



Directorate of Higher Secondary Education
Government of Odisha



Webinar on

Career Pathways in Skill-based Sector

Date: 06th September 2025, Saturday

Organised By

**Directorate of Higher
Secondary Education (DHSE)**

**In Collaboration with
UNICEF Odisha**

Technical Partner

Identity Foundation Trust



About the Collaboration:

The **Directorate of Higher Secondary Education (DHSE)**, under the Department of School & Mass Education, Government of Odisha, in collaboration with **UNICEF Odisha** and its technical partners, conducts career guidance webinars for students in higher secondary schools and colleges. These sessions are designed to empower students to make informed and confident career decisions. The initiative plays a vital role in strengthening the transition from school to higher education and the world of work through structured and meaningful career guidance.

About the Webinar:

Following this practice, the sixth (6th) session of the webinar series Academic Session 2025-2026 was organised by the Directorate of Higher Secondary Education (DHSE), Odisha, on **06th September 2025, Saturday, at 12:00 pm** on the topic of **“Career Pathways in Skill-based Sectors”** at the DHSE conference hall. The webinar was attended by **125 higher secondary schools** where the faculties and students of grades 11 & 12 were along with the officials from DHSE, Odisha. The Deputy Director of DHSE, Mr. Jitendra Nayak gave the welcome note by welcoming the resource person, moderator, students, and faculties for joining the webinar after the summer vacation.

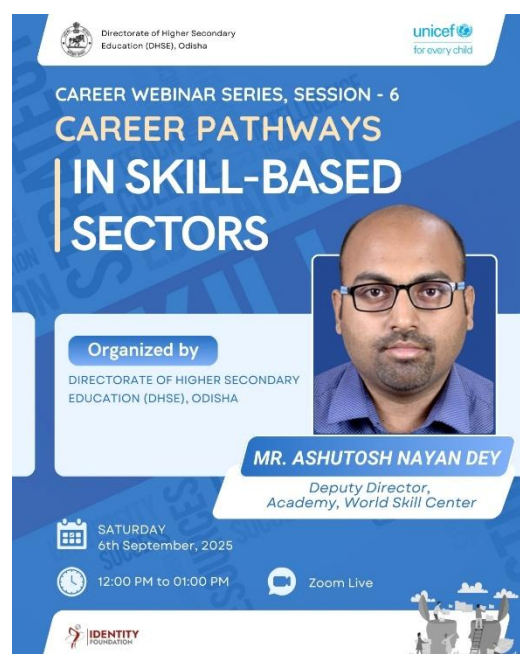
Descriptions	Boys	Girls	Total
No. of Class XI students who attended the webinar session	3,017	4,512	7,529
No. of Class XII students who attended the webinar session	2,815	4,404	7,219
No. of faculties who attended the webinar session	380	298	678
No. of higher-secondary students schools attended the webinar session	15,426		125

About the Resource Person:

Ashutosh Nayan Dey is the Deputy Director, World Skill Centre, Skill Development & Technical Education Department, Government of Odisha, contributing over a decade to the transformation of vocational and technical education across the state. Renowned for his leadership in institution-building, pedagogical innovation, and administrative excellence, he has significantly impacted both academic ecosystems and community development.

As Deputy Director (Academy) at the World Skill Centre since 2021, he has led transformative initiatives, including Training of Trainers programs that have upskilled nearly 2,500 faculty members in pedagogy and assessment. He also oversees life and employability skills training, placement readiness initiatives, and the Learning Resource Centre with integrated Virtual Reality for immersive learning.

Previously, as Principal of Government ITI Puri, he modernized a 50-year-old institution with state-of-the-art labs, placing it among India's top 100 ITIs. His leadership extended beyond academics, coordinating large-scale relief efforts during Cyclone Fani. At ITI Bheden and Government Polytechnic, Puri, he championed enrollment, female participation, and academic excellence.



Welcome Note by the Moderator:

Mr. Jasobant Narayan Singhlal, Founder and Director of Identity Foundation Trust, moderated Session 6 of the Career Webinar Series by warmly welcoming students and faculty members from various institutions. He encouraged students to actively engage in the session by attentively listening to the resource person and thoughtfully absorbing the shared insights. Mr. Singhlal emphasised the importance of such sessions in helping students make informed career decisions, particularly in the field of skill-based sectors. He highlighted that gaining clarity about career paths requires curiosity and active participation. To that end, he urged students to not hesitate in asking questions during the session, as open dialogue is a key part of meaningful learning. His remarks set a motivating tone for the session, aiming to inspire students to take charge of their future career choices.



Vocational / Skill-based Careers:

A career in the vocational education sector involves acquiring specialized skills through hands-on training for direct entry into specific fields such as healthcare, engineering, IT, construction, and hospitality. Vocational education equips individuals with job-oriented expertise, often through shorter, affordable programs that emphasize practical experience, internships, and apprenticeships, allowing graduates to become employable immediately and excel in technical or skilled trades.

Vocational careers differ from mainstream (traditional) careers in several key aspects. Mainstream careers typically follow conventional academic pathways, focusing on broad-based theoretical knowledge, research, and critical thinking, often requiring several years of study and resulting in degrees that may not lead directly to employment. In contrast, vocational education is career-specific, skill-driven, cost-effective, and designed for rapid adaptation to industry requirements, offering direct pathways to employment or entrepreneurship.

Importance of Skill-based Careers:

Skill-based careers are crucial in today's rapidly changing job market because they bridge the gap between traditional education and industry requirements, making individuals immediately employable with practical expertise. As technology transforms workplaces, employers increasingly prioritize candidates with demonstrable skills—such as digital literacy, problem-solving, and communication—over mere academic qualifications, ensuring readiness for real-world challenges. Skill-based education

fosters adaptability, enabling professionals to upskill and remain competitive as roles evolve due to automation, AI, and new industry demands.

Moreover, skill-based careers promote lifelong learning and personal growth, empowering individuals to pursue entrepreneurial ventures and innovative solutions. These careers also play a significant role in reducing unemployment and supporting economic resilience by matching workforce capabilities to current labour market needs. In summary, skill-based careers are fundamental for individual success and a robust, future-ready workforce in the dynamic global economy.

Job Roles in Skill-based Careers:

The skill-based vocational education sector in Odisha offers a wide spectrum of job roles across key industries, equipping candidates for direct employment, entrepreneurship, and specialized trades.

Common Job Roles in Odisha's Vocational Sector:

- Electrician and Electrical Technician
- Electronics Mechanic
- Plumber (General)
- Refrigeration & Air Conditioning Mechanic
- Automotive Service Technician
- Welder and Fabricator
- Mechatronics Technician
- Hospitality Staff (e.g., hotel clerk, housekeeping, food and beverage steward)
- Healthcare Assistant and Paramedic
- Beauty & Wellness Consultant, Hair Fashion Designer
- Retail Sales Associate
- BFSI (Banking, Financial Services, and Insurance) Trainer
- Apparel Tailor and Stitching Operator
- Agriculture Field Assistant and Horticulture Technician
- Life Skill Trainer, Soft Skills Trainer
- IT Support Associate
- Facility Technology Technician

These job roles are aligned with the National Skills Qualifications Framework (NSQF), ensuring they match industry standards and offer clear career progression from school level upwards. Vocational education in Odisha focuses on practical training—for instance, through the World Skill Centre, ITIs, and PMKVY/Skill Odisha programs—enabling students to gain employability immediately after completing their training. The sector emphasizes both technical proficiency and employability skills, including communication, ICT, and entrepreneurship, which are integrated into the curriculum.

Fast Growing Sectors for Skilled Professionals:

Fast-growing sectors for skilled professionals in vocational education are responding to technological advances and market demand, creating diverse opportunities across industries. Healthcare and



hospital management remain prominent due to the rising need for trained medical technicians, paramedics, and caregivers. The IT and telecommunications sector is expanding rapidly with demands for technicians skilled in networking, electronics, and digital services. Electrical and electronics engineering continues to grow, driven by renewable energy and smart technology adoption.

Construction and infrastructure development require skilled workers like plumbers, electricians, and welders, fuelled by urbanization and government projects. The hospitality and tourism sector is also booming, creating roles for skilled hotel management, culinary arts, and customer service professionals.

Emerging areas include green technologies and sustainability-focused trades, such as energy auditing, environmental management, and waste recycling, reflecting global ecological priorities. Additionally, creative industries like graphic design, animation, and multimedia production are gaining ground with digitalisation.



Government Approved Certification Programs in Skill Based Sectors:

Government-approved certification programs in the skill-based sector in India focus on standardized, industry-relevant skill development, ensuring quality and recognition across sectors. Key certification programs include:

- **Pradhan Mantri Kaushal Vikas Yojana (PMKVY)** - A flagship scheme by the Ministry of Skill Development and Entrepreneurship (MSDE) offering short-term training and certification aligned with the National Skill Qualification Framework (NSQF) for various trades and sectors.
- **National Skill Certification and Monetary Reward (STAR) Scheme** - Provides monetary rewards to candidates upon successful certification through approved training programs, with certificates recognized nationwide by NSDC and other bodies.
- **National Skills Qualifications Framework (NSQF)** - A competency-based framework ensuring alignment of vocational courses to national standards with multiple pathways for skill enhancement and certification.
- **Skill India Digital Hub (SIDH)** - Offers various government-certified courses in IT, digital marketing, AI, coding, and more.
- **Sector Skill Councils (SSCs)** - Industry-led bodies that develop qualification packs and certify skills in specific sectors through NSDC.

These certifications enable learners to gain validated credentials that enhance employability and career growth across diverse industries.

Eligibility And Documents for Government Skill Certificates:

Eligibility and required documents for government skill certification programs in India generally include the following:

- Age typically ranges from 14 to 45 years depending on the specific program or trade.
- Minimum educational qualifications vary according to the skill course, often from 8th grade pass to 12th pass or ITI certificate holders; some advanced courses require diploma or degree holders.
- Candidates should be Indian residents; domicile requirements may apply regionally.
- There is no direct prerequisite for prior work experience; however, some advanced courses may require foundational skills or prior training.



Queries from Students:

Kamala Devi Women's HSS, Pankapal	Could you please explain the key differences between the roles of a Medical Laboratory Technician and a Pathologist?	Medical Laboratory Technician (MLT): • Usually requires a diploma or bachelor's degree in Medical Laboratory Technology. • Works under the supervision of pathologists or senior laboratory professionals. • Collects, processes, and analyses patient samples (blood, urine, tissue, etc.). • Operates and maintains laboratory equipment. • Performs routine tests and records results. • Primarily technical; ensures tests are conducted properly. • Does not provide a medical diagnosis. • Primarily technical; ensures tests are conducted properly. • Does not provide a medical diagnosis. • Operational and technical backbone of the lab. • Ensures smooth day-to-day functioning.
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		Pathologist: • A qualified medical doctor (MBBS + MD in Pathology). • Responsible for leading, interpreting, and ensuring accuracy in all laboratory diagnoses. • Interprets complex laboratory test results. • Examines tissues, cells, and fluids microscopically to diagnose diseases (e.g., cancers, infections). • Provides diagnostic opinions that guide clinical treatment. • Makes the final diagnostic call. • Advises treating doctors based on test interpretations. • Occasionally interacts with patients (e.g., fine-needle aspiration cytology, bone marrow biopsy). • More often interacts with clinicians to discuss findings. • Intellectual and diagnostic authority of the lab. • Ensures accuracy, quality control, and clinical relevance of all lab outputs. While MLTs are skilled technicians who perform and manage laboratory tests, pathologists are medical specialists who interpret those tests, provide diagnoses, and guide treatment decisions.
Shekhawat Alli, K. C. Pur, H.S.S., Mayurbhanj	If a student chooses a vocational course on this platform, how to get certified for the same while pursuing simultaneous course.	• Students can continue their mainstream course (like Class 11–12, ITI, diploma, or graduation) while also pursuing a vocational course. • The vocational training schedule is often designed to be flexible—weekends, evenings, or blended (online + practical sessions). • On successful completion of the vocational course (attendance, assignments, skill assessments, or practical exams), the student receives a certificate of competency/skill. These certificates are issued by recognized bodies such as: • Sector Skill Councils (SSCs) under NSDC (National Skill Development Corporation). • State Skill Development Missions. • Affiliated Training Partners/Institutes. • In some cases, NCVET/NSQF-aligned certifications which have national recognition. Students don't need to "pause" their mainstream course. The vocational certification runs simultaneously and adds an extra layer of professional skill validation. For example:

		• A Class 12 student can pursue a vocational certificate in Medical Lab Technician, Digital Marketing, or Automotive Repair. • Upon completing, they get both their academic certificate (12th pass) and a vocational skills certificate.
Govt Women's H. S. School, Titilagarh	How to enrol in World Skill Centre, Bhubaneswar after 12th?	To enrol into World Skill Centre, the student must meet below eligibility criteria; • Must have passed Class 12 (any recognized board). • Age limit: usually 17–24 years (may vary slightly by course). • Some courses may require a science or technical background, while others are open to all streams. The student may enrol him/herself in to below courses; • School of Services – e.g., Beauty & Wellness, Hotel Management, Fashion Design. • School of Engineering – e.g., Electrical Technology, Mechatronics, Air Conditioning & Refrigeration. Admission Process: • Visit the official website: worldskillcentre.org • Fill out the online application form when admissions open (usually once a year). • Based on academic performance, aptitude test, and/or interview. • In some cases, merit lists are prepared by the Odisha Skill Development Authority (OSDA). • Shortlisted candidates are called for counselling. • Submit required documents (Class 10- & 12-mark sheets, ID proof, photos, etc.). • Pay the course fees to confirm admission.

Conclusion:

Career pathways in the skill-based sector offer dynamic, industry-aligned opportunities that cater to the evolving demands of the modern workforce. These pathways are characterized by flexible entry points, ranging from foundational vocational training to advanced certifications, enabling individuals to upskill and reskill continuously. This sector spans diverse industries such as information technology, healthcare, renewable energy, manufacturing, and digital services, making it adaptable to future economic trends and technological advancements. Ultimately, skill-based careers are pivotal to building a resilient workforce equipped for the challenges and opportunities of tomorrow's economy.

Attendees Details

District	No. of Schools	Class XI		Class XII		Faculties		Students Total
		Boys	Girls	Boys	Girls	Male	Female	
Grand Total		7529		7219		678		
Total	125	3017	4512	2815	4404	380	298	
Angul	8	257	302	217	284	40	18	1060

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		Boys	Girls	Boys	Girls	Male	Female	
Grand Total		7529		7219		678		
Total	125	3017	4512	2815	4404	380	298	
Balasore	3	37	59	20	28	4	3	144
Baragarh	3	80	125	96	134	15	10	435
Bhadrak	4	81	186	80	200	11	5	547
Bolangir	13	205	400	239	452	35	17	1296
Cuttack	8	141	275	148	276	35	33	840
Dhenkanal	5	203	266	163	187	18	8	819
Gajapati	4	91	124	73	69	8	9	357
Ganjam	8	121	268	71	307	49	31	767
Jagatsinghpur	5	44	144	46	143	11	10	377
Jharsuguda	2	35	60	66	87	1	4	248
Kalahandi	5	204	197	184	188	12	3	773
Kandhamal	3	68	56	37	45	0	0	206
Keonjhar	7	107	178	148	236	18	11	669
Khurda	8	214	232	233	230	17	25	909
Koraput	7	253	374	226	280	24	17	1133
Malkangiri	2	69	104	62	91	6	3	326
Mayurbhanj	9	328	464	304	480	35	25	1576
Nabarangapur	1	15	13	20	21	3	3	69
Nayagarh	1	0	71	0	62	0	0	133
Nuapada	1	0	18	0	11	0	0	29
Puri	1	63	71	22	31	3	15	187
Rayagada	1	61	54	48	52	2	4	215
Sambalpur	5	78	154	60	156	9	12	448
Sonepur	1	80	95	75	91	10	3	341
Sundargarh	10	182	222	177	263	14	29	844
Total	125	3,017	4,512	2,815	4,404	380	298	14,748
Grand Total		7,529		7,219		678		15,426

Photos from the Ground:



