

PLENATITUDE¹ Teacher Education for Effectiveness and Well-being With Neuro-linguistic Programming

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The role and functioning of schools are changing as well as what is expected of teachers (who face growing and diversified challenges); consequentially, well-being at the schools is endangered. As teachers and teachers' educators concern is: How to improve schools' and teachers' effectiveness² and promote well-being. Believing that the path to effectiveness is through evidence-based practice, according to research results (meta-analysis and effect-sizes), the authors analyzed which factors have more impact on schools effectiveness; teachers arise as a significant factor, accounting for about 30% of the variance on pupils' achievement. So, the authors have searched for factors that have significant impact on teachers' effectiveness. Evidence shows that, among other factors, giving/receiving feedback, beliefs and expectations, self-efficacy, establishing clear goals, effective interpersonal communication, and classroom climate are determinant. In face of these findings, the authors have explored how NLP (neuro-linguistic programming) can contribute to improving teachers' effectiveness, through professional training.

Keywords: teachers' effectiveness, NLP (neuro-linguistic programming), teachers' education

For teachers can make education a thing of joy and success or a matter of frustration and despair. (Gage, 1977, p. 13)

Education has moved its emphasis away from ensuring that all students go to school to ensuring that all pupils learn while they are at school, meaning "from planning the quantity of education to planning the quality of education" (Postlewaite, 2004, as cited in Anderson, 2004, p. 13). To ensure quality we must promote schools' efficiency and well-being for all its elements.

Why an Evidence-Based Approach?

Teaching is a complex reality and teachers, "In the myriad judgments they make every day, would be more professional in those judgments if these were based upon the accumulated evidence from their own practice and from that of the profession as a whole" (Pring, 2010, p. 210). Lemov (2010, p. 6) diagnosed: "One of the problems with teaching is that there is a temptation to evaluate what we do in the classroom based on how clever it is, how it aligns with a larger philosophy, or even how gratifying it is to use, not necessarily how

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¹The name results from the fusion of two Portuguese words: PLENA + ATITUDE (full + attitude) = PLENATITUDE, and reducing "AT" size one reads "PLENITUDE" (fullness).

²Efficacy studies happen in a controlled environment or clinical laboratory, while the effectiveness studies are performed in real contexts, in order to evaluate the results in everyday practice (as the APA Division 12, as cited in Diniz-Neto & Feres-Carneiro, 2005; Webster-Stratton, Gaspar, & Seabra-Santos, n.d.).

effective it is in driving student achievement”. The authors agreed with Petty (2009, p. 1) who supported an evidence-based practice, not custom and practice: “People often mistake common practice for best practice, and seem to prefer the comfort of the crowd to thinking for themselves using hard evidence”.

Petty (2009) characterized an evidence-based teaching practice; used the methods that work best (the 20/80 rule)³; understood the learning process (in terms of brain science); and found the problems and fixed them (contextual factors).

Therefore, this authors present as principles of an evidence-based practice (see Figure 1):

- (1) The authors need all the evidences to make sound decisions;
- (2) It is not enough to know what works, the authors need to know why;
- (3) The authors need to find the critical success factors that are failing in their teaching context and fix them;
- (4) The authors need to review/monitor their teaching constantly in the light of the evidence.

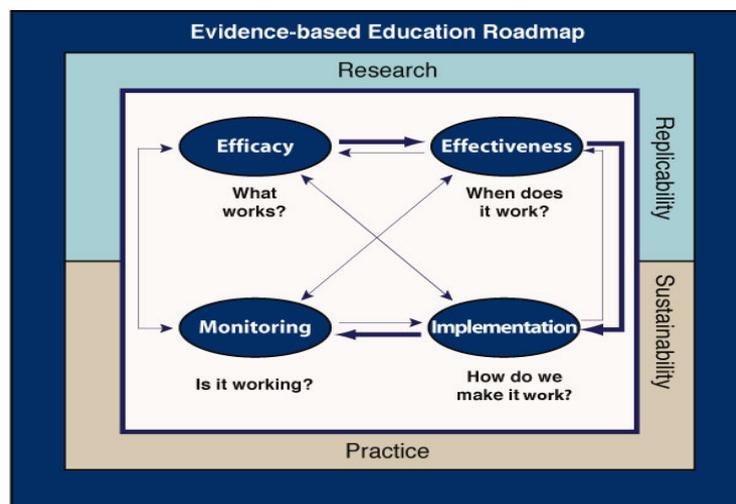


Figure 1. Evidence-based education model (Wing Institute)⁴.

Summarizing: “We want the truth... (evidence rather than tradition...). The whole truth... (all the evidence...). And nothing but the truth” (Petty, 2009, p. 5). In this framework, Petty (2009) pointed out a road for teachers to promote change in their practices by creating their own evidence: action-research, “theory in use”, belief analysis, and feedback gathering about the way they teach.

What Does Research Show Those Works on Enhancing Schools’ Effectiveness?

More than knowing research results, filtering them is required as Hattie (2009, p. 1) stated “In the field of education, one of the most enduring messages is that ‘everything seems to work’”; therefore, attention must be focused on what causes difference in a significant way, by using effect-sizes (see Figure 2)⁵. This author pointed as the “hinge-point”, the value of 0.40, meaning that only values above that are significant as efficiency indicators.

³ Twenty percent of what you do makes 80% of the difference, so let us work more smartly, not harder, by concentrating on the factors that make this difference (Petty, 2009, p. 3).

⁴ Retrieved from <http://winginstitute.org/The-Wing-Institute/Our-Activities/>.

⁵ The advantage of using the effect-size method is that effect sizes can be interpreted across tests, classes, times, etc. (Hattie, 2012).

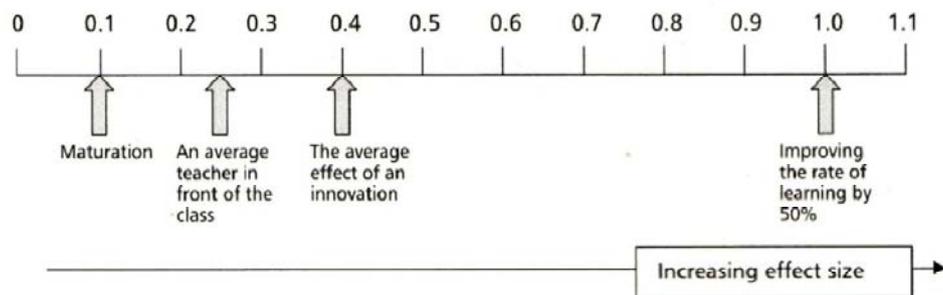


Figure 2. Comparing effect-sizes, according to Hattie (Petty, 2009, p. 60).

Table 1

Effect-Sizes of School Factors on Students' Achievement (Hattie, 2003, p. 4)

Influence	Effect size	Source of influence
Feedback	1.13	Teacher
Students' prior cognitive ability	1.04	Student
Instructional quality	1.00	Teacher
Direct instruction	0.82	Teacher
Remediation/feedback	0.65	Teacher
Students' disposition to learn	0.61	Student
Class environment	0.56	Teacher
Challenge of goals	0.52	Teacher
Peer tutoring	0.50	Teacher
Mastery learning	0.50	Teacher
Parent involvement	0.46	Home
Homework	0.43	Teacher
Teacher style	0.42	Teacher
Questioning	0.41	Teacher
Peer effects	0.38	Peers
Advance organizers	0.37	Teacher
Simulation & games	0.34	Teacher
Computer-assisted instruction	0.31	Teacher
Testing	0.30	Teacher
Instructional media	0.30	Teacher
Aims & policy of the school	0.24	School
Affective attributes of students	0.24	Student
Physical attributes of students	0.21	Student
Programmed instruction	0.18	Teacher
Ability grouping	0.18	School
Audio-visual aids	0.16	Teacher
Individualization	0.14	Teacher
Finances/money	0.12	School
Behavioural objectives	0.12	Teacher
Team teaching	0.06	Teacher
Physical attributes (e.g., class size)	-0.05	School
Television	-0.12	Home
Retention	-0.15	School

Effect-sizes are, indeed, a brilliant source of evidence (Petty, 2009). Hattie (2003), based on hundreds of meta-analysis, has determined the impact of each factor on students' achievement, according to effect-sizes, being teachers' impact weight evident (see Table 1).

TALIS (Teacher and Learning International Survey) Report (OECD, 2009) presented an analytical model of the associated factors of an efficient education which has the following variables: teachers' characteristics (demographic and employment profile); school and classroom characteristics (background); professional development characteristics; teaching practices and beliefs; school evaluation characteristics; teachers' praise and feedback; and leadership style.

Why Is Important to Promote Teachers' and Learners' Well-Being?

As Hunt, Wiseman, and Touzel (2009) stated, the great challenge for schools is to balance two concerns: develop and implement instructional programs that lead to greater academic success while also support the individual affective needs of their students.

According to Lawson et al. (2010), well-being is important for at least two reasons: (1) Well-being is multi-dimensional and has a wide sphere of influence in people's lives; and (2) Students and teachers bring into schools and classrooms their relationships and states of well-being, all of which have a powerful impact on teaching/learning.

So, although effective teaching primary purpose is to increase academic achievement, two additional points are important (Hunt et al., 2009): (1) The most effective instruction is associated with academic achievement producing positive affective ends; and (2) No instructional strategy or behaviour should be applied for achieving academic gain which results in affective loss.

Weare and Gray (2003) reported the benefits of promoting emotional and social competence and well-being (identified both in literature and on research): improvement in teachers' performance, improvement in pupils' behaviour, increased inclusion, improved learning, greater social cohesion, and improvement to mental health. Matos and Carvalhosa (2001) presented the results of several studies which indicate that: a direct relationship between the perception of a positive school climate and well-being of students (Battistich & Hom, 1997; Samdal et al., 1998, as cited in Matos & Carvalhosa, 2001); a school that promotes a sense of belonging and having support facilitates students' personal and social development and their well-being (Battistich & Hom, 1997, as cited in Matos & Carvalhosa, 2001).

School's population needs to have a sense of belonging. This school connectedness is increasingly identified as significant for enhancing young people's resilience, pro-social behaviour, and learning outcomes (Benard, 2001; Libbey, 2004; Cunningham, 2007, as cited in Roffey, 2008). Connectedness encompasses how students feel at school, their participation and engagement with learning, and the quality of the relationships they experience (Bond et al., 2001; Whitlock, 2006, as cited in Roffey, 2008). There are also studies (as cited in Roffey, 2008) in mental health (Raphael, 2000; Rowling, 2005), anti-bullying initiatives (McGrath & Noble, 2006), and school effectiveness and well-being (Zins et al., 2004). It is linked in the school effectiveness literature with school efficacy (Hargreaves, 2001, as cited in Roffey, 2008), school leadership (Leith & Reihl, 2003, as cited in Roffey, 2008), mental health (McKenzie et al., 2002, as cited in Roffey, 2008), and positive outcomes for students (Putnam, 2001, as cited in Roffey, 2008)⁶.

⁶ Studies mentioned in this paragraph are as cited in Roffey (2008).

Weare and Gray (2003) referred that to promote learning of emotional and social competence school and classroom climate, its key-aspects must be based on and foster warm personal relationships, encouraging positive communication and autonomy and promoting security and clarity.

Teachers' well-being is also important. Weare and Gray (2003) identified teachers' behaviour and attitudes as a main factor which determines how efficiently pupils learn emotional and social competences and experience emotional and social well-being. Therefore, teachers' needs must be taken into account and met in order to promote their well-being; professional development should contribute.

How Important Is Teachers' Effectiveness?

Being teachers, "The greatest influence on students' achievement over which we can have some control" (Hattie, 2012, p. 22), we need to ensure that this greatest influence is optimized to have powerful positive effects on our pupils (Hattie, 2003) (see Figure 3).

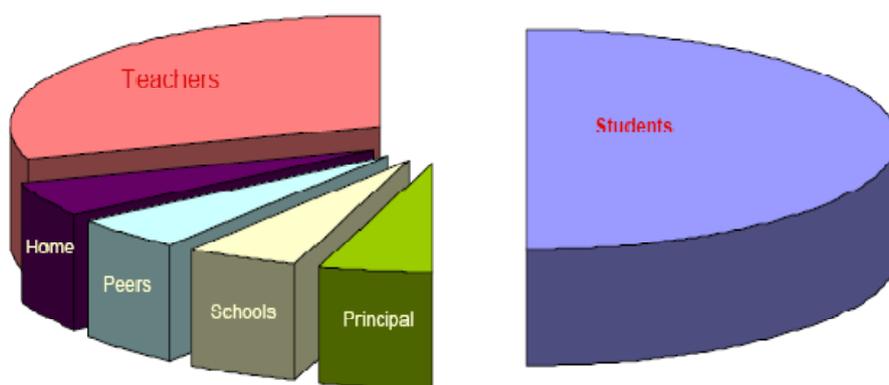


Figure 3. Percentage of achievement variance (Hattie, 2003, p. 3).

Research shows that differential teachers' effectiveness is a strong determinant of differences in students' learning, far outweighing the effects of differences in class size and class heterogeneity, being the impact of teachers' effectiveness (or ineffectiveness) additive and cumulative (Anderson, 2004, p. 20).

Researchers have always wanted to list the characteristics of an effective teacher, promoting extensive research in this direction⁷. Being teachers' characteristics relatively stable traits that are related to and influence the way teachers practice their profession, Hay McBer (2000, as cited in Anderson, 2004) identified 12 teachers' characteristics organized in four clusters:

- (1) Professionalism—commitment, confidence, trustworthiness, and respect;
- (2) Thinking/reasoning—analytical thinking and conceptual thinking;
- (3) Expectations—drive for improvement, information seeking, and initiative;
- (4) Leadership—flexibility, accountability, and passion for learning.

Burden and Byrd (2007, as cited in Hunt, Wiseman, and Touzel, 2009) suggested that the most essential effective teachers' characteristics may be placed into three categories:

- (1) Knowledge—professional, pedagogical, and pedagogical content;
- (2) Skills—to use their knowledge efficiently;
- (3) Dispositions—values, commitment, professional ethics, beliefs, and attitudes.

⁷ Perrott (1982) presented several lists of criteria, produced by educational researchers, with effective teachers' characteristics since 1960.

Petty (2009) described expert teachers as those who set challenging goals, have very deep understanding of teaching and learning, monitor learning and provide feedback, and structure effective teaching in high-stakes exams. Hattie (2003) made the distinction between experienced teachers and expert teachers, claiming teachers' expertise/efficiency can be promoted according to the categories presented in Figure 4.

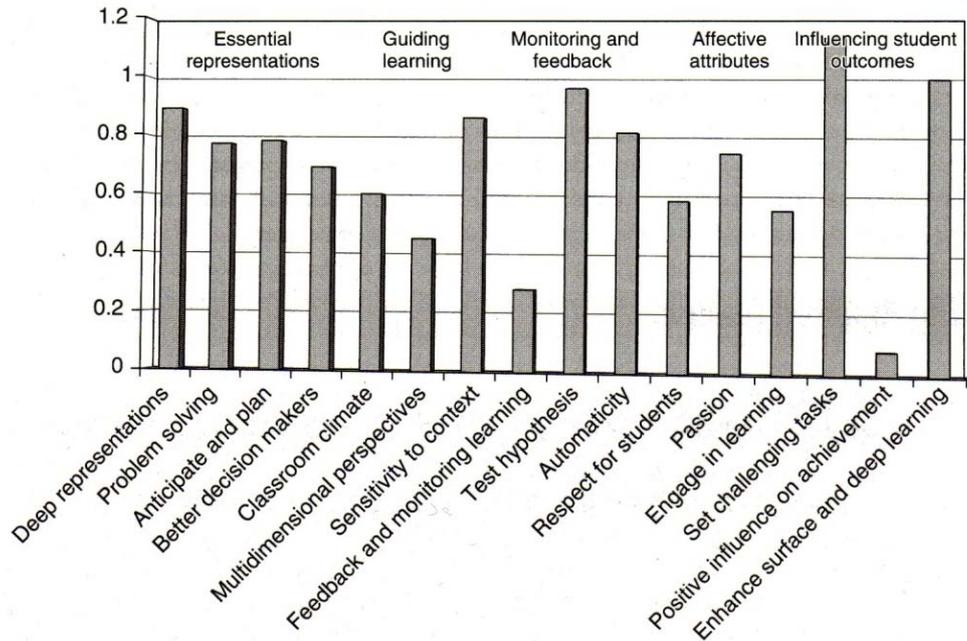


Figure 4. Effect-sizes of differences between expert and experienced teachers (Hattie, 2012, p. 29).

Hattie (2009) stated that, summarizing, what works is: define a challenging goal, get the students to work in that direction, and give them feedback of what they have already achieved.

According to TALIS (OECD, 2009), two variables are important pre-conditions for teachers' professional success: teachers' self-efficacy and classroom climate. Portugal has negative indices in these variables: teachers' self-efficacy (-0.08) and classroom climate (-0.39), being TALIS average 0.00 on both. The same report refers that teachers' practices and beliefs have a significant impact on these two variables.

How Is Self-efficacy Sense Related to Teachers' Effectiveness?

Self-efficacy perception is a construct related to teachers' beliefs and influencing their accomplishments (Ashton, 1984; Tavares et al., 2003, as cited in Castelo-Branco, 2006). Teacher's self-efficacy sense, according to Denham and Michael (1981, as cited in Castelo-Branco, 2006), contributes in a significant way to the perception that teacher has of his/her practice and students' achievement.

Self-efficacy perception is a fundamental human conduct construct, since when someone believes and develops self-perceptions of capabilities, and creates the path to achieve objectives. Bandura (1986, as cited in Castelo-Branco, 2006) stated that personal efficacy self-perceptions constitute the best predictors for involvement and persistence in different tasks, explaining three dimensions of tasks confronting:

- (1) The first dimension—self-efficacy perceptions that determine whether a behaviour is started or not;
- (2) The second dimension—experiences of self-efficacy that determine the amount of effort expended on a task;

(3) The third dimension—perceptions of self-efficacy that predict the individual persistence in face of obstacles and adverse circumstances.

Also, teachers' self-efficacy sense has a cognitive and an affective component (Ashton, 1984). The cognitive component involves two aspects: (1) The feeling of the probability that teachers can cause positive changes in students (according to their expectations of themselves and students); and (2) The assessment teachers make their own skills or abilities to cause such changes (Denham & Michael, 1981, as cited in Castelo-Branco, 2006). The affective component refers to the sense of pride or shame associated with the sense of efficacy (Denham & Michael, 1981, as cited in Castelo-Branco, 2006).

In the last three decades, a growing body of empirical evidence supports Bandura's theory: Teachers' self-efficacy beliefs are related to the effort teachers invest in teaching, the goals they set, their persistence when things do not go smoothly, and their resilience in the face of setbacks (Tschannen-Moran, Woolfolk, & Hoy, 1998, as cited in Tschannen-Moran & Hoy, 2005). Teachers' sense of efficacy has been related to their behaviour in the classroom and students' outcomes, such as students' self-efficacy beliefs, motivation, and achievement (Anderson, Greene, & Loewen, 1988; Ashton & Webb, 1986; Midgley, Feldlaufer, & Eccles, 1989; Ross, 1992, as cited in Tschannen-Moran & Hoy, 2005). Several studies have found that students with teachers who score highly on self-efficacy did better on standardized tests of achievement than their peers who are taught by teachers with low self-efficacy beliefs (Moore & Esselman, 1992; Anderson et al., 1988; Watson, 1991; Bamburg, 1994, as cited in Muijs & Reynolds, 2011).

Therefore, "teachers' belief in their own self-efficacy is related to their effectiveness" although it does not mean it is his/her cause (causal direction), most likely "the relationship goes both ways" (Muijs & Reynolds, 2011, p. 93).

How Can Teachers' Self-efficacy Be Promoted?

TALIS Report (OECD, 2009) stated that more professional development is often associated with greater teachers' self-efficacy; therefore teachers' educators have a core role to play. The growing demand attributed to teachers' professional and practical knowledge must not, in this framework, neglect personal development and understanding of themselves as the key aspects of teachers' professional growth.

What Is Classroom Climate's Role on Teachers' Effectiveness?

Teachers' effectiveness is related to and dependent upon students' outcomes, therefore, teachers need to create classroom climate⁸ which supports and promotes students' success (Hunt et al., 2009).

The importance of attending to classroom culture has been emphasized by Alton-Lee (1993, pp. 82-83, as cited in Anderson, 2004, p. 55), "to focus on the instructional dimension without attending to the lived culture of the classroom context makes invisible some of the most significant questions about both the learning and the well-being in classrooms".

Muijs and Reynolds (2011) presented several studies and meta-analysis in which classroom climate is identified as an important factor in pupil achievement (Mortimore et al., 1988; Brophy & Good, 1986; Rosenshine, 1979), self-esteem (Fraser, 1994), pupils' participation in the classroom and democratic values (Cotton, 1997), and lower levels of bullying and victimization (Shechtman, 2002). Byer (2000) also mentioned

⁸ Classroom climate "can be defined as the mood or atmosphere created by a teacher in her/his classroom, the way the teacher interacts with pupils, and the way the physical environment is set out" (Muijs & Reynolds, 2011, p. 137).

studies which provide evidence of positive relationships between students' perceptions of classroom environment and learning outcomes (Fisher & Fraser, 1983; Martin-Reynolds & Reynolds, 1983; Moos, 1979; Trickett & Moss, 1974); students' perceptions of classroom environment explained substantial variance in their learning outcomes (Anderson, 2004; Fraser & Walberg, 1981; Walberg, 1976); there is a positive relationship between students' perceptions of the classroom climate and academic achievement (Moos & Moos, 1978), social attitude (Fouts, 1987; Fouts, Chan, & Biao, 1993), motivation (Knight & Waxman, 1990; Zevin, 1983), academic self-concept (Van Egmond, 1960; Knight & Waxman, 1990), and self-esteem (Schmuck & Schmuck, 1992).

In short, the development of a classroom climate really safe, generating confidence and acceptance, is crucial in children and adolescents' education and for success of any educational practice requiring a deep involvement by the teachers, reflecting not only on their professional skills but also—as a professional who deals with persons—reflecting on their own personal and social skills (Comenius, 2009).

How Does Feedback Have Such Impact on Students' Achievement?

Hattie (2009, p. 12) synthesized effect-sizes across meta-analyses to determine what has significant impact on students' achievement and stressed feedback as “the most powerful single influence enhancing achievement”. Hattie's meta-analysis of 13,209 studies found that feedback from teachers and/or peers produced an average effect-size of 0.81; Marzano's meta-analysis of 488 studies involving students receiving feedback on the processes they used to complete a specific task produced an average effect-size of 0.74 (Petty, 2009).

So, feedback “is one of the most powerful influences on learning and achievement, but this impact can be either positive or negative”, meaning that “the type of feedback and the way it is given can be differentially effective” (Hattie & Timperley, 2007, p. 81). In fact, research shows considerable variability on feedback effect-sizes, which indicates that some types are more powerful than others (Hattie, 2009). The least effective forms of feedback are praise, punishment, and extrinsic rewards; the most powerful form of feedback provides cues or reinforcement to the students related to learning goals (Hattie, 2009).

There must be a clear distinction between providing instruction and providing feedback, because, when feedback is combined with effective instruction in classrooms, it can be very powerful in enhancing learning. Feedback is what happens second, it can only build on something; it is of little use when there is no initial learning or surface information. So, “feedback needs to provide information specifically relating to the task or process of learning that feels a gap between what is understood and what is aimed to be understood” (Sadler, 1989, as cited in Hattie & Timperley, 2007). According to Wine and Butler (1994, p. 5740), “Feedback is information with which a learner can confirm, add to, overwrite, tune, or restructure information in memory, whether that information is domain knowledge, beliefs about self and tasks, or cognitive tactics and strategies” (as cited in Hattie & Timperley, 2007, p. 82).

Since “the main purpose of feedback is to reduce discrepancies between current understandings and performance and a learning intention or goal”, the “major feedback questions are ‘Where am I going?’ (learning intentions/goals/success criteria), ‘How am I going?’ (self-assessment and self-evaluation), ‘Where am I going to next?’ (progression and new goals)” (Hattie, 2009, pp. 176-177).

According to Hattie and Timperley (2007, p. 82), feedback can be provided in different ways: “affective processes (increased effort, motivation, and engagement) and cognitive processes (restructuring understandings,

confirming correctness/incorrectness, indicating more information, pointing directions, and alternative strategies”).

To be really effective, feedback must be a two-way road. As Hattie (2009, p. 173) found that feedback is even most powerful when it is from the students to the teacher: “When teachers seek, or at least are open to, feedback from students as to what students know, what they understand, where they make errors, when they have misconceptions, when they are not engaged—then teaching and learning can be synchronized and powerful”. Petty (2009) enhanced that expert teachers seek feedback to test their own understanding of what is happening in their classrooms to determine their effectiveness and also give more feedback to their students.

Petty (2009), synthesizing research findings, presented feedback stages:

- (1) Presentation of information to students (student starts constructing their knowledge of the topic);
- (2) Application (student constructs or improves their construct of the topic through an activity);
- (3) Product (student produces a product from the learning activity, as a performance, answers, a document, etc.);
- (4) Feedback (student receives feedback on the product).

The same author operationalized feedback stages on a conceptual map (see Figure 5).

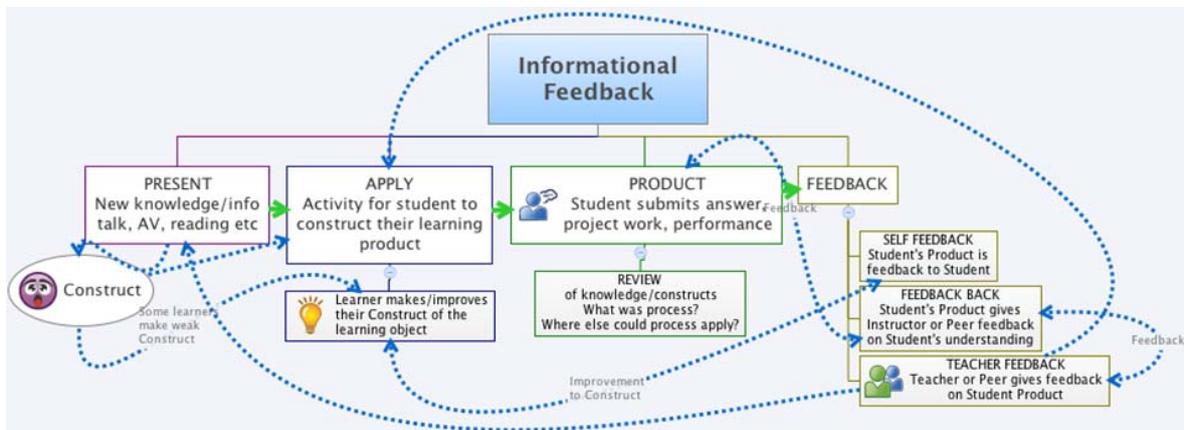


Figure 5. Feedback loops⁹.

It is clear that providing and receiving feedback requires much skill by students and teachers. “To be effective, feedback needs to be clear, purposeful, meaningful, and compatible with students’ prior knowledge and to provide logical connections” (Hattie, 2009, p. 104). It also needs to prompt active information processing on the part of learners, have low task complexity, relate to specific and clear goals, and provide little threat to the person at the self-level.

According to OECD (2012), report on evaluation and assessment stated that in Portugal, “There is little emphasis in assessment practices on providing students’ feedback and developing teacher-student interactions about student learning” (p. 10), suggesting that a “greater focus on a culture of feedback on student learning would deliver a number of wins for the system” (p. 148).

What Is Teachers’ Education Role on Enhancing Effectiveness?

UNESCO Report (Anderson, 2004) set a path to improve teachers’ effectiveness by:

- (1) Overcoming teachers’ reluctance to change—mostly caused by: (a) a lack of awareness that change is

⁹ Retrieved from <http://thekglawyerblog.com/ptblog/articles/how-to-do-feedback-in-plt-an-evidence-based-approach/>.

needed; (b) a lack of knowledge (procedural) of how to change; and (c) the belief that changes will not make any difference to their students;

(2) Supporting the improvement efforts—providing opportunities to benefit from mistakes (as a source of information), providing opportunities to learn from others, and treating teachers as individuals.

To overcome reluctance to change, we need to pay close attention on what might motivate them to get involved in an evidence-based practice. In a study¹⁰, all teachers reported to be “willing to engage with evidence if they thought it would help them enhance pupils’ learning (and) help them to make a difference”. Cordingley (2010), addressing teachers’ training and aiming an evidence-based teaching practice, stated that new knowledge must be integrated into teachers’ practice, so that they accept the risk of promoting change.

In our days, the problem is not lack of information, but rather, lack of evidence-based teachers’ training. As Muijs and Reynolds (2011) stated, the next decade presents new challenges from the increased knowledge from educational research and the new knowledge from cognitive neuroscience. “Responding to these challenges through utilization of conventional methods of teacher education and professional development is unlikely to be adequate” (Muijs & Reynolds, 2011, p. 316).

Teachers’ education has a core role to play; for instance, Portugal is one of the five countries in which the amount of professional development taken by teachers is significantly associated with classroom climate (OECD, 2009). In terms of professional development, according to this report, Portugal is slightly below the average percentage (88.5%) of teachers who participated in professional training in the previous 18 months, with 85.8%. Simultaneously, it is significantly above the average percentage (54.8%) of teachers who wished to participate in more training, with 76.2%.

The relevant data are a significant proportion of teachers (more than half) who think that professional development does not meet their needs (this is common across disciplinary groups). The extent to which this undermines the effectiveness of teachers is not measured by TALIS, but “it is difficult to imagine that such deficits are not to some extent detrimental to effective teaching and learning” (OECD, 2009, p. 77). These results point the need to ensure professional development opportunities that match teachers’ needs.

Teacher education must give teachers the tools for effectiveness. Lemov (2010) stated: The path to excellence teaching is the focus on technique and its constant refinement, associated with strategy¹¹. OECD (2009) advised teachers to use a wider range of instructional strategies and techniques. Torrance (2010, as cited in Petty, 2009) referred to “knowledge about action” and “actionable knowledge”.

Teacher training towards effectiveness must be implemented both before and during teachers’ careers:

No matter how good pre-service training for teachers is, it cannot be expected to prepare teachers for all the challenges they will face throughout their careers. Education systems therefore seek to provide teachers with opportunities for in-service professional development in order to maintain a high standard of teaching and to retain a high-quality teacher workforce. (OECD, 2009, p. 49)

Successful programs involve teachers in learning activities that are similar to those they will use with their students (OECD, 2009).

¹⁰ Teachers answered a questionnaire: Members of national teacher research panel, participants at TTA-funded research networking conferences, and teachers of TTA’s school based research consortia (Cordingley, 2010).

¹¹ This author makes the distinction between strategy and technique: Strategy is a generalized approach to problems, a way to inform decisions; a technique is an action, can be practiced, honed and adapted throughout life.

What Is NLP (Neuro-linguistic Programming)?

NLP can be defined shortly as “the study of the structure of subjective experience” (Dilts, Grinder, Bandler, & DeLozier, 1980, as cited in Wake, 2010, p. 13).

NLP has its origins in the early 1970s when Richard Bandler, a student of mathematics, and John Grinder, a professor of linguistics (University of California, Santa Cruz), began a process of discovering how masters (like Milton Erickson, Virginia Satir, or Fritz Perls) in the domain of therapeutic communications performed. What distinguished the work of these individuals was their unprecedented success with cases and clients that other reputable therapists had failed (see Figure 6).

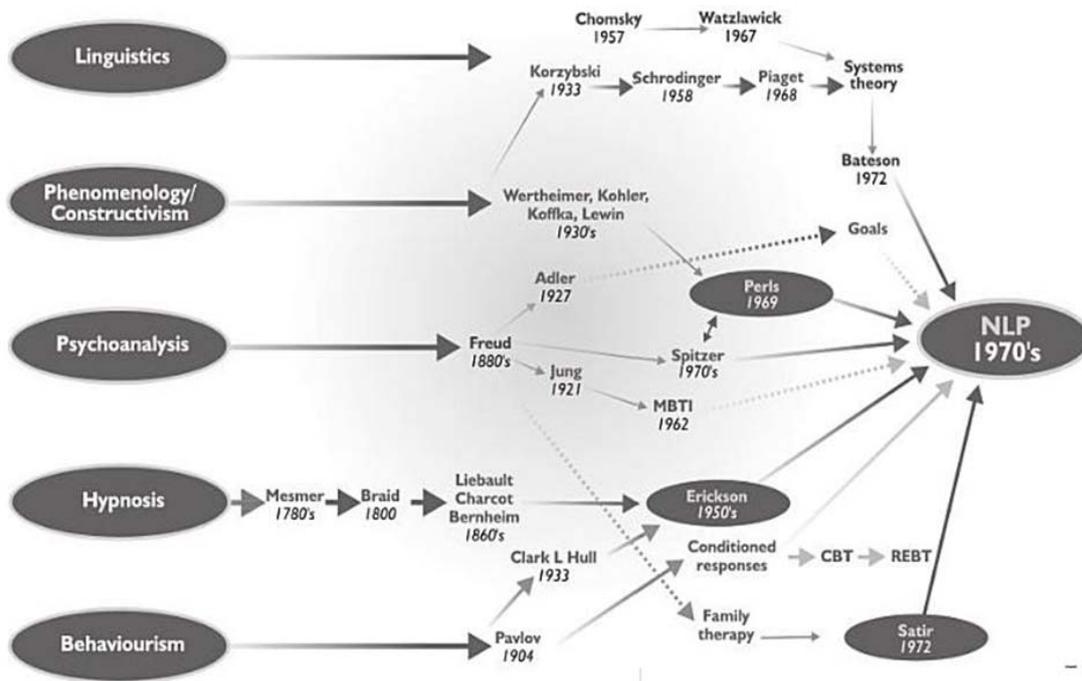


Figure 6. Map of influences on NLP (Wake, 2010, p. 9).

So, the significant difference of Bandler and Grinder’s approach is that, instead of studying what goes wrong and why, they studied what works and how it works. So, NLP studies “not only what effective people do but also how they go about doing it” (Churches & Terry, 2007, p. 1): The visible external behaviours/language and the internal mental processes that effective people use and the way in which they think. That is why NLP is sometimes described as the study of human excellence.

As Linder-Pelz and Hall (2007) explained that NLP is a communication model; it is about the internal representation of experience and how people communicate with themselves as well as others. It focuses on peoples’ subjective experience and constructed reality (Tosey, Mathison, & Michelli, 2005) and how it relates to external behavior (see Figure 7).

NLP is related to education since its origins, as one of its founders Bandler (1985) stated that NLP explores “the subjective experience of the processes by which people learn things” (p. 117). Therefore, NLP is “an educational process. Basically, we are developing ways to teach people how to use their own brains” (Bandler, 1985, p. 7).

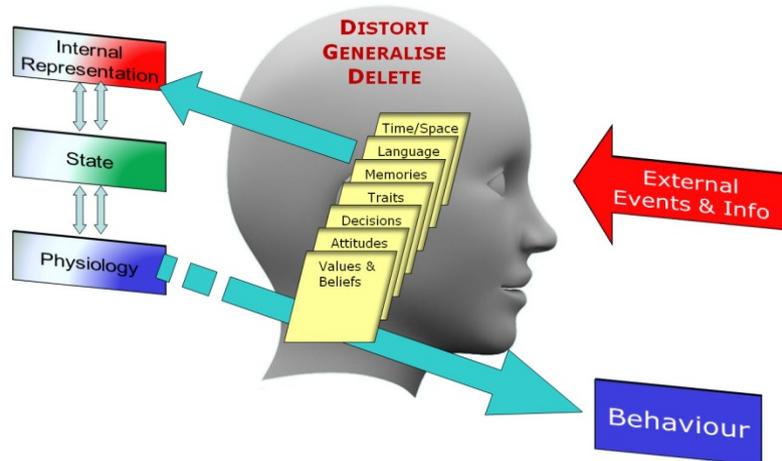


Figure 7. NLP communication model¹².

“Neuro” refers to the way humans experience the world through their senses and translate sensory experiences into thought processes, both conscious and unconscious, which in turn activate the neurological system; “Linguistic” refers to the way we use language to make sense of the world, capture and conceptualize experience and then communicate that experience to others; “Programming” addresses the way people code (mentally represent) their experience and adopt regular and systematic patterns of response. (Hall & Belnap, 1999; Corsetty & Pearson, 2000, as cited in Linder-Pelz & Hall, 2007, p. 2)

How Can NLP Increase Teachers’ Effectiveness?

Teaching requires mastery over interpersonal and intrapersonal skills. In fact, “effective teaching begins and ends with our capacity to manage our internal responses and external behaviours” (Churches & Terry, 2007, p. vii). So, being NLP about personal effectiveness, it offers teachers a range of tools and techniques to develop interpersonal and intrapersonal capacity, manage emotions, and communicate more effectively.

Bandler (1985) noticed that “people who teach a subject may be very good at it, and know a lot about that particular area. However, they usually know very little about how they learned it, and even less about how to teach it to someone else” (p. 117). Churches and Terry (2007) noticed that teachers who achieve excellence have four main characteristics:

- (1) Know what they want—identify precise and achievable outcomes; know what the purpose and direction of communication and action is;
- (2) Know if they are getting what they want—develop sensory acuity to notice responses from pupils in order to provide feedback to ensure progress towards outcomes;
- (3) Have the flexibility to change—adapt behaviour, language, and internal feeling, to a wide range of possibilities, in order to involve others in the outcome;
- (4) Take action—use their senses to notice if they are achieving what they want in order to adapt quickly and respond effectively.

What Does Evidence Reveal About NLP Impact on Education?

A good example is the Durham Project devised to provide groups of teachers with NLP training.

Schools benefit from using NLP by improving the quality of teaching and learning for students. Teachers share many

¹² Retrieved from <http://www.scoop.it/t/the-ethos-of-neuro-linguistic-programming>.

of the techniques they learned, such as engaging and motivating students, supremely effective communication, improved tutoring, lively learning and much more. All of this is designed to raise standards of achievement and crucially to help schools raise levels of wellbeing in staff and pupils¹³.

Preparing this project, Benson and Carey (2006) made a “Summary Report” which reviews 111 studies/articles about NLP application in schools. The studies/articles represent a wide variety: academic articles, conferences, quantitative and qualitative studies, case studies, different strategies and techniques of NLP applied individually or combined, impact on students, teachers, parents, environment school... studies provide evidence on which they based their conclusions in favor of applying NLP in schools, addressing the following areas:

(1) Communication in the classroom—language and learning; non-verbal communication and interpersonal skills; and study skills;

(2) Emotional and behavioural difficulties—specific learning difficulties and educational psychology;

(3) Emotions and learning—learning and anxiety; self-expression; emotional states management; self-esteem; self-concept; motivation and relationships in the classroom; learning mindfulness; and approach to learning, information processing, and serotonin levels;

(4) Adapting the teaching style—combining the teaching style to the various sensory learning preferences and behaviour; specific strategies and approaches (spelling strategy, creative strategy, well-formed outcomes); modeling; meta-programs; e-learning; and professional identity;

(5) School community—peer counseling; building positive relationships with parents; and parental behaviour and home environment.

The majority of studies draw positive conclusions from the use of NLP in the classroom practice (the few articles which give negative opinion do not provide evidence), with a strong emphasis on the use of influence language patterns, awareness of all the sensory modalities and the use of anchors; there are still references to intervention in social and behavioural difficulties.

The Durham Project consisted of giving NLP training to teachers from 12 schools on NLP definition, presuppositions, well-formulated outcomes, eyes access cues, modalities and sub modalities, anchors, rapport, metamodel, Milton model, and emotional state management. Then there was an intervention phase, from individual to groups or classes. One NLP technique or strategy or a combination of several was used. Students’ ages vary from 3 to 17. Schools’ dimension was from small rural school to big secondary town school. This resulted in 24 case studies (Carey, Churches, Hutchinson, Jones, & Tosey, 2009), which revealed that teachers: optimized their professional skills; shared these approaches with their colleagues; used influential language, being able to motivate students to learn more; could understand students in a completely different level; achieved significant change in students’ individual and group behaviour; there was improvement in their feelings about their own abilities to handle difficult situations in the classroom; there was significant improvement in levels of self-confidence of students; students were more motivated; learning in the classroom was improved. Therefore, evidence indicates that NLP can enhance teachers’ effectiveness¹⁴.

¹³ Retrieved from <http://meta4education.co.uk/the-durham-project/>.

¹⁴ There are more recent researches and articles about NLP applied in educational context but, due to space limits, we decided to refer “only” the above.

Which Teachers' Effectiveness Factors Can NLP Improve?

Evidence indicates that NLP can help teachers in areas than enhance teachers' effectiveness, such as:

(1) Factors above 0.50 (except "students' prior cognitive ability"), from Hattie's (2003) table of effect-sizes of school factors on students' achievement (see Table 1);

- (2) Teachers' sense of self-efficacy;
- (3) Teachers' beliefs and expectations;
- (4) Classroom climate management.

What Is Our PLENATITUDE Proposal?

We are planning an NPL teachers' continuous education course (25 hours with presential learning and 25 hours of autonomous work). Presential sessions will take place every two weeks and autonomous work will be developed by the teachers between them, at the end a reflexive report is done. Table 2 presents the content and activities designed for presential sessions.

Table 2

Content and Activities for PLENATITUDE Teacher Training Sessions

Presential learning	
Content	Activities
Knowledge ("We have all the resources we need to have success") <ul style="list-style-type: none"> ✓ Brain—constitution, working, learning, and neuro-plasticity ✓ Representational systems—visual, auditory, kinesthetic, and auditory-digital ✓ Interaction mind/body—posture, breathing, and heart rate 	Miller's magical 7 TOTE model Eye accessing cues Rapid relaxation techniques
Self-knowledge ("The map is not the territory") <ul style="list-style-type: none"> ✓ Communication model—sensory filters (senses) and mental filters (values, beliefs, meta-programas, memories, etc.) ✓ Mental representation of reality—generalization, distortion, and omission ✓ Neurological levels—context, behaviour, capacities, believes and values, identity, and mission ✓ Motivation—certainty, variety, significance, connection, growth, and contribution (Robbins) 	Sensory acuity Meta-model Mapping across Modalities and sub-modalities Neurologic levels alignment
Intrapersonal skills ("There is no failure, only feedback") <ul style="list-style-type: none"> ✓ Emotional states management—from presented state to desired state ✓ Sensory acuity—approach the "map" to reality ✓ Behaviour flexibility—the most flexible element controls the system 	Anchoring Excellence circle Perceptual positions Dissociation Attract the future
Interpersonal skills ("communication = response") <ul style="list-style-type: none"> ✓ Effective communication—calibration, rapport, and leadership ✓ Meta-programmes—general/specific, away from/to, procedures/possibilities, internal/external, and similarity/difference ✓ Body language—satir's categories ✓ Objectives—well-formulated ✓ Powerful questions—promote reflection ✓ Feedback—for success ✓ Behaviour management—"All behaviour has a positive intent" ✓ Accelerated learning—emotional state, music, etc. 	Milton model Verbal ju-jitsu Pace/lead Chunking up/down/across Adequate contents to meta-programmes Spatial anchoring Stepping stone Feedback sandwich Strokes 1/5 Embedded commands Peripheral praise Metaphors Mind map

Teacher's autonomous work will be developed between the sessions. Each teacher selects a class to apply NLP techniques and strategies. To do so, each teacher creates materials, as for instance:

- (1) Charts for students' representational systems;

- (2) Reminders of rapid relaxation techniques;
- (3) Samples of meta-model application to their class;
- (4) Samples of “pace/lead” applied to their discipline contents;
- (5) Well-formed outcomes (for teachers and pupils);
- (6) Samples of “feedback sandwich” for their students;
- (7) Samples of “powerful questions” applied to their content;
- (8) Samples of “metaphors” applied to their discipline content;
- (9) “Mind maps” (for planning and content).

Each time, teachers make a reflective report, stating how they applied difficulties and observed results. At the end, teachers make a general reflective report.

A Detailed Example: Teachers’ Beliefs

Beliefs have a determinant role in teachers’ efficiency. Gage (1977) talked about “implicit theory” as a hierarchically organized set of beliefs about the adequate purposes and means of teaching, students’ characteristics, modes of learning and how this interact to influence teachers’ behaviour and their decision-making. It is what allows teachers to handle the abundance of problematic situations they face daily.

There is a great variety of teachers’ beliefs, attitudes, and practices:

The postulated relations of these constructs of the perceived quality of the learning environment and teachers’ job satisfaction are by and large found across countries, confirming their relevance for teachers and schooling. An important policy issue is therefore, how to further facilitate these aspects of teachers’ effectiveness. (OECD, 2009, p. 120)

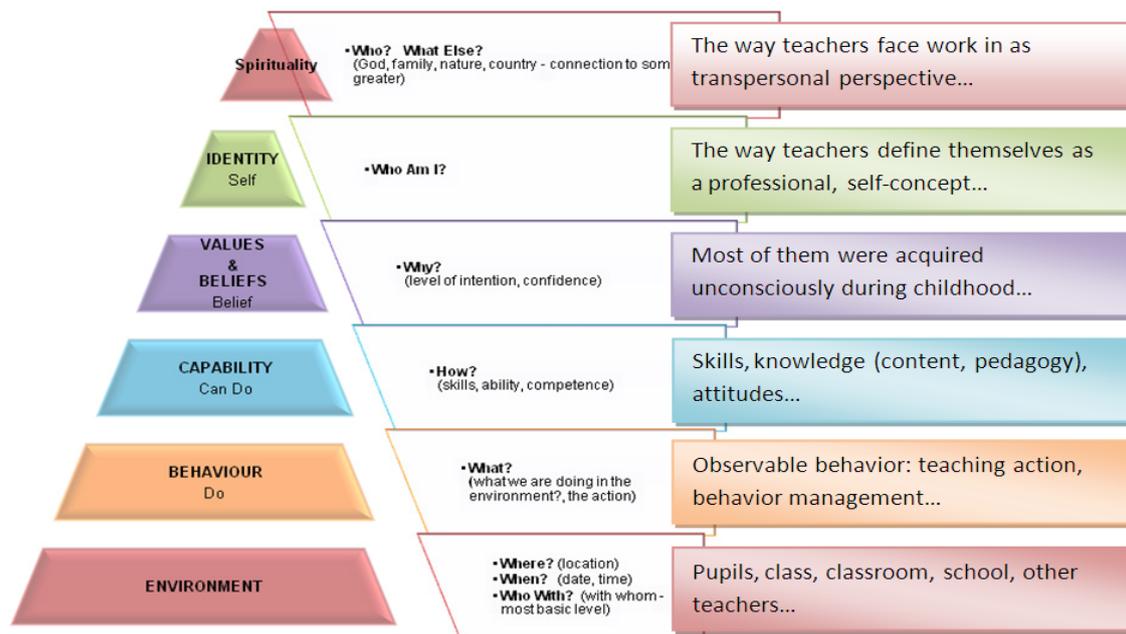


Figure 8. Neurological levels of change applied to educational context¹⁵.

According to Korthagen (2004), any attempt to describe the essential qualities of a good teacher should

¹⁵ Adapted from an image retrieved from <http://www.psychologyafrica.com/2009/12/at-what-level-does-the-journey-begin-a-quick-look-at-nlp/>. Korthagen (2004) presented levels as concentric circles, we have chosen Dilts’ original pyramid shaped.

take into account that various levels are involved that fundamentally differ from each other, being the level of teachers' competencies just one of these. This author introduced a model clarifying the various levels and offering a framework for reflecting about teachers' effectiveness. He pointed as reasons for this approach: (1) Changes in the aims and methods of teacher education are taking place worldwide; (2) There is considerable emphasis on promoting reflection in teachers, but at the same time, it is not always clear exactly what teachers are supposed to reflect on when wishing to become better teachers; and (3) The pedagogy of teacher education strongly builds on insights from other disciplines, so it must take into account that new developments have taken place.

Korthagen (2004) proposed a framework based on Bateson's learning levels and Dilts' neurological levels (see Figure 8).

Often, for instance, when a teacher faces a dilemma, it arises from a mismatch between different levels, for example, a mismatch between belief and behaviour, which can be addressed by the technique of "neurological levels alignment".

This holistic approach allows an integrative perspective of what being a good teacher is, in harmony with the different levels. Only the levels of "environment" and "behaviour" can be seen by others, but they all influence each other, sometimes the problem is that there are incongruities between levels. The awareness of the existence of these levels can help to have a notion of our limitations and "open" the way for transformative, consistent, and durable change.

NLP is growing and developing.

Recent advances in neuroscience and cognitive linguistics have provided an ideal opportunity for NLP to demonstrate the effectiveness of its approach with researchers... beginning to demonstrate some of what NLP has had as a fundamental theory for over 30 years. (Wake, 2010, p. 195)

Therefore, NLP is a path to promote teachers' effectiveness, it is surely not the only one but we believe that training teachers in NLP techniques and strategies can be a major contribute.

Consciously, we teach what we know; unconsciously, we teach who we are. (Hamachek, 1999, p. 209, as cited in Korthagen, 2004, p. 77)

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