



# Map skills in action



To increase the uptake of students in geography in her school, **Maureen Ferguson from Chipping Norton School** arranged, through the **World Challenge Initiative**, a fundraised trip to Namibia. During the expedition the party of 16 would experience another culture and give much to a local community.

In July 2008 a party of 14 students and two teaching staff, accompanied by a World Challenge leader, travelled to Namibia. This month-long trip was the realisation of 18 months of hard work preparing and fund-raising over £3 300 per person. For many of the participants, me included, it was outside our comfort zone. We had trained for our trekking phase and planned for our R&R section, but the project phase was where we interacted most with the local people.

Our route led us over many unmetalled tracks, and every day saw one student take on the role of travel coordinator. No voice from the dashboard of GPS to supply directions, rather, a student balancing a map on their lap and a stoical driver asking whether to turn left or right after travelling for hours on the only road! Even then, we did U-turns, but managed to reach our destinations. It was a pleasure to watch practical map skills developing alongside a sense of place. The scenery was breathtaking and a physical geographer's dream. We traversed lava fields and dusty plains, saw huge waterfalls and wild mountain ranges, all the while spotting flora and fauna. And such a sense of space.

We arrived at our project site, Omukandu Combined School near Ondangwa, north-east Namibia, excited and a bit worried about what lay in store. We needn't have, as the acting Principal and a Peace Corps teacher, **Justin Morse**, who had applied for help from World Challenge, met us and led us along unmarked roads to the school. It consisted of 10 classrooms with bare ground surrounds. Our home for 10 days was a concrete-floored classroom with no electricity but, thankfully, a standpipe with safe

drinking water. The students had cultivated a garden area and were looking for us to create a netball pitch for them on ground roughly cleared of scrub. It was more or less flat but took a lot of raking, digging of channels to place brick boundary lines in and hours of enthusiastic, amateur effort to complete. Our students were amazing and worked well as a team to achieve their goal.

Now it was on to painting murals. I was impressed at how quickly our students thought through ideas and organised the planning of their implementation. A wonderful mural of a tree of friendship, where all the leaves belonged to the hands of the local learners, was created – a sense of scale was essential to every enterprise. A map was suggested as an idea for one of the end walls of a building. Lots of discussion took place, which finally agreed on an ambitious combination of UK, Namibia and Africa – and there was not a template in sight!

Fortunately, I had taken a world map wall chart for use as a resource by teaching staff, so from there it was back to basics. We had a tourist map of Namibia, which gave us the outline of the country and location of both Windhoek, the capital, and Omukandu, the school. What to do next was the problem. A gifted student, Josh John, was our artist in residence, who took overall charge of sketching the map outlines and supervising the painting work. James Rooney, an A level geographer and mathematician, became our cartographer, working out scale, while a willing support group painted to instruction. It was a combined effort and took around five days to complete, all the time watched by a huge group of giggling and pointing Namibian learners, incredulous at our attire and activities.

We centred the available wall space and roughly allocated areas for the two countries, their national flags and the addresses of the two schools. The core idea was to provide a sense of place for the Namibian learners by linking their place within their country,



# NAMIBIA



of which they are fiercely proud, their location within the African continent and our own school's location within the United Kingdom. The capital cities of both countries were added to further promote the mural as a learning tool. There was a very long and convoluted debate as to what should be included on our home map – UK alone or the British Isles with UK identified by different use of a colour key. I accept responsibility for the final choice and admit I pulled rank on this one! And so to work.

The area allocated to Africa was framed and sectioned, then each quadrant completed with the coastal outline. Pencil worked well on whitewashed plaster and a jigsaw of unfamiliar countries took form on the blank canvas. Our student was truly amazing and a credit to our Art Teacher's tuition, his point of reference being the world wall chart. An outline of our host country, Namibia, then emerged, based on the tourist map; that was fairly straightforward as it has a reasonably regular shape. Again, the base map was enlarged to fit available space. The headache really started with the British Isles, as everyone had an opinion about how much detail could or should be included. Purists will note that Anglesey and the Western Isles are but a few of the casualties that fell in the face of pragmatism and style. Still, it is recognisable and fairly accurate – maps from memory in action as a technique in a distant corner of Africa! The national flags were again, fortuitously, found on our wall chart and the Union flag was edited slightly to conform to lines drawn using a plank of wood from a builder's wheelbarrow.

A team of students worked out how they could maximise the use of a gloss paint palette limited by both a tight budget and availability in the local hardware shop, 20 miles distant. Our artist was a stickler for accuracy and great precision was required to meet his high-spec demands. No adjacent countries could be the same colour – it became a really taxing puzzle. All the time interest grew in our progress: break times saw us as the main entertainment and the builders came to ask for their photos to be taken alongside us, though I'm not sure why.

It is 40 years since my geography teacher in Glasgow instilled high standards of cartography in me, and I remain an exacting taskmaster today. I insist on precision in presentation and was thrilled to witness this being put into action with clear headings, direction arrows and careful shading, though it very much remained the work of our students.

The tricky issue remained: how were the Namibian learners going to use this map mural as a learning tool without scale? My A2 Geographer and I sat on erected outdoor classroom benches in the shade of an acacia tree and worked our way methodically through each map. The map of Namibia was straightforward, enlarged by a factor from the tourist map and then the linear scale established. Justin, the Peace Corps teacher, asked us to include a representative fraction to add mathematical application to the uses of our murals. Luck had it that our guide book stated that the British Isles was approximately the same distance north to south as Namibia. We cross checked this, as best we could, against our world map and then applied the same scale as Namibia to the UK. James and I felt this was the best way to allow the learners to access and compare both countries.

What of the continent of Africa? We had to get this correct and it meant referring back to the indispensable world map. We carefully measured the chart using rulers taken by the group to donate to the school. We then stood on a plank of wood, balanced on two chairs atop a pile of builders' waste, to mark the height of the mural along the edge of

another piece of wood. James is as tall as I am short, so we must have presented an amusing picture as we struggled to obtain accurate measurements! This was measured with our 30-centimetre rulers, with the figure acquired used as our base for our calculations of scale. We had the linear scale on the wall chart and sat checking and triple checking that our calculations correlated before we allowed the paint to be committed to whitewashed wall. The use of ratio to establish a representative fraction was hotly disputed by other voices, but James and I were convinced by our calculations and stuck to our principles.

The work was completed and I was absolutely thrilled by the achievement. The teacher in me felt that we had left a useful legacy to a generation of local children. Gifts of sports equipment and games were pressed into use amid lots of laughter. Two Ordnance Survey map sheets of the Chipping Norton area are in use as teaching aids to promote understanding of maps and symbols, while providing a basis for comparison of rural England with rural Namibia.

The local headman and regional school inspector both visited and were openly delighted with the netball pitch, which provided a sport facility for girls, the tree of friendship mural and our maps. However, I was most thrilled by the acting Principal's comment that our work had transformed the school from one of the poorest to one with most facilities in the area. The project phase had helped students from two countries develop in many ways. It was an experience that touched all the participants: geography is, truly, an amazing subject.

## A map is a fine thing

Justin Moree

At Omukandu Combined School, outside of Ondangwa, Namibia, the grade 8 class practised identifying countries on a mural of Africa. Numbers were pasted onto the different countries and learners were required to identify them. They enjoyed it immensely, both having a full-sized map and the aspect of being outdoors. They were highly disappointed when class was over and they had to go back to their classroom.

The mural, created by a group from Chipping Norton School and their visionary instructors, Mrs M P Ferguson and Mr A Norman, fills a huge niche at Omukandu, and in the Namibian curriculum in general. The learners have a sense of direction from walking in an area with few roads and no signs. If you ask them where a place is, they can point right at it. If you ask them the distance, it is generally 'not far', 'far' or 'very far'. If you ask if it is more or less than 10 km, they are dumbfounded. They have extreme difficulty finding even basic symbols or places on a map. Practising with this map, they can use the scales as well as techniques using straight edges and even twine, to measure distance and direction. A highly effective learning aid. It is also used almost daily as a political map.

Coupled with all of these worthy uses is the fact that the map is decorative. Any person driving up to the school must use the driveway leading right past this mural. It always elicits some comment from visitors. Also, it keeps the idea of geography in the minds of the learner. Even the small children, who don't have the advanced skills, look at the map and find their village and Windhoek. They ask about the United States, the United Kingdom and surrounding countries. The biggest disadvantage that these learners have is not the lack of money, resources or not enough teachers, but in the lack of a culture of learning. They go to school merely to become a doctor or a teacher. No one understands the idea of learning to improve. This mural is a tool that we can use to change that.

Thanks are due to the learners and teachers from Chipping Norton. Their vision made a difference in the lives of 350 learners as well as an entire community in the far north of Namibia.

