for school pupils to expose them to the nuances of science. These camps serve as an interactive platform between students and scientists. During the camps students are sometimes accommodated on campus to foster interaction among peers and learn basic science, scientific methodology and skills from their mentors. However, INSPIRE Camps have not been able to match the aspirations with which the programme was instituted.

Primarily, there is a need to make changes in the selection procedure. Currently, marks or grades obtained is the sole criterion. Such a criterion deprives students interested in basic science and preferentially selects top scorers, who aspire to be doctors or engineers. The present criteria do not take into account personal traits of students like intelligence, observational skills or their interest levels. Therefore, DST should alter the selection procedure. Secondly, several camps do not provide lodging facility, leaving no room for pupil-mentor interaction. On campus lodging should be made mandatory to cultivate informal discussions and foster pupil-mentor relationship. It is also important to choose mentors who can talk to children in a simple and lucid manner. Also, laboratory and group experimentation should be considered during these camps.

For organizing such camps, DST is allocating huge funds. The funds should be utilized in a streamlined fashion, with not too much spending on promotional activities, while the institutes should observe expenditure guidelines. With respect to the points mentioned above, DST should take a fresh look to meet the aspirations with which this programme was instituted.

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Skill development through government initiatives: anything for women?*

Jamal and Mandal1 provide of the status of vocational education and training (VET) in India that largely constitutes schemes or programmes initiated by the Government to promote employable skill development system. However, the article misses out on reviewing the initiatives taken by the Government to strengthen skill development for women.

Women worldwide, not only in the developed countries but also developing countries, face the challenge of getting employment. Nearly, 48.4% of the Indian population are women (Census of India, 2011). However, the female labour force participation rate remains less than half of that of males. An employment and unemployment survey (2009–10) by the National Sample Survey Organization (NSSO) reveals that 23% of women are in the labour force compared to 55.6% of men. Similarly, unemployment rate has been consistently high for women since 1972–73 in both rural and urban areas. Decline in the workforce participation rate of women is a matter of concern and has implications on their overall economic empowerment. Therefore, there is an urgent need to increase productive employment opportunities for women through skill development in different sectors.

The National Policy on Skill Development (2009) emphasized on equal access to skill development among all social groups, particularly women and disadvantaged sections of the society to help them secure a decent employment and as a measure to alleviate poverty. The 11th Five-Year Plan detailed a roadmap for skill development in India that favoured the formation of Skill Development Mission (SDM), both at the state and national level. To create such an institutional base for skill development in India at the national level, a coordinated action on skill development with three-tier institutional structure was made operational. The following features were envisaged with respect to gender equality in skill development: (i) to raise women’s participation by at least 30% by the end of the 11th Plan; (ii) to facilitate women’s participation by providing hostels, scholarships, transport, training materials and loans; (iii) expanding Women’s Vocational Training Programme (WVTP) through institutional network; (iv) to identify sectors employing large number of women in order to promote skills and employability among women and (v) to eliminate gender stereotyping from vocational courses to encourage women’s participation in non-traditional occupations, including existing and emerging technological fields.

Realizing that the process of social development has to take into account the needs, interests and aspirations of women, the gender-specific WVTP was designed and launched during 1970s under the Directorate General of Employment and Training (DGE&T), Ministry of Labour and Employment, Government of India to mainstream women into economic activities. At the central level, it was implemented through a network of 11 institutes under DGE&T that included National Vocational Training Institute for Women (NVTI) at Noida and ten Regional Vocational Training Institutes for Women (RVTIs) at Mumbai, Bangalore, Thiruvananthapuram, Panipat, Kolkata, Tura, Indore, Allahabad, Vardar and Jaipur. These institutes offer about 7768 seats for regular courses and also run short-term courses. As on 30 September 2011, approximately 90,000 women have been trained since its inception. The WVTP aims to promote self-employment and wage-employment for women in industry as semi-skilled, skilled or highly skilled workers by increasing their participation in skill-training facilities.

Under the state sector, vocational training is organized through a network of Government and private-run women’s Industrial Training Institutes (ITIs) or women’s wing in general ITIs which are directly under the administrative control of the respective governments of the State or Union Territory. As on May 2011, there exist 313 Government ITIs

*Disclaimer: The views expressed here are personal and not those of the organization (NMEW/MWCD).
India’s ranking in materials research

Recent Global Research report on ‘Materials Science and Technology’ by Thomson Reuters provides information on materials research output of several countries including India. Table 1 of the report reproduced in this letter provides information on ranking of 20 institutions/universities by output (number of papers), citations and citations impact for materials science research for the period 2001–2011. In this report only IITs of India are identified as single institution contributing to materials science research.

In Table 1, first column IITs occupies 5th position with a total of 4522 papers, where as the Chinese Academy of Sciences (CAS) occupy number one position with a total of 14,019 papers. In this ranking based on number of papers, none of the US based institutes figure, since rankings is restricted to the institutes having contributed a minimum of 2500 papers. Further column 4 of Table 1, list institutes based on total number of citations. In this kind of ranking CAS occupies first position with a total citation of 104,104. IITs moves down to last position (20th rank) with a total citations of 22,297. Interestingly only six US institutes figure based on the total citations count. Of these six, MIT is ranked number 5. Column 7 of the table list 20 institutes based on the total citations impact. Of these six, MIT is ranked number 5. Column 7 of the table list 20 institutes based on the total citations impact. Of these six, MIT is ranked number 5. Column 7 of the table list 20 institutes based on the total citations impact. Of these six, MIT is ranked number 5. Column 7 of the table list 20 institutes based on the total citations impact. Of these six, MIT is ranked number 5. Column 7 of the table list 20 institutes based on the total citations impact. Of these six, MIT is ranked number 5. Column 7 of the table list 20 institutes based on the total citations impact. Of these six, MIT is ranked number 5. Column 7 of the table list 20 institutes based on the total citations impact. Of these six, MIT is ranked number 5. Column 7 of the table list 20 institutes based on the total citations impact. Of these six, MIT is ranked number 5. Column 7 of the table list 20 institutes based on the total citations impact. Of these six, MIT is ranked number 5.

Table 1. Skill development programmes/schemes offered by the Government under various ministries

<table>
<thead>
<tr>
<th>Ministry</th>
<th>Schemes/programmes</th>
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<tbody>
<tr>
<td>Ministry of Micro, Small and Medium Enterprises – for women entrepreneurs</td>
<td>Tread-Related Entrepreneurship Assistance and Development Scheme for Women (TREAD)</td>
</tr>
<tr>
<td>Ministry of Labour and Employment</td>
<td>Modular Employable Skills (MES) under Skill Development Initiative Scheme (SDIS)</td>
</tr>
<tr>
<td>Ministry of Housing and Urban Poverty Alleviation</td>
<td>Swarna Jayanti Shahari Rozgar Yojana (SJRSY)</td>
</tr>
<tr>
<td>Ministry of Rural Development</td>
<td>Swarnjayanti Gram Swarozgar Yojana</td>
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<tr>
<td>Ministry of Women and Child Development</td>
<td>Jan Shikshan Sansthan (JSS), National Literacy Mission Authority</td>
</tr>
<tr>
<td>Ministry of Human Resource Development</td>
<td>Rajiv Gandhi Scheme for Empowerment of Adolescent Girls (RGSEAG; ‘SABLA’), National Resource Centre for Women, National Mission for Empowerment of Women, Ministry of Women &amp; Child Development, Government of India, Room No. 118, Janpath Hotel, New Delhi 110 001, India e-mail: <a href="mailto:sunitasangar@yahoo.com">sunitasangar@yahoo.com</a></td>
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