

# WHY SKILLED, ACADEMIC, PRACTICAL WORK IS IMPORTANT

(A personal observation by V.Ryan - World Association of Technology Teachers)

## MY DEFINITION OF A SKILLED PERSON

**“A practical and academic person. He / she exhibits a unique mix of expertise and creativity. The ability to successfully complete high level tasks, as an individual or as a team member, due to training, experience, talent, perseverance, motivation and practice. Has overwhelming competence in performance, as evidenced by quality outcomes. Has a craft, trade, career, profession or job, requiring theoretical, manual and intellectual dexterity. A person prepared by specialised training. He / she has developed particular, valued aptitudes. A ‘gifted’ person. Someone to be admired and respected.”**

## INTRODUCTION

The development of practical, academic skills, results in benefits to the individual, businesses and the entire economy. Some of our most successful entrepreneurs, inventors, designers, engineers and manufacturers, have skills in abundance. The UK was once acknowledged as a country extensive and diverse in manufacturing skills. It manufactured for the world and commanded great international respect as a result. Let's bring skilful academic practical work back home! Back into schools!



## THE ECONOMY

Less than a generation ago, manufacturing industry dominated our economy. Consequently the UK achieved a monetary surplus. Today the UK has an ‘eye watering’ national debt, with manufacturing being less than ten percent of the economy.

When manufacturing dominated our economy, it provided the financial means by which schools were well equipped. School workshops in the 1950s, 60s and 70s, were stacked with machinery and equipment (usually made in the UK). Pupils were taught the academic, practical skills, which prepared them for productive lives, supporting the economy.

As the economy moved away from manufacturing in the 1980s, to one based on the financial markets, banking and retail (euphemistically known as the, “lots of money economy”), this slowly changed the school curriculum. Skilled work, in school workshops slowly diminished, to the detriment of the education of many pupils and the economy. There is now a substantial skills shortage and a mass of unskilled young people, ill prepared for the workplace, with many trapped as low paid employees.

## PERSONAL / COGNITIVE DEVELOPMENT

How participating in skilled, academic practical work helps.....

**Abstract thinking** - is enhanced by skilled, practical activities; e.g. the ability to create by hand or through the use of machines and equipment.

**Logical thinking** - helps pupils think through problems, in a strategic and procedural manner, leading to a well thought out solution.

**Reasoning** - involvement in a skilled practical task, helps develop both investigative and critical reasoning. Reasoning is central to practical activities.

**Maintaining attention and focus** - the ability to concentrate, for a period of time, without losing focus. A simple example of this, is seen when teaching a difficult class. Increased practical work, often leads to increased focus, due to the purposefulness of the activity.

**Decision making** - whether it is selecting the right tools and equipment for practical endeavours, or deciding on a design solution, or choosing a suitable material. Skilled practical work requires the pupil to make one decision after another. Learning from the consequences of decisions taken.

**Language and communication** - the ability to interpret / create designs and convert them into a product.

Practical skills develop **hand / eye coordination**.



## OTHER BENEFITS OF SKILLED, ACADEMIC, PRACTICAL WORK

### Practical work:

- Makes learning easier and is proven to encourage further learning. It improves the rate of engagement of pupils. 'Doing' is a strategy, that promotes better learning and retention of knowledge.
- Often involves team work and cooperation with others.
- At its best is exciting, enjoyable, inspiring and motivating, leading to enhanced pupil progress.
- Allows pupils to face and tackle real-life situations.
- Is interactive in nature. Therefore, it has more impact, pupils learning and understanding is to a greater depth.
- Allows a pupil to directly observe and understand, how to carry out and organise procedural activities. This is an important aspect of independent learning.
- Encourages pupils to do things for themselves and to become confident in their ability to make decisions and solve problems.
- Helps pupils develop a unique set of talents and skills, impossible if learning is from a textbook or mainly theory based.
- Is intellectually challenging and academic.
- Increases the ability to improvise.

The practical application of mathematics, measuring, accurate marking out, geometry and engineering drawing, are essential work / life skills. Practical skills are transferrable to a variety of workplaces, occupations and careers.

Two important benefits of practical work are .....mental well-being and general health.



## **SKILLED PRACTICAL WORK IS ACADEMIC !**

### THE BENEFITS OF SKILLED PRACTICAL WORK TO BUSINESS, THE INDIVIDUAL AND INDUSTRY



### Skilled workers are:

- A valuable asset for any company, especially a manufacturing company.
- Much more likely to have a stable career and to benefit from higher wages / salaries and further training.
- An investment in the future and a statement of a company's intent to evolve and develop their position in the market place. Over time, a skilled workforce is a proven benefit.
- More committed and loyal to their employers, tending to receive training to upgrade their skills, in return.
- Better at problem solving, than unskilled workers, making them more able to work independently, or in a cooperative team.
- More likely to have enhanced career opportunities.
- More likely to be adaptable to changes in the workplace and employment market.

Working conditions are better for skilled workers. Companies want to hold on to them. Companies with valued skilled workers, tend to have higher productivity, than those that rely on an unskilled workforce. Benefiting the whole economy.