

5 TOOLS USED IN SOCIAL SCIENCES

This section contains activities that practice using social science tools:

- Activities to maximize the use of data.
- Activities to better understand how numbers are used in the social sciences.
- Activities to visualise information in different ways.
- Interactive data activities.

These activities are organised under four different types of tools:

1. **Timelines** highlight, group and prioritise important events and put them in order. They are used to study personal, community, and national histories.
2. **Statistics** are data collected through surveys and observation. By interpreting statistics, we can make connections and predictions about communities and societies.
3. To visualise and organise statistics, we can create different types of **charts and graphs**. These tools help students to discover patterns in data, and explore the importance of these patterns.
4. Reading **maps** is an important life skill. This section focuses on the different types of maps that appear in geography, history, and development studies.



Together, these tools help develop the skills necessary to:

- identify how events cause other events, and look at their effect on society.
- ask questions about, organise and analyse data.
- compare and contrast information.
- choose and create appropriate charts and graphs to visualise statistics.
- read and create different kinds of maps for different purposes.
- connect students' own lives and experiences to the social sciences.

Each section starts with some activities where students generate their own tools using information or data about themselves, their communities or their ideas. This is called personalisation. After that, we look at activities to help students understand and use these tools, that you can adapt to the topic you are teaching.

5.1 Timelines

Why Use Timelines?

Timelines show us important moments in history, when they happened, and how much time passed between these events. Days, months and years can be organised on timelines. Timelines also help students to learn about new events and how to connect events they have studied already. Then, we can analyse the order in which events and changes occur. This section shows how to:

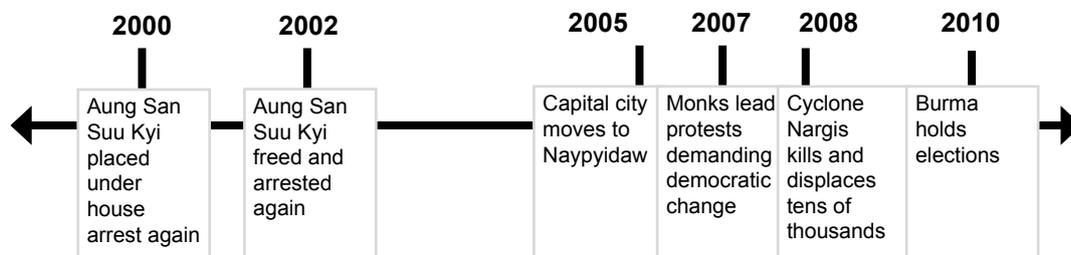
- adapt a timeline from a text.
- connect events and dates.
- put events in order.
- Bring personal and community histories into the classroom.

Often, timelines are easier to follow and to read than a long text, and can be helpful tools when introducing or a reviewing a topic.

Timelines can be made to scale, meaning that all space on the line equals a specific amount of time. For example, if the timeline is 20 centimeters long and covers a period of 20 years, one centimeter on the line would equal one year. If a timeline covers all human history, 1 centimetre might equal 500 years.

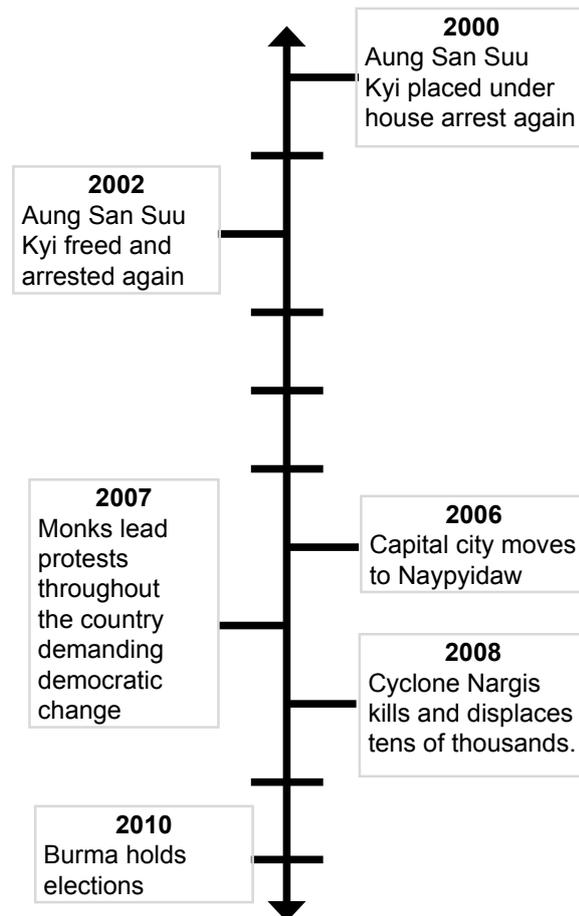
Timelines can be vertical, with events starting at the top and moving toward the bottom, like the one on the right.

They can also be horizontal, and the same information can be read from left to right, like the one below:



Timelines are learning and storytelling tools that can encourage cooperative and communicative group work. They also can be added to student presentations and afterward can be displayed in the classroom as a record of what has been studied.

A Decade in Burma's Political History: 2000-2010



PERSONALISING SOCIAL SCIENCE LESSONS: TIMELINES

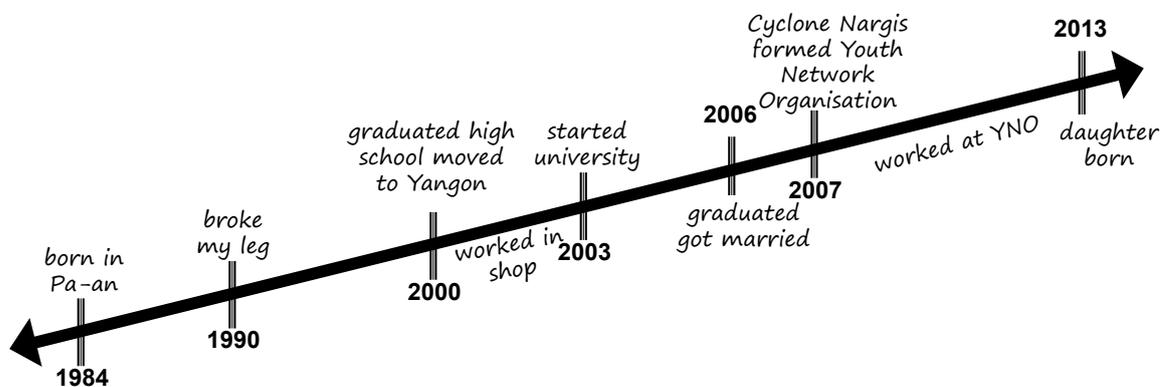
Before – or after – your students use timelines to present the lives of others, give them practice using personal timelines. Applying these skills to their own lives and communities can help students understand cause and effect relationships, make connections between their lives and outside events, and reflect on their own priorities.

5.1.1 Personal Timeline

a. Students identify the most important events in their lives, e.g:

- significant family events (births, deaths, marriage)
- significant education events (starting at a school, graduation)
- significant work events (starting or ending a job)
- significant social events
- achievements
- living arrangements (leaving or moving somewhere)

b. Students choose at least ten important events, and put them on a timeline.



c. Encourage students to add pictures and decorations. Put these up on the walls. Students go around looking at each others' timelines.

Follow-up

Ask the class questions, e.g.:

- Who has the biggest family?
- Who has had a lot of different jobs?
- Who overcame a difficult problem? What was it?
- Who has lived in a lot of different places?
- Who has been very busy during the last five years?

Variation

Do this as an interview. In pairs, students ask each other questions, and create timelines of each others' lives.

Objective: students prioritise and order events in their own lives

Practicalities: students work individually.

Bloom: applying, analysing, creating

EXAMPLE TEXT

Notes on the Text

This text is adapted from a website of biographies (life stories) of famous people.

Another useful site for biographies is *wikipedia.org*, but because Wikipedia is open source (open for anyone to change), you must take care when using it as a reference.

The language is approximately pre-intermediate level English, or CEF A2.

Biography of Nelson Mandela

Nelson Mandela was one of the most loved and respected people in the world. For countless reasons he was and remains a hero to many. He experienced many things in his nine decades, from being tortured to becoming president of the country he loved.

Nelson was born in 1918 into a South Africa that was divided along black and white racial lines. He said he had a wonderful childhood and was a good runner and boxer. He learnt more of the terrible apartheid system when he went to university to become a lawyer in 1943. This led to his campaigning for equal rights and his involvement in the African National Congress (ANC). He became the leader of the ANC in 1950.

The South African government tried to keep Mandela from spreading his message of equality for blacks and racial unity. In 1962, he was sentenced to 27 years in prison. He became famous around the world as an icon of the struggle for freedom in South Africa. Rock stars, actors, politicians and ordinary people campaigned to free him and end apartheid. He was released from prison in 1990.

Nelson Mandela's call for racial reconciliation won him the hearts of millions. He won the Nobel Peace Prize in 1993, and over 250 more awards. A year later, he became his country's first ever black president and served in office until 1999. In his retirement, he continued to tirelessly campaign for many global causes until old age slowed him down. He died on the 5th of December, 2013, aged 95.



Adapted from: http://www.famouspeoplelessons.com/n/nelson_mandela.html

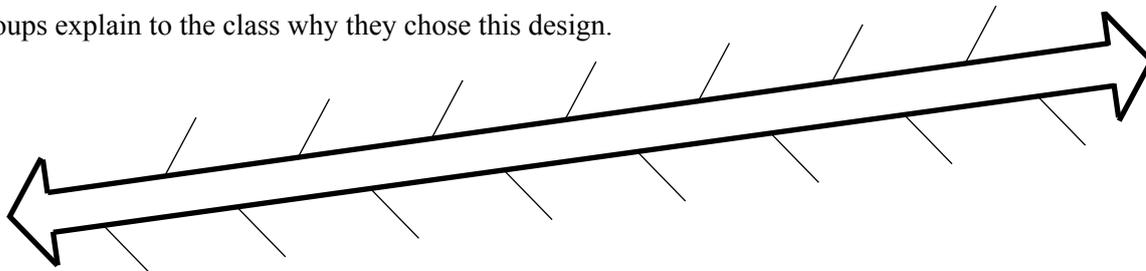
5.1.2 Design a Timeline

- a. Students look at the information they need to put on their timeline, and discuss these questions:
 - How much information will we include on the timeline?
 - What scale is necessary?
 - What design of timeline best presents the information?
- b. Groups design a timeline to present the information.
- c. Groups explain to the class why they chose this design.

Objective: students decide the best format to present information

Practicalities: students work in groups

Bloom: applying, analysing



5.1.3 Text to Timeline

- a. Students identify the most important events in the text.
- b. They design a timeline and put the events, with the years they happened, on it.
Encourage students to write events on the timeline in their own words, rather than copying directly from the text.

Objective: students identify and order events

Practicalities: students work individually or in pairs or groups

Bloom: understanding, applying, analysing

Variation

Tie a piece of string across the length of the class.

Set the scale. For example, the length of two hands could equal ten years on the string.

Students write important events on paper and hang from the string.

You can also do this with tape on the floor or walls of the classroom.



5.1.4 Order the Events

- a. Write events on pieces of paper. Don't use the exact same words as in the text. Make enough for one set per group.

He leads a political organization.

He goes to university to study law.

He is born into a South Africa which is not equal.

Objective: students order event

Practicalities: students work in groups

Preparation: make sets of events on pieces of paper ; one set per group

Bloom: remembering, understanding

- b. Groups put the pieces of paper in order.

Variation

To make this **less controlled**, give groups some blank pieces of paper. Groups add other important events.

Do this as a pre-task prediction activity. Students order the events before they read the texts, or get information about the topic. After they get the information, they check whether their order was correct.

5.1.5 Timeline Race to the Board

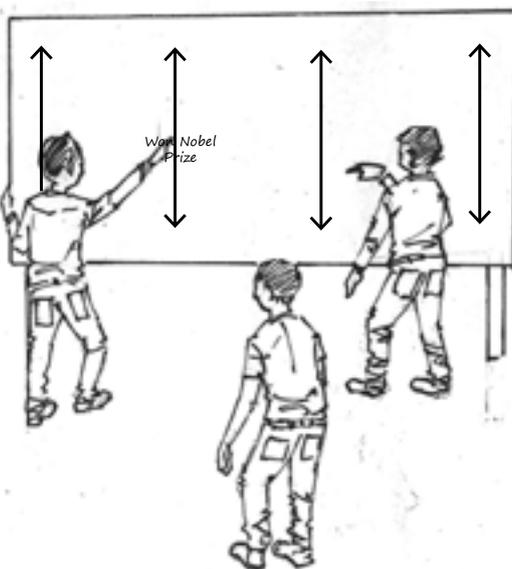
- a. In equal sized teams, students stand opposite the board.
- b. Say one of the years or months listed in the text. The first student in each team runs to the board, and writes the event that happened on the correct place in the timeline.
- c. The rest of the team calls out advice.
- d. Say another date, and the next student in each team writes it on the timeline.
- e. Continue until all members have had a turn. The team with the correct order, and the most correct events, is the winner.

Objective: students recount and order events

Practicalities: students work in two or more teams. Teams stand at the opposite end of the room to the board

Preparation: draw blank timelines on the board, ones per team

Bloom: remembering



Variation

To make this **more controlled**, say the events, and the teams write the dates on the timeline.

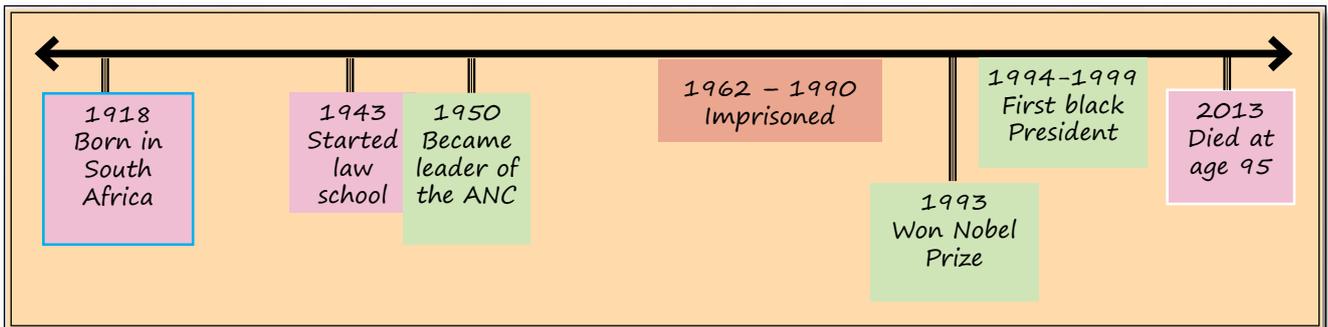
5.1.6 Classify the Events

- Groups make a list of important events.
- Students decide on a colour code for events, e.g.:
 - blue pen or paper for events in personal life (e.g. was born, got married)
 - red pen or paper for events involving violence or injustice
 - green pen or paper for events that promoted peace
- Students put events in the correct colours.

Objective: students classify events on a timeline

Practicalities: students work in groups; each group needs colour markers or paint, or different coloured paper

Bloom: understanding, analysing



5.1.7 The Most Important Event

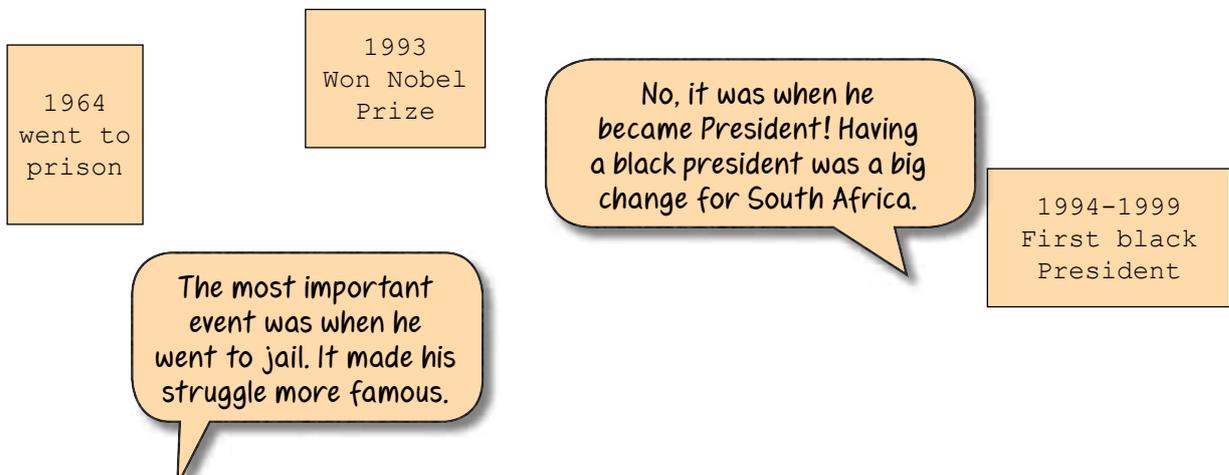
- Put important timeline events on pieces of paper around the room.
- Students stand next to the event they consider the most important.
- Students explain the reason they chose this event.
- If students change their opinion as a result of listening to others' opinions, they go and stand next to their new choice.

Objective: students prioritise events

Practicalities: students move around the room

Preparation: write important events on separate pieces of paper and put them around the room

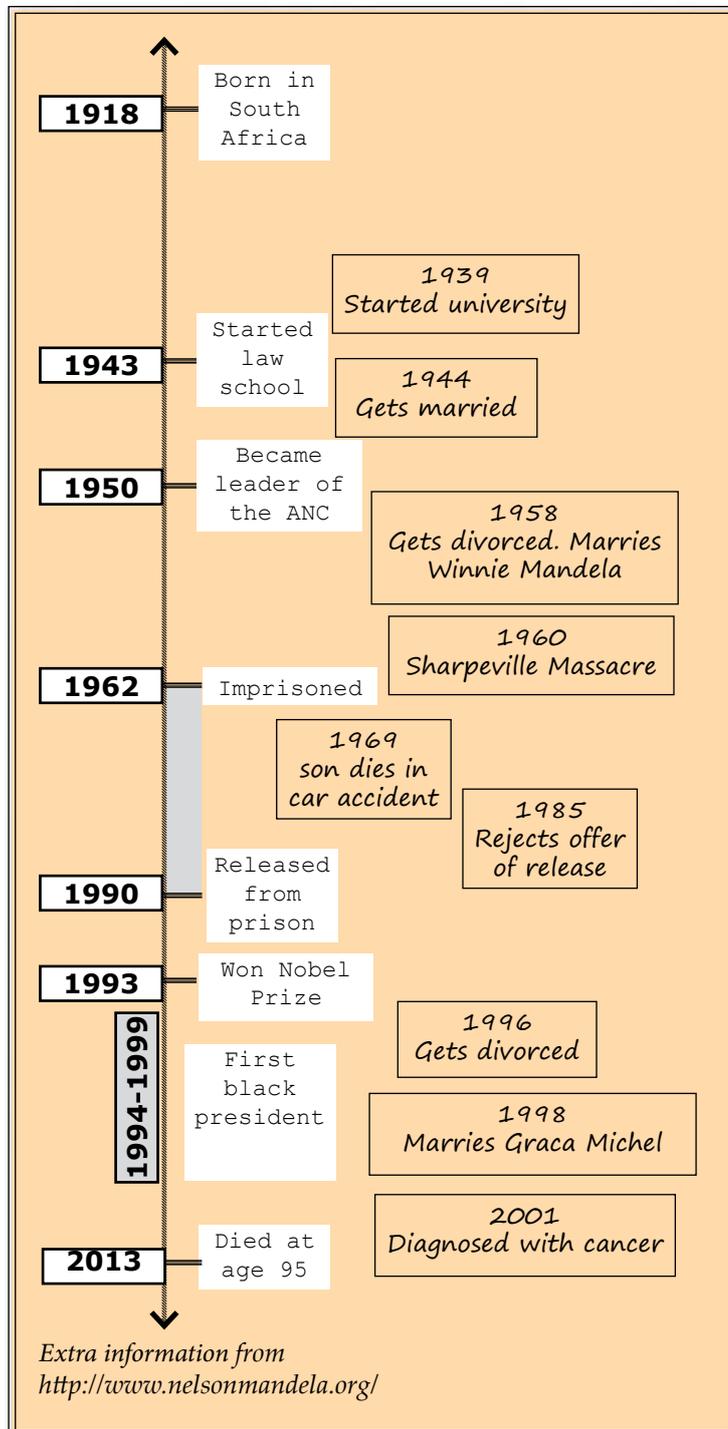
Bloom: evaluating



5.1.8 Add to the Timeline

Provide another source, or sources, of information. This could be a written text, a documentary or guest speaker, or student research.

Students put more events on their timelines.



Objective: students add events to a timeline

Practicalities: students work individually or in pairs or groups

Preparation: find more sources of information about the topic

Bloom: understanding, applying, analysing

Variation

Students add events from national, regional or world history, and compare the events.

If the class is focusing on personal or local events, bring an elder from the community as a guest speaker. Arrange for them to talk about a specific period in history that they have lived through, or to share their life story in general. Students prepare interview questions ahead of time to guide or review the speaker's story. Students take personal notes on the lecture or presentation. After the speaker has left, students work together as a class to compare their notes, and recreate the speaker's stories and experiences on a timeline.



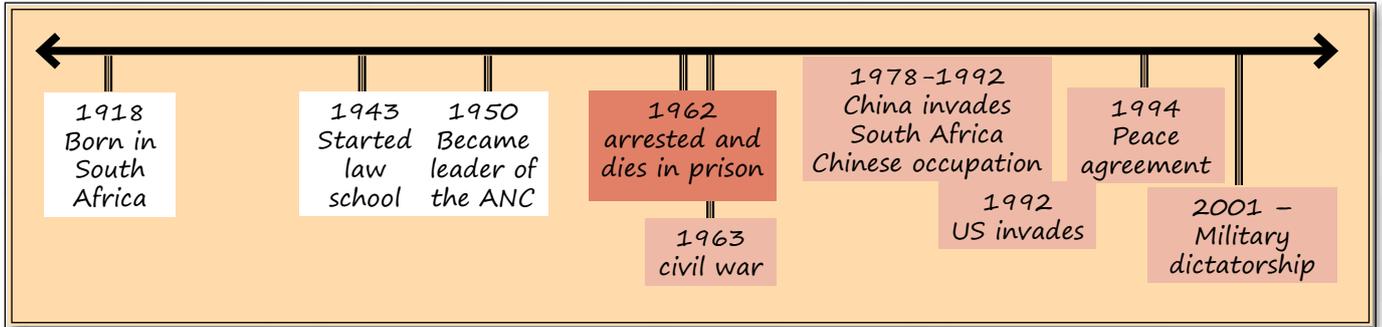
5.1.9 Change an Event: Alternative History

Objective: students imagine an alternative version of events

Practicalities: students work individually, or in pairs or groups

Bloom: creating

- a. Students change one event in the timeline.
- b. Students imagine the rest of the events that might follow this change, and make a new timeline based on what they think could have happened.



Variation

Make a timeline of future events. Students predict how the situation might develop in the future, and put these events on their timelines.

