



VOCATIONALISATION IN SECONDARY & SENIOR SECONDARY EDUCATION IN JHARKHAND

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Jharkhand is among the fastest growing economies in the country characterized by a young demography. Thus, the scope of skill development intervention should encompass both the repair and prepare jobs. The project is being implemented by Jharkhand Education Project Council (JEPC) (Level-I in class 9th) in Government schools, each school with two trades with the goal to make students employable when they complete senior secondary education.

Keywords: Vocational Skills, School Education.

Background

A large section of the population in Jharkhand even now does not enter in higher education. The Gross Enrolment Ratio in the Higher Education is nearly 16 % only, where as 74% in Secondary and 56 % in Senior Secondary education. The state has a total of 46,578 schools, including 35,623 government schools and 10,955 private schools. There are 1882 Secondary and 844 Senior Secondary Government schools in the State. Jharkhand has also been improved the facilities for higher education. As per the survey reports of MHRD in 2019, the total number of colleges in the state is 308 while there are 29 public and private universities across its districts.

Government of Jharkhand is committed to enable growth of the state through skilling the youth. A skilled and high productivity manpower base is a critical enabler in the growth of manufacturing, services and agriculture. It is also a critical intervention to harness the potential of 'Demographic Dividend' in a youthful state. To give impetus to growth with scale, speed and standard, Government has framed a 5 years Skills Policy for the state 'Jharkhand Skills Policy 2018. The objectives of vocational education are :

- (i) To enhance the employability of youth through demand driven competency based modular vocational courses
- (ii) To maintain their competitiveness through -
 - ✓ multi-entry multi-exit
 - ✓ vertical mobility
 - ✓ interchangeability in qualifications
- (iii) To fill the gap between educated and employable
- (iv) To reduce dropout rate at secondary level

To full fill the above objective the Government of India brought out a revised Centrally Sponsored Scheme for Vocationalisation of Secondary and Higher Secondary Education (CSS for VSHSE) by Ministry of HRD (MHRD) to integrate employability education into School

Education in September 2011. In 2018, this scheme got further revised and brought under the integrated initiative (Samagra Shiksha) by MHRD and termed as Vocationalisation of School Education (VSE). The revised norms allow a student to complete training in one Job Role in 9th and 10th standards; followed by another Job Role in 11th and 12th standards. The scheme is operated within the NSQF (National Skill Qualification Framework), which establishes a system of clear educational pathways from school to higher education while providing certification on vocational skills.

To enhance the skill in children from school education, vocational education is imparted from classes IX to XII in composite Government Secondary and higher Secondary schools. Till now, the students select a particular job role in class IX, whose curriculum was spread over 4 years (till class XII), irrespective of the course content and number of notional hours required for completing the course. Thus, the student studied and trained in a single job role in 4 years. In order to provide diverse opportunities to school students in the field of vocational education, 100 more job roles in various sectors needed to be identified which "Pandit Sunder Sharma Central Institute of Vocational Education" (PSSCIVE), Bhopal on ' 04.11.2016 and courseware in respect of these job roles are being developed by "PSSCIVE" Bhopal. The list clearly indicates the job roles, along with the certification levels, which may be taken up in secondary classes (IX and X) and curriculum for which will get completed in class X and external assessment will take place in Class X. Similarly, there are job roles which may be taken up in senior secondary classes (XI and XII), curriculum for which will get completed in class XII followed by external assessment. The progression of the job roles within the same sector has also been indicated. This will help them to specialise in a particular sector and also provide them greater flexibility after Class X, which is as follows:-

Table 1 : Job Roles with Career Progression in Schools

Sector		Job Roles		
	S. No	Classes IX - X	S. No	Classes XI - XII
1. Agriculture	1	Green House Operator (L3)	55	Micro Irrigation Technician (L4)
	2	Nursery worker (L3)	56	Floriculturist (Open) (L4)
	3	Solanaceous crop cultivator (L4)	57	Dairy Farmer (L4)
	4	Assistant Gardener (L3)	58	Tuber crop Cultivator (L4)
	5	5 Pack house worker (L3)	59	Gardener(L4)
	6	Bee keeper (14)	60	Supply chain field assistant (14)
	7	Non timber forest produce collector (L3)	61	Mushroom Grower (L4)
	8	Floriculturist (Protected) (L4)	62	Medicinal plant grower (L4)
			63	Forest nursery raiser (L4)
			64	Florist (L4)

2. Tourism and Hospitality	9	Housekeeping Attendant - Manual	65	Room Attendant (L4)
		Cleaning (L3)	66	Travel Consultant (L4)
	10	Meet & Greet Officer (L4)	67	Counter Sales Executive (L4)
	11	Food & Beverage Service Trainee. (L3)		
3. Apparels	12	Hand Embroiderer - Addawala (13)	68	Self Employed Tailor (L4)
	13	Hand Embroiderer (L4)		
	14	Assistant Designer Home Furnishing (L4)	69	Specialised Sewing machine Operator (L4)
	15	Sewing machine Operator (L4)		
Security	16	Unarmed Security Guard (L4)	70	Fireman (L4)
4. Food Processing	17	Industrial production worker (L3)	71	Jam Jelly and Ketchup Processing
	18	Packing Machine worker (L3)		Technician (L4)
	19	Consignment Tracking Executive (L3)	72	Fruit Pulp processing technician r (L4)
	20	Consignment booking assistant (L3)		Jam Jelly and Ketchup Processing
	21	Inventory Clerk (L3)		Technician (14)
				Fruit Pulp processing technician (L4)
			73	Documentation Assistant (L4)
5. Logistics	22	Warehouse Dinner (L3)		
	23	Receiving Assistant (L3)	74	Warehouse Claims Coordinator (14)
	24	Warehouse Quality Checker (L3)		
	25	Courier Sorter (L3)	75	Shipment Query Handler (L4)
	26	Courier Delivery Executive (L3)		
	27	Courier Pickup Executive (L3)		
6. Electronics & Hardware	28	Installation Technician - Computing	76	Field Technician - Computing and
	29	and Peripherals (13)		Peripherals (14)
	30	Wireman Control Panel (L3)	77	Solar Panel Installation Technician fL4)
			78	LED Light Repair Technician (L4)
			79	Access Control Installation and Service
				Technician (L4)
7. Healthcare	31	CCTV Installation and Service	80	Diet Assistant (L4)
	32	Medical Equipment Technician		General Duty Assistant
		(Basic Equipment Technician) (L3)		(Already Available) (L4)
	33	Vision Technician	81	Dental Assistant (L4)
		(Already Available) (L3)	82	X-Ray Technician (L4)
				Diet Assistant (L4)

				General Duty Assistant (Already Available) (L4)
				Dental Assistant (L4)
8. Retail	34	Store Ops Assistant (L1)	83	Sales Associate (L4)
	35	Cashier (L2)		
	36	Trainee Associate (L3)		
9. IT / ITes	37	Domestic Data Entry Operator (L4)	84	Domestic IT helpdesk attendant (L4)
	38	CRM Domestic Non-Voice (L4)	85	Junior Software Developer (L4)
			86	CRM Domestic Voice [L4]
10. Automotive	39	Showroom Hostess (L3)	87	Customer Relationship Executive cum
	40	Sales Executive Dealer (L4)		Telecaller (L4)
11. Plumber	41	Plumber (General) [L3]	88	Plumber (General) - II (L4)
12. Construction	42	Assistant Manson (L2)	89	General Manson (L4)
13. Media & Entertainment	43	Color Key Artist (L3)	90	Character Designer (L4)
	44	Clean Up Artist (L4)	91	Animator (Already Available) fL4)
	45	Modeller (L3)		Editor (L4)
	46	Story Board Artist (L3)	92	Roto Artist (L4)
	47	Texturing Artist (L3)		
14. BFSI	48	Microfinance Executive (L2)	93	Life Insurance Agent (L4)
	49	Business Correspondent & Business		
		Facilitator (BCBF) (L3)		
15. Telecom	50	Optical Fiber Splicer (L3)	94	Optical Fiber Technician (L4)
	51	Handset Repair Engineer [L4]	95	Broadband Technician (L4)
			96	Telecom Terminal Equipment
				Application Developer [Android] [14]
16. Power	52	Consumer Energy Meter	97	Distribution Lineman [L4]
		Technician CL3)	98	Cable Jointer electrical power system [L4]
17. Gems & Jewellery	53	CDS - Handsketch Designer	99	CDS - Designer CAD (L4)
		(Basic) (CLS)		
18. Beauty & Wellness	54	Assistant Beauty Therapist (L3)	100	Beauty Therapist (L4)

Program Structure

Jharkhand is among the fastest growing economies in the country characterized by a young demography. Thus, the scope of skill development intervention should encompass both the repair and prepare jobs. The project is being implemented by Jharkhand Education Project Council (JEPC) (Level-I in class 9th) in Government schools, each school with two trades with the goal to make students employable when they complete senior secondary education (level 4, class 12th). Till 2019-20, 388 Government Secondary and Senior Secondary schools have covered with two trades in each school under the scheme. In each trade, 35-40 students from class 9th are selected for registration in Level 1. The Vocational Subject is included as the sixth subject (optional) in class 9th and class 10th.

Scheme Features

The scheme is implemented with the help of Vocational Training Partners who provide the manpower and technical support. Following are some important features of the scheme:

- ♦ 2 trades in each school
- ♦ 2 Vocational Labs (1 for each trade)
- ♦ 2 Vocational Trainers (1 for each trade) deployed by Vocational Training Partners
- ♦ Up to 40 students enrolled in each trade
- ♦ Regular expert lectures (guest lecture) and industrial visits
- ♦ Internship in nearby industry for 11th and 12th standard students
- ♦ External Assessment in 10th& 12th Board
- ♦ Joint Certificate for students from JAC and NSDC after completion of 10th& 12th board exams
- ♦ Placement of eligible and desirous students after completion of 12th board by the VTP

Schools & Trades in Jharkhand

Table 2 : Year wise distribution of Schools Covered under Different Sector / trade.

S.No.	Year	Schools Covered	Sectors / Trade
01	2015-16	53	IT/ITeS, Tour & Travel, Healthcare
02	2016-17	107	IT, Media & Entertainment, Healthcare, Tour & Travel, Security, Beauty & Wellness & Retail
03	2017-18	55	Beauty & Wellness, Healthcare, IT/ITeS, Media & Entertainment, Retail, Security and Tour & Travel
04	2018-19	45	Agriculture, Apparels, Automotive, Electronics & Hardware, IT/ITeS, Retail, Tourism & Hospitality and Multiskilling
05	2019-20	128	Agriculture, Apparels, Automotive, Electronics & Hardware, IT/ITeS, Retail, Tourism & Hospitality
TOTAL		388	Per school two trade

Sector/trade wise distribution of schools can be found from the following table:

Table 3 : Trade Wise Distribution of Schools

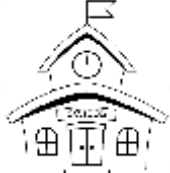



S.No.	Trade	Covered Schools
1	IT/ITeS	198
2	Media & Entertainment	78
3	Health Care	82
4	Tour & Travel	43
5	Security	22
6	Beauty & Wellness	34
7	Retail	55
8	Electronics & Hardware	78
9	Tourism & Hospitality	39
10	Automotive	62
11	Agriculture	37
12	Apparels	30
13	Multiskilling	18
	Total	776

In terms of coverage across State, the selection of trades is being done on the basis of the Skill Gap Analysis being conducted by Deloitte. Currently the Vocational Education is being covered across 24 districts basis the viability of a particular trade.

Table 4 : District Wise /trade wise distribution of Schools in Jharkhand

S No	District	Agriculture	Apparels	Automotive	Beauty & Wellness	Electronics & Hardware	Healthcare	IT - ITeS	Media & Entertainment	Multi Skilling	Retail	Security	Tourism & Hospitality	Total
1	BOKARO	0	4	4	0	6	3	8	3	0	5	0	5	38
2	CHATRA	2	5	5	4	2	1	7	3	0	0	1	8	38
3	DEOGHAR	2	2	6	2	6	2	13	4	0	2	0	7	46
4	DHANBAD	0	0	3	0	3	3	4	5	0	3	0	5	26
5	DUMKA	0	0	2	3	3	6	10	2	3	2	3	2	36
6	GARHWA	1	1	2	1	3	5	10	6	2	1	1	3	36
7	GIRIDIH	3	3	2	2	9	5	9	4	2	5	2	8	54
8	GODDA	3	0	5	2	4	6	10	5	0	1	2	0	38
9	GUMLA	0	0	0	4	2	3	3	3	0	1	4	0	20
10	HAZARIBAG	5	1	2	1	10	4	10	7	3	5	1	3	22
11	JAMTARA	0	0	0	0	4	1	4	2	0	4	1	4	20
12	KHUNTI	0	0	0	1	0	2	4	2	1	0	0	2	12
13	KODARMA	0	4	5	1	1	2	4	1	0	1	1	6	26
14	LATEHAR	2	0	4	1	1	2	5	4	0	1	1	1	22
15	LOHARDAGA	2	1	1	1	2	0	3	4	0	0	1	3	18
16	PAKAUR	0	0	1	2	2	5	7	0	0	0	0	3	20
17	PALAMU	3	1	1	0	12	2	15	1	5	11	1	2	54
18	PASHCHIMI SINGHBHUM	1	3	1	2	2	7	15	6	0	0	0	3	40
19	PURBI SINGHBHUM	0	1	1	2	3	6	11	2	0	3	1	2	32
20	RAMGARH	5	0	1	0	3	0	7	2	1	0	0	3	22
21	RANCHI	1	1	1	2	3	7	18	5	0	8	0	10	56
22	SAHIBGANJ	3	0	4	0	2	5	9	1	0	0	1	1	26
23	SARAIKELA-KHARSAWAN	4	2	0	1	5	4	8	4	1	1	0	2	32
24	SIMDEGA	0	1	0	2	1	1	4	2	0	0	1	0	17
		37	30	51	34	89	82	198	78	18	54	22	83	776

Overview of the Programme:

 <p># 388 schools</p>	 <p># 13 Vocational Trades</p>	 <p>#26991 enrolment #13748 boys #13243 girls</p>	 <p>#6583 students assessed in 12th #2416 students assessed in 10th</p>
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Engagement with Implementation Partners:

VTPs working in sectors and number of schools: VTP & Sector Wise
Allocation of Schools

S. No	Name of Vocational Training	Partners Sector/Trade	Total
1	AISECT LTD, Bhopal	IT - ITeS, Retail,	107
		Apparels,Made ups and Home	
		Furnishing, Agriculture	
2	Amass Skill Ventures Pvt. Ltd., Gurgaon	Agriculture, Healthcare	30
3	ASTM Skills Pvt. Ltd, Mumbai	Security	17
4	Centum Works Skills India Ltd	Healthcare, IT - ITeS, Multiskilling,	112
		Retail, Tourism & Hospitality	
5	Indus Education Private Ltd., Ghaziabad	APPAREL & MADEUPS, Beauty &	88
		Wellness, IT - ITeS, Media &	
6	Labournet Services India Ltd	Entertainment, Security	37
7	Mindleaders Learning India Pvt. Ltd., Delhi	Beauty & Wellness, Retail, Tourism	81
		& Hospitality	
8	Quess Corp Limited., Bengaluru	Healthcare, Tourism & Hospitality,	131
		Electronics & Hardware	
9	Rooman Technologies Pvt. Ltd., Bengaluru	Electronics & Hardware, IT-ITeS,	28
		Automotive,	
10	Time Centre for Learning Ltd., Mumbai	Electronics & Hardware ,Retail	104
11	Venture Skill India Pvt Ltd	IT -ITeS, Media & Entertainment, Retail	41
		Automotive, Healthcare, IT-eS	
TOTAL			776

6583 total number of 10th standard students and 2416 total number 12th standard students are appearing for Assessment in the year 2019-20. Tradewise numbers can be seen in the following charts:

Sector	Students Covered (Class12)	Students Covered (Class10)
IT/ITeS	3130	1086
Healthcare	360	205
Tour and Travel	790	108
Security	530	173
Beauty and Wellness	596	193
Media and Entertainment	1017	629
Retail	160	22
Total	6583	2416

Placement Details (2018 - 19)

Sector Name	No. of students appeared for Class 12th	No. of students passed Class 12th	No. of students placed in Industries	No. of students willing for placement
IT/ITeS	334	312	26	16
Healthcare	26	21	6	0
Tour & Travel	31	25	7	0

Vocational Education and New Education Policy

Stressing the need for changing the perception of vocational education as being inferior to mainstream education, the policy states that the students can be introduced to vocational subjects from as early as grade six, including opportunities for internship from grade 06 to grade 12. By 2025, at least 50% of learners through the school and higher education system shall have exposure to vocational education. Vocational education will be integrated in the educational offerings of all secondary schools in a phased manner over the next decade. Starting with 53 schools in the FY 2015-16, currently the CSS-VSE project is being implemented in 388 Jharkhand Government schools, each school with two trades with the goal to make students employable when they complete senior secondary education (level 4, class 12th).

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