

Grinder's Group Mastery Theory: Scientific research and its application to classroom teaching

**Author: Tània Muñoz Leiva
Màster de Professorat de Secundària
(Anglès) UPF-UOC 2011-2012
Advisor: Tom Maguire
Mentor: Isabel Monte
Date: 1st June 2012**

I would like to express my thanks to my advisor, Tom Maguire, without whose dedication and guidance this work could not have been accomplished; to my mentor, Isabel Monte, for being my teacher in the art of teaching, for letting me be in charge of her students and for being a perfect camerawoman; to my family for supporting and encouraging me; to my girls, Laura, Lourdes and Montse, who have showed me that real friends are always there, even when you have no time to devote to them; and to my true love for being my smile and my strength in the best moments and also in the hardest ones.

INDEX

1. INTRODUCTION	4
2. THEORETICAL FRAMEWORK - GRINDER'S PENTIMENTO: VAK/B	6
2.1 VISUAL PATTERNS	6
2.2 AUDITORY PATTERNS	7
2.3 KINAESTHETIC PATTERNS	8
2.4 BREATHING PATTERNS.....	10
2.5 CALIBRATION	11
3. METHODOLOGY	12
4. DEVELOPMENT	14
4.1 SCIENTIFIC RESEARCH THAT SUPPORTS GRINDER'S THEORY.....	14
4.1.1 <i>Auditory (A)</i>	14
4.1.1.1 Klofstad - Voice pitch study.....	14
4.1.1.2 Pentland - Honest Signals (Voice).....	15
4.1.1.3 Correspondence with Grinder's Auditory Patterns	16
4.1.2 <i>Body Language (K)</i>	16
4.1.2.1 Ambady & Rosenthal – Thin slices of non-verbal behaviour.....	16
4.1.2.2 Pentland – Honest Signals (Movements).....	17
4.1.2.3 Correspondence with Grinder's Kinaesthetic Patterns.....	17
4.1.3 <i>Calibration</i>	17
4.1.3.1 Gladwell - Blink	17
4.1.3.2 Chabris & Simons – The Invisible Gorilla.....	18
4.1.3.3 Correspondence with Grinder's Calibration	18
4.2 APPLICATION TO CLASSROOM TEACHING	19
4.2.1 <i>ABOVE (pause) whisper</i>	20
4.2.2 <i>Approachability vs. Credibility</i>	21
4.2.2.1 Approachable Patterns	21
4.2.2.2 Credible Patterns	21
4.2.3 <i>Calibration</i>	22
5. CONCLUSIONS	24
BIBLIOGRAPHY	27
ANNEXES	29

1. INTRODUCTION

It is widely acknowledged that teachers, whatever the subject or the educational stage being taught, have to be very competent professionals and dominate a wide range of skills in order to perform their task effectively. Teachers need to have mastered a deep knowledge of their specialization and to be able to apply this knowledge to the subject requirements transforming it into educational content by means of planning objectives, procedures, activities and preparing materials. However, all of this extremely laborious process would not be fruitful if teachers did not have the ability to effectively manage the class in order to deliver their knowledge in such a way that it reaches all the students in the classroom, Classroom management theories and approaches deal with this delivery process, focusing on *how* to teach rather than *what* is being taught.

During my teaching practicum I have had the opportunity to experience how important classroom management is to be an effective teacher and to achieve positive educational outcomes. I could observe that it did not matter how much time I spent carefully planning the lessons. It did not matter if I had very clear what I was going to teach, why and how. I needed to have the ability to sort different situations, sometimes unpredictable for inexperienced teachers, in order to make everything that I had planned actually happen in the classroom.

As can be observed, classroom management is inherent to teaching practice and it has therefore existed since teaching exists, which is since ancient times. Nevertheless, the approaches to this aspect of teaching have varied along the way. Traditionally, classroom management was associated to power, discipline, punishment and verbal orders and reprimands. However, these old authoritarian techniques have been revised by a new generation of experts who have based their theories on psychological and scientific studies, and which suggest that the best way to approach class management is through prevention and creating a positive learning environment in the classroom.

Among these recent class management theories can be found Michael Grinder's Group Mastery Theory, which is based on NLP (Neuro-Linguistic Programming), an approach to communication which was developed taking a psychological model as a reference. NLP describes how our mind and language working together affect our body and behaviour. The aim of this approach is to identify effective language and behaviour patterns which have been learnt through experience and to organize them in order to help to produce the desired results and to achieve specific aims (López Rodríguez, 2005). Thus, NLP, when applied to educational purposes, aims to identify the patterns used by effective teachers.

Michael Grinder, after 17 years of teaching experience in different levels of education, carried out more than 4,000 classroom observations in order to recognize these communication patterns. According to existing research published by the National Education Association of the United States, 82% of teacher's communications are non-verbal messages (Grinder, 1993). Grinder's work is therefore focused on non-verbal communication. His Group Mastery theory describes different non-verbal classroom management techniques which

are intended to help teachers to develop their communication skills in order to manage the class effectively while establishing a positive relationship of influence with their students.

As I could observe and experience during my practicum, managing a class is not an easy task. It requires a huge amount of energy, skills and patience, and it is perhaps the most difficult and feared aspect of their profession for many teachers, and the reason why many of them become stressed and leave the profession. When I started to teach, I realized how frustrating it was when I had put a lot of effort into preparing interesting and attractive activities and materials for a particular lesson and I did not obtain the expected result in terms of attention, behaviour and motivation from my students in the classroom.

Taking this observation into account, I resolved that it would be essential for my future to do more research on this topic in order to work on my managing and communication skills and my ability to establish a positive learning environment in the classroom. I find Michael Grinder's work about non-verbal communication techniques especially interesting in this field, since even with little knowledge about non-verbal communication strategies I could observe that it is a very powerful tool to reach all students. I strongly believe that working on my class management skills will enhance the other abilities and knowledge that I have acquired during my master's degree and my teaching performance.

The aim of this paper will be to analyse Grinder's Group Mastery Theory and the non-verbal communication techniques that he proposes which are related to visual, auditory, kinaesthetic and breathing elements, and to determine the scientific research available which supports this model. This study will describe and analyse the different scientific publications related to Grinder's model in order to establish the extent of an objective basis to his work.

As an extension of this research work, I will put into practice some of Grinder's non-verbal communication techniques in the real context of a secondary school classroom. They will be recorded as practice and accompanied by reflection with the aim of improving personal management abilities. In order to do so, I will observe, describe and analyse the recordings of these interventions in order to determine the students' reactions, the effect that these techniques have in the general development of the lesson and whether they achieve the aims that are intended.

2. THEORETICAL FRAMEWORK - Grinder's Pentimento: VAK/B

As previously stated, Michael Grinder's work is aimed at identifying effective non-verbal communication patterns, which he has named as the Pentimento Patterns.

Pentimento is an Italian word referring to an art process: when the surface of oil paintings cracks, what was invisible beneath the surface is revealed (the original sketch marks or another painting) unveiling the substructure of the painting. Grinder borrows this word and transfers it to the world of communication: the Pentimento Patterns reveal the structure of non-verbal communication, often hidden to the untrained eye (Grinder, 2007).



Image 1: Paintbrush that symbolizes the Pentimento Patterns (Grinder, 2007)

Recognising and mastering these patterns help communicators to predict the effect on the recipient as observed from an external point of view ("as seen by the fly on the wall"), and to convey their messages effectively.

The Pentimento model, when applied to teaching, takes the form of group and individual non-verbal communication techniques which provide the teacher with a powerful tool to effectively manage a classroom.

However, before applying the model to class management, it is essential to understand these Pentimento Patterns which are divided into the four categories of non-verbal communication: Visual, Auditory, Kinaesthetic and Breathing (VAK/B).

2.1 Visual patterns

The visual patterns deal with what we do with our eyes when we are communicating, an essential ability to establish an effective communication. This is, where to focus our eyes, how to change this focus from one location to another, and how to learn to see where we are looking and where we are not looking at the same time, which is crucial when it comes to communicating in group settings.

Points of Focus:

There are four locations where the eyes can be focused:

- One point: looking down, used to emphasize emotions or to separate topics
- Two point: making eye contact, recommended when the contents of our message are positive

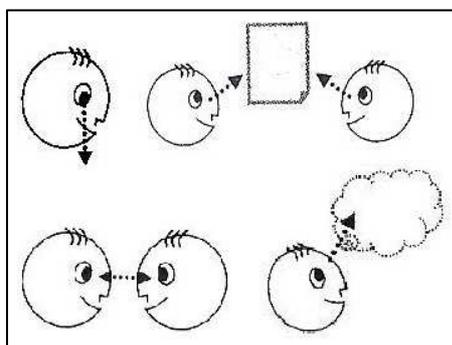


Image 2: Visual points of focus (Grinder, 2007)

- Three point: looking together to a close point, recommended when the contents of our message are negative
- Four point: looking to a far point, used to refer to the past, to the future, or to something which is not immediately present

Transition between Points of Focus:

Varying our points of focus and knowing how to choose between one and the other is beneficial to keep the listener's attention and make our messages more powerful and easier to follow. The most usual switch is between the two point (eye contact) and the three point (close point).

On one hand, when the listeners are looking at a third point (for example a paper) while we are talking close to them with our gaze directed to the same point, they may need to look away to access their mental screen, this is, where everyone pictures concepts, memories and possibilities and which is about one arm's distance from the face. When switching from a three point to eye contact (two point) we need to move a bit away from listeners in order to respect this distance needed.

On the other hand, if we need to change the focus of attention to a third point when making eye contact, it is important to bear in mind that listeners tend to follow the speaker's gaze. Therefore, if we point to a third point with our hand but keep the eye contact, the listener will keep it as well. In order to focus the attention to the third point effectively, eye and hand coordination is required. We need to learn to look and point in the same direction at the same time.

Peripheral Sight

When we talk to a group, it is impossible to maintain eye contact with every single person and see everyone's reactions: therefore, training our peripheral perception is crucial to notice movements and reactions and to broaden our field of vision.

2.2 Auditory patterns

The auditory patterns are related to how we use our voice to convey our messages, not in terms of 'what we say', but 'how we say it'. There are three patterns.

Voice Patterns:

Listeners can be influenced by the speaker's intonation and rhyme. There are two voice patterns which are the most used: one perceived as credible and another one perceived as approachable.

The credible voice pattern is flat and has a falling intonation; it is used to deliver a message and to highlight its relevance. On the contrary, the approachable voice pattern has a rolling intonation and curls up on the last syllable; it is used to seek information or to reinforce relationships.

Voice Speed and Volume:

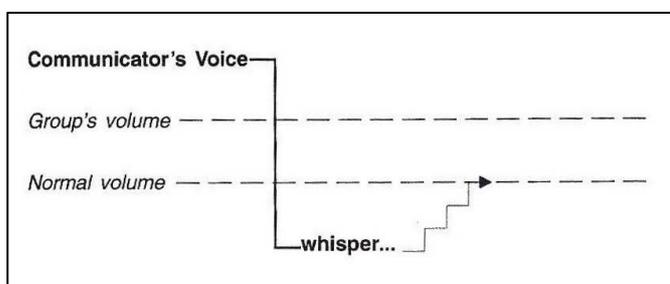
Credibility and approachability are the two main voice patterns; however, there are other two variables which need to be dominated to communicate effectively with our voice: speed and volume.

Speech speed and volume have an effect on listeners. If the communicator uses a slow and soft voice pattern the listeners' metabolism will decrease. If, on the contrary, the communicator speaks louder or faster, the listeners' metabolism will increase.

A LOUD voice is usually needed to get the attention of a group. Changes in our usual pattern of communication capture the listeners' attention, who perceive this change as something different and important to be remembered.

ABOVE (Pause) Whisper

Once mastered, the 4 voice patterns can be combined to get a group's



attention effectively while maintaining a positive relationship. In order to do so, we need to use a LOUD voice to shock the listeners, followed by a (Pause) to hold their attention, and then a Whisper (slow and soft voice) to calm them and keep their attention.

Image 3: Illustration of ABOVE (pause) whisper (Grinder, 2007)

2.3 Kinaesthetic patterns

The kinaesthetic non-verbal communication describes how what we do with our body influences our listeners. It is the category which includes most patterns, since body language is very powerful tool in conveying non-verbal messages.

Physical Presence:

Touch and proximity with listeners has a direct effect in their metabolism. A welcome touch or proximity lowers the listener's metabolism and breathing and reinforces relationships. An undesired or unexpected touch or proximity, nevertheless, increases the metabolism and gains the listener attention. Choice of whether proximity or touch are appropriate or not has to be determined by the requirements of the situation and taking into account that the relationship with the listener will play an important part on how touch is interpreted.

Decontamination:

Decontamination is valuable to deal with difficult topics or stress situations. Locations can be easily associated with concepts, which can be observable in how workplace and home are related with different feelings. We can use certain locations in a room to separate unpleasant topics and to prevent other concepts from being "contaminated".

Frozen Hand Gesture:

The frozen hand gesture is a technique that goes well together with the pause, an integral part of several non-verbal communication patterns. When we are talking and gesturing and we pause, if we 'freeze' our hand gesture until we begin to talk again, the listener's attention will be held.

Gesturing: Four Quadrants:

This pattern describes the four directions we can point to with our gestures, which are equivalent to the four visual points of focus.

Assigning Attributes:

According to this pattern, choosing where to point with our gesture when we use adjectives and attributes can induce the listeners to associate them with that point and, therefore, increase or reduce their energy and enthusiasm.

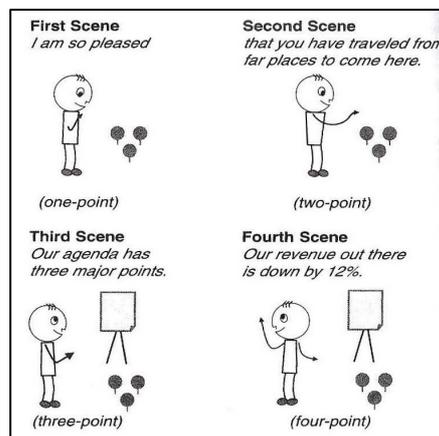


Image 4: Gesturing quadrants (Grinder, 2007)

Gestures of Relationship:

Gesturing between ourselves and the listener silently indicates that there is an existing connection between the two points, and reinforces the sense of relationship.

High Expectations:

When we are silent and no information can be obtained from our verbal speech, voice or accent; our posture gives a clue to listeners about what to expect of us. Usually, this message is more meaningful than the verbal communications. This is the reason why choosing the correct posture will influence the perceptions that listeners apprehend.

The high expectation posture is related to the position of forearms which makes us look intelligent. Forearms are recommended to be parallel to the ground (both of them or just one, with the other arm at the body side). It is important to avoid postures which can convey an inappropriate message such as: arms folded, fig leaf position, or hands on hips, pockets or behind our back.

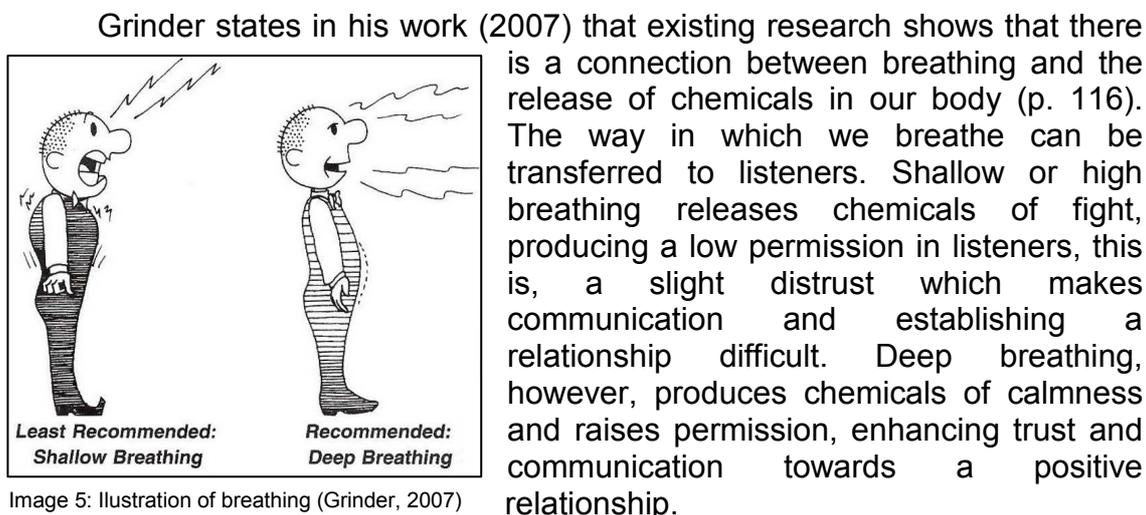
Kinaesthetic Equivalents of Credibility and Approachability:

There are kinaesthetic patterns equivalent to the credibility and approachability voice patterns. Credibility is associated with stillness, weight on both feet, toes pointed ahead, hands in high expectations, gestures with palms down and gestures which go from the speaker towards the listeners with fingers flat. On the contrary, approachability is associated with movement, weight more on one foot, a fashion posture, hands in an inappropriate position, gestures with palms up or with fingers curled from the listeners to the speaker.

2.4 Breathing patterns

The breathing non-verbal communication patterns are the most sophisticated of the VAK/B patterns, since breathing is always present and it may be difficult to perceive or to pay attention to.

BLIP (Breathing Level Indicates Permission):



Indicators of Breathing:

There are helpful techniques to observe the listeners' breathing and to perceive permission levels without looking directly at their chest. These techniques involve peripherally noticing how the listener's head, shoulders and clothes are moving; fixing on a point in front of the person's face to observe the head movements and to identify exhalations and inspirations; or calibrating our head movements with the other person's breathing in order to pace it.

Influencing Another's Breathing:

The breathing observations are valuable to influence the listeners' breathing if they are breathing too high. The simplest method to deepen the listener's breathing is to speak softer and slower. Sophisticated methods comprise visual, auditory and kinaesthetic techniques: talking, moving our head visually or touching the listeners in sync with their breathing to lead them towards deep breathing.

Pause, Breathe & Join VS Break & Breathe:

When we deliver content we may want to join sentences in order to turn them into a sole piece of information that will be clearer and more easily remembered. We can use breathing to achieve this purpose: we need to pause after delivering some information, breathe, and then start moving and speaking again at the same time.

However, we may also want to separate a piece of information because it is not related to the following one or because it has some negative connotations

(as when we decontaminate). In this case, it is recommended to pause, and to start speaking again after having moved silently.

By using these two opposite non-verbal communication patterns, we can deliver a clearer message and listeners unconsciously join or separate meanings.

2.5 Calibration

As communicators, we want our messages to reach our listeners and to produce a desired behaviour. If our message is rejected or misunderstood, there is no point on continuing to use the same strategy. This is the reason why effective communicators need to have the ability to read the listeners reactions: because perceiving the response allows speakers to readjust how they deliver the message in such a way that it achieves the desired result. This is the process known as calibration.

Grinder, however, insists on how difficult it is to perceive accurately the listeners' responses, especially in group settings where it is impossible to focus our attention on everybody, and on how advantageous using VAK/B techniques is to calibrate the feedback received.

3. METHODOLOGY

Grinder's Pentimento Patterns are a non-verbal communication model which aim is, as can be observed in the previous section, to deliver an effective communication fostered by influence and the establishment of a positive relationship with listeners. It is based on behavioural observations of effective non-verbal messages delivered by master communicators.

This model is applicable to any context where a speaker or a communicator needs to convey a message to an individual or to a group of people: education, business, conferences or even private settings. Grinder's educational non-verbal management method extends and shapes the Pentimento Patterns to adapt them into class management techniques directed to any stage of education.

Grinder's group mastery method is relatively recent, but it has awakened interest among education professionals from all over the world, who have successfully implemented his techniques.

However, to what extent can the Pentimento Patterns be scientifically established? To what extent are the non-verbal communication techniques proposed useful to manage a typical secondary classroom in Spain/Catalonia's educational system? The aim of this paper is to provide an approximate answer to these two main issues by looking at the scientific research available and by implementing, recording and analysing the techniques associated.

The first scientific research about non-verbal communication dates back to Darwin. (Pease & Pease, 2004) Since that time, many researchers have approached the topic from different points of view; however, as Grinder's model is fairly recent, there is not scientific research available to cover all the Pentimento Patterns.

The main scientific papers which show results that can be applied to Grinder's model have been selected and are going to be analysed in order to determine if their findings correspond to what the techniques describe and to the actual results obtained through their implementation within the framework of our educational system.

The research available is related to the Auditory and the Kinaesthetic Patterns and to Calibration; therefore the techniques implemented are going to be auditory and kinaesthetic techniques whose results are going to be contrasted with scientific findings and analysed to determine the students' responses (calibration).

Gathering attention through ABOVE (Pause) Whisper will be the first teaching non-verbal communication technique to be implemented and recorded in a real secondary school classroom. The aim of this technique is to focus the students' attention by raising our voice while asking for their attention slightly above the general volume of the class. Once we get the students' attention we need to freeze and (even better if complemented with the Frozen Hand Gesture) in order to keep them focused and drop our voice to a whisper to transmit a quiet atmosphere and force listeners to attend closely.

Observing the recording of this technique will provide the opportunity to analyse both auditory and kinaesthetic patterns, especially the contrast between the credible voice used in the ABOVE step and the approachable voice used during the whisper phase, as well as the effect that our pause and frozen gesture, and our credible posture have on the students.

As an attempt to analyse and illustrate more extensively the difference between credible and approachable non-verbal signals, a

combination of both the approachable voice and kinaesthetic patterns, and both the credible voice and kinaesthetic patterns is going to be recorded in two separate videos. The analysis of the techniques will enable us to distinguish between the flat voice ending with a falling intonation: the credible voice pattern, and the higher voice pitch with rolling intonation: the approachable voice pattern, as well as between the stillness, posture and gestures associated with credibility and the movement, posture and gestures associated with approachability. Additionally, the students' responses to the two different techniques presented by the teacher are going to be evaluated.

The described methodology will provide the required information and evidence to evaluate the similarity of scientific findings with Grinder's model of non-verbal communication and the results of the implemented class management techniques. These results, in turn, will make possible a reflection about positive and negative aspects of the method and the suitability of its application in future teaching practice.

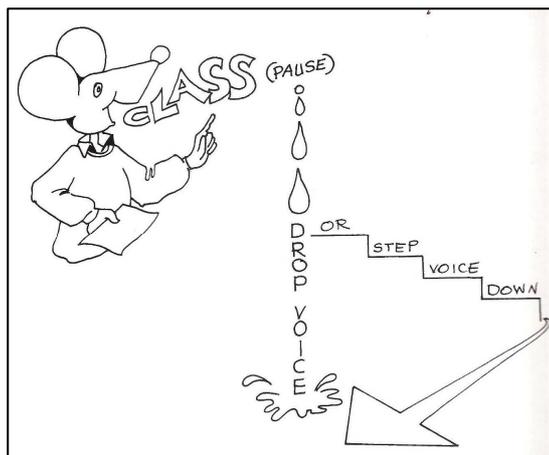


Image 6: Illustration of the technique ABOVE (pause) whisper (Grinder, 1993)

4. DEVELOPMENT

4.1 Scientific research that supports Grinder's theory

All the available research which is significant to be contrasted with Grinder's Group Mastery theory and the Petimento patterns deals with non-verbal communication from different points of view, but all of them agree on the same: people have two different "channels" of communication the obvious verbal channel which provides linguistic information, and a non-linguistic channel which is often hidden, but which can provide even much more information.

4.1.1 Auditory (A)

4.1.1.1 Klofstad - Voice pitch study

Research demonstrates that human voice pitch is related to how the speaker is perceived. These perceptions can influence on humans behaviour, for example when choosing their leaders, as some research studies have made evident. In one of these studies carried out by Tigie et al. in 2011, recordings of the voices of nine United States presidents were modified to obtain two different versions of each one: a lower pitched voice recording and a higher pitched voice recording. Subjects were asked to decide which one of the voices in each pair they would vote for. Findings determined that lower pitched voices gained most of the votes. A similar second study developed with unknown voices and a message out of context obtained very similar results.

These experiments have shown that, although the selection of leaders involves responsibility and following an ideology, impressionistic judgements may affect the choice of votes, especially of those who are not actively involved in politics. However, the results of the first study could be altered by the political preferences of the subjects, because the speakers could be recognized and because the verbal content of the recordings varied from one to another, while the results of the second study were neither completely relevant as there was not electoral content in the utterances.

Casey Klofstad et al. (2012) developed an experiment in to determine which characteristics are attributed to different voice pitches that may influence vote choices. They recorded 17 unknown women and 10 unknown men saying "I urge you to vote for me this November", so that the voices were novel and partisan neutral, and the utterances were presented in context. As in previous experiments, each recording was converted into a pair of recordings: a higher pitched one and a lower pitched one.

During the first stage, female and male voices were listened separately by both women and men and the listeners were asked which of the two voices they would vote for. In the second stage of the experiment, another sample of participants had to match leadership characteristics to the voices, identifying which of each pair of recordings was perceived as more competent, stronger, trustworthy, etc.

The results showed that lower pitched female voices were the most voted by both men and women, as they were found to be perceived as stronger, more competent, and more trustworthy. With regard to lower pitched male voices they were also the most voted by both men and women, although men are the ones who find lower pitched male voices to be more competent, while women are not influenced by pitch when they are asked to judge the competence. A possible explanation to this different perception may be that from a female listener point of view any male voice is low enough to be perceived as competent.

4.1.1.2 Pentland - Honest Signals (Voice)

Alex Pentland and his team from the Human Dynamics Group at the Massachusetts Institute of Technology (MIT) Media Lab, have developed different experiments to uncover social patterns which can explain success, especially in business contexts.

What is special about Pentland's research is that he built a device to measure non-linguistic human communication: the *sociometer*. It is an electronic device in the form of a badge or a mobile phone which the experiments' participants carry with them and which keeps record of movements and vocal behaviour so that the experts can monitor day-to-day human behaviour and interaction.

The team at MIT Media Lab have used these wearable electronic devices to analyse non-verbal communication in a wide range of business situations, from salary negotiations and call centre interactions to business plan pitches. The results of these experiments which are significant to this paper are related to influence and consistency, two of the honest signals that Pentland describes in his work.

According to Pentland (2008) influence is measured by the extent to which one person causes the other person speaking pattern to match their own pattern, it is the amount of influence that each person has on another in social interaction. Consistency is measured by the amount of variation in speech prosody or gestures, this is the variation in pitch, volume and rhythm while speaking, or the variation in speed, size or acceleration while gesturing.

One of the studies that Pentland and his team carried out was developed in a call centre, with the aim of identifying the operator's speech patterns which were more successful in their profession. It turned out that successful operators listened more and their voices fluctuated in amplitude and pitch, which suggested responsiveness to the customers; while operators who spoke with little variation were seen as too determined and authoritative (Buchanan, 2007).

However, the results were different when it came to analyse salary negotiations experiments or business plans presentations. In these situations, the speakers who spoke more time and with consistent voices were found to be more successful, because they were seen as more determined and dominant.

According to Pentland, when speakers are affected by emotions and different thoughts, their speech and movements become accented, and this is

why consistency in speech and movement is perceived as a signal of mental focus and a determined mind, while greater variability suggests openness to influence from others.

4.1.1.3 Correspondence with Grinder's Auditory Patterns

As it can be observed, both Klofstad and Pentland make references in their work to two different types of voice patterns. These two voice patterns can be associated to the two main voice patterns of Grinder's model: credibility and approachability.

On one hand, the results from Klofstad's voice pitch study which showed that lower pitched voices were perceived as more competent and trustworthy, together with the results from Pentland's studies which suggested that consistency in speech denotes mental focus and determinacy, match with Grinder's credible voice pattern represented by a flat and falling intonation.

On the other hand, Grinder's approachable voice pattern, represented by a higher pitch and a rolling intonation, is well illustrated by the fact that high pitched voices were not chosen as the most competent in Klofstad's study, together with the results of Pentland's experiments which showed that variability in speech tone suggests responsiveness and openness to influence from others.

4.1.2 Body Language (K)

4.1.2.1 Ambady & Rosenthal – Thin slices of non-verbal behaviour

The psychologists Nalini Ambady and Robert Rosenthal (1993) developed a study aimed to determine the accuracy of stranger's consensual judgements of personality in the absence of any interaction, just based on very brief observations of non-verbal behaviour (thin slices of non-verbal behaviour). To develop their experiment they selected teacher effectiveness as a criterion in order to identify non-verbal patterns associated with the perception of a good teacher.

To this end, Ambady & Rosenthal gave students three silent videotapes of a teacher ten minutes long, and they found that students were very accurate at rating teacher's effectiveness by paying attention to body language behaviours (i.e. head movements, facial expressions, gaze, touches, hands and legs shaking, emphatic gestures such as pointing and clapping, and posture).

The two psychologists narrowed down their study, cutting the video tapes to obtain five seconds clips, and after that, two seconds clips. They found that students' ratings were equally accurate in both cases than when evaluating the ten seconds clips.

The judgements of the students who watched the silent video tapes were contrasted to the ratings of students who had attended those teachers' lessons for a full semester and they were found to be very similar. As regards to the non-verbal behaviours which were determined to be representative of teacher effectiveness, teachers who fidgeted with their hands, shook their head and

were sitting, were evaluated as less effective, while those who showed more non-verbal expressiveness and involvement by walking around, touching their upper torsos, standing, smiling and using emphatic gestures, received the highest ratings.

4.1.2.2 Pentland – Honest Signals (Movements)

Alex Pentland (2008), whose investigations with the *sociometer* to uncover social patterns have been previously mentioned, also achieved significant findings about body language. It has been stated that consistency plays an important role in the perception of voice patterns but also in the perception of gesturing patterns.

Consistency in body language is measured by the amount of variation in speed, size or acceleration while gesturing and, as when speakers respond to uncertainty and emotionality their movements tend to become accented, those communicators who stay still and move in a smooth and consistent manner are considered more determined and unlikely to be influenced.

4.1.2.3 Correspondence with Grinder's Kinaesthetic Patterns

The fact of a person being able to measure the effectiveness of an unknown teacher with the same accuracy as a student who has been sitting in that teacher's class just by observing two seconds of body language, as happened in Rosenthal & Ambady's study, demonstrates that Grinder's opinion about how important non-verbal kinaesthetic patterns are to deliver effective communication is not mistaken. Considering the results of the research developed by both Rosenthal & Ambady and Pentland, similarities between their findings and Grinder's model can be easily recognized.

In Rosenthal and Ambady's study, the teachers who received the highest rates were those who were standing, walked around naturally, used emphatic gestures such as pointing and touched their upper torsos; and in Pentland's experiments people who showed more consistency in their movements were considered to be more determined. These non-verbal behaviours fit with Grinder's kinaesthetic patterns, especially with the four gesturing quadrants and the gestures of relationship, with the high expectations posture and with the kinaesthetic equivalent of credibility, which also help communicators to be perceived as more credible and determined.

4.1.3 Calibration

4.1.3.1 Gladwell - Blink

Malcolm Gladwell (2005) popularized the idea that human behaviour can be predicted with surprising accuracy by paying attention to thin slices of non-verbal language. He observed different studies in which trained experts could predict with 90% of accuracy the future success of a marriage by observing a 15 minutes video recording of a couple's conversation, or in which observers could guess how likely a doctor was to be sued by malpractice after 15 seconds of conversation with his patients.

Gladwell's core work is devoted to those first two seconds that it takes to get a first glimpse about something. These first impressions, he claims, sometimes may be more accurate than those acquired after careful and long rational thinking.

However, these first impressions can be affected by our likes and dislikes, prejudices and by the overload of information received from our environment. According to Gladwell, to become experts at getting good perceptions, we must learn to identify and separate those thin slices of relevant information from all the other information which can corrupt our conclusions.

4.1.3.2 Chabris & Simons – The Invisible Gorilla

Two Harvard psychologists, professors Chabris & Simons (2010), carried out an experiment in 1999 which has become very famous. In this study, participants were asked to watch a video of 6 people, 3 wearing white t-shirts and the other 3 wearing black t-shirts, passing basketballs to each other, they had to count the passes made by the players in the white team (the original video used for the experiment is available at <http://www.youtube.com/watch?v=vJG698U2Mvo>. It is recommended to watch it before continuing reading if you never heard about it before).

About half of the people who participated in the experiment did not notice the gorilla walking into the basketball court, even if it remains there for nine seconds. Moreover, most of the participants who missed the gorilla were sure that they would never miss such a thing.

This video was the starting point of a study which demonstrated that we cannot perceive everything that happens around us even if it is in front of our eyes, especially when we focus our mind in an activity which requires a lot of attention and we are not expecting to see anything else. This is what Chabris & Simons called *inattentional blindness*. In their work they explored other illusions of our mind related to memory, knowledge, confidence and ability, and the real problem about these illusions, they pointed out, is that we are often unaware of these limitations of our perception.

These illusions cannot be eliminated as they are part of our brain functioning. However, awareness of our limitations and caution are powerful tools to achieve a better understanding and perception in our lives.

4.1.3.3 Correspondence with Grinder's Calibration

Gladwell and Chabris & Simons agree in the same aspect: intuition is a very powerful tool, but we cannot completely trust our perceptions. Chabris & Simons highlight that we must be aware of not being able to perceive everything around us, while Gladwell insists on the importance of selecting relevant information.

Grinder refers to this fact in his work, when he describes the difficulty to accurately perceive the responses of listeners to calibrate our messages. Grinder model proposes a return to the senses, which means using our eyes, ears and touch (V, A, K and also B) to obtain sensory-based evaluations and to

avoid subjective interpretations. These sensory-based evaluations can correspond to Gladwell's sources of thin slices of reliable information, and involve Chabris & Simons' need to be aware of illusions and limitations.

4.2 Application to classroom teaching

After having understood how non-verbal communication works and how different studies correspond with Grinder's model, its application to classroom teaching can be approached. Grinder (1993) proposes class management techniques based on the Pentimento Patterns and the use of communication through influence instead of power whose aim is to create a healthy environment in the classroom that is conducive to learning.

In the context of our educational system, special relevance is given to the measures of attention to diversity and the development of the Key Competences established in the Decret 143/2007. Grinder's model offers a response to these issues to a great extent.

The VAK/B management techniques make the most of the use of different senses in such a way that they attend to the needs of different types of students with different learning capabilities and styles (visual, auditory and kinaesthetic learners) especially when presenting contents.

By managing the class through the influence of non-verbal communication and not through imposition the teacher becomes a model of behaviour to the pupils. They unconsciously learn to act and resolve their conflicts through the power of influence rather than the influence of power, which helps to develop their social competence.

The implementation of three different non-verbal communication techniques with a group of 1st of ESO students from INS Valldemossa, in Barcelona, will illustrate their effectiveness in a real educational context. This group of 25 students aged 12, consists of 15 boys and 10 girls. It is a strong group with a good English level, but the students are talkative, they become distracted easily and they sometimes need to be settled down and encouraged to keep working.

The video recordings of the implementation are available in the CD-Rom annexed to this study, and can be also accessed online via the following links:

- [ABOVE \(pause\) whisper](#)
- [Approachable patterns](#)
- [Credible patterns](#)

4.2.1 ABOVE (pause) whisper

When the teacher arrives in the classroom the students tend to be hanging around, talking in small groups or even running and screaming around the classroom, and getting them ready to start may be a difficult task for the teacher. On the day I recorded the implementation of the techniques, the students had English class just after the break, and they were therefore particularly excited. In this type of situations the teacher performance to open the lesson is crucial to set its tone.

In the video recording it can be observed that the students were talking and moving and that they were not ready to start the class yet. I placed myself in front of the room and I put the credible body posture into practice: I stood still, balancing my weight on both feet, with my toes pointed ahead and my hands in the high expectations gesture (with my forearms parallel to the ground).

In order to indicate to the students that it was time to start, I told them "Listen, please" trying to raise my voice above the class volume, so that the students could hear me and they focused on me. I used the credible voice, with a flat and falling intonation in order to sound determined.

After that, I did a pause, freezing my body and my hand gesture to hold their attention. The aim of this step of the technique was to model the students how quiet and attentive I wanted them to be. Otherwise, if I had been moving after asking them to be in silence, to stop moving and to focus their attention on me, my body language message would have been contradictory to the verbal message (incongruent) and the students would have been more likely to look down again and to go back to what they were previously doing (Grinder; 1993).



Screenshot from Video 1: Frozen arm gesture during the pause

As it can be observed in the recording, the students were excited, moving and talking. When they heard me they looked up and started to focus their attention on me while I was frozen in front of them, until the only noise that could be heard was coming from the adjoining classrooms.

Once the students were quiet and paying attention, I dropped my voice to a whisper, using a softer timbre, with an approachable tonality and moving slowly in order to put the class in a more listening mode by slowing their metabolism and, thus, calming them. It can be appreciated how I increased my voice volume until I reached the normal volume to continue de class.

There are some aspects of my performance which could be improved with more practice, especially my voice control: the contrast between the LOUD

voice and the whisper should be more marked, so that it would be even more unconsciously noticeable for the students. Despite that, the students' response was very positive: as can be seen in the video, I managed to gather the students' attention and start the class effectively, establishing an appropriate working atmosphere.

4.2.2 Approachability vs. Credibility

4.2.2.1 Approachable Patterns

On the day I recorded the techniques implementation, the students had to work with a reader. They had to read and listen to each chapter from a CD and after that, reconstruct what was happening in the story in their own words. As they had to speak in front of their classmates, I needed to make them feel comfortable and to encourage them to participate. In the words of Grinder's theory (2007), I had to seek information and to emphasize my relationship with the students, so I needed to use approachable auditory and kinaesthetic patterns.



Screenshot from Video 2: Approachable posture and gestures

It can be observed in the second clip that after having read a new chapter I asked the students to explain what happened in that part of the story. I used an approachable voice pattern with a rolling intonation and curling up on the last syllable, and its kinaesthetic equivalent pattern, a body posture which suggested approachability: my weight was more on one foot, and I did a gesture with my palms up and my fingers curled.

After only a few seconds a student raised her hand to ask for permission to say something and she started to speak. The implementation of the technique was therefore successful, as the students did not hesitate to participate.

4.2.2.2 Credible Patterns

When the students finished reading the chapters, it was time to do a speaking activity. I maintained approachability in order to encourage them to participate, but at some point they started to laugh and to speak to each other and the level of noise in the classroom increased, so I needed to settle them down. I wanted them to pay attention and to be quiet, but I needed to ask them to do so in such a way that they did as they were told, so I needed to be credible.

In the third video recording it can be observed that I was speaking with a student while the level of noise was increasing, and it can be appreciated how I

changed to a credible voice and posture. I asked the students to be in silence using a credible auditory pattern: a flat tone of voice and a falling intonation. Moreover, I balanced my weight on both feet, placing my hands palm down with straight fingers, the kinaesthetic pattern that suggests credibility.

After a few seconds the class volume started to come down and the students became quiet again. By showing myself determined through the tone of my voice and my body language I managed to control the noise level and the students' behaviour.



Screenshot from Video 3: Credible posture and gestures

Although I achieved my aim with the implementation of the credible and approachable patterns, I must say that there is still room for improvement in my performance. One of my major weaknesses when I am managing the classroom is my voice; I have a very low and soft tone of voice which I find very difficult to modify.

According to Grinder's theory (2007) gender is traditionally associated with one or the other auditory patterns: females tend to use an approachable voice and males a credible voice (p.63). When someone tries to use the opposite voice pattern the voice is likely to be a hybrid, this may be the reason why my voice does not sound 100% credible in the video recordings.

After practicing with my voice during my practicum I have managed to achieve very positive results with the credible voice, as can be observed from the implementation of the techniques, but more practice would be needed to completely master the use of the two voice patterns. I would also need to gain more auditory control in order to be able to adjust the volume of my voice properly according to the technique requirements.

4.2.3 Calibration

From the video recording it can also be observed how calibration is needed to adjust our communication in order to achieve the desired results. Grinder's model teaches us how to use our senses to perceive how to communicate with the students in every situation and how to evaluate if our messages are being effective.

For example, in the first clip, recorded at the beginning of the lesson, I could see (V) the students and I could hear that they were talking and being noisy (A) and moving (K), and therefore I noticed that the students were breathing high (B) because they were very excited and their metabolism was high.

Thanks to this information, gathered using the senses, I could calibrate my communication strategy and choose the appropriate technique (ABOVE

(pause) whisper). While I was implementing it, during the pause, I observed the students responses, I saw that they stopped moving and started to be quiet and to breathe lower, so that I could resume talking at the appropriate time.

The same happened when I implemented the approachable and credible patterns. I noticed that my approachable voice and body posture and gestures were effective because the students responded. I could also observe the students moving, talking and breathing higher during the speaking activity so that I calibrated my communication changing from the approachable to the credible pattern, which I noticed worked thanks to the feedback received from the group.

5. Conclusions

Once having developed the present study it can be observed from the scientific research available that Grinder's non-verbal communication theory and its application to class management (Group Mastery Theory) are well founded. Grinder's proposed techniques, based on observations of effective communicators' non-verbal behaviour match to a great extent the results of the scientific research and studies related to auditory, body language and calibration that have been described. Taking into account the similarities established between these publications and Grinder's work, it can be concluded that non-verbal behaviour plays a very important role in communication in several contexts and that it is as powerful, or even more, than verbal messages.

Special emphasis has been given to the implication of such findings in education to the implementation of some of the techniques proposed by Grinder's Group Mastery Model within the context of our educational system. The implementation of ABOVE (Pause) Whisper and credible and approachable voice and gestures with a group of 1st of ESO students from INS Valldemossa suggests that by improving their non-verbal communication abilities teachers can achieve very positive results in their teaching performance and the class functioning.

The results of such implementation show that even in situations when students are very excited, as happens after the break, non-verbal messages can play a decisive role in class management. The situations illustrated in the video show that the students' response was very positive and that it is possible to gather students' attention or to settle them down by means of non-verbal behaviour, without having to resort to discipline, shouting or reprimands. This is The Power of Influence (the contrary of power by imposition) which helps to establish a positive atmosphere in the classroom and which becomes a model of behaviour for the students

As Grinder's class management techniques and patterns are based on observations of how successful teachers communicate non-verbally, his work is not invented nor proposes innovative ways of communicating with the students. In fact, his theory involves highlighting those patterns that effective teachers use more or less unconsciously.

Non-verbal language is present in everybody's interaction whether advanced communication skills are required for their profession or not. It is inherent to communication, and although it may seem obvious or explicit, we are often unaware of its implications and functioning. What is important about Grinder's work and other studies dealing with non-verbal communication is that they bring those patterns from the unconscious to the conscious.

Humans are not equally skilful when performing the same tasks. Even if there are communicators who are able to use effective non-verbal communication patterns in their interactions and presentations naturally, without having received any training, Grinder's work can really do a favour to those teachers who are not naturally skilled with this ability to incorporate non-verbal

patterns consciously in their communications in order to improve their effectiveness systematically.

After beginning my practicum and realizing that I needed to work on my class management skills, I became very interested in Grinder's model and I started to read his work and other bibliography about non-verbal communication. As soon as I got involved with this study and I started to read and reflect about the scientific papers and other studies I realized that I was acquiring awareness about non-verbal communication patterns and that they could be easily observed and identified in my environment if I paid more attention, especially in educational contexts.

I remember, for example, one day when I was sitting at the train station and there was a group of school children who were travelling somewhere with their teacher. The teacher was being approachable while she was conversing animatedly with them, but at some point the students were being too noisy and I could observe how the teacher's voice and body language changed radically when she asked them to lower their voices: she was in the high expectations posture, with her palms faced down and using a flat tone of voice.

I must say that I found this process of reading, observing and reflecting about what I had read crucial to understand how non-verbal communication works and to feel ready to start implementing the techniques in the classroom. It is impossible to go straight to the practice stage, just by reading instructions about how to implement a technique and doing it, without grasping the meaning of what you are doing. This is the reason why I started to implement some of the easiest Grinder's techniques during my practicum as I was getting on with reading, but it was not until I had analysed the other studies and I had established similarities between them and Grinder's model that I felt confident enough with my knowledge about the topic to put the techniques into practice being aware of their sense and implications.

As it happens with the theory, practice needs time, reflection and even more practice. Although my practicum has been 12 weeks long, it is a very short lapse of time, taking into account that teachers need a lot of practice to improve their performance significantly and that they always keep learning from their experience. It can be observed from the video recordings of the implementation in the classroom that, although they reflect the usefulness of Grinder's techniques, my performance could be improved in many aspects through more practice, especially my voice control.

Grinder (1993) actually recommends trying and practising one technique at a time and moving to the next one only when it has been completely mastered. There are a lot of things happening at the same time in a classroom and teachers cannot focus exclusively on their non-verbal behaviour all the time. The idea is to start implementing and practising the techniques one by one until we are comfortable with them and they become part of our natural interaction with the students.

It is necessary to mention that Grinder's theory is not the only existing communication model. There are other authors who have developed different

models which share a lot of similarities between them because they are based on the observation of the same existing patterns of non-verbal behaviour. These different models are not incompatible, and mastering one model helps to master another, which in turn increases non-verbal communication abilities. However, Grinder's work is very significant in education, since his Group Mastery Theory is mainly focused on class management.

Of course, having only good non-verbal communication abilities is not enough to be a good teacher, to motivate and involve the students and to establish a positive relationship with them. In the context of an EFL classroom it is very important to use attractive materials and resources and to be able to design communicative activities and lesson plans which enable the students to interact between them in real like situations. It is crucial for teachers to be experts on the subject that they are teaching, to care about the students, to be able to connect the contents of the subject with their daily lives and interests, etc.

Teaching involves a particular set of skills which cannot be discredited; however, class management abilities can really enhance all the other qualities of a good teacher. As it has been seen in this study, non-verbal communication is very powerful to convey our messages and to influence on others and, therefore, it is a very powerful tool for teachers to present content in such a way that the message reaches all the students in the classroom, and to establish a positive relationship of influence with them. Having a good command of non-verbal class management techniques makes it possible to create the positive working environment needed in the classroom to deliver effective teaching.

Grinder suggests peer work between teachers in his class management guidelines (1993) as an exercise to improve personal skills and to help other teachers to improve theirs. He provides worksheets to be used by teachers by means of observing other teachers' implementation of the techniques in the classroom in order to give them feedback on their performance. In my opinion, cooperative work between teachers in this and other aspects could be essential to improve teaching practice, as constructive feedback, comments, suggestions and different points of view from other teachers can help us to be aware of our weaknesses and to have more perceptions in order to calibrate our performance.

My overall feeling is that the developed work has been very positive and has really allowed me to start improving my non-verbal communication skills which, however, need still a lot more of practice to be completely mastered. I hope to be able to apply all the knowledge that I have gathered during the elaboration of this study in my future profession, delivering an effective class management and establishing a positive relationship of influence with my students, in order to enhance all the other teaching skills that I have acquired during this year.

Bibliography

Basic References

- Ambady, N. & Rosenthal, R. (1993). Half a minute: Predicting teacher evaluations from thin slices of nonverbal behavior and physical attractiveness. *Journal of Personality and Social Psychology* 64 (33): 431-441.
- Buchanan, M. (2007). The Science of Subtle Signals. *Strategy + Business* 48, 68-77.
- Chabris, C. & Simons, D. (2010). *The invisible gorilla and other ways our intuition deceives us*. London: HarperCollins.
- Generalitat de Catalunya. (2007). *Decret 143/2007*. Retrieved from: http://edums.gencat.cat/files/46-731-ARXIU/curriculum_educacio_secundaria.pdf
- Gladwell, M. (2005). *Blink: The power of thinking without thinking*. New York: Little Brown.
- Grinder, M. (1993). *ENVoY: Your personal guide to classroom management*. Battle Ground, WA: Michael Grinder & Associates.
- Grinder, M. (2007). *The elusive obvious*. Battle Ground, WA: Michael Grinder & Associates.
- Klofstad, C. A., Anderson, R. C. & Peters, S. (2012). Sounds like a winner: Voice pitch influences perception of leadership capacity in both men and women. *Proceedings of the Royal Society of London, Biological Sciences*. Epub 2012 Mar 14. Retrieved from: <http://rspb.royalsocietypublishing.org/content/early/2012/03/06/rspb.2012.0311>
- López Rodríguez, R. (2005). *La programació neurolingüística i la seva aplicació als entorns educatius*. Retrieved from: <http://www.xtec.cat/sgfp/llicencies/200405/memories/927m.pdf>
- Pease, B. & Pease, A. (2004). *The definitive book of body language*. New York, NY: Bantam Books.
- Pentland, A. (2008). *Honest signals: How they shape our world*. London: The MIT Press.
- Tigue, C. C., Borak, D. J., O'Connor, J. J. M., Schandl, C. & Feinberg, D. R. (2011). Voice pitch influences voting behavior. *Evolution and Human Behavior*. 33(3), 210-216.

Additional Bibliography

BBC World Service. (2012, March 15). Votes and voters voices. Science in Action. Podcast retrieved from: [http://www.bbc.co.uk/iplayer/episode/p00pfhr9/Science In Action 15 03 2012/](http://www.bbc.co.uk/iplayer/episode/p00pfhr9/Science_In_Action_15_03_2012/)

Chabris C. & Simons D. (1999). *Selective attention test* [video]. Retrieved from: <http://www.youtube.com/watch?v=vJG698U2Mvo>

Maguire, T. (2000). *Surviving in the Classroom*. Retrieved from: <http://tom.sinera.org/Nlp/articles/surviving.doc>

Maguire, T. & Galan, M. (2002). Classroom Management. *Resource*. Italy, Feb 2002.

Michael Grinder and Associates. (2012). *MGA. Michael Grinder and Associates. Corporate and Educational Non-verbal Communication Experts*. Retrieved from: <http://www.michaelgrinder.com/>

ANNEXES

Video recordings of the implementation of Class Management Techniques

- ABOVE (pause) whisper
- Approachable patterns
- Credible patterns