OCCASION

This publication has been made available to the public on the occasion of the 50th anniversary of the United Nations Industrial Development Organisation.

DISCLAIMER

This document has been produced without formal United Nations editing. The designations employed and the presentation of the material in this document do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations Industrial Development Organization (UNIDO) concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries, or its economic system or degree of development. Designations such as “developed”, “industrialized” and “developing” are intended for statistical convenience and do not necessarily express a judgment about the stage reached by a particular country or area in the development process. Mention of firm names or commercial products does not constitute an endorsement by UNIDO.

FAIR USE POLICY

Any part of this publication may be quoted and referenced for educational and research purposes without additional permission from UNIDO. However, those who make use of quoting and referencing this publication are requested to follow the Fair Use Policy of giving due credit to UNIDO.

CONTACT

Please contact publications@unido.org for further information concerning UNIDO publications.

For more information about UNIDO, please visit us at www.unido.org

UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION
Vienna International Centre, P.O. Box 300, 1400 Vienna, Austria
Tel: (+43-1) 26026-0 • www.unido.org • unido@unido.org
CAREER EDUCATION IN WOODWORKING IN THESOCIALIST REPUBLIC OF SLOVENIA 1/

by

Aleksander Pauer 2/

1/ The views expressed in this paper are those of the author and do not necessarily reflect the views of the secretariat of UNIDO. This document was reproduced without formal editing.

2/ Headmaster, Jose Srebrnic Education Center
I. EDUCATIONAL SYSTEM

There are two educational programmes for the woodworking industry in the Socialist Republic of Slovenia, namely a short training programme and a training programme of medium duration (secondary school).

The short training programme in woodworking is intended for those students who have successfully finished primary school (at the age of 15), and those who have finished the short training programme.

**Short training programme in woodworking**

Students get the necessary theoretical and practical knowledge and skills to perform the vocation of a woodworker. The training programme lasts 18 months.

**Medium training programme in woodworking**

Students get the necessary theoretical and practical knowledge and skills to perform the vocations of:

(a) machine joiner (the training programme lasts 2 years)
(b) upholsterer (the training programme lasts 3 years)
(c) joiner (the training programme lasts 3 years)
(d) woodworker technician (the training programme lasts 4 years)

Upon completion of this programme, it is possible to continue studying at a university.

During the first year students attend an education programme common to all vocations. An examination is set at the end of the first year and students can only continue their education programme in the second year if they have achieved the following results:

(a) machine joiner, upholsterer, joiner: pass marks in all subjects. (pass mark means at least 50 percent in each subject).
(b) woodworker-technician: at least 70 to 80 percent in mathematics, physics and chemistry, and at least 50 percent in other subjects
II. FIELDS OF WORK FOR WOODWORKING VOCATIONS

Woodworker

- operation of simple machines and devices used in woodworking for preparing wood and wood materials;
- participation in control and sorting elements of products;
- performing demanding manual work in woodworking and preparing wood or wood materials;
- preparation of raw materials, production materials and tools;
- distribution and control of work;
- maintenance of machines and other equipment;
- familiarity with work documentation and certificates.

A. Machine Joiner

- operation of machines and other devices;
- inter-phase transport;
- preparation of wood materials;
- maintenance of machines and other equipment;
- work documents.

B. Upholsterer

- operation of machines and other devices;
- measuring, marking and fabric cutting;
- upholstering finished products and components;
- manufacture of patterns and working aids;
- manufacture of upholstery products;
- quality control;
- leading working groups.
C. Joiner

- operation of complex machines and devices;
- performing complex work in woodworking;
- maintenance of machines and working aids;
- manufacture of working aids;
- manufacture of joinery products and site work;
- work preparation;
- work documents;
- quality control;
- leading working groups;
- training workers.

D. Woodworker - technician

- work on bigger and more complex machines; machine lines and other devices in wood manufacture;
- organization of work in a working group;
- operative and technological preparation of production;
- work study;
- planning, dispatching and operative preparation of production processes;
- participation in buying raw materials and production materials;
- calculations (costing, scheduling);
- quality control;
- organization of work processes;
- training workers.

III. TRAINING PROGRAMMES

Training programmes include:
- common educational subjects;
- profession/theoretical subjects;
- work-practice in the school's workshop;
- industrial experience.

The breakdown between the theoretical and the practical part of the training is as follows:
- for woodworkers: 49.5 and 50.5 percent respectively;
- for machine joiners 66 and 34 percent respectively;
- for upholsterers and joiners 54 and 46 percent respectively;
- for woodworker/technicians 55 and 45 percent respectively.

Work practice

Great emphasis is given to work practice which takes place in the school's workshop. The latter is appropriately equipped with woodworking machines and other devices. Single work operations are first demonstrated by the teaching staff. Later on students perform the work operations themselves. Students thus achieve necessary basic knowledge and skills on machine and manual production processes in the woodworking industry.

Industrial Experience

Programmes for industrial experience are made up by experts from both the schools and factories. The work of students in factories is guided by factory experts and later on their work is controlled by school experts. Thus, part of the training programme is shifted directly to the factories. Through this, students become acquainted with conditions of work and safety measures, modern technology and the organization of production processes in the woodworking industry.

The training programmes include four excursions each school year. The students visit "Meblo" in Nova Gorica, "Javor" in Pivka, "Lesonit" in Ilirska Bistrica, "Brest" in Cerknica, "Lips" in Ajdovscina, and "Stil" in Koper and become acquainted with different production processes and they thus broaden their practical knowledge.

Education for factory workers

Besides the above-mentioned regular training programmes aimed at primary school leavers, training programmes are organized for adult education. According to the needs of productive work in the Socialist Republic of Slovenia
and for developing countries. These special training programmes are organized as short courses or seminars with a special emphasis on professional, theoretical subjects, work practice and industrial experience.

IV. EDUCATION CENTRE JOZE SREBRNIC IN NOVA GORICA

The training (education) takes place in a new, modern building with a capacity of 700 students. There are 30 classrooms, among which 15 are specialized classrooms, laboratories and a library. The school covers an area of 5000 m$^2$. All classrooms are appropriately equipped. The education centre has its own workshops (1000 m$^2$), which are also appropriately equipped, there the students perform the manual and machine work, which is part of the curricula. They can also attend regular production processes.

The centre is suitable for holding seminars and symposia. It collaborates closely with the Electro-metal Technical Education Centre, where the students of wood topics and graduates can specialize in fields like electricity, electronics, cutting tools for woodworking machines and machine maintenance.

The Biotechnical Faculty of the University of Ljubljana organizes university studies (evening courses) at the Centre in Nova Gorica. The courses are held for those factory workers who have concluded the four years training programme and have several years work experience. The study lasts two years, upon successful completion of these courses, the students obtain the degree of woodworking engineer.