

**NATIONAL SEMINAR
ON
TAXONOMY OF EDUCATIONAL SKILLS
MARCH 26TH & 27TH, 2012**

CHALLENGES IN MODERN SKILLS ACQUISITION

----- B.VALLI

Lecturer, Navrachana University

INTRODUCTION

In the trajectory of development of human beings we find that skill was what really valued in the past. Whether a hunter can shoot an animal or potter can make a pot with felicity and perfection gave him a unique status in the society. All that people did was gaining and strengthening the capacity of human limbs. Whatever they did, they did in real life situations and so felt that the things they learnt to do with their hands were worth doing. As we allowed machines to take care of manual work the effort people put in “work” diminished. Now the skill they really required was that of pushing or pulling certain buttons or knobs that will trigger the machine to take forward. The skills were confined to few who can actually design and create a “perfect machine”. Science and technology and later level engineering became almost synonymous with making perfect machines.

People are also satisfied with bare minimum mastery of skills whether it is tea vendor or brick layer, skills enough to earn a livelihood is sought and nobody wishes to go further. The children of now hold joy sticks in hand and skillfully press left and right buttons in computer games or in simulated videos. They never get opportunity to get finer elements of skill. Not only that in the modern age the skills are getting complicated and interwoven with multiple levels of skill. There are skills related financial fields or rocket science but children are unable to relate to such skills because they are not in their immediacy and they are not something that can be mastered with improved malleability of the limbs. Today’s education doesn’t need kind of maneuverability of human body but a different what kind of skill if one doesn’t want loss of employability or self employability

CONCEPT OF SKILL

Skill can be said to be an accomplishment, acquirement or attainment that can be acquired by training. A person is said to possess skill if he or she can practice an occupation that may require a defined set of skills say a surgeon or cricketer

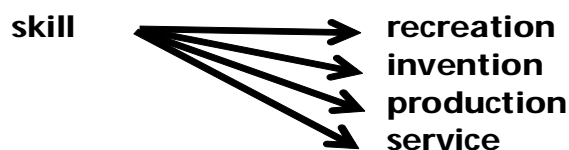
The capability to respond, in a practiced way, to the varying conditions and challenges posed by our situation, jobs and context and are determined by our environment to accomplish a goal or purpose

It can be defined in this way too.

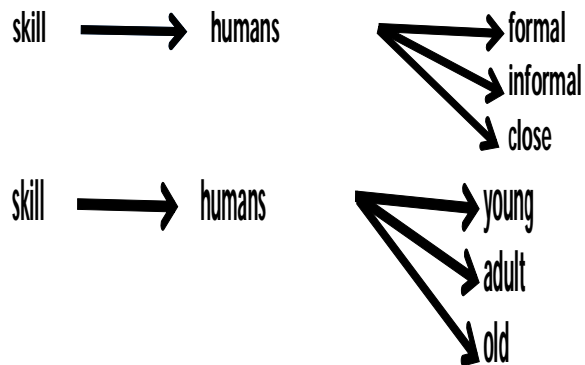
“the embodiment of acquired knowledge, experience and the practiced ability to read and respond to changes in the environment with appropriate actions and decisions to achieve a desired end-product or a state of equilibrium.”

The idea of skill undergoes changes when it moves away from simple bodily and mechanical functions to something which requires more high level functions. Therefore negotiating skills or interpersonal skills fall under different level of skill. Other skills include Life skill, Thinking Skills, Human Development Skills, Management Skills, Emotional Skills, Adaptability and Social Responsibility Skills, Vocational Skills, Professional Skills.

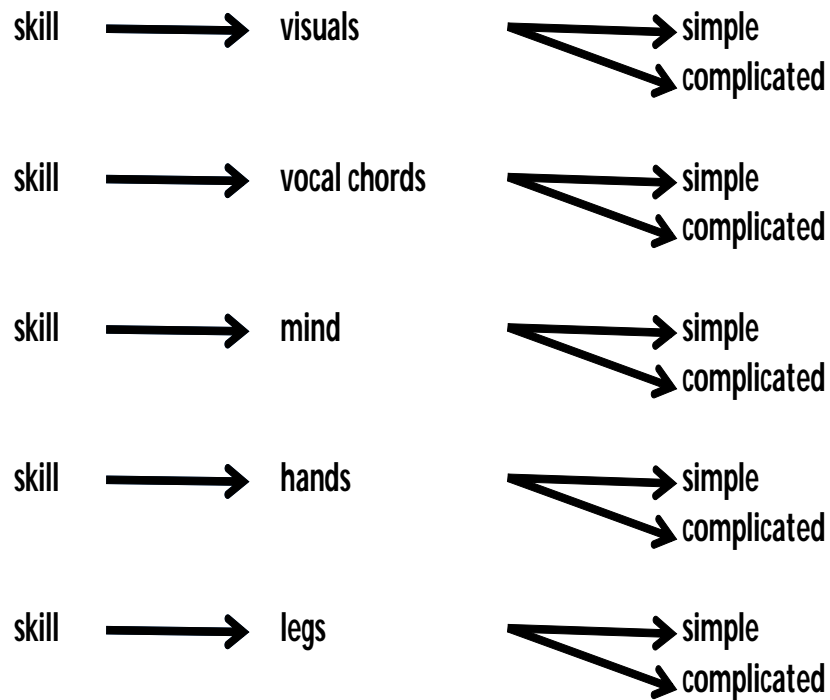
AREAS OF SKILLS



INTER-PERSONAL SKILLS



INTRAPERSONAL SKILLS



OBJECT CONTACT SKILLS



TAXONOMY GIVEN BY EXPERTS

Benjamin Bloom (1956):

LEVELS	WHAT IT MEANS
Perception	The ability to use sensory cues to guide motor activity.
Set	Dispositions that predetermine a person's response to different situations
Guided Response	Includes imitation and trial and error.
Mechanism	Learned responses performed with some confidence and proficiency.
Complex Overt Response	A quick, accurate, and highly coordinated performance, requiring a minimum of energy.
Adaptation	Modify movement patterns to fit special requirements.
Origination	Creating new movement patterns

Dave's (1975):

LEVELS	WHAT IT MEANS
Imitation	Observing and patterning behavior after someone else.
Manipulation	Being able to perform certain actions by following instructions and practicing.
Precision	Refining, becoming more exact. Few errors are apparent.

Articulation	Coordinating a series of actions, achieving harmony and internal consistency.
Naturalization	Having high level performance become natural, without needing to think much about it.

Harrow's (1972):

LEVELS	WHAT IT MEANS
Reflex movements	Reactions that are not learned.
Fundamental movements	Basic movements such as walking, or grasping.
Perception	Response to stimuli such as visual, auditory, kinesthetic, or tactile discrimination.
Physical abilities	Stamina that must be developed for further development such as strength and agility.
Skilled movements	Advanced learned movements as one would find in sports or acting.
No discursive communication.	Effective body language, such as gestures and facial expressions.

SKILLS REQUIRED IN EDUCATIONAL SET UP

Skills in lab – using microscope, dissect, estimate velocity of object

Skills in maths – problem solving constructed around real life

Skills in English – give a speech write poem

Skills in social science – use of maps, debate opposing political positions

Skills in art – art projects

Skill in music – musical instruments or singing

Skill in physical education – swimming, tennis, throw ball, cricket

Skill differs from competence in many ways. Competence makes people complacent and is happy to achieve accepted standard of performance and nothing more. Skills require engagement, persistence and also practice.

SKILL ACQUISITION – RELATED TO OBJECT CONTACT

Skill with objects – objects like scissors or ball have simple structure and

Physical contact with the objects the feel of them – may be musical instruments or the bats and balls or clay or mud

Random movements with these objects

Being able to observe an expert handling these objects

Devote certain amount of time to be spent doing that particular activity

Focusing on the actions and being aware of errors and mistakes

Minimizing errors

Gaining speed and accuracy

SKILL ACQUISITION – RELATED TO INTER PERSONAL (mind)

Perception of idea through visual or aural medium

Perception of all elements interrelated with the idea

Focusing on the final output

Devote certain amount of time to be spent doing that particular activity

Focusing on the thoughts and being aware of errors and mistakes

Minimizing errors

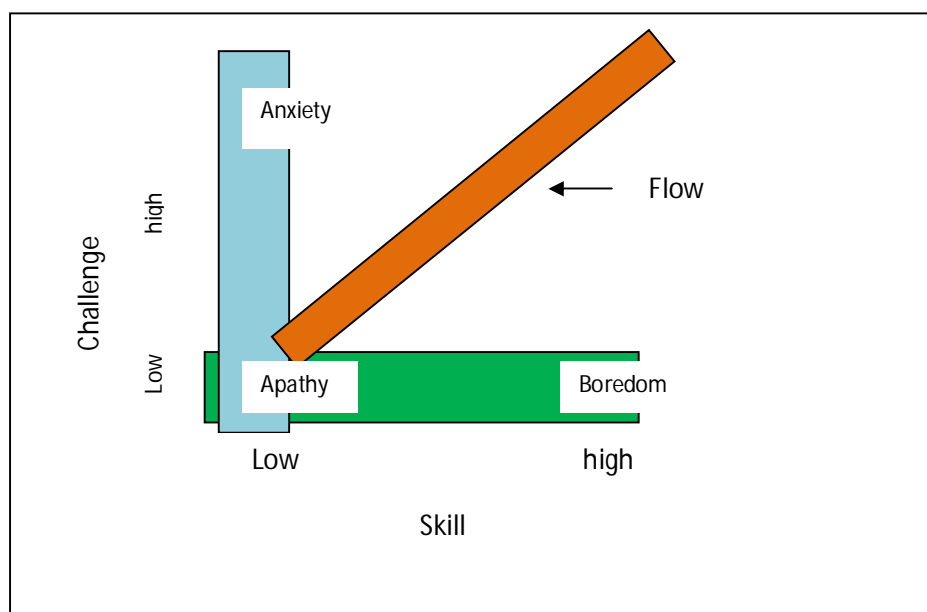
Producing the output

FLOW THEORY AND SKILL ACQUISITION

Flow and the cultivation of talent - In the late 1980s Csikszentmihalyi and several colleagues undertook a longitudinal survey of over 200 talented teenagers to discover why some are able to develop their talents while others give up. One of their principal findings, published in *Talented Teens – The Roots of Success and Failure* was that ‘flow was the strongest predictor of subjective engagement and how far the student progressed in the school’s curriculum in his or her talent’.

According to Csikszentmihalyi the essential elements in manifesting talent follows the following steps

1. Clear goals
2. Immediate feedback
3. Balance between challenge and skills
4. Action and awareness merge
5. Concentration
6. Sense of control
7. Loss of self consciousness
8. Experiences become automatic



The optimal activities in the flow channel moving outward as skills are gained

SKILL AND OBSERVATIONAL LEARNING

In making student acquire certain skills our inspiration can be had from the steps suggested by Bandura in his theory of observational learning

1. **Attention.** The first step in learning skill is the kind of attention that is paid to the actions that have to be reproduced
2. **Retention.** The next step is the making of a mental image of the actions
3. **Reproduction.** The mental picture should translate into actual behaviour
4. **Motivation.** The crucial part in doing an activity is the motivation to do that particular job. The motivation can both be extrinsic as well as intrinsic

As part of motivation it is also necessary to have self regulation or monitoring of ones own behaviour

TEACHERS ROLE

Young children need a place where they can feel that here is where I can freely do what they want to do without being criticized or laughed at when they are exploring their own talents. What parents or teachers can give a child who wants to explore his or her talent is to support and also challenge at the same time. Support is when you give them your faith and understanding; challenge when you encourage them to take moderate risk and go little beyond what they are now able to do.

- Provide challenges and complexity as students move up in mastery
- The pace and timing by teacher is important
- Allow the students to control the process of acquisition
- Teacher need to focus on inherent satisfaction of learning
- The teacher himself need to keep her interest level high

STEPS IN GIVING TRAINING IN RUDIMENTARY OR SOPHISTICATED SKILLS

- Define the skill/ability/area to be trained
- Discuss the purpose/relevance of capability
- Defining the element or part of area to be trained
- State the purpose of training element
- State the expected or required standard or parameter
- Assess the current knowledge or ability
- Collect and assemble tools, equipment, materials
- Manage timings, venue, person responsible
- Conduct activity or exercise
- Gather evidences or further information
- Take up follow-up and measurement

REFERENCES

- <http://www.xasa.co.za/Resources/SkillsDevelopment.htm>
- www.teachingexpertise.com/.../mihaly-csikszentmihalyis-theory-of-flow
- webpace.ship.edu/cgboer/bandura.html - United States
- <http://www.businessballs.com/training.htm>