

7. Teachers & Support Staff

In any education system, salaries are the largest item in the recurrent budget. This chapter discusses the salaries and utilisation of (1) specialist teachers, (2) specialist support staff, and (3) administrators.

1. Teachers

(a) Why Costs are High

As well as having good teaching skills, the best practical teachers have work experience in large or small scale industry. Such people are hard to recruit, however. Rather few people have *both* good teaching skills *and* good industrial experience; and the ones who do exist often earn much more money in the private sector, and so are unwilling to teach.

This is the first factor that makes practical teachers expensive. Governments have to offer high salaries and other inducements to persuade them to join the profession.

The second factor arises from training. Because practical teachers have to learn both how to teach and how to become good craftsmen, their training is often longer than that of other teachers. And teacher-trainers for practical subjects are even more scarce than teachers themselves. Again, governments often have to pay special inducement allowances; and sometimes they have to recruit from overseas.

The third factor arises from pupil:teacher ratios. For both safety and educational reasons, classes in practical subjects are usually smaller than ones in academic subjects. Costly staff are therefore being used to train smaller groups of students.

(b) How Cost-Effectiveness can be Improved

Several strategies can be used to maximise the effective use of specialist teachers:

Training

- * Require teachers who are being trained to gain skills in at least two subject areas (e.g. woodwork *and* metalwork, home

economics *and* needlework).

- * Reduce costs of long pre-service training by providing in-service and on-the-job training.

Deployment

- * Where possible, use specialist teachers only for specialist subjects. Do not 'waste' their time on subjects for which other staff can be hired more cheaply.
- * If an individual school's demand for specialist teachers is too low, either:
 - share specialists between schools, or
 - employ part-time staff.
- * Within the limits imposed by safety requirements and teaching effectiveness, increase the size of teaching groups. Workshop sessions may need to be with small groups, but theory classes can be much larger.
- * Request the teachers to help with maintenance and construction of facilities for which the school would otherwise have to pay outside workers.

Alternative Personnel

- * Employ ancillary staff for general routine jobs. This leaves the teachers free for teaching.
- * Provide self-instructional materials for the students, and request the senior students to supervise the junior ones.

Many governments make teaching more attractive by allowing technical staff to undertake private work out of school hours and in vacations. Such policies have to be handled with care, however, Sometimes teachers spend too much time on private businesses, and neglect their lessons.

2. Specialist Support Staff

(a) Why Costs are High

Workshops often require technical support staff. The wages of these staff are not especially high, but they add significantly to the overall cost of practical subjects.

The duties of technical support staff are usually to:

- keep the workshops tidy,
- clean and store equipment after use,

- unpack and inspect new equipment on arrival,
- maintain and, if possible, repair equipment,
- look after the general storage area,
- keep records of equipment and stock, and order more when required,
- prepare materials for use in the practical rooms,
- set out the rooms in readiness for classes, and
- help prepare visual and other teaching aids.

Besides technical staff, it may be necessary to employ night watchmen, and, for agricultural science, farm hands. These people can usually be employed on low wages; but if several are employed, their total salary costs can be quite large.

(b) How Cost-Effectiveness can be Improved

Some governments provide special training for technical support staff. This increases costs, but it may also increase their effectiveness and be a good investment.

At the same time, authorities can seek ways to reduce costs by:

- * sharing staff between institutions, and
- * requiring students to do the work.

The additional advantages of requiring students to do the work are (i) that it helps develop a sense of responsibility, and (ii) that it encourages good work habits.

3. Administrators

(a) Why Costs are High

Practical subjects may require considerable administration:

- workshops have to be maintained, and bills have to be paid,
- materials have to be ordered and stored,
- extra staff must be recruited and paid,
- complicated timetables must be worked out,
- complex practical examinations must be administered,
- attachments to outside industries must be organised,
- schools that share resources must liaise with each other.

Often, these duties can be done by existing staff; but sometimes

Job Specification for a Workshop Attendant: Trinidad & Tobago

Kind of Work

Routine semi-skilled work in the care and maintenance of working machinery and equipment.

Examples of Work

— Issues tools and instruments for use by students and instructors, and receives same after use.

— Improves tool displays, and assists in the preparation of machines, equipment, solutions and other related materials for demonstrations.

— Reconditions, cleans and assists in repair of tools and equipment.

— Maintains an inventory of all tools, and reports and records all defects in machinery and equipment.

— Prepares requisitions for hand tools and consumable materials, ensures that adequate stock is always available.

— Performs related work as may be required.

Required Knowledge, Skills and Abilities

Some knowledge of workshop methods and practices.

Some knowledge of machinery, equipment, tools and other materials used in the relevant trades.

Ability to follow simple written and oral instructions.

Ability to establish and maintain effective working relationships with other employees and with students.

Minimum Experience and Training

Experience in the relevant trade, gained e.g. as an apprentice, and training as evidenced by the Intermediate City & Guilds Certificate or Part I of the Trinidad & Tobago National Craft Diploma in the particular trade; or any equivalent combination of experience and training.

the introduction of practical subjects requires recruitment of extra administrators.

(b) How Cost-Effectiveness can be Improved

The main need is for an administrative system that operates smoothly and efficiently. Two strategies may be particularly useful:

- * provide appropriate in-service training, and
- * ensure that administrators have incentives to be efficient.

The incentives should include recognition by the authorities, and ability to retain saved income at the school level.