Learning Beyond the School Walls: Fieldwork in Singapore, Grades 1-6

Ee Moi Kho and Walter Parker

n the Southeast Asian island-nation of Singapore, many elementary schools feature a different kind of field trip. Under the name "fieldwork," first-through sixth-grade students regularly venture out of the school on excursions into the community. They conduct surveys and interviews, do simple experiments, observe and gather relevant information, sketch the site, and more. Students learn how to record the information so that they can work with it back at school—organizing and collating it, making inferences, and shaping it into presentations and publications: travel guides, historical interpretations, electronic slide shows, scripts, classroom museum exhibits, and stories. Such fieldwork is carried out in the Learning Journeys program implemented by the Singapore Ministry of Education (MOE).

National and Cultural Context

If Singapore were likened to a single school district in the United States, then MOE is the central administration. It decides curriculum and assessments and oversees an extensive system of teacher education and professional development. Singapore, as some readers will know, is a small but prosperous island nation in Southeast Asia, just below Malaysia and above Indonesia. It has been called the world's most globalized nation. It is a diverse nation of about 4.6 million people, which is roughly half the population of metropolitan Chicago. The society was built by immigrants who came from various places, most prominently China, India, Indonesia, and Malaysia.

Singapore is a proudly multilingual nation, and schools in Singapore have at least two language departments. Students from elementary to high school take two language courses: English (the language of instruction in the academic subjects) and a "mother tongue" course—that is, a course in the student's heritage language, either Mandarin, Malay, Tamil, or another Indian language such as Hindi or Bengali. The country has few natural resources, and even potable water is scarce; consequently, security, survival, and economic development have become dominant themes of life and education in Singapore.²

Social studies in Singapore is an integrated social science subject taught in primary and secondary schools. Its guiding

purpose is citizenship education. Fieldwork is promoted as an important strategy to develop active young citizens with the knowledge, skills, and values/attitudes to make informed decisions.³

Carefully Chosen Sites

All public schools in Singapore are required by the MOE to take their pupils out regularly on Learning Journeys as part of their national education. There are two main categories of Learning Journeys: 1) Journeys to partner organizations where programs and resources have been specially designed to cater to schoolchildren. 2) Journeys which take pupils to heritage sites in Singapore such as Chinatown, Little India, designated World War II sites, and the famed Singapore River.

Journeys to partner organizations teach students about the roles and importance of key institutions in Singapore's development, the constraints and limitations faced by Singapore, and causes of the country's remarkable success. The aim of these visits is to develop a sense of pride in Singapore. Partner organizations are grouped into seven categories: Education and Technology, Infrastructure and Utilities, Arts, Culture & Community, Law and Order, Health and Environment, Economic and Industrial Development, and Security and Defense. Journeys to heritage sites are aimed at developing students' knowledge of and appreciation for the country's diverse cultures, languages, and histories, to forge a secure bond of unity alongside this diversity, and to foster a sense of pride in the nation.

Many elementary schools have developed a clear scope and sequence in the Learning Journeys program. In most cases, pupils from the third to the sixth grades experience fieldwork at least once a year. Specific fieldwork sites are identified for each grade level, so that by the sixth year, pupils would have visited a minimum of four different sites in Singapore. Such sites include the water plant and the marina where children learn about Singapore's technological solutions to the challenge of scarce water resources, as well as government organizations such as the Urban Redevelopment Gallery, where they learn about urban planning and how Singapore maximizes its limited land resources. Fieldwork at cultural heritage sites include, for example, Chinatown, Kampong Glam (the Malay enclave), and Little India. By the end of the sixth grade, all pupils would have



Recording information during fieldwork.

been exposed to a variety of places and learned about Singapore's cultural heritage as well as the country's challenges and how key institutions are responsible for meeting these challenges.

Fieldwork vs Field Trips

In Singapore, fieldwork is advocated in place of field trips. The latter are conducted in the way of "Cook's Tours," which are "look-see," non-participatory tours. They have the teacher (or tour guide, as the case may be) taking on the role of information provider and the audience, in this case the students, as passive receivers of knowledge.⁵ At the National Institute of Education, the nation's sole teacher education institution, student teachers are taught to plan and conduct fieldwork as a regular part of social studies education. "Fieldwork" rather than "field trips" emphasizes active participation of students in the field and is directly tied to units of study.6

A key principle is that fieldwork is based on inquiry or investigation into an issue. Students' inquiries stem from questions that enable them to focus their investigation on a key issue or topic. These questions are related to their unit of study. Students are taken out of the school on fieldwork journeys to deepen their learning of the unit's objectives. Students may develop a hypothesis about an issue and then proceed to inquire, collecting information to test their hypothesis; or they may simply have questions about an issue that they are studying and, therefore, go out to the field to acquire information that will answer those questions.

Four Stages

The recommended structure for fieldwork has four stages: pre-fieldwork, fieldwork, post-fieldwork, and evaluation.⁷ At the pre-fieldwork stage, teachers identify the objectives of the fieldwork based on the MOE's curriculum standards. Potential sites and key questions to focus pupil inquiry are discussed and selected, followed by a preliminary visit to the agreed upon site to determine its feasibility and to identify possibilities for investigative work at the site. A risk assessment is also carried



Reading a map during fieldwork.

out to ensure the children's safety. During this stage, too, students are briefed on the objectives of the visit. Teachers may introduce the inquiry questions or, in some cases, encourage students to generate their own.

Students are taught the knowledge and skills they'll need to successfully carry out the fieldwork. Fieldwork skills may include geographical skills (orienteering, mapping, and measuring distances); interview skills (field-sketching, observation and data collection); and use of equipment (data loggers, compass, and cameras). Students must also be taught social skills (working cooperatively); process skills (organizing and analyzing information); and communication skills (presenting their findings and justifying their inferences.) During the fieldwork, pupils engage in hands-on activities, applying their knowledge and skills to gather data and other information to answer their questions. These data are then taken back to be processed, interpreted, discussed, and presented in the post-fieldwork phase.

Student presentations involve various modes such as oral presentations, charts, scrapbooks, billboard displays, show and tell, or even e-platforms such as weblogs. The final stage of fieldwork takes pupils and teachers through a process of evaluating the fieldwork to identify the strengths and weaknesses of the experience and the areas for improvement.

One School's Fieldwork Program

Rosyth School has a team of passionate social studies teachers who strongly believe in the value of fieldwork. Led by teacher Raymond Bong, the team has developed a structured fieldwork program for students in the first through sixth grades. The program adopts a multidisciplinary approach with experiential and inquiry-based learning. TABLE 1 gives the scope and sequence of a single year's program.

During fieldwork, students work in teams of five or six and, through a series of activities, learn about Singapore's heritage. For example, in the Civic District and Chinatown journeys, students apply their geographical skills to locate checkpoints with the help of a map, street signs, and landmarks. At each checkpoint,

Table 1. Learning Journeys: A Structure fieldwork Program

Grade Level	Fieldwork Program
1	Rosyth Heritage Gallery Asian Civilization Museum
2	Neighborhood Walk
3	Kampong Glam Heritage Challenge Singapore River and Museum Trail
4	World War II Sites Heritage tour Singapore Discovery Centre Tour
5	Parliament House Tour Civic District Heritage Tour
6	Little India Heritage Challenge

they perform a variety of tasks which require them to apply their knowledge of Singapore's history as well as use mathematical skills to measure or estimate distances. They are also required to acquire information through observation, reading signs and notices, or interviewing shopkeepers on site.

Children especially enjoy learning about the different cultures in Singapore. For example, the Little India journey is usually timed to coincide with Deepavali festivities. At beautifully decorated Little India, students learn about the various trades in the area and to try their hand at them. Some children may trying to make beautiful flower garlands as efficiently as the garland maker, or they may sample local Indian favorites such as chewing the betel nut or tasting *chapatti* (a kind of bread) or *lassi* (a beverage).

Challenges to Fieldwork in Singapore

There are, of course, challenges to organizing and conducting successful fieldwork in Singapore. Teachers need substantial time and administrative support to be able to carry out such fieldwork. This is difficult for a number of reasons. First, as in the United States, the workload for teachers in Singapore usually leaves them with little time to plan and conduct fieldwork. Unlike conditions in the United States, however, class size in Singapore is typically 40, and taking a group of 40 students out to the field is no "walk in the park." Second, there are not many elementary school teachers in Singapore who are specifically trained to teach social studies, and most teachers are not sufficiently skilled or experienced at designing fieldwork.

Perhaps most significant, social studies is not deemed as important a subject as mathematics, science, and language arts. Hence, in some schools, there is little administrative and other support for fieldwork during curriculum time. Because schools are required by MOE to take students on a learning journey at least once a year in each grade, the journey may be relegated to an extra-curricular activity and not part of the usual social studies units. Nonetheless, the experiences of schools like Rosyth demonstrate that fieldwork is a promising instructional



Boys try wearing sarongs on the Kampong Glam Heritage Journey.

approach and that more effort is needed to equip teachers with the time, knowledge, and skills for it. The Ministry of Education in Singapore is taking steps to improve the situation. Indeed, it is currently in discussion with faculty at the National Institute of Education to establish a Field Studies Center that will help promote fieldwork in Singapore. This is a move in the right direction.

Notes

- "The Globalization Index," Foreign Policy 163 (November/December 2007): 68-76.
- S. Adler and J. Sim, "Social Studies in Singapore: Intentions and Contradictions," in D. Grossman and J. Lo, eds., Social Education in the Asia-Pacific: Critical Issues and Multiple Perspectives (Greenwich, CT: Information Age Press), 2–8.
- 3. Primary Social Studies Syllabus (Singapore: Ministry of Education, 2006).
- 4. Ministry of Education, "Speeches (1998)," www.moe.gov.sg/media/speeches/
- M. Kent, D. D. Gilbertson, and C. O. Hunt, "Fieldwork in Geography Teaching: A Critical Review of the Literature of Approaches," *Journal of Geography in Higher Education* 21, no.3 (1997): 313-332; D. Kimber and M. Smith, "Fieldwork, Visits and Work Outside the Classroom," in M. Ashley, ed., *Improving Teaching and Learning in the Humanities* (London: Falmer, 1999), 101-118
- H. H. Sim and P. Ananthi, "Learning Outdoors: Re-examining Fieldwork in Primary Social Studies." Paper Presented at New Dimensions in Humanities Education Conference, National Institute of Education, Singapore, November 2008).
- S. May and J. Cook, Fieldwork in Action 2: An Inquiry Approach (Sheffield, UK: The Geographical Association, 1993).

Acknowledgements

Photographs courtesy of Raymond Bong, Rosyth School

EE Moi Kho is an Assistant Professor and Deputy Head of Humanities and Social Studies Education at the National Institute of Education, Nanyang Technological University, in Singapore.

WALTER PARKER is Professor of Social Studies Education at the University of Washington in the United States. Dr. Parker won the Distinguished Social Studies Career Research Award from the National Council for the Social Studies (NCSS) in 2009.

Singapore



Source: CIA, The World Factbook (1994).

Singapore was founded as a British trading colony in 1819. It joined the Malaysian Federation in 1963 but separated two years later and became independent. Singapore subsequently became one of the world's most prosperous countries with strong international trading links (its port is one of the world's busiest in terms of tonnage handled) and with per capita GDP equal to that of the leading nations of Western Europe.

Singapore consists of islands between Malaysia and Indonesia. The land area is slightly more than 3.5 times that of Washington, DC. The population is about 4.6 million.