

Building blocks

Introducing ICT-based education
for the children of brick kiln workers



Background

Given the informal and seasonal nature of brick production, brick kiln workers are compelled to migrate with their family during the brick production season (October–May). Coupled with the highly marginalized and vulnerable status of brick kiln workers, this seasonal migration seriously hampers their children's education. The children are unable to finish their curriculum, and most have to repeat the academic year. In turn, the children are unable to break free of the intergenerational poverty cycle. In Nepal, around 32,000 children experience this pattern of interrupted education.

During a rapid gender needs assessment conducted across five provinces in Nepal in 2018, brick factory owners and both women and men workers raised the issue of barriers to education access for brick kiln workers' children. The assessment identified a number of barriers that contribute to interrupted education: seasonality of work, language barriers, social stigma, and low priority placed on education. The pressing need to develop an action research intervention addressing these barriers was apparent. Consequently, ICIMOD collaborated with Open Learning Exchange (OLE) Nepal in March 2019 to pilot an information and communications technology (ICT)-based education programme in Shree Kalika School, Dhading. The novel approach is tailored for brick kiln workers' children and their parents' seasonal migration. OLE has

been integrated into many government schools in Nepal since 2007. This intervention could help initiate a larger dialogue around the issue of education access for brick kiln workers' children.



Objectives

- Provide access to quality, interactive education for brick kiln workers' children, especially the children who fall through the gaps in the system because of the informal and seasonal nature of their parents' work
- Attempt to provide the educational curriculum within six months of the brick season so that the children do not need to repeat the same class when they return to their home village
- Encourage enrolment and retention of the brick kiln workers' children at school

Why partner with Open Learning Exchange (OLE)?

OLE has been implementing interactive digital learning courses known as E-Paath since 2007 to improve the quality of education and reduce disparity in education access across the globe. OLE Nepal partnered with the Government of Nepal's Department of Education (under the Ministry of Education, Science, and Technology) to launch a laptop-based integrated learning initiative in 2008. The interactive courses can be accessed online through OLE Nepal's free digital library, known as E-Pustakalaya.

Why Shree Kalika School?

Dhading District was selected as a pilot area for an ICT-based education programme as many brick factories are moving from Kathmandu and Lalitpur to Dhading because of government attempts to alleviate air pollution from brick kilns in the Kathmandu Valley. There are 18 kilns (and counting) in Dhading, four of which are located within walking distance of Shree Kalika School. Around 60% of the students enrolled in the school are brick kiln workers' children.

During the selection process of schools for the pilot, Shree Kalika School's teachers showed commitment, capacity, and vision to develop the ICT-based education curriculum. The school also formed a committee comprising teachers, parents, the local community, and governing bodies to ensure the ICT-based education programme's sustainability.



ICIMOD's interventions (in partnership with OLE Nepal)

- Provide early childhood and digital learning resources in Shree Kalika School, Dhading
- Supply early childhood learning kits for day-care centres attended by brick kiln workers' children
- Conduct teacher trainings to improve integration of digital lessons and early childhood materials in classrooms
- Provide early childhood development trainings for day-care centre teachers



Around 60% of the students enrolled in Shree Kalika School are brick kiln workers' children. To help them avoid interruptions to their education, a computer-enabled laboratory has been set-up at the school.

ICT-based education pilot

ICIMOD set-up a computer-enabled laboratory at the school in early 2019 in partnership with OLE Nepal and Shree Kalika School. The intervention was also supported by the Dhading Brick Association. OLE Nepal conducted a comprehensive four-day training course for the teachers before integrating the E-Paath concept at the school. The training focused on pedagogical and technical aspects.

The pedagogical sessions involved training on child-friendly teaching-learning practices for the effective integration of E-Paath and digital learning resources into the classroom. This included the preparation of integrated lesson plans and job charts, classroom management techniques, use of teacher notes, and maintenance of records. The technical sessions covered basic troubleshooting techniques for E-Paath, including a hands-on session on how to operate the laptops. The sessions also provided training on early childhood education development.





STAKEHOLDERS AND THEIR CONTRIBUTIONS TO SHREE KALIKA SCHOOL FOR THE ICT-BASED EDUCATION PILOT

Stakeholder	Contributions
ICIMOD	Provided 25 computers to operate the digital classroom Provided 11 early childhood development kits
OLE Nepal	Conducted trainings for five teachers on early childhood development and ICT-based integrated education Conducted early grade and day-care centre training for 12 teachers from Dhading and Rupandehi
Dhading Brick Association	Contributed eight sets of custom-designed desks and benches for the digital classroom
Shikhar Insurance	Contributed NPR 200,000 towards the school equipment maintenance fund
Ward no. 4, Dhunibesi Municipality, Dhading	Contributed NPR 100,000 in kind towards the digital classroom's support infrastructure, such as back-up battery charger and furniture

SUPPORTED BY



IN COLLABORATION WITH



For further information

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All images taken at the Shree Kalika H.S.S., Dhading and nearby brick factories with the informed consent of the Head Teacher and parents/guardians.