

Open and Distance Learning in the Gobi Desert: Non formal Education for Nomadic Women

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(Note: the views expressed in this paper are those of the author and not necessarily those of UNESCO)

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Abstract

The use of open and distance learning for non-formal education is much less represented in the literature than for formal education. This paper provides a case study, grounded in practice, of the first open and distance learning project for non-formal education in Mongolia, a developing country undergoing rapid transition in the 1990s from a command to a market economy and from communism to a multi-party democracy. The paper outlines the project and its context, explains the rationale for it, and analyses its achievements, limitations and lessons. It also identifies the additional problems for ODE in a context of rapid economic transition.

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INTRODUCTION

Open and distance education (ODE) was introduced into Mongolia for the first time in the 1990s as a response to economic crisis and its social consequences. The 1990s saw sudden and dramatic changes in Mongolian life as the country changed rapidly from a centrally-planned command economy to a market economy, and from a single party communist state to a multi-party democracy. The impact on people's lives, whether in cities or in the countryside, was huge. It generated needs for new kinds of education outside the formal system, relating to everyday life for adults and young people alike and with few resources to finance them. As a consequence, ODE was introduced to Mongolia through donor-funded projects. Before these, ODE was unfamiliar and untried though there had been some small-scale 'self-learning' or correspondence courses in higher education. They seldom provided learning materials or correspondence tuition or learner support in the periods of time in between blocks of face-to-face teaching in the capital city of Ulaanbaatar. Concepts such as open learning, distance education, feedback, interaction, multimedia, learning objectives, learner support, in-text activities, self-assessment questions, learner-centred education and independent learner were all new and a Mongolian vocabulary for them did not exist. The various roles of teacher, tutor, facilitator, advisor, counsellor, coach mentor, instructor and lecturer were not differentiated in Mongolian education and language and so far lack a Mongolian terminology, all sharing the one word for teacher' (*bagsh*). Mongolia's isolation from the wider world outside of the Communist bloc before 1990 and lack of English language (Russian had been Mongolia's second language) meant that ODE concepts and literature were unfamiliar.

Mongolia's first experience of open and distance learning was for non-formal education (the Gobi Women's Project for 15,000 nomadic women in the Gobi Desert). Defining non-formal education is problematic, as the literature over a period of time shows (Coombs and Ahmed 1974; Coombs 1985; Carron and Carr-Hill 1991; Rogers 1992). Non-formal education has been described variously as an educational movement, a setting, a process and a system (Fordham 1980; Reed 1987; Khawaja and Brennan 1990). The projects and programmes implemented under the label of

non-formal education' are very diverse in scope. Coombs (1985) suggests that it is simply 'a handy generic label' covering

any organised, systematic, educational activity, carried on outside the framework of the formal system, to provide selected types of learning to particular sub-groups in the population, adults as well as children (Coombs and Ahmed 1974, p. 8).

This is in contrast to the institutionalised, chronologically graded and hierarchically structured nature of the formal education system (Carron and Carr-Hill 1991). However the boundary between formal and non-formal education can sometimes be blurred, especially when certification enters into a non-formal education programme. A further difficulty of definition is added when non-formal education uses ODE approaches or combined media since programme providers may not think of them as 'open and distance learning'. So there are problems of criteria and classification relating to what counts as non-formal education or ODE.

Can the research literature provide clarification and analysis of the use of ODE for non-formal education? So far, the light it can throw is limited because the research base is small. Though many ODE projects for non-formal education have taken place, the number reported and analysed in the ODE literature is relatively few. As a survey for the Commonwealth of Learning (Dodds 1996) concludes, there is a shortage of information on how ODE is used in non-formal education and the information available tends to be scattered across many different sources, hard to find, poorly documented and sometimes in the form of uncritical reports of hearsay evidence. Since well-informed description is the first step towards analysis, this makes it difficult to draw sound generalisations about the use of ODE for non-formal education and to build theoretical models. There are several reasons for the lack of systematic documentation and analysis: the imperative of schedules and project pressures for implementers, an understandable preoccupation with operational delivery, a shortage of time and staff, insufficient expertise and capacity, failure to allocate resources to it and low levels of awareness about its importance until too late. The result is that the experience and lessons of many ODE projects for non-formal education go unrecorded.

Against this background, the aim of this paper is to contribute a little to the literature on ODE for non-formal education though it will also indicate some typical gaps in data. The paper presents a case study of the Gobi Women's Project, providing an outline of the project, explaining the rationale for it, analysing its achievements, limitations and impact, and drawing some lessons. It also identifies the additional problems for projects located in contexts of rapid economic transition. The analysis in the paper is intentionally grounded in practice rather than theory, to concentrate on

giving a 'rich picture' of the project itself, given the restrictions of length on a journal paper. The case study is based on several sources of information built up by the author over a period of time: a study of project documents in English and in Mongolian (translated into English); the evaluation of the project; field work in the Gobi Desert; a review of the learning materials and some observation of their use; interviews and meetings with project personnel at central and local levels and with many other stakeholders; and information gathered in the course of 25 working visits to Mongolia between 1994 and 1999 as consultant to this and other ODE projects (including the follow-on project to the Gobi Women's Project, the *Surch Amidarya* or 'Learning for Life' project). The approach to the case study is largely qualitative because, like many similar projects, the records and data available did not permit much quantitative analysis to be made.

THE CONTEXT OF MONGOLIA

(H2) The country

Mongolia is a large landlocked country in central Asia, bordering on Russia to the north and the People's Republic of China to the west, east and south. With a population of 2.4 million in a country of 1.6 million square kilometres (half the size of India), Mongolia is one of the most sparsely populated countries in the world. The average population density is 1.5 people per square kilometre, less in the Gobi Desert (for comparison, the population density is about 120 for China, 235 for the United Kingdom and 2.3 for Australia). The population is 52.4 percent urban (half of these live in the capital city of Ulaanbaatar) and 47.5 percent rural, and half is under the age of 20. About a third of the rural population (371,100) live in provincial or district centres; the remaining two-thirds (764,100) live a nomadic or semi-nomadic life based on animal husbandry (NSO, 1997). The climate is dry and extreme, with long cold winters. The terrain varies between desert (the Gobi), the steppes, mountains and forests. The country has a weak infrastructure, with limited telecommunications, variable electricity supply and few surfaced roads (further detail can be found in Robinson 1995 and Aabenhus and Kenworthy 1996). Literacy levels were high up to the start of transition (97 percent overall, 95.7 percent for females), a legacy of socialist policy and high levels of government investment in education, resulting in almost universal basic education.

(H2) Economic and social transition

In 1924 Mongolia was the second country in the world to become communist. Seventy years of communism saw a huge improvement in the country's economic development, health and education, for the rural population as well as the urban.

During this period the agricultural economy was transformed into one with an industrial sector (about 50 percent of the economy), producing semi-processed raw materials (mainly copper and cashmere). A peaceful overthrow of the government in 1990 led to elections and a democratic constitution in 1992. Until 1990, Mongolia had a close affiliation with the Union of Soviet Socialist Republics (USSR) and Soviet subsidy contributed 30 percent of Mongolia's Gross Domestic Product (GDP). However, the collapse of the USSR resulted in two major economic blows: the withdrawal of the Soviet subsidy and the demise of the Council for Mutual Economic Assistance (CMEA), Mongolia's main trading partners. Since 1990, Mongolia has undergone a rapid transition to a market economy. During this period, inflation rose sharply (to a peak of 325 percent in 1992) and annual GDP per capita fell to 394 US dollars, one of the lowest in the world (World Bank, 1998).

The social costs of transition have been high, borne unevenly by different groups within Mongolia's population (Harper 1994; UNDP 1996). Social inequality has grown. Unemployment has appeared and social indicators such as school enrolment, maternal and infant mortality have declined (Wu 1994; SSO 1995). Poverty, a new phenomenon in Mongolia after 1990, rose rapidly and it is estimated that at least 36 percent of the population now lives below the national poverty line (World Bank 1998). As a result of economic problems and cuts in health and social welfare services, the position of women in Mongolia has deteriorated in a society with previously high levels of gender equity, higher than in many other Asian countries (Robinson and Solongo 1999). Up to 1990, literacy rates for females were only slightly lower than for males, school participation rates were similar, a high level of child-care and social services were provided in order to enable women to work, free health care was available at rural centres, generous maternity leave was available throughout the country, employment for men and women alike was guaranteed by the state, pay levels for males and females were similar and women's representation in the Mongolian parliament (the Great Hural) and other bodies was ensured by a quota system. From 1990 onwards, social services and benefits were cut, the health service contracted, cost-sharing was introduced for education, employment was no longer guaranteed and women's ability to participate in the labour market diminished as a result of reductions in social welfare and childcare services. As in other transitional economies women have been more likely to lose their jobs with the privatisation of state enterprises and to earn lower pay for equivalent jobs. Quotas for female participation in political decision-making have been removed.

The year of 1992, when planning began for the Gobi Women's Project (GWP), was a particularly difficult one with acute economic crises, food rationing and great uncertainty about the future. At the time, the most vulnerable group in Mongolian

society was identified as nomadic and rural women in the Gobi Desert, especially those who were single heads of households—a category which is disproportionately high among those below the poverty line in many countries. For this reason, the Gobi Women's Project targeted rural and nomadic women, thus anticipating government policy for targeted support for women through the National Plan of Action for the Advancement of Women (1996).

GOBI LIFE

(H2) The context of the learners

The Gobi Desert occupies the southern third of Mongolia. Although barren looking, the Gobi has enough sparse pasture to support herds of animals. Life is hard in the Gobi, particularly in the winter. As Gobi people say, 'in winter we struggle to survive and the rest of the year we struggle to prepare for winter'. Many herders live up to 100 kilometres from a district centre (or *sum*, a settlement of 200-500 families) where, in the past, free services had been provided in education, health, veterinary assistance, administration, and cultural and sports activities. Herders' families move up to ten or more times a year, a distance of 10-50 kilometres each time, living in *gers* (circular white felt tents) in encampments of 1-4 families scattered over very large areas. The average family size is 4.5. Sheep, cashmere goats, yaks, cattle, camels and horses are used for wool, for milking, meat, skins and transport. Animal dung is used for fuel and candles for light though a few families along the Chinese border now have small generators acquired through barter for cashmere wool. Income comes more from barter than from cash which constitutes only 30 percent of rural income (Bruun 1996). Until the 1990s, nearly all herders' children went to boarding schools in the nearest district centre so basic education was accessible, compulsory and provided by the state. This resulted in an educated nomadic population and in every family there was at least one member with eight years or more of formal education. Since transition began, high drop out rates from schools have appeared (particularly for rural boys whose labour is important to herding families) and illiteracy is growing.

(H2) Changes in nomadic life

For nomadic herders, the change from state management of herds as collectives to private ownership was a major one. Privatisation brought new hardships as well as new opportunities. In the past, the herders' standard of living was secure under a socialist regime. Herds were organised in collectives of single species, regular wages were paid irrespective of productivity, manufactured goods and services were supplied free, and disasters to livestock were cushioned by the state (Goldstein, and

Beall 1994). By 1995, 95 per cent of all livestock was in private hands and herders' work took on a different pattern. Families acquired their own mixed herds, needing more complex management and more labour. Households became responsible for producing their own goods, obtaining services, and marketing their products. It resulted in a larger increase in the daily workload of women than for men (Robinson and Solongo 1999).

The decrease in free and local services created immediate needs on a large scale for greater self-reliance, more information, the generation of income, the learning of new skills and the revival of skills lost or discouraged during the socialist period. Much of what was previously bought or supplied by the state had now to be made or bought out of income. As one Gobi woman (Nasandulam) described it:

Shortage of money is a new thing ... in the past the state sent money to all Gobi countryside people and we could buy clothes ready-made in the store and buy fuel ... now we need to make them both'(interview with author, August 1995).

Information became harder to get in the countryside as newspapers and other reading materials became scarce. A severe paper shortage added to the problems, decreasing the supply of reading materials to a highly literate population. A new concern became the maintenance of literacy levels. In addition, access to information by radio reduced. Though every family had been required by law under the communist regime to possess a working radio, the Russian-manufactured radios were getting old and replacement parts and batteries were unobtainable or unaffordable. Television was only available in large settlements and very few families had one.

This setting presented a number of challenges for open and distance education: a very sparse and mobile population scattered over large areas, a weak communications and transport infrastructure, lack of electricity in people's homes (*gers*), diminishing access to radio, limited media options, scarcity of financial resources and all kinds of goods including paper, a state-owned printing house with no competitors, unfamiliarity with the ideas and practice of open and distance education and a strong tradition of teacher-dependency in education. Nonetheless, the scope for using ODE was considerable (Robinson 1995; Aabenhus and Kenworthy 1996).

THE GOBI WOMEN'S PROJECT

The Gobi Women's Project (GWP), initiated in 1992 and begun in 1993, was a three-way partnership between DANIDA (Danish International Development Assistance), UNESCO and the Mongolian Government. The project had two main aims: to develop national capacity in non-formal education and ODE and to assist Gobi

women to survive the sudden changes affecting their lives (through providing access to information and knowledge, changing attitudes and developing skills for self-reliance and income-generation).

DANIDA funded the project with a grant of US\$ 1.4 million and UNESCO implemented it together with the Government of Mongolia which provided some resources, logistical and institutional support and the personnel. There was also some limited financial contribution from the World Council of Churches. DANIDA funds re-equipped local radio stations, financed materials development and provided radios and batteries for learners, jeeps and petrol, technical assistance, training and 39 tonnes of paper, among other things. The project operated in the six Gobi provinces of Dornogobi, Omnogobi, Bayanhongor, Gobi Altai, Overhangai and Dundgobi.

The project faced four major challenges:

- how to meet rural women's new needs for information, know-how and skills;
- how to reach large numbers of learners scattered over vast distances with limited transport and a weak communications infrastructure;
- how to create a decentralised framework of adult non-formal education for people accustomed to centralised planning and control and a norm of formal education;
- how to develop a learning system, curriculum and materials appropriate for nomadic women's lives, customs and culture.

(H2) Needs analysis

The starting point for project planning was a needs analysis carried out by a social anthropologist in three of the six Gobi provinces in 1992 (Bond, 1992). This involved key stakeholders: provincial and district officials, community leaders, and 142 families. The purpose was to find out what the basic learning needs were and to learn more about the lives of the women. From this, the main areas for content were identified: livestock rearing techniques and processing of animal products; family care (family planning, health, nutrition, and hygiene); literacy support; survival skills; income-generation using locally available raw materials; and basic business knowledge for a new market economy. As well as identifying content, this study helped to shape an appropriate model of non-formal education and ODE which fitted the life-style and circumstances of nomadic women, using existing resources where possible. It also raised local interest in the project.

(H2) Preparation phase

The first two years of the project were spent on three main tasks: establishing an administrative infrastructure and planning the logistics; developing a viable learning system; preparing materials and training people for different roles. New ideas about adult learning were introduced. An organisational structure was set up with

committees at national, provincial and district levels. This rested on existing administrative structures established during communism and used key officials in provinces and districts. The provincial coordinating committees had 711 members with a variety of expertise (local officials, doctors, veterinarians, accountants, school teachers and managers, and members of other organisations, such as the Women's Federation). The district coordinating committees were similar. There was a regular system of reporting from these to the centre, reflecting practices from former days. The central National Coordinating Commission (NCC) was based in the Ministry of Science, Technology, Education and Culture (MOSTEC) in Ulaanbaatar. Members came from MOSTEC, the National Institute of Educational Studies, Mongol Radio, the Women's Federation and other organisations. The NCC's role was to steer and coordinate the overall functioning of the project. It also monitored progress, controlled finance, carried out formative evaluations and liaised with other bodies. A core group within the NCC conducted the daily implementation of the programme and included the two leaders of the print and radio production groups.

Collaboration was established with the state-owned Mongol Radio in Ulaanbaatar, where a new project radio studio was installed. Three provincial radio studios (Gobi Altai, Omnogobi and Dornogobi) were re-equipped and training provided for producers and technicians (these three radio stations reached all six provinces). International consultants and technical assistants from UNESCO, Australia, Denmark, the United Kingdom and the USA worked with Mongolian counterparts in Ulaanbaatar to develop the print and radio lessons' and to provide training and technical assistance. A teacher-training programme was developed and local tutors (visiting teachers) were trained, using a cascade model together with a printed tutor guide. Local teacher trainers' were selected to supervise the visiting teachers.

(H2) The pilot phase

The pilot phase took place from January to May 1995, for 1,500 nomadic women from 10 districts. Its purpose was to test the model and refine it for the main phase of the project. Russian Jeeps (14) were distributed to the six provinces, partly to enable the visiting teachers to reach learners in their *gers*. Women learners were selected by local committees to participate. Radios (240) and batteries were distributed since 20 per cent of the target group did not have working radios or batteries and could not obtain or afford them. Supplies of anything were very scarce in Mongolia at this time. The pilot programme began with a 3-day 'crash' course in district centres, when women received booklets, writing materials (pens and paper), batteries and radios, and met their visiting teachers. Five booklets and 17 radio programmes were produced by the central project team. The pilot was evaluated by the project team and findings used in planning the main phase of the project.

(H2) The main phase

The main phase began in January 1996 and ran for one complete cycle, finishing in December 1996. It involved 15,000 women, aged 15-45 years, in 62 districts in the six Gobi provinces. At the end of the project they were given a certificate of participation. They were supported by 620 visiting teachers who worked on a voluntary basis without pay (a legacy of attitudes developed during the socialist period). More materials were produced and distributed, more radio programmes were prepared and transmitted, and the logistics of co-ordinating and managing became more complex and demanding. The pattern of activity was similar to that of the pilot phase. Radios (2,040) and batteries (40,800) were distributed to those needing them. Centrally-produced booklets (21) were distributed from Ulaanbaatar, usually by jeep to district centres (taking 1-7 weeks to reach learners). Weekly radio programmes were broadcast from Ulaanbaatar and from the three provincial studios. A total of 30 Russian jeeps were provided for project activities.

Supplementary materials were produced at the local level and a variety of local initiatives were taken. One was the creation of a 'travelling box' (in Bayanhongor province). This contained resource materials which visiting teachers could take with them on visits or send round their groups, and was a means for learners to exchange letters with their visiting teachers. Visiting teachers, each responsible for about 15 learners, travelled round mainly by horse, camel or occasionally motorcycle.

Learning materials were created both centrally and locally. Printed booklets were made on topics such as family planning, making camel saddles and Mongolian *deels* (traditional garments), making milk and meat products, bread and sweet making, fuel production from animal dung, leather processing, feltmaking for boots and *gers*, vegetable-growing, recycling used clothing, civics and the law, and setting up small businesses. Literacy support booklets were provided on Mongolian fairy tales, mathematics and the environment (used mainly with the children in nomadic families). At the local level, newsletters and information sheets were produced as well as teachers' booklets, demonstration materials and visual aids for skills development.

The intended role for radio was to support the booklets, though in practice this was not always achieved (while radio programmes went out on schedule the printed booklets did not). Two programmes were broadcast regularly from Ulaanbaatar: 'Sunrise' a half-hour general programme, and 'Shortcut', in support of literacy (both repeated). Local radio programmes were broadcast once a week, with strong local relevance and topicality. Reception was generally good and the programmes were popular though the amount of local broadcasting was heavily restricted by strict state legislation implemented by Mongol Radio.

The different uses of national and provincial radio within the project was explained by Oyensuren, a junior doctor in a provincial centre. She worked 3-4 hours each week with the project, preparing and presenting radio programmes, writing articles for the local newsletter, attending meetings of the Provincial Coordinating Committee and visiting women in their *gers* as part of her medical work.

Ulaanbaatar programmes are designed for general information ... I can give specific things which they want to know ... I am very close to our women and I can give them particular advice ... we can respond very quickly to the problems they identify ... they often write to give their reactions to programme and to ask for more on some topics, for example, how to treat sunstroke or accidents from riding horses (interview with author, August 1996).

Oyensuren's special interest was women's health and family planning (before 1991, there was no state-provided family planning other than abortion). She thought her best programme was on 'How to take care of young girls', a completely new topic in Gobi life:

this topic can help to make the next generation of women more healthy ... under socialism we didn't touch such problems because it was somehow a prohibited topic and some mothers and girls were too shy to talk to each other (interview with author, August 1996).

Learner support was provided through visiting teachers, local meetings and 'crash courses' at in district centres. Small information centres, which also served as meeting places, were set up in provincial and district centres. These contained a set of project booklets and other learning materials, information leaflets, posters, and a radio (sometimes with an audio-cassette player). The room also housed occasional exhibitions of project crafts and products and served as a base for the visiting teachers and teacher-trainers. In some there were maps displayed of the area, showing where learners' *gers* were located, and charts of learners' progress through the materials (a result of individual teacher initiative rather than a planned part of the system). Learning groups provided an opportunity for tutoring and demonstration, skill coaching and exchange of experience and news and social interaction, often with some singing (a constant feature of Mongolian gatherings). Interactivity was provided at the local level rather than across distance. Visiting teachers were an important link in the system, providing feedback to provincial and district coordinating committees, and identifying new learning needs, some of which could be responded to locally.

Gobi women

Gobi women took part in the project in a variety of roles: as learners, teacher-trainers, visiting teachers, radio journalists, writers and members of the coordinating committees. The following illustrations are selected from a large number of interviews conducted by the author in five of the six Gobi project provinces in 1996.

(H2) Javzandulam

Javzandulam was typical of many of the learners who took part in the project. She was 37 years old and lived in *ager* in Omnogobi with her husband and three children (a boy and two girls, all under the age of 13). They owned a mixed herd of 120 animals, acquired after the privatisation of livestock in 1994. Their aim was to increase the herd since you can't have too many animals'. Javzandulam had completed seven years of schooling in a state boarding school. She had a long working day (longer since the privatisation of livestock) so time for study was difficult to find. She got up before her husband, at 5 am in the summer, later in the winter. First she lit the dung-stove, then went out to milk the animals before making breakfast for her family. If occasionally this caused her to miss the project's radio broadcast her husband listened and took notes for her. She spent part of each morning boiling milk and preparing milk products such as cheese and yoghurt, some of which were dried in the sun for later use. Before preparing a mid-day meal of boiled mutton soup, flour noodles, cheese and steamed bread she collected and stacked animal dung for fuel.

In the afternoons she looked after the younger animals and sometimes set off on her horse to move the herds to new grazing (though mostly her son did that job). The animals needed milking again during the day, at different intervals depending on the species. In any time left over she made harnesses for animals out of camel wool and traditional boots out of felt made from sheep fleeces. She also mended and recycled clothes and sewed household articles, often embroidering them with traditional Mongolian designs. She prepared the evening meal quite late, by candlelight. Until 1991, she could get ready-made foods, fuel supplies and batteries in the store at the district centre and had allowances as a member of a state collective. Then, the district centre met all her needs, providing services free— health, veterinary assistance, maternity care, sports events and concerts. All this changed after transition began. The new skills and knowledge she had acquired and nearly all of her available reading materials were a result of participating in the project.

(H2) Darimaa

Darimaa was a teacher-trainer and visiting teacher in Omnogobi, responsible for 10 visiting teachers in her district. Her travels to learners took her on journeys of 200-

300 kilometres by horse and because of distance and lack of free time, she was not able to visit learners twice a month as recommended. Apart from this work, she had a full-time job. She was the director of a district school (Grades 1-8, with 306 pupils). She had four children, two away at university in Ulaanbaatar, one in secondary school, and one in kindergarten. She was also Chairperson of the District Women's Council. She described the reasons for taking on this extra work as follows:

I know how countryside women have problems now and I wanted to help ... I can see the project is really beneficial ... the women can make *deels* and other clothes ... they can't buy clothes in shops now ... and they can sell some of the clothes they make through the Women's Council (interview with author, September 1996).

(H2) Magvan and Batbayar

A visiting teacher, Magvan (a 50 year old teacher of Arts and Crafts in a district secondary school) thought the best thing about the project was its effect on the women:

they're learning by themselves from the booklets ... they're able to cooperate and to share knowledge and skills ... they teach each other and help when the book is hard to understand. In my lessons the women have learned how to make shoes and boots out of felt and second-hand materials, so they don't have to buy them any more (interview with author, August 1996).

Another visiting teacher, Batbayar in Bayanhongor, emphasised the social benefits:

It's given these women a new life ... they didn't have these opportunities before ... they like to be together now and to do things as a group ... they've become really good friends and are not so isolated ... they ride between 4 and 12 kilometres to meet each other ... they really share what they know and that's new (interview with author, July 1996).

PROJECT ACHIEVEMENTS

At the macro-level, the project introduced new educational ideas to Mongolia about lifelong education, non-formal education, and open and distance learning. It demonstrated that ODE was possible in a country which presented considerable obstacles of distance and infrastructure and it provided a model and experience of a new form of teaching and learning. In the course of this, it implemented a decentralised education programme in a country which was accustomed to highly centralised educational provision and control. It also acted as a catalyst for

government policy development for non-formal education. At the micro-level, in terms of learners, women and their families benefited from the knowledge and skills gained, the goods made for their own use or sale, access to information and social interaction. A range of skills was developed through the use of printed booklets which acted as how to guides, together with demonstrations and coaching by visiting tutors, peer exchange at informal small group gatherings, and radio programmes which gave advice and reports of learners' achievements to act as encouraging models.

A strength of the project was the flowering of activity at the local level. There were three reasons for this: a resource of educated, literate and skilled people in rural areas, a legacy of communist policy; the realisation that with the demise of central state services, self-reliance was essential; and the support framework and mobilising of effort by the central team. Local activity took on a dynamic of its own, initiating, supplementing and adapting the programme to fit local circumstances and at times rescuing the failures of the centre. It created strong local ownership of the programme and a demand for more. Many Gobi people gave freely of their time and limited personal resources to make the project successful though this might not have continued in the longer term without financial reward.

Though income-generation was the goal, income-stretching was more often achieved, perhaps because the timescale was too short for income-generation to develop in a society unused to the notions and practices of a market economy. However the women developed better survival skills and use of resources as well as knowledge and confidence. In terms of learning outcomes the range and quality of the crafts and products displayed at the final evaluation event in Ulaanbaatar (November 1996) was impressive and demonstrated a variety of skills learnt, though no systematic or direct assessment was attempted of other kinds of learning achievement. Changes in attitudes were widely reported:

The project helped Gobi women to understand how to survive ... it showed them the importance of learning .. not to wait for someone else to help them but to help themselves (District Governor, Omnogobi, interview with author, September 1996).

There were many anecdotal reports of new levels of confidence in nomadic women. Some began to trade, for example, exchanging a camel saddle they had learnt to make for a camel or two sheep. They also became more articulate in defining their own needs and learning agendas, asking for information about cashmere wool processing, or dyeing animal skins, or spinning wool for knitting, or about the new laws on herders' rights. Women wrote in to the radio stations (a new thing) with questions and requests for programmes on specific topics, for example, first aid, or how to

make cosmetics from local products or plants, or how to make a family tree (an important document in Mongolian nomadic tradition and selection of marriage partners). This was very different from the situation described in the initial needs analysis study, where there was a universal inability to suggest topics of interest or areas of learning needs. In all probability this was another manifestation of unquestioning teacher-dependent learning strategies' (Bond 1992).

(H2) Factors contributing to success

A number of factors contributed to the achievements of the project.

- A careful and thorough needs analysis of the learners and their contexts, informing the design of an appropriate learning system.
- The reach and availability of at least one medium, radio.
- A high level of interaction and collaboration between the central project team and the six provinces, despite distance and communication difficulties.
- Strong ownership and active leadership at the local level.
- An educated human resource and high levels of literacy in remote places.
- Few other competing options on offer, a climate of uncertainty and wide perception of the project as relevant.
- Scope and resources in the project design for the local creation of materials in response to local needs.
- Confidence about project funding in an unpredictable financial environment.
- Appropriate technical assistance.
- Goodwill and voluntary service at the local level, particularly by the visiting teachers.
- A culturally appropriate form of support which facilitated social interaction.
- A tradition and liking for competition between provinces and districts, so that they competed to be the best or to introduce local innovations.
- A strong administrative infrastructure extending to the most local level (a legacy of communist administration which had high levels of control over the population, including nomadic families).
- The high status given by the Mongolian stakeholders to an international (UNESCO) project as Mongolia opened up to the world.
- Support from other organisations, including those with local networks (such as the Women's Federation).
- Tangible incentives (jeeps, radios and batteries, per diem payments for attendance at meetings, training opportunities, study tours for some project staff).
- A culturally-rooted respect for learning and education.

(H2) Problems and limitations

As with any project there were some problems and limitations, both internal and external to the project.

- Inadequate training and technical assistance in curriculum design and materials development were provided for the project team and the demands and skill levels needed for creating self-study texts were under-estimated. As a result, self-study print materials appeared more like short information pamphlets, lacking the typical features of self-instructional materials (though more accessible to readers than the customary textbooks). They varied very widely in quality and there were few quality assurance procedures operating in the process of print development and production. The volume of print produced was relatively small in relation to the time and resources available.
- The production and delivery of printed materials was often late to the extent that booklets for a topic reached learners months after the related radio programmes had been broadcast and in the case of the final booklet, did not reach learners at all. This was due to a combination of factors: inexperience, insufficient training, and weak management of people and schedules within the print group. External factors included the late delivery of paper from overseas suppliers and no tradition of contracts within the country (for example, with the printers or individuals).
- Weak teamwork, inexperience and strong inter-personal rivalry and conflicts resulted in a lack of co-ordination between print and radio groups. This resulted in poor integration of print materials with radio programmes and created major planning problems for the central and regional radio producers who could not get enough advance information about print plans and delivery schedules.
- An imbalance in the needs analysis knowledge base led to some significant omissions or lost opportunities in the creation of materials. While the project's initial needs analysis study was strong in terms of learner-identified needs, the project sometimes took too little account of needs identified by others (such as the Ministry of Health).
- Confusion between the advisory and executive roles of the National Coordinating Commission resulted in a lack of formal accountability, clear line management and some conflict of interests. Clearer separation was needed.
- The management style, practices and skills of a command system, which had been highly authoritarian in nature, left managers unaccustomed to delegating decision-making and responsibility, or to consulting and sharing information and working in collaborative teams. This sometimes resulted in bottlenecks while

decisions were awaited or in lack of co-ordination as decisions by senior managers were made in isolation from each other and not communicated to others concerned.

- Bureaucratic and slow practices in the international agency (UNDP) dealing with the ordering of equipment, supplies and processing of funds to the project slowed down project activities at times and delayed delivery of equipment and supplies. This caused some project deadlines to be missed.
- Out-of-date evaluation approaches reflected the old-style monitoring, control and reporting mechanisms of a socialist state, inspecting rather than evaluating in a formative way. Though some formative evaluation was done, it tended to be patchy and unsystematic, and was only partially successful in feeding back into the project to initiate improvements.
- Effective management, control and accountability were difficult across distance and with poor communications. While local initiative was encouraged, it also meant that there were problems in ensuring that the things planned were implemented. For example, there was inadequate access to the jeeps by those for whom they were intended (a feature of many projects), thus restricting the role of visiting teachers; and the radios and batteries provided did not always reach the most needy for whom they were intended.
- The assessment of learning outcomes received little attention in project plans and this made it difficult to judge learner progress or to substantiate project claims and impact. Baseline studies were not planned or conducted as part of the project's design so it is difficult to produce evidence of what was learnt. Learning from the materials was not systematically evaluated so evidence for claims of effectiveness was partial.
- Unsystematic record-keeping and data-management by the central team handicapped project management and limited the analysis of project activities and project knowledge about its own performance. At the local level some detailed records were kept (again a legacy of communist practice) but not always of an appropriate kind or consistent in form among provinces, and not incorporated in a centralised database. A central database for managing the project and for tracking activities was not set up. This led to gaps in the quantitative data available on the project: for example, demographic data on learners, the number of learners who participated throughout and to what extent, the provision and take-up of different materials and services, and provincial and district variation, and so on.

- The achievement of original objectives varied in extent but was difficult to judge on the basis of evidence available, though there was no doubt about the widespread enthusiasm and esteem for the project. In terms of the literacy component, its role turned out to be less than planned. Information about literacy levels and needs in Mongolia was out-of-date and there was a shortage of in-country expertise in modern approaches to literacy, so the small amount of materials produced were not well-targeted.
- Gender issues within the project did not receive much explicit attention. For example, some materials for rural women were written inappropriately by urban men (demonstrating less knowledge and familiarity with country matters than the women learners — a complaint which was voiced by some rural women). Some male officials were appointed to be visiting tutors but could not then discuss the family planning booklet with female learners (it was culturally inappropriate) or teach learners how to use a crochet hook or knitting needles. The obverse of this was that some of the male visiting teachers had skills that the female visiting teachers lacked, but there was no system for sharing visits as a team. Male visiting teachers who were also local officials tended to treat the visits as 'inspection visits' rather than tutoring or counselling visits.
- Though income and expenditure were accounted for and audited in accordance with the requirements of the government and implementing agency, records were not kept in ways which permitted a cost analysis of the project as an ODE one. All inputs were not identified and costed (for example, the contributions of resources by provinces and districts, 'free' time by visiting teachers and their subsidising of their own travel costs and teaching materials). So the conclusions that can be drawn about the costs and cost-effectiveness of the programme were limited as a result.
- Collaboration with other agencies brought tensions as well as benefits. For example, the Women's Federation with its national administrative network was a valuable resource but its previous political affiliation to communism undermined its credibility and it was challenged by other newer women's groups, putting the project in a difficult position in trying to work with all.

The basis of a model?

Does the above analysis allow any generalisable lessons or model-building for non-formal education projects using open and distance learning in developing countries?

A number of lessons from this project are evident in the lists above, so will not be repeated here. These can provide some guidance or pointers to planners. Some key areas for attention by both planners and researchers are:

- the importance of a thorough needs-analysis study, to assist project planning and design and understanding of learners;
- the need to design and establish a framework of data collection and record-keeping from the start, for purposes of project management, documenting activities and formative and summative evaluation.
- the need to address in a systematic way the issue of assessment of learning in non-formal education projects which do not have examinations or testing as part of them;
- the need for cost data and cost models which would permit analysis of costs and cost-effectiveness appropriate for ODE programmes;
- the important influence of contextual factors in understanding how non-formal education through ODE works.

However, to go further than tentative guidelines needs more research, both of a comparative kind and in relation to theoretical propositions. There are several sets of complexities which need to be taken into account and it can be misleading to make easy generalisations. For example, the term 'developing countries' covers a wide range of economic, social, political and educational differences— some of the features of the Mongolian context described earlier will not be found in all developing countries.

INTRODUCING ODE IN TRANSITIONAL ECONOMIES

In addition to the challenges to ODE described earlier, the features of a society in rapid economic and social transition added some more.

- The rapidly changing economic and legislative environment was difficult to keep pace with and at times ran faster than the preparation time needed for materials development. It also destabilised some of the operational structures and administration on which a project relies. Such pace of change tends to encourage crisis management and piecemeal, sudden decision-making on an everyday basis and needs good capacity for contingency planning and management.
- The changing circumstances and lifestyles of learners required that the relevance of plans, materials and support services needed to be re-checked more often and realigned to the changing realities.
- Many of the changes were outside of the project's control (for example, changing legislation, high inflation rates, changes in government, policies, personnel and structures). The responsiveness of the project team and flexibility in planning and strategy were therefore important but faced two problems in particular. One was

that previous political and organisational systems did not prepare people well for this kind of flexible planning, implementation and decisionmaking. The second was that international projects are often constrained by initial agreements, contracts and reporting requirements by the partners involved — donors too are bound by their own practices, procedures and accountability mechanisms which may be made with a different set of assumptions about the project environment.

- The media most able to respond quickly to changing circumstances were particularly valuable. Radio proved very effective in providing topical programmes and in reaching large numbers of learners rapidly though economic problems limited access. Print production is less speedy, especially when producers are novices, learning new skills and practices, and with little access to computer technology. Different approaches to organising print production, rather than lengthy linear sequences, might have been more appropriate (and might have been possible if more technical assistance had been provided).
- Privatisation and deregulation are a feature of the transition to a market economy. In the case of media such as radio, proposals for privatisation, deregulation and cost-recovery created high levels of uncertainty and a changing environment. This problem has become more acute in the followon project (*Surch Amidarya, Learning for Life*).

Within the period of the project, a number of transitions in education took place (summarised in Figure 1).

<i>From:</i>	<i>To:</i>
<ul style="list-style-type: none"> • Ministry (MOSTEC) responsibility for formal education for young people. • Centrally planned and delivered provision. • Education as the province of 'experts' or specialist curriculum developers at government research institutes. • Heavy emphasis on and high status of theoretical knowledge and low status of practical knowledge¹. • Single form (institution-based and classroom-based teaching, provided by professional teachers). • Exclusion and discouragement of traditional Mongolian culture, folk-knowledge and skills. • Teacher-centred and teacher-dependent education. • Densely written, theoretical textbooks with few illustrations, written for teachers as the primary audience. • State provision and funding. • A highly literate population. • Based on a single soviet-influenced model of education and narrow knowledge base (previously based around a single ideology). 	<ul style="list-style-type: none"> • Extension of Ministry (MOSTEC) responsibility to include non-formal and continuing education for adults. • Decentralised planning and local provision of services. • Education as meeting locally-expressed needs and legitimating local expertise and skills. • Broader interpretation of what constitutes valid knowledge from a widening range of sources. Increase in the status of 'practical knowledge'. • Multiple forms (including use of the media such as radio, self-study and local learning groups, led by members of the local community). • Revival and renewal of traditional Mongolian culture, folk-knowledge and skills. • Learner-centred and learner-initiated education. • More user-friendly accessible texts, with illustrations, written for learners as the primary audience. • Self-help and funding by donors or NGOs (Non-Governmental Organisations). • An increasing range of literacy levels, including illiteracy. • International influences, multiple knowledge sources and models

Figure 1. Educational transitions in Mongolia (1992-1999)

CONCLUSIONS

The Gobi Women's Project was the first major step towards establishing open and distance education in Mongolia and was effective in addressing the educational needs of a vulnerable sector of the population (rural and nomadic women). While the project had its limitations it also achieved significant shifts in understanding and practice in relation to non-formal education and ODE. It met new educational needs in an innovative way and achieved a great deal in a relatively short time, given the starting point and conditions. Unlike many other non-formal education projects, it has been influential in policy development.

The vehicle for establishing ODE in Mongolia was the donor-funded development project. This approach has both advantages and disadvantages, as experience elsewhere shows. On the one hand it can introduce innovation and bypass the inertia of traditional systems within a relatively short timescale. It can focus on limited goals and identified needs, build new capacity, demonstrate new approaches and bring up to-date international experience to bear on the development. On the other hand, projects may come and go leaving barely a ripple on the pool of educational change. Distance education projects, especially for non-formal education, may remain marginalised from the mainstream of policy and resource allocation, or may fail to institutionalise or move to scale or influence traditional thinking. The time span of projects may also be too short to establish new structures, systems, practices and attitudes, especially if they only run for one cycle, as many donor-funded projects do. A one-cycle project gives implementers no time to consolidate learning from the experience or to do better next time round, and project personnel are often dispersed at the project's close. Donor timelines for projects tend to be too short to match the slow process of educational change and projects may be unsustainable in the longer term, with activities coming to a halt with the expiry date of the project.

Was the Gobi Women's Project sustainable? Some of the activities continued in some provinces after the project ended, to a limited extent — a result of local commitment and individual initiatives. However, in the main, it was not sustainable after project funding finished, because of the very limited availability of resources for education within the country and competing demands on them. The way forward has been another externally-funded project (again funded mainly by DANIDA and implemented by UNESCO), extending the scope of non-formal education and the span of ODE's reach. The experience of the Gobi Women's Project and lessons learned from its evaluation (Robinson 1996) were used to shape the follow-on project (*Surch Amidarya, Learning for Life*) for 31,000 rural families and 6,000 marginalised youth in urban centres (1997-2000).

At the same time, government support for non-formal education has developed in parallel. Partly as a result of the Gobi Women's Project and its successor project, new national policy and law for non-formal education developed. The first national seminar on non-formal education was held in Ulaanbaatar in 1996 and in the same year, the Government approved a *National Programme for Non-Formal Education 1996-2000*, with the goal of developing a national non-formal education system. In 1997, a Non-Formal Education Centre was formally established within MOSTEC though with minimal funding. A senior ministry official was given responsibility for non-formal education and local officers were appointed in each province. Some funding allocation was earmarked within education budgets at provincial level in

1997; though this was only a small amount (about one percent of provincial education budgets at best) it should be considered against the acute shortage of funds for schools. Its significance is that it backed policy with some resources, however minimal.

Other projects using ODE have followed. In November 1998, the first National Round Table on Distance Education was held in Ulaanbaatar and a draft national policy for ODE in Mongolia was prepared at the beginning of 1999. The two main obstacles facing the further expansion of open and distance education in Mongolia are lack of finance in a country with acute economic problems and limitations of infrastructure. Despite these obstacles, open and distance education is becoming part of the educational landscape of Mongolia in a relatively short time, a change led so far by non-formal education.

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