

## **Students Shine**

# **Broadening Learning Opportunities**

The first annual Kusuma Mathematics and Science Olympiads took place at the Kusuma Resource Centres (KRCs) in Hardoi on 21 December and 25 January, and in Sambalpur on 18 January.

The Kusuma Olympiads are district level competitions to recognise and reward talented students who excel in Maths and Science, and to promote interest in these subjects. The highest scoring students in each district received a certificate, a cash prize of INR 1,000 and books to further their interest in these subjects.

Almost 1,600 students (700 in Hardoi and 897 in Sambalpur) from 162 schools participated in the Olympiads at the KRCs. One hundred and four top students were awarded prizes for their performance in the competitions. The top-performing students in each district were Subhi Chaurasiya from Madhav Vidyapeeth Intercollege in Hardoi, and joint top students in Sambalpur were Debashish Behuria from Buddharaja High School and Dileep Kumar Prajapati from PBR Intecollege Gausganj.

Mathematics and Science Olympiads promote interest in the subjects and recognise talent. The competitions encourage students to engage with 'daunting' subjects in a manner where they can discover and experience the subject, but also have fun competing with their peers at the same time. As Olympiads are rigorous standards-based challenges, they raise the bar for academic excellence, widening student and teacher exposure to the STEM¹ disciplines. These competitions are now a permanent feature on the KRC event calendar.



A student participating in the Kusuma Olympiad at the KRC in Hardoi

For students, the majority of whom were Olympiad first-timers, participating in the competition not only piqued their curiosity, but also encouraged them to revise the school syllabus. Teachers were delighted with the timing of the event as it was the perfect practice for their annual examinations taking place in February and March.

Nurturing interest and encouraging students' achievement in Mathematics and Science is only one aspect of the Kusuma Schools Partnership Initiative (KSPI) where Kusuma works with 25 schools in Hardoi and 25 in Sambalpur to implement a range of interventions that contribute to an enabling teaching and learning environment. Support for students includes the Secondary School Readiness Programme which enables students whose attainment is below secondary school level to catch up; Student Learning Units for the Mathematics, Science and English syllabus; computers, library books, text books and Science laboratory kits; visits to science centres and other institutions; scholarships and mid-day meals.

An additional source of capacity building for teachers and students is through after-school activities, specialised training courses in English and Computer Skills, workshops, and audio-visual and resource materials at the Kusuma Resource Centres. The Kusuma Trust UK, in partnership with the Kusuma Foundation in India, strives to broaden learning opportunities, both inside and outside the school, so that students have the best opportunities to thrive and get the best from their education.

"The Olympiads are an innovative and positive way to instill and reinforce students' interest in Mathematics and Science.

They not only provide an experience to students to participate in a competitive examination, they also help to prepare students for their board examinations."

Mr. Sudhakar Bajpei, Science teacher, Government Inter College, Hardoi.

<sup>&</sup>lt;sup>1.</sup> STEM refers to the academic disciplines of Science, Technology, Engineering and Mathematics

#### **English course builds confidence**

For 16 weeks, Soumyaranjan Behera, a Class 9 student at Katapali Government High School in Sambalpur participated in an English communication course at the Kusuma Resource Centre (KRC). Soumyaranjan chose to study English to build his confidence and assist with his school lessons. He was worried about the challenges of learning English as it is the third language that students learn in Sambalpur, after Oriya and Hindi. Like many students attending the course, Soumyaranjan was the first in his family to learn English.

During the course, Soumyaranjan developed his English listening, reading, writing and speaking skills. After completing the course, he is coping with school English classes much better. Soumyaranjan now enjoys the challenge of regularly reading English newspapers and is confident enough to speak English with friends. He has even started to greet Kusuma staff and guests in English during their school visits.

"Before joining the course, I did not have the confidence to speak or sometimes even think of the words in English. I had so many errors in my written work and always got low marks in tests. Having worked on this during the course I am able to read English much better and can even write short pieces on my own. Thanks to Kusuma for building my confidence in English as this will help me a lot in my education and career."

Soumyaranjan Behera, Class 9, Katapali Government High School, Sambalpur

### KRC helps Fellow with career aims

Shalu Singh, a Class II student at Arya Kanya Inter College in Hardoi is one of the I00 students awarded the Kusuma Excellence Fellowship. As part of the fellowship, Shalu received advice at a careers fair and had the opportunity to explore potential future professions. She has always enjoyed making science models, and after discussing this with careers advisers she has set her sights on becoming an engineer.

With encouragement from Kusuma and the financial support which is part of the Fellowship, Shalu has enrolled in computer classes in order to help with her chosen career. Shalu had previously studied Computing at school but there were no working computers at school or home. Her lessons were therefore limited to theory. She now attends practical computing sessions at the KRC in Hardoi and also takes the opportunity to research engineering and watch science videos. She sees this as the first step to achieving her ambitions of becoming an engineer. Shalu is very proud of the fact that she is the first of her friends and family to gain practical computer knowledge and skills.

#### SSRP raises learning level

The Annual State of Education Report (ASER)<sup>2</sup> 2014 shows that 25.5% of Class 8 students are unable to read text suitable for Class 2 and that 56% of Class 8 students are unable to understand basic arithmetic.

Kusuma introduced a Secondary School Readiness Programme (SSRP), an accelerated learning framework that aims to address the learning gap that exists between actual learning levels and the levels required for secondary classes. To-date, 1900 students from Sambalpur and 4200 students in Hardoi have completed study camps, continue to study with tailored learning materials and participate in weekly coaching sessions which are integral parts of the SSRP.

Arun, a student who attends the U.G. Government High School Khandual, was struggling with the secondary syllabus as primary school had not adequately prepared him for secondary school. He felt uncomfortable asking teachers for help and fell behind his fellow classmates. Arun joined a study camp under the SSRP to help bridge gaps in his understanding and rebuild his confidence. After completing the camp his average class level increased by two class years.



Arun participating in the Kusuma SSRP study camp Photo: Kusuma Foundation

"During the camp, I got opportunities to work in small groups. Teachers leading the sessions used different methods to those in my school and encouraged me to ask questions when I needed help. I really enjoyed learning new things as the activities and learning material used were easy to understand. I now understand more of the work during my regular classes and I feel more confident and able to ask questions to my teachers."

Arun Luha UG Government High Schol, Khandual

2. http://www.asercentre.org