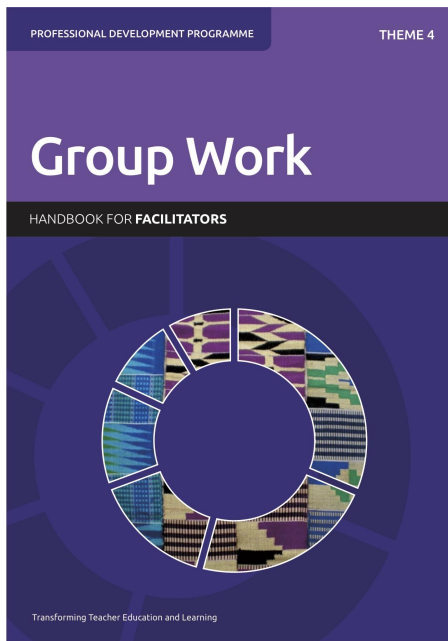
Four versions per book



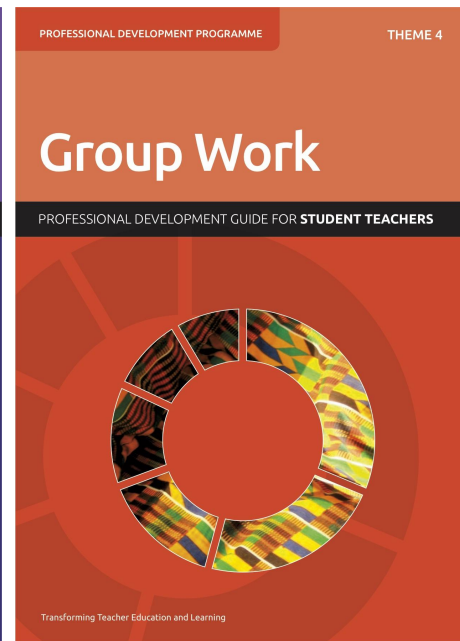
Professional Dev.
Leader/Coordinator



Tutor
(as learner)



Tutor
(as facilitator)



Student Teacher
(practice teaching)

Open Educational Resources

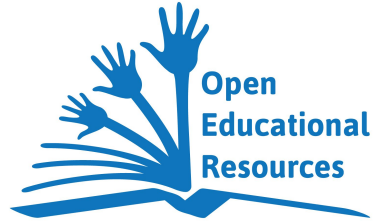
OER4Schools and T-TEL resources are OER.

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Materials can be adapted (subject to CC licence: acknowledgement and e.g. retaining the licence).

→ Potential for scaling and replication (of effective TPD, c.f. E1-E3)

→ Increased potential for interrogation by research (resources = open data)



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OER4Schools and T-TEL are two examples ...



OER TPD programmes available on the continent

One in-service programme (OER4Schools) — with published evidence

One partial pre-service programme (T-TEL) — limited published evidence

Various other resources (e.g. TESSA, resources via OER Africa / SAIDE)

*Not “TPD resources”,
not “classroom OER”,
but TPD programmes.*

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Some more
are coming...

DESPITE

~ 2,000 tertiary institutions on the continent + Colleges of Education

Multi-millions of local and international funding

Urgent need to improve teacher quality (SDG4; 2030)

Programmes & Resources

OPEN-UP RESOURCES

(Various states within the USA)

<http://openupresources.org/>



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OUR QUALITY STANDARDS

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- Unique and “designed in” research-based supports for English Language Learners



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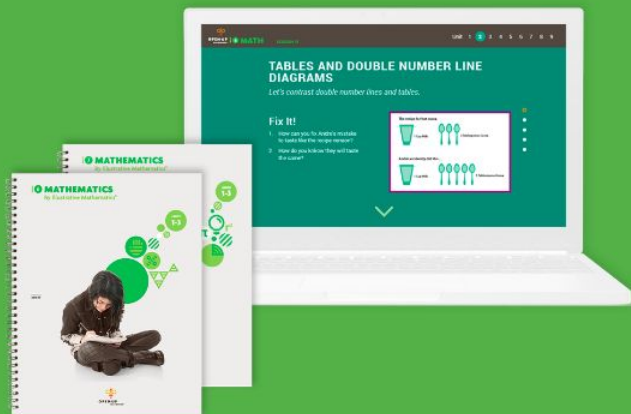
SUPERINTENDENT STEVE HOLMES

Sunnyside School District, AZ


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 District Beta Partners can login [here](#). We will make our materials publicly available in a general release prior to the 2017-18 SY.

LESSON 2

WARM UP: Notice and Wonder: The Isometric Grid

ACTIVITY 1: Translations, Rotations, and Reflections Card Sort

ACTIVITY 2: Transformation Information

SUMMARY

COOL DOWN: Some are Translations and Some Aren't

SURVEY

LESSON 2

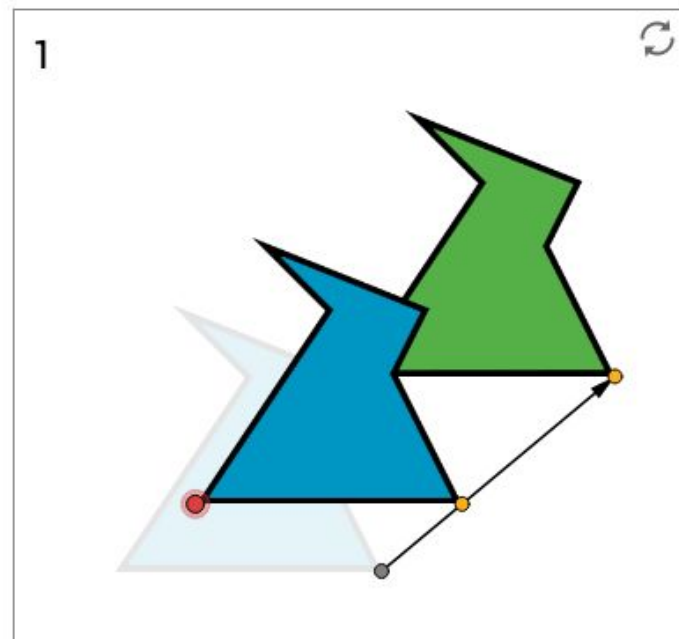
Naming the Moves

Learning goals	<ul style="list-style-type: none">Identify and describe translations, rotations, and reflections.Understand and explain that a reflection is a flip over a line.Begin to use the terms translation, rotation, and reflection.
Learning goals (Student Facing)	Let's get more specific about describing moves.
Required Materials	<ul style="list-style-type: none">geometry toolkitspre-printed cards, cut from copies of this page

Student-Facing Task Statement

Your teacher will give you a set of cards. Sort the cards into categories according to the type of move they show. Be prepared to describe each category and why it is different from the others. You can explore the cards below to see the ways the images move.

Drag the red point. Explore how the image changes.



Shared problem

Shared action?

OER

Open CourseWare

Realising SDG4 by 2030
will require collaboration



Realising SDG4 by 2030 will require collaboration

Capacity building

OEResource sharing

Joint research

Open Educational Resources

What are Open Educational Resources

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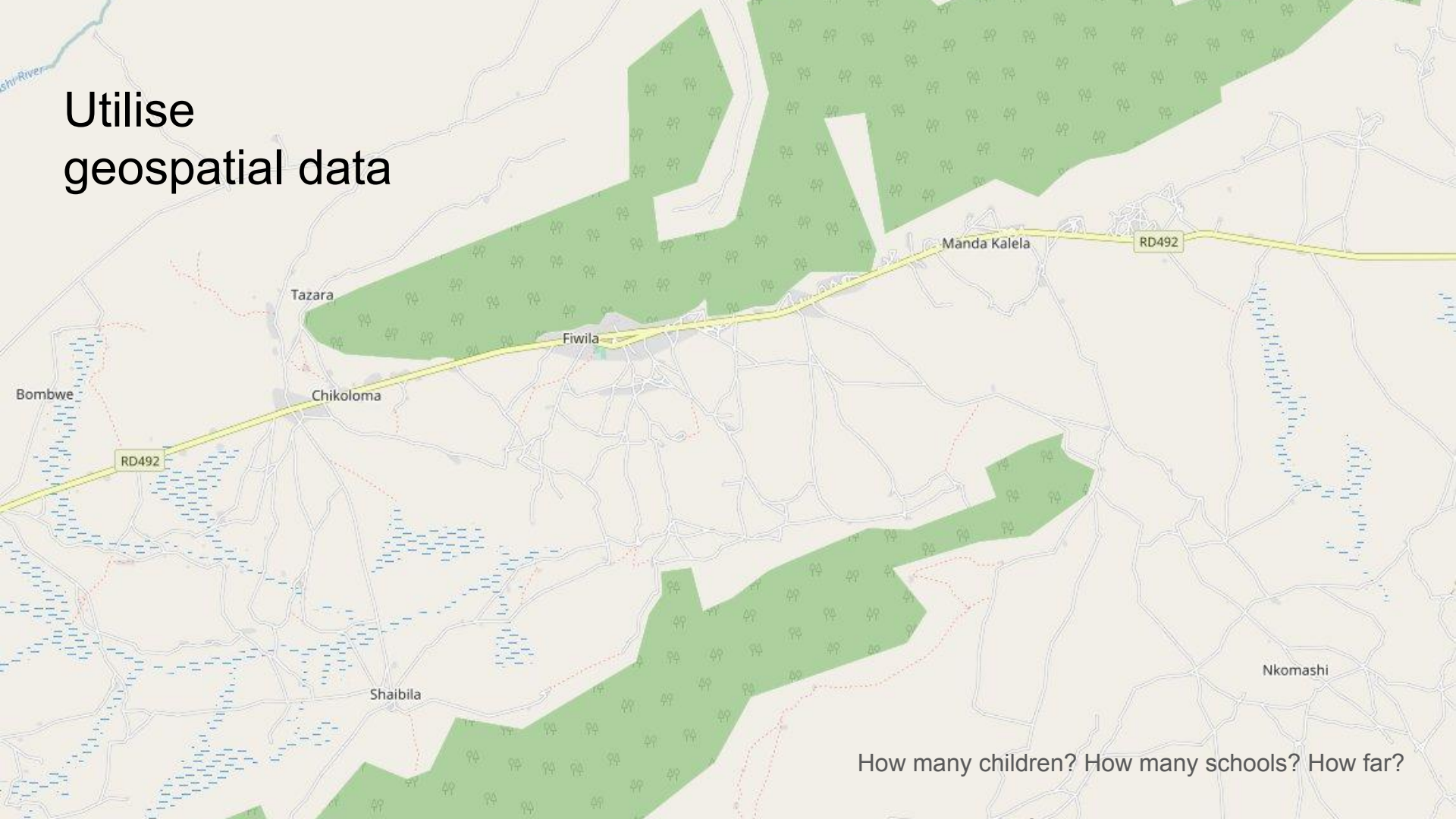
- Permission to distribute
- Permission to adapt
- Requirement to take ownership



Intended for education (primary/secondary/tertiary)

Usually portable (downloadable)

Utilise geospatial data



How many children? How many schools? How far?

About this document

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Website	http://opendeved.net/