THE BASIC TEACHING STRATEGY OF MASTER VIOLIN TEACHER DOROTHY DELAY

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Dissertation submitted in partial fulfillment of the requirements for the degree Magister Musicae of the Potchefstroomse Universiteit vir Christelike Hoër Onderwys

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January 2001
Potchefstroom

Abstract

The purpose of this study is to construct a model of the basic teaching strategy of master violin teacher Dorothy DeLay. The method used is the modeling techniques of Neuro-Linguistic Programming (NLP), in particular the Experiential Array process developed by David Gordon. The specific objectives are to identify the following:

- DeLay's criteria for effective teaching;
- her beliefs and motivations regarding teaching and learning;
- how she tests whether her criteria have been met;
- her procedure in a typical lesson, aimed at meeting her criteria;
- her options when her usual procedure is ineffective;
- the emotions she typically experiences while teaching; and
- her observable actions while teaching.

The finding of this study is that DeLay's primary criterion is a state of pleasure and confidence in her students. That criterion is supported by her firm beliefs about learning and teaching, the most fundamental of which is that the human capacity to learn is unlimited.

She rotates three areas, namely intonation, sound production and phrasing, always working on the weakest area first. Depending on the standard of the student she is working with, she makes a comparison between the best performance she can imagine, or some good performances she has heard, or other students' level of development.

The steps in her usual procedure are aimed at invariably achieving learning successes, and in effect set up a reinforcing loop between students' states of pleasure and confidence, and their learning successes.

While teaching DeLay usually has fun and feels "concentrated", "happy", "hopeful", "put in order", and "pleasure". Her observable actions are those of someone who strives with love and respect to create a nurturing learning environment that stimulates a sense of unlimited possibility in her students.

Opsomming

Die basiese onderrigstrategie van meestervioolonderwyser Dorothy DeLay

Die doel van hierdie studie is om 'n model te konstrueer van die meestervioolonderwyser Dorothy DeLay se basiese onderrigstrategie. As metode word die modelleringstegnieke van Neuro-Linguistic Programming (NLP) gebruik, in die besonder die Experiential Array metodologie ontwikkel deur Dávid Gordon. Die spesifieke doelstellings is om te identifiseer:

- DeLay se kriteria vir effektiewe vioolonderrig;
- haar oortuiginge rakende onderrig en leer;
- hoe sy toets of daar aan haar onderrigkriteria voldoen is;
- haar prosedure in 'n tipiese les om aan haar kriteria te voldoen;
- haar opsies indien die prosedure oneffektief is;
- haar emosionele ervaring tydens onderrigaktiwiteite; en
- haar tipiese waarneembare aksies wanneer sy lesgee.

Die bevinding van die studie is dat DeLay se primêre kriterium 'n gevoel van plesier en selfvertroue by haar leerlinge is. Dit word gerugsteun deur haar vaste oortuiginge oor onderrig en leer, fundamenteel dat leervermoë onbeperk is.

Sy roteer drie areas, naamlik intonasie, klankproduksie en frasering, en werk gewoonlik aan die swakste een eerste. Afhangende van die standaard van 'n betrokke leerling, maak sy 'n vergelyking tussen wat sy hoor en sien by 'n les, en die beste wat sy haar kan voorstel, of goeie uitvoerings wat sy gehoor het, of ander studente se vlak van ontwikkeling.

Die stappe in haar normale onderrigprosedure is daarop gemik om onvermydelik tot leersuksesse te lei, en is effektief 'n positiewe kringloop tussen die leerling se leersuksesse en 'n gevoel van plesier en selfvertroue.

DeLay voer aan dat haar tipiese emosies tydens onderrigaktiwiteite dié is van gefokusdheid, geluk, genoegdoening, hoopvolheid, en plesier. Haar sigbare aksies tydens lesse is sprekend van 'n persoon wat met respek en liefde 'n koesterenede leeromgewing skep om by leerlinge 'n onbeperkte sin vir moontlikhede te kweek.

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Acknowledgements

Sincere gratitude is due to

- Miss Dorothy DeLay for her generosity in sharing her time and expertise
- Dr. Jaco Kruger for his patience and academic leadership
- Mr. Armand Kruger for his help as NLP specialist
- Prof. Annette Combrink for moral and financial support

PREFACE

As a concert violinist who studied with Miss Dorothy DeLay at the Juilliard School of music, and as a violin teacher who strives to be more effective, it seems, in retrospect, inevitable that my involvement in Neuro-Linguistic Programming (NLP) as a certified Master Practitioner would have led me to undertake a study of DeLay's outstanding teaching skills.

The distinctions about communication and change that NLP provides led me to consider my studies with DeLay in the late nineteen seventies and early nineteen eighties with renewed enthusiasm and insight. I realized that what transpires in DeLay's interactions with students involves more than meets the indiscriminate eye.

Wanting to test my intuitions, I visited DeLay's studio at Juilliard in 1993 (4 – 10 December), 1999 (13 - 20 November) and 2000 (17 – 29 April) to observe a representative cross-section of teaching situations. What I observed through the lens of NLP was awe-inspiring. I became convinced that undertaking a formal modeling project of DeLay's teaching skills would provide exceptionally useful insights and tools for pedagogical purposes.

The principle materials for this study were provided by observations of DeLay's interactions with students, and conversations with her, some of which were transcribed verbatim, and some of which were tape-recorded.

CHAPTER 1
INTRODUCTION

1.1 The epistemology of instrumental teaching

Education for musical performance, as for other forms of professional practice, has had an uneasy position at modern research universities. This is highlighted by Schön (1987) who comes to the conclusion that the epistemology upon which curricula at universities rests, is not conducive for learning the 'artistry' that distinguishes excellence in professional practice.

Schön points out the contrast between the kind of knowledge typically offered by professional schools at universities, and the skills needed for achieving excellence in the practice of a particular profession. The one reflects the prevailing idea of rigorous professional knowledge, based on the philosophy of positivism that results in technical rationality – the idea that basic scientific research leads to an applied science that offers standardized solutions to instrumental problems in the real world. It requires recognition of instrumental problems and the application of standardized solutions; the other indicates awareness of indeterminate zones of practice where the practitioner has to deal with a dynamic situation often containing uncertainty, uniqueness, and value conflict. It requires framing of problems, experimentation and improvisation, and consideration of such intangibles as human beliefs and values.

Schön argues that technical rationality misses the nature of the real world situation with which professional practice has to cope -- seeing it as objective, containing determinate categories and problems. "The question of the relationship between practice competence and professional knowledge needs to be turned upside down. We should start not by asking how to make better use of research-based knowledge but by asking what we can learn from a careful examination of artistry, that is, the competence by which practitioners actually handle indeterminate zones of practice – however that competence

may relate to technical rationality." (1987:13.) Schön points out that technical rationality also fails to recognize the ways in which excellent practitioners actually acquire their 'artistry'. "Not only the question of the relationship between competent practice and professional knowledge but also the question of professional education needs to be turned upside down. Just as we should enquire into the manifestation of professional artistry, so we should also examine the various ways in which people acquire it." (Schön, 1987:14.)

Schön goes on to suggest that certain 'deviant' traditions of professional training, like those found in architectural studios and music conservatories, could serve as examples of how training for professional practice can be improved. "Perhaps, then, learning all forms of professional artistry depends, at least in part, on conditions similar to those created in the studios and conservatories: freedom to learn by doing in a setting relatively low in risk, with access to coaches who initiate students into the 'traditions of the calling' and help them, by 'the right kind of telling', to see on their own behalf and in their own way what they need most to see. We ought, then, to study the experience of learning by doing and the artistry of good coaching. We should base our study on the working assumption that both processes are intelligent and – within limits to be discovered – intelligible." (1987:17.)

A need exists in violin teaching for the codification, and application in training, of the expertise – the 'artistry' in Schön's terms of acknowledged teachers. Kennell, noting that music involves complex and invisible human cognitive processing, states that "we have lacked a fundamental model of applied instruction" (1992:5-6.).

The training of violin teachers too often is limited to principles of the mechanics of violin playing, as codified by different schools of playing and teaching, while the development of the 'artistry' of teaching is left to intuitive emulation rather than the application of rigorous, systematic method. Schön, referring to expert professional practice of different kinds as 'artistry', defines it as "an exercise of intelligence, a kind of knowing, though different in crucial respects from our standard model of professional knowledge" (1987:13). He argues that it is not inherently mysterious, but rigorous in its own terms,

that we can learn a great deal about it by carefully studying the performance of unusually competent practitioners, and that we should treat the limits of such inquiry as an open question. Abeles, Goffi & Levasseur (1992) concur that identification of the processes used by a master teacher is necessary for gaining insight into the competencies necessary for training in graduate music schools.

Bandura, in an interview with Evans (1989:5) states that "through modeling we can transmit skills, attitudes, values, and emotional proclivities. This is the acquisition function – the teaching function of modeling." With new developments in the behavioral sciences, like Neuro-Linguistic Programming (NLP) and related fields (cf. Andreas, 1994:24), it is now possible to model the skills of acknowledged master teachers like Dorothy DeLay by making useful distinctions about intricate processes underlying patterns of communication and influence.

In an article on "The Future of Scholarly Inquiry in Music education" Yarbrough correspondingly identifies a need to discover what makes "great and inspired teaching", and suggests that "a good start for an enterprising young researcher would be to capture the great applied teachers, like Dorothy DeLay at the Juilliard School...." (1996:200). DeLay's considerable success and international reputation as a master violin teacher make her an ideal exemplar. Jepson (1988:10) describes her as "the most coveted violin teacher in the world", while Crutchfield (1987:c15) notes that "it is hard to think of another violin teacher born in this century whose list of successes matches hers." In addition to her success in training outstanding soloists and ensemble players, DeLay has had considerable influence on the style of violin teaching through her many students who have become teachers all over the world. She represents a radical departure from the old style of authoritarian teaching, exemplified by master teachers of previous generations (Sand: 2000:57).

It seems then that an excellent practitioner like Dorothy DeLay has developed skills that lie beyond the scope of traditional curricula at research universities. What distinguishes her as an excellent teacher differs from what musicological research can offer in the form

of standard pedagogical procedures. She is an example of the "artistry of good coaching" referred to by Schön -- the kind of artistry that is developed in practice, and that should be studied on the assumption that it is intelligent and intelligible. The patterns of thought and behavior underlying excellence in professional practice -- the difference that makes the difference, as Bateson (1972) calls it -- is what should be studied as the basis for learning how to learn professional excellence.

This is not to suggest that it is possible to present a complete and definitive description of any human behavior as complex as influencing another person to optimally develop the many facets of musical talent. To paraphrase James Hillman (1996:3), there is more in human interaction than our theories of it allow. But what is possible, by using the methodologies of Neuro-Linguistic Programming (NLP), and extremely useful to aspiring teachers, is a description -- or more aptly, a model -- of critical aspects of the processes underlying particular skills that a teacher of genius like DeLay embodies.

1.2 Objective of the study

The overall objective of this study is to construct a model of the basic teaching strategy of master violin teacher Dorothy DeLay, by using the methodology of Neuro-Linguistic Programming (NLP), specifically the Experiential Array modeling process developed by Gordon (1998).

The specific objectives, as specified by Gordon's modeling methodology, are to determine what:

- DeLay's criteria are for teaching
- beliefs and motivations support those criteria
- kind of comparison (test) she makes when observing a student to decide whether or not her criteria have been met
- the steps are in a typical process aimed at meeting her criteria
- options she has when the usual process for meeting her criteria is not successful

- emotion/s she habitually experiences when teaching.
- observable behaviors she exhibits as an expression of her teaching strategy

1.3 Code congruence

It is important to stress that this project is a study of a unique individual. The objective is to find out what the elements are of DeLay's subjective experience as a teacher. The emphasis it not on identifying general epistemological and pedagogical concepts, which can be found in standard textbooks, but on making a description of DeLay's teaching strategy that is congruent with her uniqueness.

Dilts (1998:118-125) refers to such congruence between subject and description, or exemplar and model, as "code congruence". Code congruence means that the relationships between the elements within a description or model match the relationships between the system of elements of the phenomenon being described or modeled. For example, if a human hand is to be described for making a functional model of it, it would be more "code congruent" to describe the relationships between fingers, than to describe the hand merely as five separate fingers. Describing the relationships between fingers is more congruent with the way the hand actually developed and functions.

A crucial test for whether or not this study of DeLay's teaching strategy is code-congruent, would be the reader's perception of her uniqueness. More than simply understanding what good teaching is all about, the reader should hopefully understand the uniqueness of DeLay's teaching. Describing her teaching strategy exclusively in abstract conceptual terms would obscure her uniqueness as an individual, and would therefore be a case of code incongruence: the language of description (code) would not reflect the character of what is studied.

To bring DeLay's uniqueness to the reader's attention, information that is elicited about the elements of her experience as a teacher, by both myself and other interviewers, is not primarily abstracted into conceptual form, but is presented as much as possible in her

own words, within the context of teaching situations and conversations about it. And since an essential part of DeLay's uniqueness is her relationship to her students, their experience of her teaching is also presented here in their own words.

1.4 Literature overview

1.4.1 Studio teaching

From a review of the literature about instrumental studio teaching, it is clear that the training of instrumental virtuosi has always been the task of a master who can impart knowledge and stimulate students' development (Boyden, 1990). The primary form of instrumental teacher education has been the observation and emulation of the student's own teacher (Woodring, 1975). Because of the complexity of interactions between teacher and student in the studio lesson (Gholson, 1994), it has been problematic to study master teaching in action.

According to Schmidt (1992:32) "relatively little systematic research has addressed the complex nature of one-to-one or tutorial music instruction". Dinham (1987) comes to the conclusion that past research had been based primarily on the process-product model which regarded the responsibility for learning as lying primarily with the instructor, while underestimating the extensive array of factors involved and the subtle distinctions required for successful instruction.

Research variously focused on conversation (Wardhaugh, 1989), improvisation (Yinger, 1989), processes for developing and establishing knowledge (Bruner, 1964), measuring teacher and student behaviors (Gipson, 1978; Hepler, 1986), the influence of verbal communication (Albrecht, 1991), the uniqueness of the one-to-one relationship between teacher and student in the studio teaching situation (Abeles, Goffi, and Levasseur, 1992), student perceptions of teaching success (Abeles, Goffi & Levasseur, 1992), and developing students' decision making (Yinger & Villar, 1986). While Gage (1964) consideres teaching as involving processes, behaviors and activities, Yinger and Villar (1986) points out the important role of less conscious teaching processes. Schön (1987)

similarly focuses on the distinctive knowing-in-action of expert professionals, a kind of knowledge that differs from academic knowledge usually imparted in the training of would-be professionals. Kennell poses pertinent questions about teacher decision making strategies, identifying task-centered strategies -- "scaffolding which represents specific teacher behaviors in the Zone of Proximal Development" (1989:22) -- effectively used in studio teaching situations.

1.4.2 Studies of expert violin instruction

Studies have been published of master violin teachers Galamian (Koob, 1986), Dounis (Constantakos, 1985), the Suzuki Method (Keraus, 1973), and the methods of Galamian, Havas, and Suzuki, as compared to that of Flesch (Schlosberg, 1987).

The following studies have been done of DeLay:

1. An investigation into the realms of violin technique: conversations with Dorothy DeLay (Tsung, 1993)
2. Proximal Positioning: a strategy of practice in expert violin pedagogy (Gholson, 1993)
3. The Applied Music Studio: A Model of a Master Teacher (Neill-Van Cura, 1995)
4. The relationship between teaching success and Jungian personality types of Dorothy DeLay and her students (Lewis, 1998)
5. Teaching Genius: Dorothy DeLay (Sand, 2000)

These studies do not sufficiently focus on teaching skills in action. Most draw their materials mainly from interviews, writings and comments of students. The complex contextual and systemic nature of expertise, as indicated by the Logical Levels of Experience Model found in NLP (Dilts, 1998), thus remains elusive.

In the few instances where master teaching is studied in action, with the exception of Gholson (1993) and Neill-Van Cura (1995), the focus is primarily on outcomes, rather than on underlying cognitive processes. Master teachers' violinistic and musical goals,

and exercises and studies for achieving them, are investigated while underlying cognitive processes as they relate to interaction with students escape notice. Only Neill-Van Cura (1995) includes important modeling tools for describing the structure of cognitive strategies, like the TOTE (Test-Operate-Test-Exit) model developed by Miller, Galanter and Pribram (1960), and further developed and incorporated into NLP by Dilts, Grinder, Bandler and DeLozier (1980), and Gordon (1998), but makes a number of critical mistakes in applying the methodology.

The epistemological obstacle, mentioned earlier, to research of the kind suggested by this study needs to be re-emphasized. Much academic literature still considers instrumental studio teaching as involving mainly the application of musicological knowledge – as evidenced by frequent use of the terms "applied" studio teaching -- following the model of technical rationality at research universities, which posits applied science as the result of, and secondary to, basic scientific research. Academic institutions emphasize musicological research, which is supposed to inform the domain of practice, rather than the study of master teachers' knowing-in-action, which differs from formal academic knowledge (Schön, 1987). Such an epistemology obscures both the nature of expertise as it manifests in practice, and the ways in which that expertise is actually acquired.

Before the advent of sophisticated behavior modeling tools like NLP, the one-to-one studio teaching situation posed additional problems:

- Studio teaching involves highly complex interactions between individuals (Schön, 1987, and Gholson, 1994), making it difficult to study all the variables and their interactions.

- It followed a tradition of example and coaching rather than systematized knowledge. Studio teachers learned to teach through experiencing the example of their own instrumental teachers, and observing the teaching skills of other competent teachers.

- Due to a tradition, or a perceived tradition, of successful authoritarian pedagogues (Auer, Flesch, Oistrakh, Yankelevich, Neuhaus, Levine) the process-product model of studio teaching gained currency. This model regarded expert knowledge of the content of a field -- about violin technique and about music, for example -- as the critical factor for student development, the teacher's responsibility simply being the one-way transmittal of that knowledge. Dynamic interaction between teacher and student, involving feedback, adjustment, and strategies of influence was either not acknowledged, or beyond the available techniques of research.

- Individual instrumental teaching provided privately or in schools specializing in practical music and arts training, like the Juilliard School (where DeLay teaches) or the Curtis Institute in North America, and the Musik Hoch-Schules in Germany, did not fall within the gambit of academic research.

- Such outstanding teaching skills were believed to be the result of inborn "talent" and/or "personality" and therefore beyond the scope of academic research, since it had not been possible to describe the structure of the cognitive strategies and the levels of experience underlying such skills.

By employing the modeling technologies of NLP it is hoped that such problems could be overcome. Information about the cognitive strategies of master teachers could illuminate the nature of teaching expertise, and serve as framework for the training of instrumental teachers.

CHAPTER 2

Dorothy DeLay: a short biography

Dorothy Delay was born on 31 March 1917 in Medicine Lodge, Kansas, a cattle town near the Oklakoma border. She was the eldest of three sisters, the other two being Nellis and Louise. Her mother, Cecile Osborn DeLay, was a teacher who played the piano. Her father, Glenn Adney DeLay, was the local school superintendent and an amateur cellist. DeLay reports that there was always music and education at home. Her mother, she says, gave her tremendous support, while her father was not particularly approving of her. He was generally difficult to please, and somewhat judgmental of many people around him. Her mother who had an optimistic and adventurous spirit used to tell her that life was full of opportunities and that she (DeLay) could do or become anything she wanted. Often, in conversation, DeLay refers to the many things she learned from her mother that are fundamental to her approach to teaching.

At four years of age, DeLay started taking violin lessons and gave her first concert the following year at a local church. She attended Neodesha High School where she was concertmaster of the school orchestra. With an IQ measured at the time to be 180, she was an exceptionally precocious student. Having been the top student in all her classes she graduated high school at age fourteen, and had to wait more than a year to enroll in college, since her parents felt that she was too young to do so immediately after high school.

At sixteen she entered Oberlin College in Ohio where she took violin lessons with Raymond Cerf, a student of Eugene Ÿsaye. However, at the end of her freshman year she transferred to Michigan State University, because her father thought that a conservatory education was too limiting. There she studied with violinist Michael Press who was a product of the Moscow Conservatory. After graduating with a BA degree with psychology as one of her subjects, she defied her parent's wishes by going to the Juilliard School in New York, with only thirty dollars in her pocket.

At Juilliard she studied briefly with Louis Persinger, successor to Leopold Auer, before moving on to Hans Letz and Felix Salmond who became her principal teachers. DeLay spent four years earning her Artist's Diploma at Juilliard while working her way through school by doing baby sitting in exchange for room and board, playing as concert mistress of a Broadway show for a year or more, and doing restaurant and weddings gigs with her sister Nellis who studied the cello. She also played in Leopold Stokowski's All-American Youth Orchestra, which in 1940 toured large South American port cities with a chartered ship.

At the end of the tour she met her future husband, Edward Newhouse, on a Pacific Railroad train, en route back to New York from Los Angeles. With characteristic humour Newhouse says that, because of his shyness, he did not ask DeLay to marry him until Trenton, and she did not say yes until New York, and it took until the tunnel before arriving at Pennsylvania Station before they decided to have two children, a son and a daughter. As it happened, they had a son Jeffrey, now a professor of radiology, and a daughter, Alison, now a children's librarian and storyteller.

At the time of her wedding to Newhouse, DeLay was still a student at Juilliard, doing an increasing number of concerts. She formed a piano trio, the Stuyvesant Trio, with her sister Nellis and pianist Helen Brainard, and did several successful seasons with the group, receiving considerable press attention.

Because of the second world war, however, the familiar structure of their life was "shattered", as DeLay puts it, with Newhouse having joined the army and being posted all around the country. DeLay followed along as much as her career allowed, and eventually the couple ended up in Washington, D.C., where her husband had a posting at the Pentagon as aide to Air Force general Henry H. "Hap" Arnold, writing reports and speeches.

DeLay remarks that life in wartime Washington was fascinating but difficult for them. Their first child was born, she had her career as a performer, and she did not consider herself equipped to handle the situation very well. She discovered that she did not like being a soloist. Never having felt particularly well prepared for a performance and having been too self critical, she used to dread the congratulatory remarks (and parties) afterwards, which she felt were not well deserved. To compound difficulties, DeLay was loath to be on tour away from her children for any length of time, despite having had a housekeeper that enabled her to continue with her career. At the time, she even briefly considered changing her career and enrolling in medical school.

However, back in New York after the war, DeLay decided to return to serious study of the violin. She was dissatisfied with what she had done as musician, and wanted to learn much more. Early in 1946 she started looking for a teacher, and ended up taking lessons with the legendary Ivan Galamian. She befriended Galamian and his wife Judith, and became a regular visitor at their house for supper on Monday nights, when the discussions invariably revolved around students and teaching methods.

Her lessons with Galamian in New York were followed by a couple of weeks at his summer place in Westport, New York, in the Adirondack Mountains, together with a fortunate few of his students. These summer gatherings for intensive study was the beginning stage of Meadowmount, the summer camp that Galamian and his wife had established in 1944. DeLay admired Galamian's devotion to his school, and although not yet intent on a teaching career, she was deeply impressed by the pride he took in his pedagogical work.

In the fall of 1946 DeLay was invited by a friend to teach the violin one day a week at the Henry Street Settlement School in Manhattan. She agreed to give it a try and instantly fell in love with teaching. Shortly thereafter, in 1947, she was asked to join the part-time staff of the then Preparatory Division of the Juilliard School. She jumped at the opportunity, and discovered that her day of teaching was the most enjoyable day of the week.

Soon, more opportunities came along. DeLay and her sister Nellis accepted jobs to play chamber music at Sarah Lawrence College in Westchester, New York, where DeLay ended up staying on as a member of the teaching staff from 1948 to 1987. In 1948 Galamian invited DeLay to become his assistant at Juilliard and at Meadowmount. Their collaboration lasted for 22 years until 1970 when a disagreement over teaching methods caused a permanent rupture between them.

DeLay's success skyrocketed. Her teaching appointments at the Juilliard School (1947 -), Sarah Lawrence College (1948 -) and Meadowmount (1948 -1970) were followed by the Aspen Festival and Summer Music School (1971 -), the University of Cincinnati (1974 -), the Philadelphia College of the Performing Arts (1977 -1983), the New England Conservatory (1978 -1987), and the Royal College of Music in London (1987 -).

She has received honorary doctorates from Oberlin College, Columbia University, Duquesne University, Michigan State University, the University of Colorado and Brown University. She is a Fellow of the Royal College of Music in Great Britain. She was awarded Yale University's Sanford Medal for "Distinguished Contributions to Music", the Artist Teacher Award of the American String Teachers Association, the American Eagle Award of the National Music Council, the King Solomon Award of the America-Israel Cultural Foundation, the Order of the Sacred Treasure bestowed on her by Emperor Akihito of Japan, and the Educator of the Year Award (2001) of Musical America. In 1994 she was the first teacher in the history of the USA to receive the National Medal of the Arts, presented to her by President Bill Clinton at a White House ceremony.

Dorothy DeLay is clearly an astonishingly successful teacher, the likes of whom has seldom been seen in the musical world. The list of former pupils of hers who have become world renowned soloists, members of famous ensembles, concert masters of top symphony orchestras, and successful teachers all over the globe reads like a who's who of violinistic fame of the past several decades. Names like Itzhak Perlman, Gill Shaham, Midori, Cho-Liang Lin, Shlomo Mintz, Sarah Chang, Nigel Kennedy, Robert McDuffy,

Joseph Swensen, Mark Peskanov, Nadja Salerno-Sonnenberg, Kyoko Takezawa are but a few that stand out among a stellar crowd. Her legacy is a worldwide standard of playing hitherto unknown. She has been called "the most coveted violin teacher in the world" (Jepson, 1988:110), while the New York Times noted that "it is hard to think of another violin teacher this century whose list of successes matches hers" (Crutchfield, 1987:c15).

Her students, former and current - she is 83 years old and still going strong - never seem to run out of superlatives when talking about the qualities of their beloved "Miss" DeLay. Words like "amazing", "incredible", and "fantastic" seem to stand for learning and nurturing experiences so profound and encompassing that the detail seems too overwhelming to describe. Robert McDuffy (1997:15) calls her a "full service teacher" , meaning that she plays many roles, from teacher and coach, to psychologist and career manager, while Cho-Liang Lin describes a lesson with her as being like a session with a shrink. "You'd walk in there with a head full of problems about your latest bad review or a breakup with a girlfriend, and you'd walk out of her studio feeling all clear" (quoted by Jepson, 1988:110).

Obviously, DeLay is an exemplar par excellence, and her generosity in sharing her thoughts and experience makes her an ideal candidate for modeling. Having studied with her for several years in the late seventies and early eighties, she has allowed me to observe numerous lessons she has given since then, and has been willing to answer all questions that I have asked in our many conversations about her work. During my last visit to her studio at the Juilliard School in New York she was as energetic, observant, creative and full of humor as I remembered her from twenty-odd years ago.

Her lessons often are scenes of youthful mirth, mixed with serious study and urgent career strategizing. She firmly believes that learning and performing should be fun, and exemplifies the principle by often shaking with subdued laughter of joy when a student is playing particularly well, which, one should add, is quite often. When asked whether she has considered retirement she gleefully replies, "No, not happily, I'm having too much fun to stop!"

Sweetness seems to pervade her entire workspace, with students being called the customary "sweetie", "sugarplum" and "honey", while ice cream and cakes of various varieties are being sent for regularly to satisfy her famed sweet tooth. And while she seems to glow with sweetness and nurturance, she is not above sharing a naughty joke, mocking her own foolishness, or strongly expressing her disdain for people who block a student's career path or violate her professional and pedagogical values.

Her energy is quite extraordinary, not even considering her age. She still drives herself to the Juilliard School in the heart of Manhattan almost every day from her home in Nyack, an hour away, and teaches till late at night, when she is still willing and keen to discuss teaching, learning and performing - topics that she has worked with and thought about intensely for well over 60 years.

She seems awed by the sheer scope of human possibility. It is this awe, this awareness of the fundamental mystery of life, imagination and possibility that probably accounts for her youthful enthusiasm and her uninflated way of dealing with students. There is nothing pompous or authoritarian about DeLay. She does not talk down to students, like some exalted teachers of previous generations did from a position of absolute authority and knowledge (cf. Schwarz, 1983:551; Sand, 2000:59-60).

She continuously strives to be in touch with her students' world and their way of thinking. She undertakes a journey of learning with them, being as eager as they are to learn. This infatuation with possibility is contagious, infusing the atmosphere in her class with positive expectation. Contrasting her approach with Galamian's more authoritarian demeanor, Schwarz, in Great Masters of the Violin (1983:551) writes "...DeLay has an infinite capacity for understanding the students' problems without being less demanding professionally".

Perhaps surprisingly, but certainly poignantly appropriate, Dorothy DeLay claims to be proudest of those students of hers who become teachers all over the globe, carrying on

the noble calling of helping young people develop their musical talents. "I'm very proud of those people because I think it's maybe the most important thing a person can do, to encourage the next generation to do better." (quoted by Duchen, 1990:128.)

If all of this seems larger than life, it is probably a good indication of what DeLay represents: the full human gamut from earthiness -- the "female who runs with the wolves", if you will -- to the infinity of imagination where anything is possible. We have here a remarkable personality, uniquely suited to the task of nurturing people's potential for growth. From this rich mixture of common sense and imagination, or what Sternberg (1997) calls practical and creative intelligence, combined with humor and love, arise convictions about learning and teaching, strategies of influence, and patterns of communication that are precise and consistent, if not always conscious. It is a kind of knowing-in-action described by Schön as different from our usual kinds of academic knowledge, but "rigorous in its own terms " (1987:13).

CHAPTER 3
MODELING METHODOLOGY

3.1 Overview

In all areas of human endeavor people strive to emulate outstanding exemplars. We have our heroes who set the standards and serve as models and mentors from whom we learn a great deal. To excel like Tiger Woods or Itzhak Perlman or Bill Gates is the dream of many whose ambition drives them to learn from the best in their chosen field. It is, in fact, the way we learn from infancy: we watch and listen to those who have the skills we want to learn, like walking and speaking, and we copy them as best we can, continually fine-tuning our attempts.

Neuro-Linguistic Programming (NLP), a behavior technology developed in the early nineteen-seventies by mathematician and computer scientist, Richard Bandler, and linguist, John Grinder, offers distinctions and methodologies for explicitly modeling complex skills. NLP has been described as "the study of the structure of subjective experience" (Dilts, Grinder, Bandler & Delozier, 1980), since it focuses primarily on internal processes and patterns.

Early NLP scholars studied the skills, in action, of experts like hypnotherapist Milton Erickson, family therapist Virginia Satir, and Gestalt therapist Fritz Perls, and found that what was critical in making these exemplars more effective than other people in their fields were patterns of internal sensory representation and linguistic construction.

Bandler and Grinder, and their co-developers of NLP, became increasingly aware that peoples' internal worlds, out of which arises their external behavior, consist of sensory representations of external stimuli, and that such representations are both reflected in, and shaped by language. They postulated that:

- The scope of sensory stimuli in the environment surrounding us, and the very nature and limits of human neurology, necessitates filtering. In the process of filtering, stimuli get deleted, distorted and generalized by both our neurology (our sensory apparatus) and the contents of our minds (our wishes, fears, preferences, associations, beliefs, values, etc.). Thence arose the notion that we each live in a "subjective" world, different from the "objective" world.
- The way in which the filtered stimuli are converted into sensory representations in our minds determines the meaning it has for us. We turn stimuli into information by structuring it into internal sensory representations. The structure or patterning of these sensory representations determines the subjective meaning of the stimuli we have processed. Thus arose the notion that "structure" gives meaning to "content".
- Language is a symbolic expression, for communication, of our internal sensory representations of filtered stimuli, and thus functions on a different "level". This insight led to the notion of levels of representation: "deep" structure" and "surface" structure (Dilts, 1998:11).
- Language also filters incoming stimuli, and shapes sensory representations. This multiplicity of function has given rise to the notion that sensory and linguistic representational processes have a systemic and cybernetic, rather than a linear relationship to each other.

From these insights were developed categories of distinctions and methodologies for "mapping" or "modeling" the subjective structure of human excellence.

In the process of modeling various experts of influence and examining the work of Bateson (1972), Dilts (1990) realized that modeling complex skills for transfer to others requires more than descriptions of sequences of sensory and linguistic representations. He developed an expanded model of levels of experience and pointed out that in their systemic relationship certain levels have a more pervasive influence on behavior than others.

First of all, according to Dilts (1998), when modeling a skill we need to be sure of the exact context or environment where it manifests – the *where, when, and with whom* of the skill. Often, the context contains stimuli and boundaries that help shape the development and expression of skills. Depending on the purpose for modeling, it sometimes might be sufficient to merely duplicate a series of physical actions – the *what* (observable actions) of the skill. In other cases, we also might have to find out how an expert sequences sensory and linguistic distinctions – the *how* (internal strategy) of the skill. It might be that we need to discover what is important to an expert – the *why* (beliefs, values and criteria) of the skill. It could also be that what distinguishes and drives an exemplar's skill is the role she perceives herself as playing in the context of the skill's manifestation – the *who* (self-definition or identity) as it relates to the skill. And finally, we might have to discover their vision and sense of mission in relation to a larger context (system) – the *for whom or what else* (spiritual dimension) of their skill. To model any complex skill, we need to make distinctions about all these different levels of an expert's skillful experience:

- Where, when and with whom is she being skillful?
- What does she do?
- How does she do it?
- Why does she do it?
- Who is she when she does it?
- For whom or what else does she do it?

This "logical levels of experience" model constitutes the framework within which skills can now be modeled using the distinctions and methodologies of NLP. It illustrates the notion that people experience themselves and their world in a systemic way on different levels that contain different kinds of information. The more complex a skill that we wish to emulate, the more of these levels of information we need to access.

Behavior modeling involves identification, on the different levels of experience, of the essential elements of thought and action required to produce the desired response or outcome. It is the process of taking a complex event or series of events and breaking it

into small enough chunks so that it can be recapitulated in some way. "The purpose of behavior modeling is to create a pragmatic map or 'model' of that behavior which can be used to reproduce or simulate some aspect of that performance by anyone who is motivated to do so." (Dilts,1998:29.)

The fundamental presupposition of modeling is that experience has structure. Gordon (1998:2) points out that our experiences are comprised of various elements: behavior, emotions, patterns of thinking, and the beliefs or assumptions on which those patterns are based. Differences in experiences are a direct result of differences in how these elements are structured. Behaviors, feelings, thinking, believing, and how all of these elements interact with one another, combine to give rise to a person's experience at any moment. That array of content and relationships constitutes the structure of experience. The differences that distinguish someone who is adept at an ability from someone who is not, are found within these structures. "In modeling we are 'mapping' out the under-lying structure of experience that makes it possible for an exemplar to manifest his/her particular ability... Modeling, then, is the process of creating useful 'maps' (descriptions of the structure of experience) of human abilities." (Gordon, 1998:2.)

Gordon (1998) developed a modeling procedure called the Experiential Array that allows a modeler to gather information about the different elements (or "levels" in Dilts' terms) of an exemplar's experience. He points out that the usefulness of a map is largely determined by whether or nor the distinctions used to draw it are appropriate for its intended purpose. In mapping human abilities, for instance, distinctions are made about patterns of thinking (strategies), feeling (emotions), doing (external behavior) and believing (criteria equivalences and cause-effects). Most human abilities involve the simultaneous expression and interaction of these elements of experience.

However, the influence they exert on each other is not necessarily equal. While behavior affects feeling and thinking, the impact is not as great as that of feeling and thinking patterns on behavior. Similarly, beliefs have a greater impact on thinking, feeling and doing than any of the elements has on what a person believes at a moment in time.

Bandler points out that one way to think about behavior is that it is organized around beliefs: "You can think about all behavior as being mobilized by the beliefs that we have." (1985:103.) The importance we attach to whatever we decide to do stems from the beliefs we hold about it. Dilts (1990a) illustrates the pervasive influence of beliefs and values on behavior with his logical levels of experience model mentioned earlier. Since beliefs represent one of the larger frameworks for behavior, people will behave congruently with the beliefs they hold (Dilts, 1990b:12). MacDermott and O'Connor (1996:56) call beliefs our "guiding principles" and show how it can affect even our health, as illustrated in medical research by the placebo response. The importance of investigating beliefs when doing a modeling project is confirmed by James and Woodsmall when they state that "one of the more important elements in modeling...is to find a person's beliefs about the particular behavior we are trying to model" (1988:8).

3.2 The Experiential Array

The Experiential Array modeling methodology designed by Gordon (1998) specifies four areas, related to a skill, that need to be examined:

- Beliefs
- Strategy
- Emotions
- External behavior

To map the structure of experience underlying an ability, Gordon suggests that a number of distinctions be made within each of the elements of experience (1998:3-7). The array of elements of experience includes:

- **The Ability:** "an ability is anything a human being is capable of doing and/or experiencing."

- **The Belief Template:** The belief template is designed to gather information about a subject's *criteria* (or criterion) in the context where his/her skill manifests, the

subject's belief/s about what makes it possible (*enabling cause-effects*) to satisfy the criteria , beliefs about what is important about the criteria (*motivating cause-effects*), and other supporting beliefs that are crucial to the skill.

- Criteria: "Our beliefs about what is important in a situation."
- Criterial Equivalences (definitions of criteria): "A description of the kind of experience tied to (labeled by) a criterion."
- Cause-Effects:
  - Enabling cause-effects: beliefs about what makes things happen. Beliefs about what behaviors or conditions make it possible to satisfy a criterion.
  - Motivating cause-effects: "A deeper level of values or criteria that can be attained through the satisfaction of the criterion." (In a sense, the pay-off for achieving the criterion)

- **Supporting Beliefs:** In the course of going through the modeling process the modeler may become aware of supporting beliefs that play a contributing roll to the exemplar's skill.

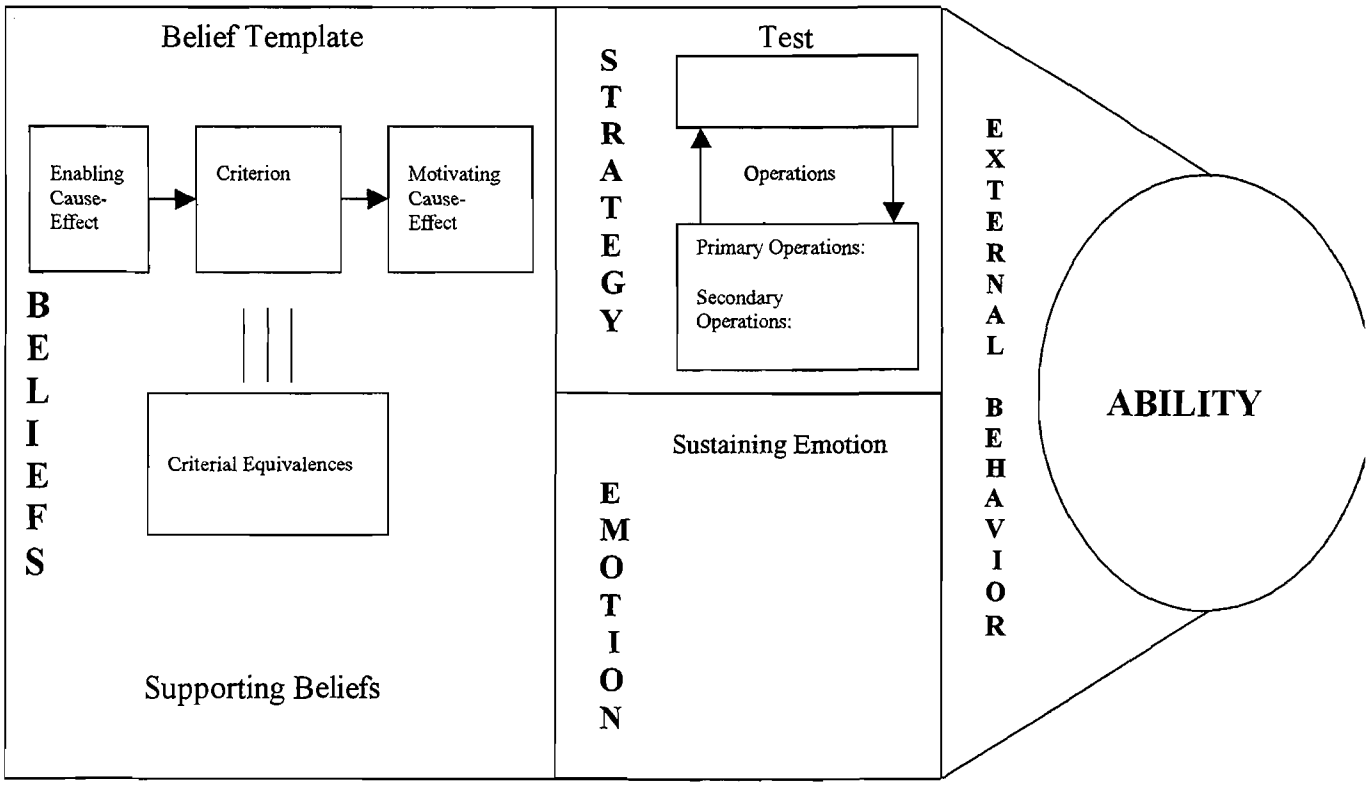
- **The strategy:** It is defined as the steps – in thinking and/or actions – that a person follows in order to achieve their criterion. A strategy usually involves:
  - a *test*: a comparison between the current situation (present state) and the desired outcome (desired state)
  - *primary operations*: the sequence of thoughts and/or actions that the person usually employs to satisfy his/her criterion
  - *secondary operations*: what the person does when the criterion
    - is not sufficiently satisfied
    - is not satisfied at all
    - seems impossible to satisfy

- **Emotions:** Particular background emotion/s supportive of the ability.

- **External Behavior:** Observable actions (body movements and/or verbalizations) that the subject engages in while manifesting the skill/s being modeled.

- **Contributing Factors:** Factors, outside of the array, like other abilities, preparations, prerequisites, conditions or considerations on which the ability may depend.

Figure 1: The Experiential Array (Gordon, 1998:15)



3.3 Modeling questions

Specific questions have been designed for eliciting information about each element of experience in the array.

Beliefs (the belief template)

- **Criterion.** "When you are [ability, for example, 'teaching'], what is important to you?" (The answer is the person's criterion or criteria, for example, 'attention').
- **Definition.** "What do you mean by ['attention']?"
- **Enabling Cause-Effect.** "What leads to or makes it possible for there to be ['attention'] when you are ['teaching']?"
- **Motivating Cause-Effect.** "What is important about having ['attention'] when you are ['teaching']?"
- **Supporting beliefs.** To gather information about supporting beliefs, the subject's general conversation relating to his/her skill and to its context is explored. Beliefs, generally, are statements about identity, meaning and causal relationships (Dilts, 1990). The modeler therefore listens for statements that indicate beliefs about what phenomena "are", what causes them, and what they mean.

Strategy

- **Test.** "How do you know when you have ['attention'] when you are ['teaching']?"
- **Primary Operation.** "What do you normally do to get ['attention'] when you are ['teaching']?"
- **Secondary Operations:**
    - When the criterion is not sufficiently satisfied. "When you don't get sufficient ['attention'] when you are ['teaching'], what do you do then?"
    - When the criterion is not at all satisfied. "When you are not at all getting ['attention'] when you are ['teaching'], what do you do then?"

- When it appears that it is not possible to satisfy the criterion. "When it is not possible to have ['attention'] when you are ['teaching'], what do you do then?"

Emotion

- **Sustaining Emotion.** "What emotion/s do you normally experience as a background while having ['attention'] when you are ['teaching']?"

External Behavior

- "What actions or behaviors that are physically observable do you engage in to get ['attention'] when you are ['teaching']?" (Note: These actions are observable while the exemplar is manifesting the skill, whether or not they can describe it in words.)

CHAPTER 4
MODELING DELAY'S TEACHING STRATEGY

The "experiential array" modeling methodology explained in the previous chapter is applied here to identify the elements of experience underlying DeLay's teaching ability. She was observed in 1993, 1999, 2000 while teaching in her studio, and asked specific questions to elicit the elements of experience underlying her teaching strategy. In addition, literature about DeLay and her students was researched for finding corroborating information.

4.1 The Belief Template

As stated in the previous chapter, the belief template is designed to gather information about a subject's *criterion* (or criteria) in the context where his/her skill manifests, the subject's belief/s about what makes it possible (*enabling cause-effects*) to satisfy the criteria , beliefs about what is important about the criteria (*motivating cause-effects*), and other supporting beliefs that are crucial to the skill.

4.1.1 Criterion

Criteria are our beliefs about what is important in a situation.

Koornhof: "I asked you the other day what's important to you when you're teaching. If I were to ask you the same thing today, what would you reply?"

DeLay: "What's *important* to me, is to be able to see the kids standing up there, and feeling all of a sudden feeling competent and pleased that they can do something they couldn't do before."[1]

[1] To avoid an over-abundance of references in the text, the reader is herewith informed that all quotes and observations of DeLay that are without bibliographical reference were

Koornhof: "Is that, is that all of it?"

DeLay: "Hmmm, it's nice if they go out and play a concert and people like it. Not as nice though as, as watching them really get such pleasure out of having learned something they didn't think they could do... You know, because that gives you such tremendous power. If you can open up a person's talent, which has been tied up by unfortunate experiences, painful experiences, and if you can open it, so that they can use it - *that* is power... I think... it's a *powerful* thing to do... I don't mean power in the sense of personal advantage. What I mean is... It's an *incredible* thing to do - it's like discovering a powerful drug. It's like discovering a cure for uh, for polio... if you can do that..."

4.1.2 Enabling cause-effect

Enabling cause-effects: beliefs about what makes things happen. Beliefs about what behaviors or conditions make it possible to satisfy a criterion.

Koornhof: "What do you think makes it possible to do that?"

DeLay: "You have to prove it to them, that they can do it. And they find themselves doing it, and they go 'ah, great!', you know?, but it takes all kinds of maneuvering..."

Koornhof: "I was just going to ask what do you think makes it possible to prove it to them?"

DeLay: "Oh, in each case it is something different. I told you about Kawasaki and speed. That's one of them."

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recorded during visits to her studio. Italics are used to indicate emphases placed by the speaker.

Koornhof: "Can you think of another kind of example?"

DeLay: "Oh, well, it happened today with little, uhm, Christiana... when I showed her to just take a little extra time before she took the top note, and she of course got it. And she had that 'pleased' look, you know: 'Oh!', you know, 'Oh, I'm great!'... I just, it's just the third time I've seen her, and she's still kind of scared, but we'll get her over that."

4.1.3 Motivating cause-effect

Motivating cause-effects are found on a deeper level of values or criteria that can be attained through the satisfaction of the criterion - in a sense, the pay-off for achieving the criterion.

Koornhof: "What is important about having that kind of power to have the kids develop, to be able to do something that they weren't before...What's important to you about that?"

DeLay: "Well, I have this mental picture of how we struggled and evolved, and... come up from... all through the stages of fish, and reptiles, and animals, and becoming more and more specialized so we can do more and more things, and... I *love* the idea that development's going on, and - you see, you start to imagine all *kinds* of things, that people could learn to do that'd be absolutely *fabulous* - it would read like a really bad science fiction book. I love science fiction, and, uh, you know, the things that people can do are so exciting... Such exciting things... I would be proud of that... "

Analysis

In terms of Gordon's Experiential Array method of modeling a skill (Gordon, 1998), DeLay's primary *criterion* when teaching is the feelings of competence and pleasure that pupils experience when they have learned to do something that they weren't able to do before. Broadly, this is what she's trying to achieve in the teaching situation.

"You have to prove to them that they can do it" is what she believes makes it possible to achieve the criterion – the *enabling cause-effect* in Gordon's terms. "It gives you such tremendous power...[to] open up a person's talent...", is what motivates her to achieve the criterion – the *motivating cause-effect* in Gordon's model.

In conversation with Sand (1988:47), DeLay stated her criterion in words very similar to those quoted above: "What *fascinates* me... is watching somebody come in here and stand in front of that music stand and suddenly discover that he can do something that he didn't think he could do. It is wonderful to watch the pleasure and the surprise and the upswing of mood. There are so many ways this can be done. It's very amorphous. It's hard to get hold of. But that's what I'd like to research."

Epstein (1987:73) also reports DeLay as stating: "To watch someone become able to do something he couldn't do before – well, that is such a fabulous thing. People come in with ideas about themselves – I'm this kind of person, I can never do that – and they're unhappy with their self-concept. If you find a way to bypass that kind of thinking, they find they're better than they thought they were. I've always felt we only use a small part of ourselves."

When talking about the pleasure that children experience when they learn successfully, she said, "The first thing they have to do is learn that they're *very* capable." In other words, she seems to believe that enabling students to have successful learning experiences is what makes it possible to "see the kids standing up there, and feeling all of a sudden feeling competent and pleased that they can do something they couldn't do before."

An example of the importance she attaches to students having such positive feelings when learning is related by DeLay in an article she wrote for The Instrumentalist (1989:56):

> Masao [Kawasaki] asked if I remembered the time he brought me Wieniawski's Scherzo Tarantella to work on. I remembered. I had asked what tempo he would like to take, and he said he thought the Perlman recording was just right, but of course he couldn't play that fast. I said he could. Dolefully, he insisted he could not. Then, as he played on, making sure he would not notice, I set the metronome higher and higher. He played faster and faster, beautifully, without missing a note. You never saw such astounded delight when I showed him the setting on the metronome. Now, years later, at that birthday party, he asked if I remembered. Yes, I remembered. You don't forget those moments.

4.1.4 Supporting beliefs

Since beliefs have a determining influence on behavior, as noted earlier, it should be stressed that DeLay's beliefs about learning and teaching form the framework within which her teaching strategy and communication skills manifest. Her skills and behavior in the teaching context are organized around her beliefs. Without such beliefs it would be impossible to successfully emulate her teaching strategy and communication skills.

During lessons and in conversations about her teaching DeLay repeatedly makes the following statements:

"People can learn almost anything."

"People are capable of doing so much more than they are."

"You can teach anything if you can figure out how people learn it."

"Teaching is helping people learn."

"Learning is becoming more aware."

"People learn best when they feel successful at it."

"People learn best when they're having fun."

"Children need to be loved."

"There always is a right approach -- it's just a matter of finding it."

"Children become what you tell them they are."

"Everyone has talent; the types differ."

"People deserve respect (because they have value; and they put in effort)."

"Learning is fun."

"I want them to think about their options."

"Our hope for the future lies in our gifted children."

"Imagination precedes achievement."

"The ear develops in leaps ahead of technique."

"Children who are good at sequencing (numbers, events, etc,) develop fast."

"Given enough time and ways of measurement people can learn to do anything."

"People deserve to be helped."

"Students are growing situations."

"It is necessary to give students all the support I possibly can."

These statements are expressions of DeLay's deeply held beliefs about teaching and learning. Her beliefs could be illustrated under the following headings:

a. Limitless possibilities
b. Respect
c. Fun
d. Measurement
e. Options/choice
f. Experimentation
g. Independent thinking
h. Internal experience
i. support

a. Limitless possibilities

"People can learn almost anything."

"People are capable of doing so much more than they are."

"You can teach anything if you can figure out how people learn it."

"Given enough time and ways of measurement people can learn to do anything."

"Everyone has talent; the types differ."

"There always is a right approach -- it's just a matter of finding it."

DeLay's husband, the writer Edward Newhouse (quoted by Sand, 1988:47), captured the essence of DeLay's teaching when he said: "She gives her students a limitless sense of the possible". About the issue of the limitlessness of learning possibilities, DeLay refers with mock exasperation to the debate she's been having for many years with her husband. "I've always believed that I can do anything," she says. "Before we were married he said 'Do you really think you can make a sculpture like Michael Angelo could?!'". She drives her conviction home by saying, "And you know what I say to him? I tell him 'yes, I could! I could learn to sculpt like Michael Angelo, given enough time!'"

Repeatedly, in conversations, DeLay spontaneously makes statements like, "People are capable of doing so much more than they are", and, "I really believe anything is possible!" In a conversation in her studio about learning she said with great conviction "I think people are capable of doing almost *anything*! I even think that they will learn to do telepathy!" She looked at a carton of milk on the table in front of her, and with childlike enthusiasm continued "...to move this by just thinking about it... I'd like to be able to move this by just thinking about it!"

Sand (2000:70), noting DeLay's empowering beliefs about learning, quotes the following statement from her: "Is musical sensitivity innate? I think it is too easy for a teacher to say, 'Oh, this child wasn't born with it, so I won't waste my time.' Too many teachers hide their own lack of ability behind that statement. I don't like that statement. It gets my back up. I don't want it to be true that a quality like that is inherited, because you can't do anything about it. I want it to be true that we can all learn anything."

In another interview with Sand (1988:28), DeLay expressed her belief about the importance of heredity versus environment: "I found myself interested in how certain talents can be developed, because I've always had the desire to believe that environment is more important than heredity. I would say to myself that if someone doesn't play in

tune, it's because he hasn't learned how, and I would experiment with all kinds of things."

DeLay expresses her belief in limitless possibility where-ever she is involved, whether at a panel discussion as a member of the jury at the Hannover Violin Competition, where she said (quoted by Chadwick, 95:251) "Everyone has talent, but there are different types of it", or in a meeting with senior students who serve as coaches in her "scales" classes for pre-college pupils, whom she advised: "Do not consider age when evaluating students' playing! Ask yourself, 'Is this as good as Oistrakh? If not, why not?!' Because they can do it! It's just that no one has asked them to do it!"

DeLay often tells students about instances of learning achievement which she regards as indications of what everyone is capable of. When a student mentioned a fellow student who had studied with Christian Altenberger, a former student of DeLay, she took the opportunity to tell the student about Altenberger's amazing ability to learn. Apparently he had dyslexia as a child. His father then took him to someone who had a special way of teaching dyslexics how to learn. Altenberger ended up having the ability to learn the full score of the whole Alban Berg violin concerto, away from the violin, line for line, working out bowings and fingerings in his imagination, so that he could then play the whole work through from memory, the first time he actually played it on the violin.

When a student was asked by Sand (2000:114) how DeLay reacts to a student who does not work, he replied, "Well, she teaches each student differently. She usually tries to talk to them and wants them to think of her as a friend. I have seen situations where a student is not working and then he will have a long talk with Miss Delay, and he really changes his attitude. She makes you believe you can do it, and that is what we all want to believe."

Mark Peskanov, famous violin virtuoso, quoted by Wen (1984:518), said of DeLay's belief in students' capabilities: "She is remarkably encouraging and really believes everyone can reach their full potential." Oksenhorn (2000:1) in The Aspen Times in an

article *The gift of greatness* states that "DeLay believes, as an absolute, that each of her students, from the most gifted to the least developed, has the potential for brilliance."

Making her belief in people's unlimited capacity to learn clear, DeLay said in a discussion about intonation, "Galamian said you can't teach intonation. It's not true – of course you can teach intonation. You can teach *anything* if you can figure out how do people learn it. What is teaching? It's helping somebody learn something. Right?"

b. Respect

"People deserve respect (because they have value; and they put in effort)."

The following conversation illustrates the supreme value DeLay places on respect in the context of teaching.

Koornhof: "What's the *most* important advice that you can give someone who wanted to learn how to teach the violin?"

DeLay: "*Never*, try to teach a student you don't respect. And *never, ever,* do anything to make him think you don't respect him."

Koornhof: "What do you mean by respect?"

DeLay: "You believe that person has value... [long pause]...You know, I have a lot of friends who're - not a lot, but a few friends who are Scientologists and I really think they're being taken for all their money - but, uhm, they fascinate me, because they believe all kinds of things that are, sort of, uh, out there, sort of, uh, bad science fiction kind of stuff, you know. But among other things they believe in, they believe in... re-incarnation, ...which is, I would love to have happen, I'd be very pleased if I suddenly find out I've got another time around, but... uhm... I'd started thinking - this is what I do with crazy ideas, you see, like this - that's in my mind probably not a sensible idea, but,

so I say, 'but what if it were true?' So try to imagine what it would be like if it really was true. Now you look at all the people around you, and you see that they've been coming back, life after life after life, working on things, working on things, 'cause I *really* believe everybody does the best you can. You know, he may be doing something you think is spectacularly stupid, but it's what he thinks is the best. So, uhm, here are these people going around and around and around, and here's this little kid standing in front of you with twenty lives, forty lives, a hundred lives? - just the fact of that means that his effort now is important, and if it doesn't exist - reincarnation - doesn't exist, *still* his effort is important. I, I don't know how that all fits together, 'cause it doesn't really logically fit together in my mind, but it's *there*... [long pause]... And these little kids come in and they're able to do the things they can do. I just *can't* believe they could've learned it in one life-time. And I think 'let's see now, who died just before [laughs] they were born [laughs]? Who have I got in the studio now?'"

Jepson (1988:112) quotes DeLay as saying "One big rule, is never, ever to make a student feel small or incompetent or untalented. The minute you do that, you stop the ability to learn." Referring to DeLay's legendary tact, Itzhak Perlman, a former student, is quoted as saying "most instructors will tell you you're out of tune. She says, 'well, sugarplum, what is your concept of F-sharp?'" (Jepson, 1988:110.)

"It's very important", DeLay says, "that students don't think you regard yourself as superior to them". When asked how she defines herself in the context of teaching, she said "I'm a helper". She went on to express her intense disapproval of the kind of authoritarian teaching that she demonstrated as "No, no! You're wrong! Do this! Do that!"

"Never, ever", she admonishes, "make a student feel anxious!", arguing that, "When people feel anxious, they cannot learn". In contemplative mood, she softly says, "People need to be loved", recognizing a profound truth, "When they feel loved, they are free to do other things..."

c. Fun

"People learn best when they're having fun."
"Learning is fun."

Very often in lessons DeLay exclaims with genuine enthusiasm that a performance or a learning experience -- either a pupil's or her own – was "fun!". She congruently states that, "For me what's fun is seeing a child do something they weren't able to do before, and for me to be learning something new. That's fun!"

She recalls with indelible vividness the pleasure and excitement -- the glee -- she observed in her own children when they discovered, sometimes quite by accident, that they had learned something new as infants and toddlers:

> I remember when Alison, my daughter, was... [laughs]... she was pleased, she was about, I don't know, wasn't 2 years old yet, but she could stand up, when she was pleased she would go with her feet like this, you know, she was standing by the crib and her feet are going like this, and she's smiling 'oh-oh, the world is lovely!'... and, uh, I remember [laughing] coming into her room once, she's standing at the end of the crib - her diaper was loose, and she had deposited quite a lot in the diaper, and she had decided it would be fun to throw it [laughs] - she hurled it at me, splat! splat! And I came through the door, and she saw my face, and she started reaching like mad to throw it all before I could stop her [laughs]. I'll never forget that. And then she started to learn, she started to learn words, and every time she'd say a word, somebody'd say a word there, and she'd say the same word, and everybody would smile and laugh, and she'd jump, she'd jump 'ahaa!-ahaa!' And she would start making sentences. And she just broke us up. 'Cause she'd say, instead of 'put the glass on the table', she'd say 'put the glass on the dung-dunk', she would say, and jump up and down, and of course when she jumped up and down everybody cracked up with laughter. And *that's the way* children learn. I'll never forget watching Jeffrey learn to walk. He's doing this

thing -- he's standing, holding on to something, and uh, he'd let go of it, and he'd start to lean, and he didn't have anything to hold onto, he'd start to lean, like Groucho Marx, [laughs], and all of a sudden he went across the room, like Groucho Marx, he's leaning, he's going like this, to keep from falling. He got to the other side of the room, and he grabbed hold of a chair, and he looked around, and the *startled pleasure* on his face was *incredible* - 'I walked!' - So, he wanted to do it again, so we put him back here, and he held on for a while, and he let go, and he's doing this [demonstrating], and he's waiting - something is supposed to happen - but he didn't lean [laughs]... he was *furious*, he starts to shriek [laughs] ... [long pause]... I love to watch people learn - the *pleasure* that they get from it ...

The violinist Marc Peskanov, who had studied with DeLay, confirms how effortless learning can seem when having fun in DeLay's class. Describing his previous teacher Boris Brant's astonishment at DeLay's success in correcting his bow grip, Peskanov (quoted by Sand 1990:26) says, "I told him I don't know how it happened... we were just playing - just having fun."

In an article in Strad magazine, Sand (1992:1061) reports that famous child prodigy Sarah Chang's father, himself a violinist, noted that besides giving Sarah bowing techniques, fingering techniques and musical ideas, DeLay taught her how to enjoy the music – to feel very good. "Sarah is always happy after a lesson," he said. Deitch (1980:19) in an article in The New York Times about DeLay notes that her students report, "She wants to see and hear joy in the music, rather than cold perfection and passivity."

It seems that DeLay has always enjoyed teaching. Talking to The Aspen Times (Oksenhorn: 2000:1) about her initial teaching experiences, she said, "I was the new kid on the block.....I got all the worst, least-developed students, hunting desperately for the notes. We had such a good time. It was just fun. We laughed, laughed, laughed. I loved it right away. And it's always been like that." When I asked her about the joyful

atmosphere she fosters in her studio, she simply said, "People learn best when they're having fun."

In 1988, when asked by Jepson (1988:112) whether she's thinking of retirement, DeLay said, "Oh, no, I'm having too much fun." When asked the same thing in 2000 by an accompanist in her class, the reply was, "No, not happily. I'm having such a good time, I see no reason to stop."

d. Measurement

"Given enough time and ways of measurement people can learn to do anything."
"Learning is becoming more aware."

In the following conversation about her teaching skills, DeLay expresses the fundamental importance of measurement for increasing pupils' awareness:

Koornhof: "Given your considerable record of success as an extraordinarily skillful teacher, what exactly would you say is it you're able to do?"

DeLay: "I honest to God don't know."

Koornhof: "If you look at your success, if you look at the pupils that you really helped to develop *very* well ...?"

DeLay: [softly] "I really don't know. I think I was just working and they would have done it anyway... or... [laughs] you know?... or... one thing I *know* I can do better than other people, and that is that I *know* that if you want to communicate something about sound to somebody else, you better measure it. And I learned that from... Da Vinci. I learned that from the Da Vinci story that I told you.

Koornhof: "About measurement... is that a key concept for you?"

DeLay: "Oh, yeah."

Koornhof: "Is measuring whatever you're working on... "

DeLay: "It's the only thing that they [students] can understand... "

Referring to the same story mentioned above about Leonardo da Vinci measuring the proportions of a famous Greek sculpture in order do learn from it, DeLay said to Stockholm (1975:42), "You can seek a way to recreate a masterpiece - in sculpture or in music - if only you can find some means to measure it precisely!" She went on to say that, "From there you can go further in two directions: being more specific about what musical timbre to think of as you play and more conscious of what to do physically to produce it."

Duchen (1990:128) quotes DeLay as saying "The whole of sound can be measured. If it can be measured, it can be clearly dealt with and spoken about - we can speak more easily in terms of measurement than in terms of psychological concepts. And we can build a bridge in our minds between the musical message and the actual sound."

DeLay complains about teachers who use "vague" language. Instead of talking about a "heavenly" sound, for example, she prefers specific words about measurable factors like bow speed, weight, sounding point (distance from the bridge of contact with string), size of contact area (amount of bow hair touching the string). By using such "measurement" words the student learns what to be aware of, and what should happen mechanically on the violin to obtain a desired sound. A "bridge between the musical message and the actual sound" is thus built.

DeLay would often say to a student, "On a scale of one to ten, how much finger pressure did you use?" or, "How loud was the sound?" Or she might ask the student to compare events sequentially: "Was this louder, or softer than the previous time?" This way of

focusing awareness and making distinctions is similar to the strategies proposed by Timothy Gallwey (1974) in his Inner Game approach, recommended by DeLay to almost all her students. On one occasion she was heard saying that Gallwey's Inner Game of Tennis was probably the best book on violin playing she has ever read.

Then there are her famous tempo charts. She would instruct students to go listen to all the recordings they can find of a piece that they are working on, metronome in hand, and make a chart indicating each player's exact tempi, including all the changes, from beginning to end. This both focuses the students awareness through the exercise of measuring, and provides an overall view of what DeLay calls the "channel of style", meaning the boundaries of what seems to be acceptable in the musical market place.

e. Options/choice

"I want them to think about their options."

The following conversation with DeLay shows the emphasis she places on options:

Koornhof: "You very often end [suggestions to students at lessons] by saying 'that's one option you have'... "

DeLay: "I try always to do that... Because I don't want them to say, to feel they have to do this... I want them to think about their *options*."

Talking about a lesson during which she and a student successfully explored several phrasing options, DeLay said: "I told her those were options - she could use all of them, or two of them, or whatever she wanted to use - combine the ideas - so, ... I'm feeling pretty good today, because I think that was a very successful lesson... because not only did it show her what her possibilities were for that phrase, but it also told her that she is free to make dynamics, and she is free... to make some rhythmical alterations."

Sand (2000:103) witnessed the following statement of DeLay to a group of students, delivered in mock pompous tones: "I'm going to make a statement... There is no correct way to do something. There are many ways, and that includes your fingerings, your hand position, and everything else."

Gholson (1994:186-187) transcribed the following statement DeLay made to students at a class:

> Now, I was just thinking as you were playing. Some of you have worked with coaches who will say this is the way to do it. [Gestures for emphasis] And, the reason they say that is because they had to struggle so hard to find a way that worked. When they finally did they thought, 'Oh my god, this is it', you know? And so, they are telling you in all good faith - this is the way to do it. Well, there are thousands of ways to do it. For example, now some people will say, 'playing this early music is wonderful. It's like being in charge of a great museum so the people can come in and see the coats of armour that were worn during the time of King Arthur or they can come in and see the burial things of the Egyptians.' Well, that's one way of looking at music... I think you have to figure how we use music and why music is important to us. Why is it important for people to come and listen to you play Bach? What do they get from listening to Bach? And, whatever it is that they get from that Bach is what you want to see to it that they have, because it's important to them. And, it has to do with sheer beauty in my mind. Something that's beautiful. This does not mean that it has to be traditional, that does not mean that it has to be historic, that does not mean anything at all... Now, the things I am suggesting to you, I am suggesting bluntly. I will tell you this because it's what's currently accepted today, not what was accepted fifty years ago, but what is currently accepted today. But, you're perfectly free to break it open, okay. That's why I said to you last time, try to get your rhythm straight because today, because people are more influenced by history, most people will play their Bach with a rhythmic flow like this [snaps her fingers in rhythm] – rather than anything bent. But, at a later time if you decide to do something, you will.

f. Experimentation

"There always is a right approach -- it's just a matter of finding it."

Schön (1987), in his study of how professionals think in action, describes and analyses a lesson he witnessed DeLay giving at the Aspen Music School. [Not wanting to reveal her identity, he refers to DeLay as a "famous teacher of violin... whom I shall call Rosemary..." The style of teaching, and the utterances he quotes, are unmistakably DeLay's, and she has confirmed that Schön did indeed visit her studio in Aspen]

He came to the following conclusion:

> It is crucial to Rosemary's way of coaching... that the student imagine more than one way of producing the qualities she desires. Implicitly, Rosemary communicates the idea that technique is not a matter of following rules but of trying out and evaluating alternative methods of production... In this process, Rosemary demonstrates a way of decomposing the larger performance into unitary problems, each of which can be solved by experiment. She treats the design of a performance as a series of experiments in the production of desired musical effects... (Schön, 1987:213).

Referring to the basics of sound production, specifically weight, sounding point, bow speed, and the amount of bow hair that touches the string, DeLay often invites students to try out different possibilities until they find the kind of sound that appeals to them, and that manifests the musical concept they've decided on. By encouraging experimentation with such elements, and enhancing student's awareness of differences, DeLay teaches how to "build a bridge between the musical message and the actual sound".

Stockholm (1975:42) describes DeLay's style of teaching in this way: "A casual answer to a student's technical inquiry will not do for DeLay. She carries any investigation to an extreme. She and the student will experiment with a dozen different actions with the

hand, arm, bow, until they find what is both a comfortable and possible solution to the problem."

g. Independent thinking

"I try to teach the students to think for themselves, and to trust their own thinking."
"I want them to think about their options."

DeLay's students, almost without exception, report that she allows them to make their own choices, based on systematic exploration of options. Robert McDuffy, a former student of Delay and now a well-respected soloist, is quoted by Modi (1990:902), while he was still studying with her, as saying about her teaching: "She is very, very open-minded, and that's why her students - the ones who are playing today and are successful - have their own imagination. No two students play the same because she lets us grow on our own terms. That's the sign of a great teacher... Basically she will let you develop your own personality and she is not restrictive or dogmatic." DeLay knows that true artistry can only stem from strong individual identity.

Itzhak Perlman, DeLay's most famous student, quoted by Jepson (1988:112), had this to say about DeLay's insistence on making students think for themselves: "Instead of 'I'll tell you what to do'... she asks, 'What do you think?' She forces you to participate."

Duchen (1990:128) quotes DeLay as saying: "I try to teach the students to think for themselves, and to trust their own thinking. After all, all that any of us has is the contents of our minds. We don't have anything else. So first of all we have to learn to use it and to trust it." Writes Oksenhorn (2000:2) in The Aspen Times: "Delay is determined to create an environment that fosters that brilliance. And for her, that environment is one of patience and respect, knowing what to say and how and when to say it. A fierce proponent of allowing her students to find ways to teach themselves - teaching students to think for themselves is her own first principle - Delay suggests rather than insists, questions instead of declaring."

Sand (2000:66) notes that "DeLay may stand a problem on its head, turn it inside out, break it into tiny bits, and lay out ten different possibilities, but the final choice of a solution is left to the student. 'Do it my way' or 'Do it this way' are simply not in DeLay's lexicon. She is a committed individualist, and rather than imposing her own ideas, she insists, gently, cheerfully, but relentlessly, on making her students think for themselves."

Sand (2000) also notes that DeLay punctuates lessons with questions to stimulate her students to think: "What do you think Beethoven was trying to say in this passage? Can you see a way to make a better transition from this theme to the next? Why don't you experiment a bit with the bowings and see what you can come up with to give this section more vitality? Do you think the phrase would sound better if you take more time with the down-bow? (p.66)... What about the character of the chord? You can accent the top, you can accent the bottom, you can play it quickly or slowly... You're going to have to figure out what kind of chord you want here. What about the character of the whole phrase?"" (p.173-174.)

The following interaction with a student, after he had played the Tchaikovsky violin concerto for her, illustrates how DeLay let's students decide for themselves:

Pupil: "Do you think it was too fast in general?"

DeLay: "Do you think it was too fast?"

Pupil: "Yes."

DeLay: "Play it slower. It'll make you feel good" [smiling, pleased]

Another student, who played the Dvorak concerto absolutely beautifully at a lesson for the first time, received a blown kiss from DeLay, and this response to his query

concerning an interpretative matter: "It's your baby, take it home and decide [with a pleased smile]."

Helping a student to give shape to a section in a concerto, DeLay asked the following questions:

> Let me ask you, what shape do you want with this material at [mentions a particular place in the score]?...What is the high-point of that section?... Now, the next one, what is the shape gonna be?.....well, that might work, if the previous section was well-built.

DeLay's students universally attest to her insistence on having them think for themselves. Marc Peskanov is quoted (Sand, 1990:25) as saying: "She allowed me to do what I wanted to – the most important thing at that time. She knows how to bring out whatever is within the person. That's what makes a great teacher - to teach you how to teach yourself." Nadja Salerno-Sonnenberg, another former pupil, and somewhat controversial soloist, (as quoted by Wen, 1984:518) is of the same opinion: "What is so special about Miss DeLay's teaching is her way of making a student feel that he is figuring out a resolution to a problem himself. Consequently a student learns to listen and ultimately becomes his own teacher." Anne Akiko Meyers, now a famous soloist, comparing DeLay to her previous teachers, said to Connoly (1993:461): "Dorothy DeLay was completely different in that she taught me to teach myself."

In an interview published in Strings magazine (Eisler, 1995:47), DeLay was asked about her students forming independent judgments, to which she responded: "I try to encourage it here. I have classes where the students play for each other, and after each performance, I ask all the listeners how they would develop the piece further after getting it to that stage. I do this even with the very young ones."

This last statement of DeLay about letting even the very young ones decide for themselves, is borne out by a statement DeLay made to eleven-year old Sarah Chang, quoted in Strad magazine by Sand (1992:1061). The statement followed Chang's report

about the differences between the recordings of the Sibelius violin concerto of Oistrakh and Mintz that she had listened to, and her emulation of Oistrakh's: "You don't have to do everything Oistrakh did unless you think it's good."

In his study of the coaching patterns of expert practitioners in different fields, quoted earlier, Schön (1987:180-181) notes the similarities between DeLay's and architectural studio master Dani's approach:

> In both cases, the coaches made it legitimate for the student to like or dislike something, and in both, they invited the student to reflect on the qualities liked or disliked. Then these descriptions were taken as the materials of a problem: how to produce what was liked? Coach and student stood side by side before the same problem. The coach suggested ways of producing the intended qualities, inviting the student to join in a process of experimentation, teaching by demonstration the idea of practice as experiment. And the relationship constructed was not of performer and critic but of partners in inquiry.

Schwarz (1983:553), in his book Great Masters of the Violin, comes to a similar conclusion about DeLay's teaching: "Part of DeLay's success with her students is psychological: there is a give-and-take relationship; she does not impose her will, but makes the student feel that he participates in the decision-making process."

DeLay (1989:14) herself wrote:

> You give the student choices. You ask him to listen to traditional as well as historical Bach. He may ask to know which interpretation is right and which is wrong. You explain that Bach was rediscovered in the Romantic period and that romantic was the approach favored by Joachim and Casals. You ask him to listen to some stickler for historical accuracy as the fellow arpeggiates the Chaconne - an outrage, but 'correct'. Which is right? the student will ask. The answer, as any psychiatrist will tell you, is "What do you think?"

Of course, DeLay does not promote a laissez faire attitude to personal choice that disregards violinistic or musical consequences. She indicated that she does two things to ensure that student's choices are informed, and do not cause them professional embarrassment:

- she enlarges their range of available options, and
- she makes them aware of the possible consequences of their choices

In such a way she helps a student to achieve a balance between what she calls the "channel of style" - the boundaries of what is currently acceptable in the professional world - and the student's personal "style". I have heard her say that an artist must be thoroughly acquainted with and versed in the prevailing norms of style, before she can attempt, if she wishes, to shift the boundaries.

h. Internal experience

"Children become what you tell them they are."
"People learn best when they feel successful at it."
"Imagination precedes achievement."
"The ear develops in leaps ahead of technique."

DeLay believes that a teacher should have a constructive engagement with the student's internal world – his subjective experience of himself and the world. She acquaints herself thoroughly with the student's thoughts and feelings, beliefs, values and goals, respects his integrity and tries to determine the best, most "ecological" ways of stimulating development.

She gathers information about a student's experience on both verbal and non-verbal levels:

- she considers the students' cultural background and the influence it might have on their perceptions and reactions

- she asks many questions about the students' ongoing experience – questions that illuminate their beliefs, values, preferences, goals and motivations
- she is acutely aware of non-verbal responses
- she imagines herself to be the student, to experience what it is like to think their thoughts, have their emotions and feel what their bodies feel while playing the violin

Considering cultural influence

The following conversation that DeLay had with Gholson (1994:193-194) illustrates both her awareness and utilization of cultural factors that might influence a student's experience, and her sensitivity to non-verbal responses.

Delay: "The reason I did that is primarily cultural. Because the student comes from X. And I have a strong feeling with student 103 that the student thinks (he/she) is right. I'm not sure why the student feels (she/he) has to be right, but could be because the student feels defensive about being X and the student was taught in X, that Xs are always right about music and they know more than anybody else whatever it is."

Researcher: "Do you get that from the student's language, or the student's... "

Delay: "From the student's face when I talk to the student. There's no pleasure in receiving a thought from somebody else. You know? And there's this desire to resist there. And all I know about the student – I don't know as much about the student as I do (some of the other students). So, well I'm thinking well, what would somebody who grew up in a rigid, old culture like the X culture most want? I mean the culture is just so stiff by this time. So I'm thinking, freedom."

Researcher: "Do you think that the student understands that (her/himself)?"

Delay: "The only way the student is going to understand it - no - consciously no. The only way the student's going to understand it is if the student has somebody who is in authority stand up in front of (him/her) and say, "You are free to choose." Now, in doing that, I'm running the risk of loosing the student's respect. Okay? But, it is worth it."

When asked whether she thought that there might be a transference between teacher and student similar to what transpires in the psycho-analytic situation between therapist and patient, her reply (quoted by Frohman, 1994:88) confirms her sensitivity to the cultural backgrounds of her students: "I think it depends on the family background, and even more on the culture the students come from. It exists much less in the families of American children, but certainly in the Asian families, children learn to have tremendous respect, almost veneration, for the teacher."

Asking questions

She gathers precise information about a student's subjective experience, by asking very specific questions - questions that elicit sensory-based information - and by being acutely aware of a student's non-verbal responses. These examples were randomly selected from a large selection of similar questions, recorded over a two-week period in 2000 while observing her lessons:

"What does it feel like to you?"

"What do you hear?"

"How much bow do you have left at the end of that stroke?"

"How much pressure did you use, on a scale of one to ten?"

"What's the difference between how you did it previously and now?"

"What are you aware of?"

"How would you like it to be?"

"What different ways have you tried?"

"What do you think about it?"

"How do you feel about it?"

Paying attention to non-verbal responses

In addition to skillfully asking questions to gather information about the student's experience, she is acutely aware of non-verbal responses as well.

In a conversation in 1993 she spoke about the importance of body language in communication. She contrasted her awareness of the information about student's internal experience communicated through non-verbal responses, with, as an example, the limited awareness of a writer of her acquaintance who is only aware of words, and so misses a lot of information useful for communication.

Gholson (1994:181) also noted DeLay's sensitivity to non-verbal responses of students, and asked her what she meant by "getting a feel" for a particular student's resistance to some of her ideas. Delay responded "Well, just watching people's faces and getting some kind of visual feedback to things you say to them. You can often read what their reaction is... "

DeLay (1989:15) has stated clearly her acute awareness of non-verbal indications of a student's internal experience at any particular moment: "Now and then you will encounter a student who'll be exquisitely courteous - and silent; but one measure of a teacher's quality is the speed with which he notes and responds to the glazing of the eye."

Imagining being the student

DeLay has an uncanny ability to imagine what it is like to be the student - to be in his/her mind and body - and uses it to figure out what the barriers to development are, and "how to get around them". She often describes how she habitually makes such an imaginary shift into someone else's body to feel what they feel, not only in lessons or at concerts, but also in non-musical situations.

This habit of "trying on" another person's experience, and seeing from their point of view, is noted by Gholson (1994:132-134), in the following interview:

Researcher: "You have also mentioned that you get a sense of the physical feeling a performer has when playing. Can you describe or characterize the cues which allow you to develop these perceptions?"

DeLay: "You mean when I'm watching?"

Researcher: "Yes. You said that you can actually - that you understand how it feels for somebody to play something a certain way."

Delay: "Yes. I can either do it from watching his body or I can do it from listening to the sound and watching his body. But you know how - let's say you are sitting some place and you are bored and you're watching people walk up and down the sidewalk in front of you or something - or walk across the room. And, you can just imagine yourself in his body and you can imagine yourself making all of the motions... I do that all the time. I imagine I'm in his skin... what it feels like... If you watch television and you see somebody on television who was shot, do you imagine what it must feel like to be hit in the stomach like that?... Well, imagine that somebody gets hit in the head. Can you imagine that?... Alright. So for a moment, you're inside that guy's body... Or, you see somebody jump off a high place and dive into some water. Can you imagine that?... Well, this is the same things. Except you want to watch him walk. And, you start to say to yourself, 'how does [his] walk feel?' I was riding in the airport tonight behind a poor guy who was limping, and he had his foot all turned and I imagined walking like that and thought, 'Gosh, there's something wrong on the bottom of his foot, he can't stand on it.' You know it must be awfully uncomfortable... Well, it's the same thing. You look at somebody playing on stage and you see his arms doing this, and his body doing that. (I knew this one student.)] I think the kid - was sick mentally and when he played. He played like this [mimics] and he didn't move, he looked catatonic. Except, this arm went up and down - totally still. And, I thought, "how stiff and uncomfortable." As far as the

sound is concerned, I can tell by the sound about the direction, whether it's down or whether it's towards the bridge, or what it is - you know, on the bow. And, so I know how to handle the feel of the bow to get that sound. You know that. Sure."

Gholson (1993:135) comes to the conclusion that:

> Miss Delay's sensibilities aided by imagination allow her to consider the instructional problem spaces from her students' point of view, their internal and external landscapes of consciousness and feeling. Miss Delay creates an internal image of how students construe ongoing experience. Her images, her mental maps are veridical enough so as to cohere significantly with a student's actual experience. The power of these maps is demonstrated in the use of them holistically or in part as sources for interactional leverage in shifting, adjusting, and shaping other construed frames of student experience which are organically related.

i. Support

"Students are growing situations."
"It is necessary to give students all the support I possibly can."
"Children need to be loved."

In a conversation recorded by Gholson (1994:195), Delay summed up some of her beliefs regarding teaching: "If I lose the student's respect then I lose the opportunity of being effective, you know, in teaching her. Except, I'll tell you what I believe you see. I believe that telling students the exact truth is necessary and letting them know that I respect them and that I'm on their side is necessary, and giving them all the support that I possibly can. And I think that works - I just think that's the moral stance that any teacher has to take."

Sarah Chang, now an established professional, was quoted (Buchan, 1993:35) when she was a sensational child prodigy, as saying about DeLay: "She is concentrating on me as a performer now, but she has hundreds of students and she cares about each one of them

the same way she does about me. She is just wonderful to all of us." Arturo Delmoni echoed many of DeLay's former pupils when he said to Crutchfield (1987:c15): "When we needed her to be a friend, or a psychiatrist, she was completely available to us." Similarly, voicing the sentiments of DeLay's many students through the years, Midori (quoted by Sand, 1988:28) said: "She is not only a teacher, she is also a mother and an adviser. She is everything. All her students see her that way."

DeLay (1989:13) wrote: "Any teacher worth his salt should not be reticent about sticking his nose into other people's business. Young people's business is a teacher's business. I'm not inclined to stop at the teaching of musical values and mastery of the instrument. I like to help in the process of change from student to professional musician."

Schwarz (1983:553) also noticed DeLay's supportive relationship with her students:

> She is a very good listener, both when the student plays and when he talks. She unmistakably cares, a feeling that is gratefully reciprocated by the student. She is concerned with his total personality, with his musical and extramusical problems, with jobs and career opportunities and impresarios and contests. Her commitment to her students is total and she emanates an aura of warmth and helpfulness, balanced by experience and authority. It is no wonder that students rally around her as a tower of strength.

4.2 Strategy

DeLay states that three things are important to her when working with students to achieve her criterion:

1. "finding the next area of development"
2. "figuring out how to develop it"
3. "having the time to do it properly"

In the terms of NLP, it indicates that what is important to her is establishing an outcome ("finding the next area of development"), designing a strategy for achieving it ("figuring

out how to develop it"), and establishing a time-frame ("having the time to do it properly").

4.2.1 Test

To find out which area needs development, DeLay compares the student's performance to either

- "the best that I can imagine",
- "some good performances I've heard", or
- "several other students on this student's level of development".

To the question, "How do you know when you are finding the next area of development?" she replied, "When I hear something fundamental that's wrong: intonation, notes, rhythms, and so on, and then I go to structure." When she was again asked the same question at another time, she replied, "When it bothers me. I can't stand wrong notes and intonation and rhythms!"

Koornhof: "I also asked you yesterday, 'When you're teaching, and you're finding the next area that should develop', maybe I should ask you, how do you know which is the next area to develop? How do you decide - "

DeLay: "What sounds the worst [laughs]. I always go for what sounds worst... "

DeLay states that she rotates three areas - intonation, sound production, and phrasing - and first goes to the area that sounds worst. "I usually go to the weakest area first... go to basics... I usually say, 'Look, I know you know most of it, but I want to make sure we haven't skipped any details, so let's go over it again' - so that they don't think or feel they've been put back to the beginning, because they're no good.'"

She reaffirms: "I *always* go to the weakest area first. I go to the basics of that area, working on small parts, making the student more aware." She emphasizes that it is

essential to make it impossible for the student to fail. This is ensured by working on one small building block at a time, making sure that it is manageable for the student: "People enjoy learning when they are successful at it".

DeLay wrote: "I try to look at a student and think, this part he does well; this part isn't developed; let's go to work in the undeveloped area." (1989:14.)

4.2.2 Primary operations

DeLay says that once she's aware of what area needs to be developed, she

- isolates it
- tries to build some interest in it
- goes to the basics
- works slowly
- one step at a time

Isolating an area

DeLay (1989:15): "I try to isolate an area and go to work on it. When I fail, I realize that usually I have not set it up well enough to fit that student's needs"

Building interest in it

DeLay states that she builds interest in an area that needs development by

- pointing out what the student starts doing successfully in that area, and complimenting it, and if that is not sufficient to build interest,
- making a game out of it.

Complimenting successes

Explaining how she builds interest in an area that needs work, DeLay said: "I notice something that they do well, in the area that needs improvement, and say 'that's great, I was just going to talk about it', or I make a game out of it."

In a conversation with Gholson (1994:191-192) about the importance of boosting students' confidence, Delay said: "Alright. What you do - What I do in some cases - I'll wait until something in that area happens accidentally and I'll say, 'Oh hey, look what you did, isn't that great? You did this. You did this, that's wonderful.' Sometimes it will work. Or, number two... I'll try to break the activity into something so simple, into small, small, small parts and make each task so simple that the person cannot fail and say, 'Oh that is wonderful.'"

DeLay deliberately worked on ways in which to encourage students: "See, I had a student whom I'm *very* proud of - it's a girl who went into working with children who are mentally handicapped, and she would come in after her practice sessions with these kids in some special school, and tell me what she did. And one day she gave me a list of thirty-seven different ways you can tell a child he's done well. And I kept that for years."

A student of DeLay's in Aspen said to Sand (2000:114): "I look forward to every lesson I have. I can remember one time we were working on my sound, and there was this one note I played, and Miss Delay stopped me and said, 'Now that is a beautiful sound.' It was like, Wow! If I can do it there, I can do it everywhere. She explained that you have got to work on every note so that every note has a beautiful beginning, a beautiful middle, and connects beautifully into the next note. It was such a clear way of thinking about it. You listen to Perlman and others, and think, How am I going to have a beautiful sound? and it is just an overwhelming concept to a student."

DeLay does whatever it takes to boost students' confidence. As is illustrated by the following discussion, she would even on occasion deliberately demonstrate something badly on the violin so that the student can feel good by comparison.

DeLay: " ... also, with the intonation thing, before I let them go,... when I play the Kreutzer No. 2, and they have to tell me on the tonic, you know, the c note, whether it is sharp or flat, I deliberately play miserably, just horribly, which gets them laughing, because they, you know, 'u-huh, u-huh', and their laughter is kind of guilty at first, and then they get really [laughs] 'oh boy, the teacher sounds terrible!' and then, you see, when *they* go, and they do it better, they feel perfectly comfortable. I learned *that* from Edward [unclear on the tape], who said ' If you want a student to play a passage really well demonstrate it for him very badly [laughs]."

Koornhof: "So that they can have that sense of accomplishment you mentioned... "

DeLay: "Oh, they have a sense of being really really on top of the world, absolute the best there is, you know, sure!"

Making a game out of it

Another way in which she "builds interest" in a particular area that needs development is to turn the learning process into a game. One often hears her say, "Now, let's play a game!".

When a student swayed excessively with her upper body, DeLay ceremoniously took out a handkerchief, neatly folded it into a square, and with a twinkle in the eye asked "have we done this before?", instantly grabbing the student's attention, like a magician about to amaze with a sleight-of-hand trick. She then instructed the student to play the same piece while holding the hanky in one spot against the wall with the scroll of her violin. The resulting contortions caused much merriment all around, with DeLay adding, "You're going to practice like that for the next week, starting tonight."

Going to basics, working slowly, one step at a time

Koornhof: "So, it sounds like you do two things: You brake it down into basic components. And if necessary, you slow it down."

DeLay: "Oh, we go slowly enough that there are no failures. I try to set it up so there are no failures. So they're never aware of not succeeding. They have to succeed from the very beginning."

According to Chadwick (1995:249), in a panel discussion at the Hannover Violin Competition DeLay said: "One should never say to a pupil, `that's wrong'. Instead one should say `that's fine', and then find easy steps towards the discovery and correction of the fault."

To students at Juilliard who help pre-college pupils with scales DeLay said: "Let your students concentrate on just one thing at a time. Make it easy for them." As a student in Aspen reported to Sand (2000:113): "Miss Delay breaks it all down for you, but it's always one thing at a time with her, it is never overwhelming." A former pupil of DeLay, and now a successful teacher, Heidi Castleman told Sand (2000:116) of DeLay's "incredible attention and the ability of her logical mind to break things down into doable sequences."

Said DeLay, as quoted by Stockholm (1975:43): "A lot of students' success depends upon the clarity and appropriateness of the goals the teacher sets. If we're working on fingering, bowing, intonation, projection, dynamics or style, we should master the challenges by separating out these elements in manageable gradations – not try to do everything in one 'swell swoop.' We must exercise students' talent in slow, easy stages." Fifteen years later, DeLay (quoted by Duchen, 1990:129) reiterated the same principle by saying, "A large part of teaching, it seems to me, is to set things out clearly, in such a

way that students are successful and feel successful. When people feel successful at something, they love to do it."

Chatwick (1995:251) reports the following about DeLay's responses to questions at a panel discussion in Hannover: "Her advice was to stop after a small part of the exercise and break it into manageable parts, which can gradually become longer. The same principle applies to practicing fast and long passages. Our brains, she said, seem to function better when trained by this `grouping' process, because that is good for us."

Talking about making students aware of basic components of an area, DeLay explains that she says to a pupil, for example, "'Okay... look, now we're not gonna use any rhythm pattern, we're just gonna take one whole bow martele per note, and we're gonna go: bahm, silent, bahm, silent, bahm - and in this game you can tune during that whole bow - [sings and demonstrates] - you can tune - and any note you get into by the end of the stroke is your score.'"

Using as an example a student who needed to develop his tone production to a higher level, DeLay indicated how she would work slowly and step-wise on basic components of an area: "I think the best thing for me to do for him... would be to... spend an hour on martelé, and have him... you see, it's a question of awareness... if I could, and have him just do a couple of martelé's: now tell me, 3 areas - beginning, middle, and end of the stroke - what was your bow speed? What was your pressure pattern? What was your sounding point? And just do it, and do it, and do it, so that when he's confronted with a stroke, he automatically is aware of the shape of it ... "

4.2.3 Secondary operations

a. When the criterion is not sufficiently satisfied

If the improvement is not sufficient, DeLay stays with her principle of enabling the student to succeed, by breaking the area down into even smaller component parts, and making the student even more aware by providing ways of measurement.

Koornhof: "And if you're working on an area, if you're trying to develop an area, and what you usually do doesn't sufficiently get you the development that you want, what do you do then?"

DeLay: "You have to go to smaller details, and keep it slow. And make them even more aware."

The next day she was asked the same question.

Koornhof: "I asked you yesterday, if you didn't sufficiently get the development that you wanted in a particular area with a student, what you would do?"

DeLay: "Well, the first thing I would do would be to say, 'I used the wrong approach; what is the right one? 'And I would hunt around for some other way to go at it, because I'm *convinced* there always is one, but I can't always find it. So, I don't come to the conclusion: 'this student is hopeless', I just come to the conclusion: 'I don't know enough yet'. And, so I keep looking. But you don't want the student to feel as if you think he's failing because you tried this and it didn't work, and you tried that and it didn't work. You don't wanna put him in a position to feel a failure, and I think that's where Galamian's advice to drop it for a year, is good."

This is how DeLay (1989:15) explains it in writing: "Let's say we're working on a sound control exercise. The factors involved are bow speed, sounding point, and weight. I make

variations of each one, then ask the student to describe what he has heard. I ask which one he likes, which ones would be suitable for this or that kind of music. This helps to get them to listen and to think".

To Sand (2000:70), DeLay said: "If you take any task, and it looks like it's too big and it's not working, you have to break it into small steps, and take it in small steps. You just have to find those small steps, and I do find that process fascinating."

Stockholm (1975: 40) made this perceptive observation of DeLay's strategy of breaking a problem into do-able units, and them reassembling them: "No matter how much minute analysis has been done on small portions of a particular work, she never fails to put the fragments of the piece back together again, re-investing the music with a restorative quality of wholeness and completeness."

b. When the criterion is not satisfied at all

Koornhof: "And if what you do doesn't get you any development at all, what do you do?"

DeLay: "Then I have to figure out why, because then it is not something that I'm doing, it's something in the child's [pause] way of thinking that's in the way. And, I *suppose*, things that kids, that children, think that could get in the way are things like 'I'm a bucket-head', or 'my mother said I could never hear anything', or, uh... 'the last time I tried to do this in front of so-and-so, I made a mistake, and he made fun of me, or'... and I think it's that kind of flop usually... "

Koornhof: "How do you find out what it is? How do you go about to find out?"

DeLay: "I'm not sure that I find out what it is. What I have to do is find a way around it [pause]... I have to find a way of making them do one successful thing, which I then talk about forever... "

Gholson (1994:181) had this response from DeLay in a discussion about a student who DeLay thought was not developing: "... and here's this student who is very bright and [in some ways is different] from the other kids. Who still, although [this student's] got a fine emotional gift, has not done the necessary technical work. [If this student] had done the necessary technical work [this student] would be having a very fine career at this moment. So, I was trying to figure out what it is in [this student's] background that had kept [the student] from doing this."

The statement above is an example of how DeLay tries to imagine what a person she is communicating with was like at earlier stages in his/her life in order to develop an understanding of the dynamics that give rise to their current state of being. It is part of her engagement with the person's internal world. She is acutely aware that the organization of people's internal experiences determines their outward functioning in the world. She knows that the internal resourcefulness of her students is a prerequisite for violinistic and musical growth. In that sense she works generatively with students by constructively engaging with their internal worlds. Her ability to keep on searching until she finds an effective approach for dealing with internal obstacles to students' growth results from her belief that "there always is a right approach - it's just a matter of finding it".

c. When it seems impossible to satisfy the criterion

Koornhof: "If what you usually do - if you get the *impression* that what you usually do to get development, in an area cannot work... "

DeLay: "Well, if I can't figure out something, maybe I'll drop it for a year. Galamian said 'look, if it doesn't work, drop it - let it go for a year, and you try again' [pause]... of course, you know, there're sometimes things I never did get answers for... "

The assumption behind DeLay's willingness in extreme cases to "drop it for a year" is that experience is systemic. She trusts that development in another less resistant part of

the system may influence the whole system, including the part that seemed impossible to develop. Such a grasp of the multi-dimensional and systemic nature of internal experience supports DeLay's strong belief in the limitlessness of human possibility.

4.3 Supporting emotion/s

These are the emotions DeLay habitually experiences while teaching:

- Concentrated
- Happy
- Fun
- So put in order
- Hopeful
- Such pleasure

When first asked what emotions she habitually feels when teaching well, she said, "I feel concentrated and happy."

Later on, the following conversation took place:

Koornhof: "And when you're working on development, and you're figuring out how to do it, and you have the time to do it properly, what are you feeling?"

DeLay: "*Gooood. Really* good. I feel so put in order, and so... hopeful... and so... such *pleasure*... 'cause the kids can *see* that they're getting better... "

4.4 External behavior

DeLay has been observed to do the following at lessons:

- Talking to students in a gentle, respectful and constructive manner.

- Asking many questions to determine a student's thoughts, feelings, outcomes, choices, preferences - in short, gathering information about the student's internal experience.
- Letting students play through works without interruption, as if in a public performance, before starting to work with them.
- While students are playing, making notes in their sheet music and in her own notebook, rather than interrupting the flow of their performance.
- Showing many signs of enjoyment, especially when students are learning successfully or performing well, like smiling, giggling, and laughing.
- Demonstrating when she feels the need, by playing on the violin, gesturing, or singing.
- Tapping tempi and rhythms on the table in front of her with her pencil.
- When enjoying a performance, or thinking deeply about a problem, sitting back with her hands in her lap.
- When actively engaged in problem solving or development work, leaning forward animatedly, speaking faster and louder, and gesturing more.
- Sitting mostly in one place in the room, behind a table.

CHAPTER 5
SUMMARY OF THE MODEL

Belief Template

Criterion

"To see students feel confident and pleased that they can do something that they couldn't do before." [confidence and pleasure = internal state]

Enabling cause-effect

"You have to prove to them that they can do it." [enabling successful learning experiences]

Motivating cause-effect

"It gives you such power to unlock a talent."

Supporting beliefs

"People can learn almost anything."

"People are capable of doing so much more than they are."

"You can teach anything if you can figure out how people learn it."

"Teaching is helping people learn."

"Learning is becoming more aware."

"People learn best when they feel successful at it."

"People learn best when they're having fun."

"I want them to think about their options."

"Children need to be loved."

"There always is a right approach -- it's just a matter of finding it."

"Children become what you tell them they are."

"Everyone has talent; the types differ."

"People deserve respect (because they have value; and they put in effort)."

"Learning is fun."

"Our hope for the future lies in our gifted children."

"Imagination precedes achievement."

"The ear develops in leaps ahead of technique."

"Children who are good at sequencing (numbers, events, etc,) develop fast."

"Given enough time and ways of measurement people can learn to do anything."

"People deserve to be helped."

"Students are growing situations."

"It is necessary to give students all the support I possibly can."

Strategy

Test

"When I hear something fundamental that's wrong [in the areas of intonation, sound production and phrasing]... compared to the best I can imagine, or some good performances I've heard, or other students on the same level of development."

Principal Operations

"Isolate the weakest area."

"Build some interest in it." [by complimenting successes and/or playing games]

"Go to the basics of it."

"Go slowly."

"Make them more aware."

"One step at a time."

"Set it up so they cannot fail... they have to succeed from the very beginning."

Secondary operations

When the criterion is not sufficiently satisfied

"Go to even smaller details."

"Make them even more aware."

"Try another approach."

When the criterion is not at all satisfied

"Try to figure out what in student's thinking is preventing development."

"Try to get around it."

"Find a way to make them do one successful thing.....talk about it forever."

[compliment it]

When it seems impossible to satisfy the criterion

"Leave it for a year."

"Then try again."

Sustaining emotions

"Concentrated."

"Happy."

"Fun."

"So put in order."

"Hopeful."

"Such pleasure."

External behavior

- She talks to students in a gentle, respectful and constructive manner.
- She asks many questions to determine a student's thoughts, feelings, outcomes, choices, preferences – in short, the student's internal experience.

- She lets students play through works without interruption, as if in public performance, before she starts working with them.
- While students are playing, she makes notes in their sheet music and in her own notebook.
- She shows many signs of enjoyment, especially when students are learning successfully or performing well, like smiling, giggling, and laughing.
- She demonstrates when she feels the need, by playing on the violin, gesturing, and singing.
- She often taps tempi and rhythms on the table in front of her with her pencil.
- When enjoying a performance, or thinking deeply about a problem, she sits back with her hands in her lap.
- She leans forward animatedly, speaks faster and louder, and gestures more, when actively engaged in problem solving or development work.
- She mostly sits in one place in the room, behind a table.

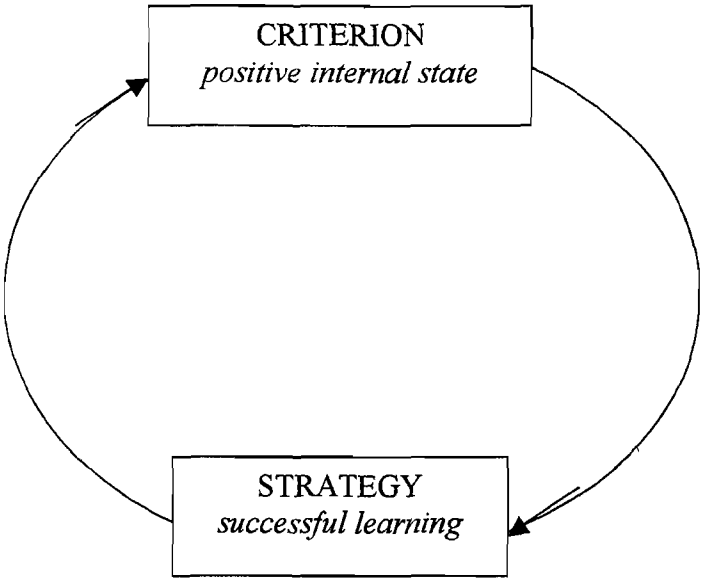
CHAPTER 6
CONCLUSION

Modeling DeLay's teaching skills evinced manifold cues to her success, of which several keys have become evident:

- She has empowering beliefs about learning and teaching.
- Her strategy enables students to develop self-confidence by building step-wise on learning successes.
- She has a constructive engagement with each student's unique internal experience.
- Her patterns of communication continuously stimulate growth and development.
- She embodies what she teaches.

It is significant that DeLay's primary criterion when teaching is a positive internal state in her students. She wants students to have the confidence needed for growth, and to feel pleasure about the results. The state of "*confidence* and *pleasure*" is both the result and the generator of successful learning. By aiming for that state and structuring the learning process for students to be successful from the very beginning, DeLay in effect sets up a reinforcing loop:

figure 2: reinforcing loop



DeLay convinces students of their capabilities -- having them feel confident -- by structuring the learning process step by step to ensure success. As she says, "You have to prove to them that they can do it...they have to succeed from the very beginning." She breaks every area that is worked on into small enough steps, suitable to each student, provides ways of measurement to increase awareness, makes it a lot of fun, and positively reinforces their successes, however small, with compliments.

Her criterion, and her strategy for satisfying it, is the result of, and is supported and sustained by, a set of extremely empowering beliefs about learning and teaching. These beliefs to her are fundamental and genuine, not just pedagogical clichés. The congruence with which she presupposes her beliefs while working with students creates what has been described as the essential components for outcome achievement: outcome expectancy, self-efficacy expectancy, and response expectancy -- that is, believing that a desired outcome is possible in principle, believing that you personally are sufficiently capable of learning or doing what is required to reach the outcome, and believing that the process you have embarked on will in fact lead to outcome achievement (Dilts, 1990:12-14).

DeLay's positive orientation is evidenced by her focus on outcomes, and on the successes of each step toward those outcomes. She is not problem orientated, and does not think in terms of failure, but only in terms of feedback: unsuccessful attempts at reaching outcomes are not regarded as failures, but as feedback information about what has to be done differently.

DeLay does not simply pass on information about violin technique and musicianship to students. Not only is her criterion in the teaching situation the achievement of a positive internal state in her students, but the way she tailors her strategy and patterns of communication to each student indicates an acute awareness of, and a constructive engagement with, every student's unique inner world.

Another critical factor in DeLay's teaching success is that she embodies what she teaches. She is an example of the pedagogical maxim that the example a teacher sets has a greater influence than words. She has confidence in her own ability to learn, enjoys the learning process, focuses on fundamental areas, increases her awareness of critical detail in those areas, and learns in a stepwise manner that ensures success.

It should be pointed out that a process as complex as helping gifted students to optimally develop their talents defies adequate description within the confines of a master's dissertation. Because of the limited scope imposed by academic prescription, information crucial to understanding DeLay's teaching skills in terms of its own dynamics, rather than in terms of general pedagogical and metaphorical concepts, has had to be excluded from this study. All of it needs to be considered in its systemic relation to what has been offered here, for the development of a more comprehensive model of DeLay's masterful violin teaching skills. Such a study, for pedagogical purposes, would be more suited to a doctoral dissertation.

Information excluded from this document includes the meta-levels of experience as explicated in NLP neuro-semantics. Meta-levels of subjective experience are higher frames of thought and feeling that give meaning to and "drive" the lower levels of experience (Hall, 2000). They are in effect thoughts and feelings about thoughts and feelings on successively higher levels. It is clear that DeLay's subjective experience while teaching includes several higher levels of meaning – frames of mind – that have a crucial function in generating and sustaining her abilities as a master teacher. In keeping with the notion of code-congruence, these meta-levels of DeLay's experience need to be elucidated as an integral part of the model being developed.

Another important feature of DeLay's teaching strategy (not included in this study) is her considerable ability to communicate with students in ways that stimulate growth and development toward ever higher levels of excellence and achievement. Among her patterns of communication have been observed:

- skillful and imaginative use of metaphors, analogies, anecdotes and quotes

- the empowering use of presuppositions
- ingenious reframes of meaning
- critical timing and delivery of verbal and non-verbal interventions
- consistent use of language patterns that affect comfort, ease and confidence

This study shows that NLP, in particular the Experiential Array modeling methodology developed by David Gordon, provides a useful empirical framework of distinctions for describing critical features of pedagogical skill.

The essence of genius can never be captured fully. As Gombrich (1979:136) said, "The scholastics who were impressed by the fact that the individual eludes language coined the famous phrase that *individuum est ineffabile*. I think it follows from this that *individuum est inexplicabile*."

DeLay's genius as a great teacher, therefore, will always defy full description, since it is too complex and not static. She is continuously learning, experimenting with different ways of helping students develop, exploring other fields for useful ideas, searching for new insights, and changing in the process.

However, some elements do remain constant: her love of teaching and learning; her respect for students; her belief in the unlimited capacity of human beings to learn; her awareness of, and her engagement with the internal experience of her students; her insistence that learning should be enjoyable; that communication should be specific and not vague, empowering and not degrading; and that the learning steps must be tailored in such a way that students cannot fail.

While acknowledging the growth and change resulting from the dynamic nature of her genius, it would seem possible to describe crucial elements of what Delay usually does. This study is a limited attempt toward such a description. Hopefully it can make a difference to those who would like to improve their skills at helping others develop their talents.

Perhaps the ultimate crux of Dorothy DeLay's success as a teacher is that she is all about love - she loves her students, loves teaching and learning, and she loves music. As Mozart said,

> "Neither a lofty degree of intelligence nor imagination nor both together go to the making of genius. Love, love, love, that is the soul of genius"
> (McWilliams, 1988)

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