## 720 CHNO

### DEVELOPMENT

ANCIENT: SYSTEMATIC TREATMENT OF AN ART

**MODERN: EXCLUSION OF FINE ARTS** 

**ASSOCIATION WITH LARGE-SCALE** 

**PRODUCTION** 

ALL OF THE PRACTICAL ARTS

### **YPES OF TECHNOLOGY**

- ANY HUMAN ACTIVITY CONCERNED WITH THE MAKING AND DOING OF USEFUL THINGS
- THE MEANS BY WHICH THESE ACTIVITIES ARE ACCOMPLISHED
- THE THINGS PRODUCED BY THOSE MEANS

TECHNOLOGIES = USEFUL THINGS



### **INTANGIBLE TECHNOLOGIES**

- ☐ TECHNOLOGY IS NOT MERELY HARDWARE
- ☐ TECHNOLOGY INCLUDES THE WAY THINGS ARE MADE OR DONE
  - TECHNIQUES
  - METHODS
  - APPROACHES



### KNOWHOW

# KNOWHOW IS A VALUABLE COMMODITY

## KNOWHOW TRANSFER

- THE MOVEMENT OF PEOPLE
- PERSONAL CONTACT 
  OJT
- EDUCATION



### LET'S GET UNPHYSICAL

### **TECHNOLOGIES IN PHYSICAL FORM**

- PRODUCTS
- PROCESSES

### IF YOU CAN'T TOUCH IT YOU CAN'T USE IT

### BUT

### **TECHNOLOGIES ARE NOT PHYSICAL THINGS**

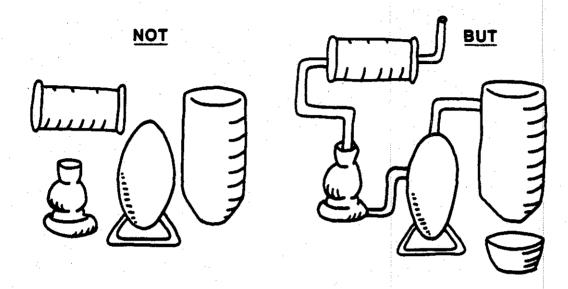
- INVENTIONS ARE NOT OBJECTS
- MOST TECHNOLOGIES NEVER BECOME OBJECTS
- SOME TECHNOLOGIES RESULT IN MANY TYPES OF OBJECTS

**TECHNOLOGIES ARE IN PRODUCTS** 

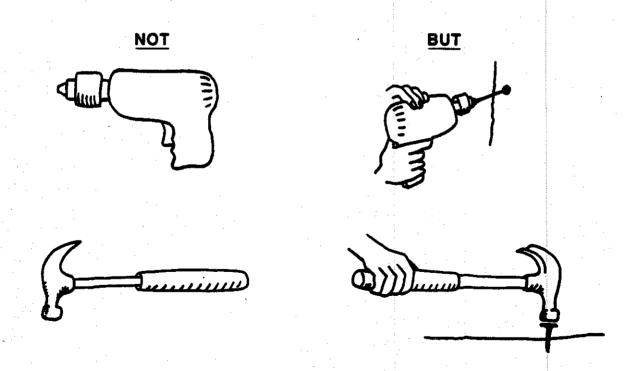
PROCESSES ARE TECHNOLOGIES



### A TECHNOLOGY IS AS A TECHNOLOGY DOES: PROCESSES



### A TECHNOLOGY IS AS A TECHNOLOGY DOES: PRODUCTS



FUNCTION: THE ACTION FOR WHICH A THING IS SPECIALLY FITTED



### IMPORTANCE OF FUNCTIONAL CONCEPT

- LABORATORIES TRANSFER TECHNOLOGIES, NOT OBJECTS
- IDENTIFICATION SHOULD CENTER ON FUNCTION
- TECHNOLOGIES MAY BE UNIDENTIFIED



