



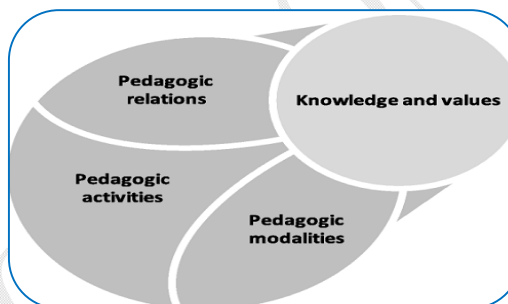
## AN EMPIRICAL NOTE ON UNDERSTANDING PEDAGOGICAL TERMINOLOGIES

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### ABSTRACT :

*Pedagogy makes use of the resources of various disciplines such as psychology, sociology, philosophy, engineering, management, medicine, linguistics, logic, logistics, computer science, Robotics, economics, etc. The terminologies of these disciplines are very specific in nature. However, there are some terminologies, which are frequently and repeatedly used in the course of pedagogy. The pedagogy courses at Bachelor and Master degree level revolves around these terminologies. Students of various disciplines, after completion of a bachelor degrees or master degrees enter the bachelor degree course of pedagogy. While they are in the degree courses, they are not exposed to the core terminologies of pedagogy. After joining the pedagogical courses they unable to understand the meanings of those terms and terminologies. Even after the successful completion of the course of study of Bachelor of Education most of them unable to define, distinguish, analyse, correlate and integrate them. The reason for this problem is that in most of the states in India, the pedagogical courses are imparted through the medium of instruction of regional languages or in Hindi. The books available in the regional languages are not so resourceful to cater the expectations of the Bachelor in Education and Master in Education courses.*



**KEYWORDS :** management, medicine, linguistics, logic, logistics, computer science, Robotics.

### INTRODUCTION:

The terminologies repeatedly used in the course are education, learning, behaviours, knowledge and skill, competency and performance, listening, speaking, reading and writing, goals, aims, objectives, and content. Actually, after completion of the course, when they become professional teachers only on / for these terminologies, they are going to work upon. Hence it is necessary for the student of pedagogy enable to define all the above terms. Then only they can distinguish, analyse, correlate and integrate one another. This conceptual research paper is written in order to sensitize the students of pedagogy and working teachers. Unless they acquire working knowledge and skill on the above said terminologies they cannot impart lessons and measure the outcomes objectively.

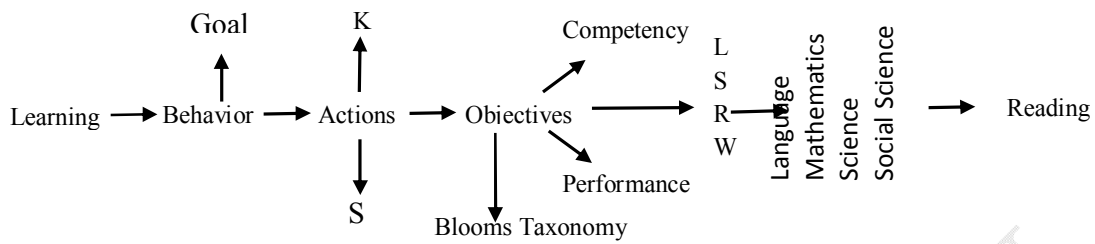


Fig.1: Chart shows the inter-relations and similarities of various pedagogical terminologies.

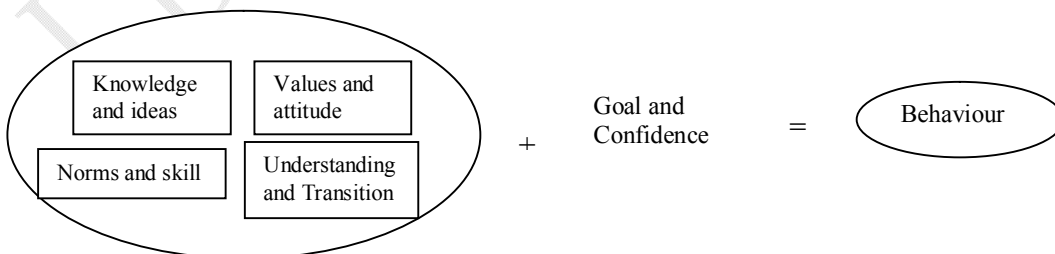
**Learning**

Teachers are engaged to make the learners to learn. On the other hand learners are sent to receive learning. **Nambiar, Vijayan K.K. (2009)** defines learning as a fundamental process that involves acquisition of new experience, retention of new experience, development of experience by steps, modification experience and lastly organization, synthesis, integration, etc., of old and new experience”. For **Ghorpade, M.B (1977)** learning is “any relatively permanent change in behaviour that occurs as a result of practice or experience. In the first place, learning is a change or modification of (earlier) behaviour for the better or worse. It is not transitory but relatively long lasting. It is also change brought about by practice (repetition) or experience and not by any other thing. Many other things may also bring about a change in behaviour. **Janda, Louis, H. et.al (1982)** expresses learning as “Most of the psychologists use the term ‘learning’ more broadly than lay people use it. What is learned need not be ‘correct’, that is, we can learn poor habits along with good one. Moreover, learning can be subtle, involving attitudes and emotions as well as knowledge or skills. Many aspects of social life, such as language, religious beliefs, and prejudices regarding race, sex and social class are learned and learned through experience.

The above definitions help us to come to a conclusion that learning is acquisition, retention, organization, synthesis, integration of old and new experiences. Learning brings about relatively permanent change in behaviour. The change also takes place in the cognitive constructs. Learning aims at attainment of stated **goals**.

**Behaviour**

The term behaviour refers to the activities performed in the entire life of living organism. It comprises of overall experiences of any organism. Woodworth (1948) explains as “any manifestation of life is activity” and the term ‘behaviour’ is a collective name for these activities. Therefore, the term ‘behaviour’ refers to motor or conative activities, cognitive activities and affective activities. Leagans (1961) shares the above definition and expresses that behaviour refers to what an individual knows (knowledge), what he can do (skill-mental, physical), what he thinks (attitudes) and what he actually does (actions). Bahama, O.P and Bhatnagar, O.P (1981) represent the behavioural components as follows.



Therefore, it can be concluded in broad sense, that behaviour is nothing but what an individual does. These definitions resemble Bloom’s taxonomy instructional / learning objectives.

### Goal

'Learning' is the goal of our learners and parents. But, in true sense, it is not. The real goal of education and of school is becoming – becoming a "good" person and becoming a more capable person than when you started. Goals are general and non-specific. They cannot be exactly prescribed as we prescribe specific learning objectives. Goals are appropriate for entire course of study or a curriculum of study. The goal of goals of education or learning is to prepare mentally, socially and physically fittest citizens for respective nations. The goal is attained through aims, objectives, teachers, etc. The behaviours of the students are modified in the school by the teachers reach the ultimate goal. **Tyler, R.W. (1942)** expresses educational goals can serve as general criteria for judging the worth of educational products, but only in an indirect way. Because, they are stated as general behaviours and they are vague. Therefore they cannot be measured. The solution to this problem is to transform the general goal statements into behavioural objectives.

### Knowledge vs Skill

"Knowledge is defined as the collection of relatively objective ideas and facts about the physical and social worlds. For **Harre, Rom and Lamb Roger (ed.) (1983)** knowledge is the state of being in or having attained the intellectual goal in respect of proposition or facts, subjects or whole fields of study, languages, skills and other objects described as "known". It is also defined as the ability of remembering or recognizing of previously learned materials. The dictionary of education defines 'skill' that it refers to systematic and co-ordinated pattern of mental and physical activity, involving both receptor processes and effector processes. Skill may be perceptual, motor, manual, intellectual, social etc. For Reddy, skill implies proficiency in the performance of task. It involves motor learning. Skill means to do something or perform some task efficiently.

According to Dececco and Crawford, a skill has the following characteristics. "1. A skill involves a chain of motor responses, or muscular movement, for example, the movements of fingers, hands, arms, legs etc. Each movement can be viewed as an individual stimulation – response, association, A skill is a series or chain of such movements. Thus, every skilled behaviours involves some amount of body movements. 2. Skilled action involves the coordination of hand and eye movement. That is why motor skills are called perceptual motor skills. 3. Skill is a hierarchical response pattern. It requires the organization of a number of individual response chains into a complex response-pattern. Thus, complex skills are the result of learning of subordinate skills". Skill is also defined as the ability, coming from one's knowledge, practice, aptitude, etc. do something well. Usually, for differentiating the two terms, the processes involved in learning of cycling are used as illustration with example. Before learning to ride a bicycle, a person accidentally or casually learn some of the required information about cycle and cycling. This learning shall be branded as 'knowledge'. If a person activates or applied the learned information to ride a cycle, then it is said as that he/she has got the skill of cycling.

### Action

The common term to denote behaviour is action. Action is a process (such a breathing, drinking etc.) that an organism carries on or participates in by virtue of being living. An action is also defined as a thing that a person or group does or has done. Acquisition of knowledge and skills are nothing but varieties of actions. All human behaviours are actions.

### Objectives

Objectives are related to broad goals of education from which they are derived. They are prescribed considering suitability, need of the students, accuracy, logical grouping, revision etc. Objectives are specific, observable, and measurable behaviour or learning outcomes. Objectives are prepared for individual units of study – lessons or chapters. Learning outcomes are new behaviours or new actions. Hence, the objectives

are stated in specific, measurable actions or action verbs. These action verbs prescribe precisely what the students have to do following the instructions.

It needs to be understood by the learners of pedagogy that some behaviours are complex; they cannot be specifically and precisely stated. So, they cannot be measured directly. By measuring the characters or traits of the complex behaviour, measurement becomes possible. For example while measuring the circumference of a room the needed characters such as length, breadth are measured; not the room itself is measured. By measuring the traits, room is measured similarly in teaching the complex and difficult behaviours have to be broken down into small and measurable behaviours or actions. By developing the specific behaviours among the children increases the accountability of teaching and learning and measurement.

### Taxonomy of Bloom

**Bloom, B.S. (1956)** and his associates prepared taxonomy of educational objectives. The objectives were prepared according to some norms. According to them, learning takes place in three areas of behaviour; technically known as domains. They are cognitive, affective, and psychomotor domains. The cognitive domain covers the mental skills. Each domain has sub-domain is identified with actions or action verbs. The actions have been arranged in a graded way based on the difficulty level. These action verbs are identified with **specific objectives**.

| Sub domains in cognitive domain | Description  |
|---------------------------------|--|
| Knowledge                       | → Ability to recall previously learned material          |
| Understanding                   | → Ability to grasp meaning                               |
| Application                     | → Ability to apply the learned material in new situation |
| Analysis                        | → Ability to split or separate materials                 |
| Synthesis                       | → Ability to put together, join ect.                     |
| Evaluation                      | → Ability to judge the worth                             |

| Sub domains in Affective domain | Description                                      |
|---------------------------------|--|
| Receiving                       | → Attending to something                         |
| Responding                      | → Expressing some new behaviours as a result     |
| Valuing                         | → Showing commitment                             |
| Organization                    | → Integrating a new value into one's general set |
| Characterization                | → Acting consistently with the learned values    |

| Sub domains in Psychomotor domain | Description  |
|-----------------------------------|--|
| Imitation                         | → Attempted copying of a physical behaviour                    |
| Manipulation                      | → Ability of reproducing an activity from memory               |
| Precision                         | → Ability to perform an activity accurately without assistance |
| Articulation                      | → Ability to adopt and integrate expertise to satisfy a task   |
| Naturalization                    | → Ability to carry out unconsciously and effortlessly          |

Though, there are criticisms on Bloom's classification, it has become essential part of pedagogy. Educationist rise question that is it possible to split the human brain into three distinct parts such as cognitive, affective and psychomotor domains. However, it has developed teaching and learning an empirical field and made teaching a quantifiable behaviour to a limited extend. Earlier to Bloom, teaching was based on 'content' and 'concept'. In the past, before recommendation of Bloom, teachers adopted 'concept based

teaching' or 'content based teaching'. These methods could not ensure the development of knowledge and skills related to all round brain development. As there was no possibility for qualification of teaching, there was possibility for the teachers to teach one thing, and testing on something else. Since Bloom made teaching a quantifiable one, assurance for attainment of required skills or competencies could be realized. Therefore the teachers should understand here, that what should understand here, that what could be defined, alone could be measured; what could be measured alone could be quantified or tested. Bloom made teachers to provide teaching in a 'measured way' and evaluate the learners in a 'measured way'. Hence, the tool for testing could not too much deviate from classroom teaching.

### Competence Vs Performance

Following the recommendation of Bloom's and his associates, the teaching and evaluation processes are based on competency based. Therefore knowledge about competency and performance is necessary for the in service and pre service teachers usually knowledge and skill are compared with competency and performance respectively. From the explanation given by **Goodluck, Hellen (1994)**, the meaning for the terms can be understood. He explains "an adult's knowledge of rules of his native language is largely unconscious knowledge. A speaker of English who has never taken a linguistics course will have no trouble saying that both (1a) and (1b) are grammatical and mean the something, and that (2b) is not grammatical paraphrase of (2a).

(1a) Tony threw out the chair, (1b) Tony threw the chair out;  
(2a) Tony walked out the door; (2b) Tony walked the door out.

A speaker of English can make this judgement even if he has never thought about these types of sentences before; but without formal instruction, it is very unlikely that the same speaker will be able to give an accurate account of why it is he finds (2b) ungrammatical.

A native speaker's unconscious implicitly knowledge of rules that underline his judgements of grammaticality and meaning is called the speaker's competence. A speaker's competence is distinguished from a speaker's performance a term used to refer actual events of language production and comprehension. The judgement that define a speaker's competence result from the speaker's introspection about whether a phrase or sentence is grammatical phrase means etc. **Scovel, Thomas (2014)** distinguishes the difference between performance and competence. He says that native speakers can monitor and quickly correct any mistake in linguistic output proves Chomsky's contention that there is distinction between performance and competence. The former refers to the world we say or write the overt manifestation of our ability in a language; the latter describes our trait, intuitive knowledge about the language or languages we have mastered.

It is clearly understood that the term competence refers to the innate, unconscious knowledge and performance refers to the actual comprehension and production. This concept can be extended to other areas of discipline.

### Learning Skills (LSRW)

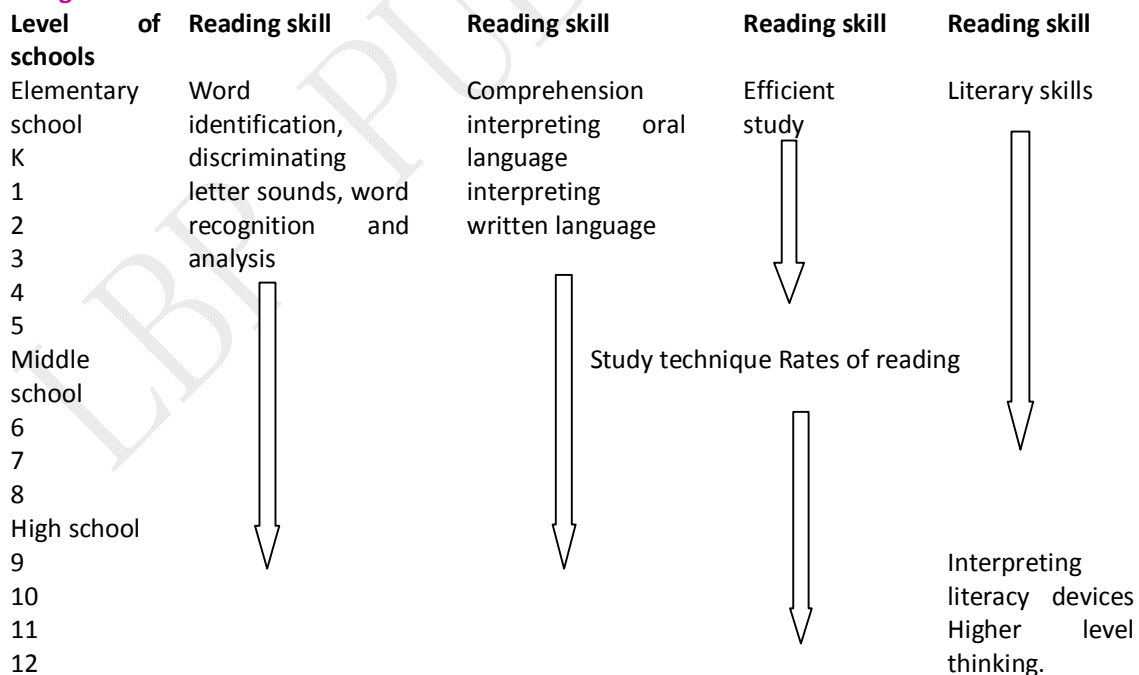
The basic skills of learning are listening, speaking, reading and writing. The purpose of developing these four skills are to develop the communicative competence. Therefore, the purpose of teaching the text books is to develop the four skills along with communicative competence. The students of pedagogy and teachers of all discipline must realize, that they are supposed to develop the four skills. In otherway, it can be said, that these are the general instructional objectives of classroom teaching. But each skill cannot be developed seperatly or isolatelly. Because they are not like water tight compartments. One skill depends on other skills. When developing one particular skills, other skills may also be developed. Teaching of LSRW means teaching of general instructional objectives (GIO). In turn, the GIOs are converted into specific instructional / learning objectives (SIO / SLO); otherwise known as specific behaviours.

**Reading**

“Reading makes a fullman; conference a ready man and writing an exact man” **Francis Bacon (1883)**. From the above statement of Bacon, Francis – reading is necessary to become a complete man. It also implies that it is also necessary for speaking in public. Without voracious reading one could not become a writer. Therefore, reading is considered as the most important skill among the learning skills. It is the passport of acquisition of academic learning. Knowledge and skills about various fields of discipline can be accumulated by voracious reading. There are plenty of books on developing reading skill. But, in practice it is conveniently neglected by the teachers at the basic levels. In the pedagogical courses least importance is given to teaching of reading, mechanics of reading, types of reading, skills involved in learning of reading. In the analysis of the specific skills of reading, similarity is found between the taxonomy of Bloom and specifications of three levels of reading (literal, interpretation, critical). Comprehensively, it shall be understood that learning, behaviour modification, acquisition of knowledge and skills, development of learning skills and teaching of content of various subjects are nothing but learning of reading or reading. Gray, William, S. (1960) has identified different levels of reading. He suggested that different levels of meaning could be obtained from the same reading materials. The first level of reading is literal level, which involves mere translation of what the words convey; an interpretation level is the second level, which relates the material to its context; the third level is a significant level, which involves implications; and an evaluative level, which requires the readers to react to the material in own terms.

To **Betts, Emmett Albert (1957)** reading is a thinking process calls for purposeful interpretation, carrying a sequence of ideas in mind, association of immediate experience with a background of information and feelings, anticipation of meaning, organization of ideas drawing of inferences... use of judgements and similar mental and emotional responses. **Anderson, Verna Dieckman, (1968)** defines reading is recognizing and interpreting symbolic language and interacting with it. This interaction may be any degree of acceptance or rejection of what is stated; enjoyment of the language itself; retention of fact, feeling or inspiration; stimulation to create. Reading skills are taught in graded steps at various levels of education. They are given below.

**Reading skill**



The above general learning outcomes are specifically stated and given below. These specifications can be compared with the taxonomy of Bloom. There is close association or similarities found between them.

| <b>Literal</b>   | <b>Interpretation</b>  | <b>Critical</b>  |
|--|--|--|
| To recognize and understand words or groups of words that are meaningful as units; to recognize ever increasing groups or units of words; this includes word meaning, paragraph meaning, and meaning of continuous written discourse (prose and poetry). | To understand the meanings of words and to realize the effect of the context upon meaning.     | To recognize objective evidence and to distinguish between fact and opinion.   |
| To realize the appropriate vocabulary of meanings and to understand nuances of meanings between words.   | To understand why the author included or excluded certain things.                              | To be aware of basic assumptions the author expects the reader to take for granted.  |
| To detect figurative language and well-turned phrases and interpret the effect upon meaning.   | To assess the reliance of the materials.   | To make critical judgements; such as: (a) to evaluate statements that conflict with or contradict one another; or (b) to judge if an argument is supported.                  |
| To recognize the function of grammar and syntax in controlling meaning.  | To summarize the passage   | To identify a valid objection not answered by the author.  |
| To interpret typographical devices as clues to meaning.  | To select a suitable title.  | To detect special pleading such as emotional appeal or propaganda.   |
| To grasp the literal meaning, or to understand direct statements made by the author.   | To identify the type of passage, e.g. fiction, history, factual, description, exposition, etc. | To judge the effectiveness of devices used by the author, e.g. metaphor, simile, rhetorical questions, etc.  |
| To identify parallel statements.   | To be able to recognize and state the author's purpose in writing.                             | To understand that materials will differ greatly in validity and reliability because of the time written, pressure of circumstances, bias of writers and many other factors. |
| To recognize paraphrases.  | To establish a purpose for reading.  |  |
| To identify things mentioned most frequently.  | To keep the question or problem, in mind while reading for the answer.                         |  |

|  |  |
|--|--|
| To recognize topic sentences and where divisions might come in a single paragraph. | To see the motives of the author.                      |
| To state the main topics of separate paragraphs.                                   | To draw and support conclusions.                       |
| To understand the main idea in a passage.  | To make inferences or predictions.                     |
| To follow the sequence of ideas and to anticipate this sequence.                   | To identify the tone of the passage.                   |
| To understand the basis on which a passage is organized.                           | To determine the author's attitude towards the reader. |

**Source:** The Teaching of Reading – UNESCO (1973) Ralph C. Staiger

## CONCLUSION

The analyses of the terminologies of pedagogy enlighten the teaching practitioners and the students of pedagogy about the existence of relationship among them. It is known from this research paper that the meaning of term 'learning' is related to behaviour; the meaning for the term behaviour is identified with 'actions'. It is learnt that human actions are categorized as either 'knowledge' or 'skill'. Most of the 'knowledge' and 'skill' are found in bundles; the bundles of knowledge and skills are specifically stated in measurable human behaviours which are known as 'specific objective's (Bloom's classification). The terms 'knowledge' and 'skill' are compared to Chomsky's 'competence' and 'performance' respectively. The basic skills of learning – listening, speaking, reading and writing develops knowledge and skills or competence and performance among the learners. The four basic skills are acquired with the help of prescribed text books. These books aim at developing comprehension of the concepts. While 'reading' the text books three levels of meanings are generated. These specific skills of readings correlate with the classifications suggested by Bloom. If these terms are not clearly understood by the teachers, or the trainees they will be struggling with teaching.

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