Latent Teacher: The Enfolded Potentials for Enhanced Teaching

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Abstract

Teaching makes use of all excellent general qualities that are intrinsic and develop subliminally as people mature. The impact of education on the level and quality of one's maturity determines the efficacy of one's teaching too. This paper reviews and synthesises the evidence on latent teachers and awakened teachers: compares the empirical data for and against the natural teachers, enlists and emphasizes the generic skills, and confirms the weightage of latent potentials over the methods and approaches in education. Data sources include empirical studies and published literature available from websites. The review finds that teaching is a dynamic process just as human life is dynamic; and that the latent teacher within ought to be awakened to address the complex process of education. The findings suggest that educational reforms focusing on the techniques and methods of teaching without sharpening the latent teaching potentials bear little fruit.

Keywords: *Latent potentials,* natural, implicit, explicit, generic skills, system of systems, teacher education

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Introduction

" Education is unfoldment of what is already enfolded in the germ." – F. W. Froebel

The ability to learn and to teach is an exclusive characteristic that made homo sapiens distinctive among all other species. As a cognitive quality teaching is species-typical, and it is species-unique (Strauss & Ziv, 2012), which enabled them to adapt to their surroundings, and also to get the surroundings adapted to them. Consequently, human species have been amazingly flourishing practically in every habitat on the planet and even beyond. Human evolution across generations have been facilitated by their exceptional ability to communicate and convey their cumulative culture and innovations in a nongenetic way. This is teaching, which, like any skill, is meant to promote personal and social growth and advancement.

Along with the evolution of social system and the development of specialized knowledge, teaching has become a sophisticated profession (Tezcan, 1996; Erden, 2007). Professional teaching requires professional training (Cipani, 2008; Hotaman, 2010). In 1948, University Education Commission of India had confirmed that education was a profession for which intensive preparation was necessary. The quality of education being a decisive factor in national progress, periodical improvement of teaching became a global agenda. European Commission (2013, p.16) advocated “quality frameworks” which fulfills “an ‘ethical’ obligation precisely about teacher educators’ work. In Australia, the design of teacher education programmes underlined clear goals including the content covered in the courses (O’Meara, 2011). Teacher education in Scotland focused on the triumvirate of Values, Skills and Knowledge, with research underpinnings (Menter & Hume, 2011). Finnish teacher education programmes emphasized on

research base (Sahlberg, 2011), and National Education Policy 2020 of India proposed multidisciplinary perspectives focusing on dispositions and values for teacher education.

While there are incisive recommendations across the globe to improve teaching (Bruns & Luque, 2014), there are teachers, irrespective of the scholarly backup, who are naturally successful in teaching (Strauss, 2005; Malikow, 2006; Ellis,1994). Success story of human species is also the success story of their teaching which is purely implicit and natural at the onset. Researchers have recommended a knowledge-sharing framework that recognizes the examples of successful practice along with research-based practices (Cochran-Smith & Lytle, 2009; Lowrie, 2014) so that teacher education can become plausible with an impactful position in future. Here opens a space for a review on effective teaching, weighing the natural and instinctive teaching skills against the instilled ones.

Aim and Objectives

This review paper aims to fix a poise between the question of innate skills and acquired skills and their respective effectiveness in teaching. How much teaching is a natural human characteristic which implicitly develops, and how much of it is explicitly acquired through training, is discussed.

This study does not entertain the concept of born teachers: the view that a person can, by nature, be exclusively fit for the teaching profession while some are not. Instead, it proposes that every human being is a teacher. Pertaining to that, the following questions are addressed:

1. Is teaching an instinctively common human characteristic?

2. Does teaching require exclusively specific skills?
3. What are the generic skills applied in teaching?
4. Is teacher development a nonconscious implicit process?
5. Is explicit training imperative for developing teacher competence?
6. What could be accountable for the dilemmas in teacher education?

Specifically, the goal of this paper is to discuss the latent teaching skills and to delineate the dynamic shift from functional level to potential level of teaching.

Method and Design

The method of study is narrative review, and it is designed for exploring the representative data to identify the indicators of innate characteristics and the sophisticated model of teaching. Relevant and qualitative secondary data from seventy-seven (77) research papers are purposively culled and acknowledged. The review sources mostly spread from the year 2000 to 2024 with a few exceptions. The data are thematically analysed, interpreted and synthesised through an inductive process of back and forth shifting between the main theme and the database.

Rationale

Critical reviewers have reported that there are “many persistent and intractable dilemmas in teacher education” (Kennedy, 2010, p.1). Consequently, there have been no dearth of recommendations for the improvement of teaching across the globe (Kosnik et al., 2016). Many of the reformations in education have been inconsistent pushing in different directions. Studies

by Freeman et al., (2014) have confirmed that the student-active and project-based approaches positively impact student learning against the teacher-active and lecture-based classes. Whereas Martella et al. (2024) found a different result in their study that compared the impact of project-based and lecture-based learning. They found that the lecture-based approach was more effective than student-active learning. They also found that the lecture method interfaced with the project method has significant impact on student learning, even though not significantly different from lecture only learning.

Such conflicting evidence are not rare in the realm of education, which come by way of the "dilemma management" as Lampert (1985,p.185) had put it. Tessema (2007) observed that in Ethiopia, the teacher education terrain is characterized by contradictory activities. Similarly, Darling-Hammond and Lieberman (2012, p.129) reported that in Australia, there was "a confusing blend of professionalizing and de-professionalizing initiatives"; and in Netherlands, "calls for higher standards have been accompanied by a call for the establishment of alternative routes". In India, the Justice Verma Commission in 2012 criticized the existing teacher education as reproducing rituals of teacher preparation. Hence, there is a widely felt need to improve teaching and teacher education by studying it closely and deliberately (Kennedy, 2010), which this study intends to.

Apart from incoherence, there are unceasing shifts of direction in teacher education with new reform emphases every couple of years (Kosnik et al., 2016). Reforms in pedagogy, with their undue focus on the technology and techniques of teaching, fail to hit the point: the human

element in teaching; the potentials that 'tick' inside for teaching. The interaction of teacher–learner dyad being the core of human pedagogy, the researcher felt that what actually animates the pedagogy has been cast outside the limelight. Bearing on the generations of experiences, it is now evident that there is no magical method of teaching.

Hence, away from the pedantic propositions, this study features natural endowments and generic skills, and their promises and possibilities. Specifically, the present study highlights the innate teacher potential which can be tuned up for specific professional performances. The research questions of this paper are addressed in the discussions under the subsequent headings.

Discussion

Natural Teachers

The first question to stir the review is whether teaching is an instinctively common human characteristic. Education, as John Dewey (1897) had observed, is not preparation for life, but is life itself. The man is exposed to teaching from early age, and it is a prerequisite for his development. Teaching is a vital part of rearing younger generations among all living creatures, and it is especially so in the case of human species (Strauss & Ziv, 2012) who has a long childhood compared to other animals. Children normally meddle with their parents asking questions, and the parents, in turn, naturally respond with appropriate answers. While the fledglings learn through emulation of the elders, they are also taught and trained by their caretakers how to step into and progress in this world. As such, parenting is seamless with teaching where the parents,

like teachers, believe that they have something to give to their kids, and that they ought to bring up those kids that are entrusted with them.

Review of the apposite articles have evinced that as learning is very natural among human beings, teaching is very natural too, because the human brain has been designed for both (Rodriguez & Fitzpatrik, 2014); essentially, teaching and learning mean using the brain very normally. Some people possess a combination of personality characteristics that are conducive to effective teaching (Malikow, 2006). They teach effortlessly and without instruction despite the complexity involved in teaching (Strauss, 2005).

Among the trained teachers, sometimes, teaching takes a natural form of excellence without them being aware of its underlying logic (Strauss, 1993; Strauss & Shilony, 1994). It means, teachers intuitively develop their own strategy or resort to some techniques in certain challenging situations of teaching. For example, when they found a study material too complex for the students, instinctively they broke it up; they altered the classroom setting, or even arranged a field experiment to make the learning easier for their pupils (Steiner, 2002; Strauss & Shilony, 1994). Nevertheless, they were unaware of the cognitive principles underlying the measures they adopted for ensuring effective teaching (Strauss, 2005).

Researchers affirm that teaching is a natural cognitive ability in humans (Strauss et al., 2002; Strauss, 2005; Csibra & Gergely, 2009). Cosmides and Tooby (2010) remind that natural cognitive abilities have five properties: cognitive abilities are (1) complexly structured for solving a specific

type of adaptive problem; (2) distinct from more general abilities to process information or behave intelligently; (3) applied without any conscious awareness of their underlying logic; (4) developed without any conscious effort and in the absence of any formal instruction; and (5) reliably developed in all normal human beings. All these properties are applied to teaching, making it connatural. Thus, there are no specific skills exclusively for teaching, and no skills are branded solely for teaching.

Teaching mental models comprise of cognitive goals; cognitive processes leading to these goals; and cognitive assumptions about how a particular teaching ensures these cognitive processes and, in turn, the cognitive goals (Rodriguez & Fitzpatrik, 2014). Essentially, the goal, the process and the assumptions are triggered by the innate psychological skills that are latent in any individual who embarks on any endeavours. In the context of classroom, the innate skills are employed for formulating teaching goals, teaching processes and meta-assumptions about teaching. The term latent teacher stands for this innate potential that is dormant in every individual.

Since teaching is inert in human, it appears to be ubiquitous: it exists in homes between parents and children and between babysitters and caretakers; it appears on playgrounds where children teach each other; and in schools where teaching and learning are pivotal (Frye & Ziv, 2004; Strauss, 1993). When an individual responds to a demanding situation, teaching happens very spontaneously, even without conscious awareness. Thus, teachers emerge, and teaching happens in any informal daily life situation.

The Trajectory of Teaching

As a natural human characteristic, teaching is reliably developing over the years. In fact, it is an evolving cognitive skill which extends from birth to adulthood (Rodriguez & Fitzpatrick, 2014). Cosmides and Tooby (2010) explain that the ability of teaching universally follows a similar developmental trajectory among children who are without serious developmental disabilities and who are exposed to a conventional social environment, no matter what that society might be.

Natural unfolding of teaching has been investigated by researchers around. They noted that youngsters spontaneously engage in teaching effortlessly, without intentional instruction. Children teach peers and adults how to play certain games and to perform skills such as movements of dancing and building constructions with blocks (Frye, & Ziv 2004). In research conducted by Akagi (2012), an experimenter made a mistake by trying to put a triangular-shaped object in a round hole in the presence of some 1-year-olds, and the infants often pointed to the correct hole to put it in. The study concluded that fundamental aspects of teaching are present at a very early age.

In another study, children of age 5 could teach peers the rules of games by explanations and demonstrations (Bensalah et al., 2012; Davis-Unger & Carlson, 2008a, 2008b; Strauss et al., 2002). Children at this age can demonstrate how a game is played, but their dominant teaching strategy is explanation. It was found that when the learner errs, a teacher who is in the Pre-Operational

stage can typically repeat or remind the learner of a rule that has previously been explained, usually in a shortened version or by demonstration. As the young teachers progress in their life span, five-year-olds are found to be better than three-year-olds at monitoring the learning process and can adapt their teaching to the learner's progress.

Further development was observed among the natural teachers at their Concrete Operational stage who could engage in more systematic but flexible teaching. Accordingly, a seven-year-old teaches a peer learner whose progress in learning determines the teacher's style and strategies of teaching. The young teacher is able to adjust a kind of scaffolded teaching according to the condition and need of the learner (Wood et al., 1995; Ziv et al., 2008). Researchers noted that if the learner succeeds, the teacher offers less help in the next intervention. If the learner fails, the teacher uses more controlled intervening. The seven-year-old has advanced in the understanding of mind. Similarly, studies among nine- to eleven- year-olds found that they were capable of offering strategic advice regarding alternative choices available to the learner (Garbarino, 1975).

As children advance in cognitive skills, there is surely more development in actual teaching between age eleven and adulthood in the Formal Operational period. The quality and efficiency of adult teaching is determined by their cognitive competence and emotional maturity: the ability to understand, accept and appreciate the distinctive human nature. Therefore, adult teaching displays adults' mental models of the dynamic workings of pupils' minds when learning occurs (Haim et al., 2004; Mevorach & Strauss, 2012).

The aforesaid studies confirm that a teacher lay latent in every individual, and that teaching as a natural skill appears to be developmentally reliable. The trajectory is from proto-teaching among 1-year-olds who do not yet speak, to demonstrations among 3-year-olds; then explanations in 5-year-olds, followed by contingent teaching among 7-year-olds and culminating in mental models among adults. There exists an internal script of teaching remaining latent in every individual and develops as one grows up. The existence of a rudimentary internal script of a skill can be regarded as a prerequisite to practice a skill (Fischer et al., 2013) and to develop the internal script of performing the skill as well as the actual performance of the skill (Chi et al., 2008). While an individual develops further in life, the latent internal script gets pruned and shaped by the experiences from the environment.

Implicit Acquisition

The second question placed in this study is whether teaching requires exclusively specific skills. Reviews confirm that as everyone has a natural propensity for teaching, teacher development is a natural daily process without training for specialized skills. Researchers like David Gordon (1980) who argue that teachers are born and not made are skeptical of the institutions that exclusively make teachers. Constantine et al. (2009) found that the different kinds of teacher training have no significant difference in the achievement scores among the students. Goldhaber & Brewer (2000) also noted no difference in science and mathematics achievement among students taught by teachers with different levels of qualifications.

As an advancing cognitive skill, teaching is fostered and formed by the experiences of life. The normal way of learning is nonconscious as people implicitly take in much information from their environments and acquire them without conscious awareness (Reber, 1989). The fourth research question of this study, whether teacher development is a nonconscious implicit process, is cited by several researchers. According to Michael Gazzaniga (2018), 90% of what is learned is without conscious awareness. Non-conscious mind picks up large amounts of information from everyday experiences and makes sense out of them, leading to the formation of knowledge, skills, aptitude and attitude, which are not necessarily manifested by an immediate overt response but lay latent awaiting its time. The learning that occurs in the absence of any obvious reinforcement or noticeable behavioural changes is called latent learning (Soderstrom & Bjork, 2015). Tolman (1948) proposed that people and animals are dynamic information processers who pick up information from every day experiences and utilize them as and when the situation demands.

The concept of latent learning was developed in 1929 by Hugh C. Blodgett who described it in laboratory rodents that gradually improved the way, while they navigated through mazes. In 1930, Edward Tolman and Charles Honzik conducted an experiment of rats running in a maze and suggested that learning could occur even when it is not immediately visible. In the same framework, students having almost fifteen years of 'maze running' in schools do retain tacit knowledge of teaching in their subconscious mind.

Every action of a teacher inside and outside the classroom has a profound impact on a student, not just for a few days but for decades. Children being great imitators, their behaviour is largely

shaped by how they see their teachers present themselves, deal with a subject matter, demonstrate concepts, and respond to diverse situations in the classrooms. Thus, teachers are instrumental in raising confident, creative and efficient future teachers. Tacit knowledge is primarily acquired, not by direct instruction from others but, rather, from one's experience of operating within a given context (Sternberg & Horvath, 1995; Sternberg et al., 2002). According to Bandura (1986), observing others is one step towards learning the observed skill; the observation fosters the initial steps of creating a sort of a cognitive schema of how and when that internal script of skill is applied (Fischer et al., 2013).

Teacher education, thus, virtually starts from school education. For many successful teachers, professional passion had been sparked during their school days; and the sparks lay latent within them advancing as they grow until some triggering situations arrive. Therefore, any individual who is untrained for teaching and even without any overt pedagogical expressions, can have a functional teacher latent within awaiting activation (Wade & Tavris, 1997). The latent teacher can be prompted at any time at home, in the playground, marketplace, nursing home, in crisis or in the formal classroom.

The Latent Potentials

Review on the third research question concerning the generic skills applied in teaching is dealt in this section. Candal (2015, p.15) pointed out that schools consider personal qualities and characteristics, not just baseline academic and professional qualifications for hiring teachers. Important components considered are the promises held within that “can fill ‘holes’ in a

department or school". This means that while teaching is a universal human ability, people are not equally promising in teaching; as personalities differ, their performances differ.

The latent potential for teaching is displayed diversely across different individuals at varying levels of efficacy. When it comes to performance, everyone may not teach in an appropriate manner, just like parenting. Whilst one can be a parent naturally, everyone may not be an effective parent emotionally and intellectually. As such, some people cannot teach while some are not interested in teaching at all due to various reasons. Again, some are interested to teach but are unable to present facts in a methodical manner. Regarding the skills and qualities that markup teaching, people, place and time matter a lot.

Teaching is an adaptive skill that has continued to develop over thousands of years (Rodriguez, & Fitzpatrik, 2014). It grows and adapts each time when it occurs in a new context. Social changes do influence teaching. From the survival requirement of primitive jungle, teaching has grown to meet the need for success in the civilized society. Similarly, personality changes do influence the efficacy of teaching. It means that the latent cognitive schema of teaching gets accommodated or even replaced as people grow and time passes. The concept and content of teaching as well as the quality and characteristics of teachers considerably alter as society changes.

However, there are certain basic and stable human characteristics that act as ingredients for effective teaching. The first in the list is leadership, for, teaching is primarily based on leadership

(Khachaturova, 2021). Etymologically, the word pedagogy means to lead children (Longenecker, 1982). Currently, a pedagogue is one who leads by teaching. The second in the list is communication which is a core skill in almost all the roles in modern society. Every communication contains an intent of informing or instructing. Both communication and leadership include an array of micro skills commonly shared by many disciplines, but they are particular for teaching.

A study by Undiyaundeye (2015) contends against the idea that a person by nature is exclusively fit for a particular profession. The skills a person is endowed with can make him successful in any endeavour. Therefore, leaders, businessmen, social workers or counsellors can also be teachers as teaching involves abilities that are not specific to teaching. For example, cognitive templates involve executive functions (Davis-Unger & Carlson, 2008b), language skills (Premack & Premack, 1996), skills for understanding human mind, personal beliefs and philosophy of life. These are separate, yet intertwined strands of general skills for personal excellence which follow a developmental course and have significant influence on teaching. Teaching being a unique human ability, there are no skills exclusively for teaching and no skills are excluded from teaching. Flexibility and adaptability enable the competent teachers to embrace any methods and employ any skills drawn from dozens of theories.

Teaching competence is a combination of knowledge, skills, abilities and attitudes (Blömeke et al., 2015) which facilitates drawing assumptions about learning (Olson & Bruner, 1996), defining goals and standards of the required change (Premack & Premack, 1996; Ziv, Solomon, & Frye,

2008), applying multiple teaching methods while adapting them to the learner, providing feedback (Premack & Premack, 1996) and making assessment. Further, as Hanifin and Appel (2000) believe, the job of a teacher is to transform unconscious thought into discourse. In essence, teaching means using the brain. It is an intentional intellectual activity employing personal and professional competences.

As an intellectual activity, teaching involves cognitive and affective elements. There is no thinking without feeling, and no feeling without thinking. Teaching is never a cognition alone as emotion is a basic form of decision making and a qualifier in motivation. Competent teachers are emotionally intelligent endowed with interpersonal skills. At the crux of teaching is a caring concern and the genuine intent to trigger off learning in someone else. Human pedagogy is exceptional in employing social skills to motivate the learner towards the curricular goals. Hence, a person's latent teaching abilities can be conceptualized broadly as a set of social and intellectual skills (Kunter et al., 2013) that are not exclusively pedagogical.

Teaching involves understanding, for, teachers know their subjects; as such, it is distinct from other skills to process information (Strauss & Ziv, 2012). Premack and Premack (1996) had underlined the skill for assessing the standard of the learner's performance and modulate the teaching accordingly. This is called contingent teaching which comprises addressing the dynamic nature of learning. As human life is dynamic, so is their learning; teachers have to adjust their approach based on the learner's response. If the learner has gained the knowledge taught, then,

the teacher can offer less support; if the learner is slow to learn, the teacher can provide more support (Rodriguez, & Fitzpatrik, 2014).

Strauss and Ziv (2012) refer to the contingent teaching as based on the teacher's ability to develop a theory of mind grounded on recognizing the "dynamic workings of pupils' minds when learning occurs." Human contingent teaching is founded on understanding the dynamism in the learners' mindset, whereas the animals' teaching almost surely rests on hard-wired behaviours that do not draw from Theory of the Mind (Premack, 2007).

Theory of Mind (TOM) is the cognitive capability of understanding another's mind (Premack & Woodruff, 1978). It postulates the possibility of "using one's own mind to simulate and predict the mental states of others" (Premack & Woodruff, 1978, p.1). Theory of Mind is a prerequisite for success in any discipline like trading, marriage, parenting, leadership, military etc. In teaching, it calls for an understanding of learners' mental states: teachers understand learners' knowledge, beliefs, desires and motives; they identify a knowledge gap in learners; then, they definitely set out to reduce that knowledge gap (Olson & Bruner, 1996; Strauss, 1993; Strauss & Shilony, 1994). In a nutshell, understanding the human mind is an important prerequisite for teaching (Strauss et al., 2002).

Empathetic understanding of the learners' feelings, insight into their cognition and appreciating their divergent perceptions call for maturity of the mind. A matured personality is the one having an authentic understanding on oneself. *Self-awareness* is the ability to look inward and

objectively understand oneself and to evaluate one's own personality (Goleman, 2012). These key understandings play a critical role in understanding others and thereby influence the judgements, decisions and interactions with them. Teachers can empathetically understand a student to the extent that they can understand themselves.

The latent teaching potentials comprise an array of generic skills and qualities that are characteristic of any mature individual qualified for any profession. When the teacher-self is awakened, all the 'weapons in the arsenals' are activated to the purpose of teaching.

Explicit Training

Studies by Wood et al. (1995), Ziv et al. (2008), Wood & Middleton (1978), and Garbarino (1975) have emphasized that children are, by nature, capable of contingent teaching; they can understand their peer learners and adjust their teaching according to their level of learning. As children grow older, advanced they become in the understanding of the human mind. Even though this is a strong argument for the natural teachers, this also carries the seeds that support teacher training, for human beings do not grow naturally like calves and cubs, but they are brought up through training and teaching. The well-brought up children exhibit exceptional skills in any endeavour. Researchers have the opinion that in-born talent is not the determining factor in high levels of performance (Colvin, 2008; Gladwell, 2008; Shenk, 2010). The fifth question of the study emphasizing the explicit training for teacher development is addressed in the following section.

The ability to understand the learner's mind varies among teachers. Olson and Bruner (1996) affirm that the type of teaching reflects the teacher's understanding about the learner's mind. Average teachers regard learners as being capable of understanding and applying rules, and accordingly teach mainly by explaining rules. However, excellent teachers regard pupils as thinkers and engage them in innovations and promote dialogues to refine their views. This makes clear that the natural way of explanation, demonstration and direction takes a sophisticated level in expert teaching. Teaching is not only a way of interacting with learners, but it is also a process unto itself calling for higher mental order. This explains why adequate training and an awakened spirit is required to equip teachers for this process; a defined system of training and development can create a professional pipeline that allows teachers to grow and succeed.

Research in teacher education has delineated and recommended the habits and traits that make up effective teachers (Amaro, 2018; Gagani, & Enoc, 2019). Although personality cannot be taught, pertinent habits and traits can be obviously marked out and inculcated. When teachers are explicitly introduced to appropriate professional habits, they become aware of the need to strengthen and practice the habits (Dottin, 2010). Cognitive architecture, like all aspects of the phenotype from molars to memory circuits, is the joint product of genes and environment (Rodriguez, & Fitzpatrik, 2014). The rudimentary architecture of unversed teaching can be restructured for impactful classroom teaching. Dottin (2010) suggests that intelligent performance is not just an exercise of ability, rather it is more dispositional in nature which needs to be activated and set in motion. Like athletes and artists, teachers are born with talents; nonetheless, those talents need to be refined with career training and practice (Malikow, 2006).

The notion of natural teachers is smashed by the fact that teachers, especially in the lower classes, are expected to recognize and accommodate the needs of exceptional students. Knowledge and skills of how to identify and support the exceptional cases are not innate. Even otherwise, teachers have to understand and manage almost twenty-five to fifty heterogenous individuals in a class while retaining the thread of instruction as well as motivation. Researchers have observed that in view of the complexity of the classroom situation teachers need to respond quickly, flexibly, and appropriately to situational demands while engaging goal-oriented teaching (Oser & Baeriswail, 2001). Hence, their internal rudimentary scripts need to be tuned for adaptability and flexibility. The ability to teach adaptively requires training (Schipper et al., 2023).

A teacher who stops growing is falling short of the potential of inspiring teaching. Rodriguez and Fitzpatrik, (2014, p.146) point out that “a teacher’s development is based on his abilities as both a learner and a teacher”. Just as a learner moves back and forth between the Functional Level of understanding and Potential Level of understanding (Vygotsky, 1978), so too do teachers; they move from the latent to awakened state of competence which takes place systematically through practice. A latent teacher may awake to the situations, but an effective awakening requires competence explicitly accrued from training.

The sixth question placed in this study probes into the factors of the dilemmas in teacher education. Educational reformations have been mainly focusing on the approaches, methods and digital applications of teaching, and consequently, there have been periodical

recommendations and findings which mutually contradict, such as the examples cited by Freeman et al. (2014) and Martella et al. (2024). Similar enigmas in educational reforms are reported by Tessema (2007), Kennedy (2010) and Lieberman (2012). Experts opine that there is no panacea for academic problems, but teachers need to adopt pproaches that are fit for the purpose (Fox, 2024). It means that knowing when to teach explicitly and when to promote open-ended or complex project-based tasks is critical for teacher effectiveness. This underscores the significance of latent teacher potential and the need for awakening the same, for, no method is above the teacher who uses it judiciously. Teaching is, essentially, a mind influencing another mind; and teacher development is, but the development of a teaching mind. Giving undue importance to methods, and the recurrent replacements of the same indicate nothing but failure of human effectiveness.

The Awakened Teacher

Teacher training programmes usually follow linear, learner-based best practices and always firmly advocate the latest pedagogical methods that are empirically proved to be best. An average teacher is confined to such a single linear system; but the latent characteristics are too strong for some others to follow a rigid method. “Those who are successful in their work are people who bring certain constellation of desirable stable characteristics to their education and later career” (Kunter et al., 2013, p.64). Eventually, the fledgling understands that teaching approach is not a rigid flow from simple to complex, nor from known to unknown; it doesn’t switch from instruction to collaboration and replace rote learning with experiential; and it is neither exclusively learner-entered, nor teacher-centred. The teachers are awakened to the fact that teaching is not sternly

centred on anything or anyone; and that classroom is not a single system, rather, it involves certain dynamic, complex, and multiple interacting systems. Each system is each brain in action and interaction and undergoes transformation by the experiences (Menchén, 2018).

The awakened teachers recognize each learner as one system, themselves as another, and their interaction with the learner as a third system (Rodriguez & Fitzpatrik, 2014). Teaching, being a system of systems, teacher is a system thinker who recognizes the parts existing within a system, how the parts interact and how they affect one another. In other words, the proficient teacher is able to identify how different brains think and is able to develop a theory of mind for each student and also for the class as a whole.

Systems thinking helps them understand the unique cognitive, affective and neurological processes occurring when they teach; feel how system changes as they explore the content deeply and place it in a larger contextual framework; synchronize with students in higher human thoughts; gain insights into the effects of various inputs and determine the interventions that can ensure learning outcomes. There is a gradual shift from the latent to the awakened, from natural to exceptional, in the manifestation of a full-fledged whole teacher.

Summing up

The review on research-based studies has effectively addressed the research questions presented in this study. Accordingly, there are empirical confirmations that a teacher is latent in every individual who exercises his/her generic skills specifically for teaching when the situation

demands. Researchers have acknowledged that the latent teacher develops naturally and non-consciously as the individual grows and matures. However, researchers are not unanimous on the question of implicit development of natural teachers against the explicitly trained expert teachers. The empirical weight of their respective arguments supports the fact that professional training can uplift the latent potential for sophisticated performance when the latent teacher is awakened to an active system thinker. The same fact unveils why periodical reformations cannot manage the dilemma in teacher education.

"Knowledge of methods alone will not suffice; there must be the desire, the will to employ them. This desire is an affair of personal disposition," affirms John Dewey (1933, p.30). The power of a teacher is the power latent within, the personal disposition, that determines the efficacy of teaching, no matter which approach and what method are followed. The stalwarts of policies and programmes should cogitate on the fact that any educational reform ignoring the latent teacher potential is bound to fail.

Author Bio

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