

INTRODUCTION

Background and Significance

Scales, etudes, performance repertoire, and orchestral excerpts are the basic teaching materials for the cello. Every young cellist has to study all of these components to become a professional. In addition to scales and arpeggios, etudes provide the basic facility and technical foundation for the student's development. Louis Potter writes, "The practice and study of etudes is [sic] an indispensable part of a student's technical and musical development and progress. Etudes should be an integral part of a balanced diet or curriculum that includes: 1) Abstract exercises and studies (scales, arpeggios, finger and bow development exercises); 2) etude study; and 3) performance repertoire (pieces, sonatas, concertos, etc.)."¹ Etudes offer a concentrated study of one (or more) technical aspect in a short musical form. Depending upon when and by whom written, etudes differ in style and demands. There have been many studies written for the cello for hundreds of years and more are being written today. The choice of etudes, like the other training materials, may vary from country to country, school to school and teacher to teacher. One of the most commonly discussed issues is the sequence of the etude books. According to Potter, "The mark of a really resourceful teacher is that fine perspicacity and instinct for assessing each student's ability and for choosing the right material which is sufficiently

¹Louis Potter, "A Tour Through Schroeder's 170 Foundation Studies, Volume One," *American String Teacher* 45: 2 (Spring 1995): 41.

challenging to sustain interest and to take the student along the path toward progressively higher levels of technical and musical achievement in a well-ordered sequence."²

Young cellists entering colleges and universities are initially at different playing levels. Although the students may require slightly different study materials, there are some cello etude books that may apply to every student. Literature written about the cello etudes in general exists, but there is no research done on what etude books are most frequently used in American colleges and universities.

Purpose

The purpose of this treatise is to serve as a reference source of common cello etudes used by teachers in American colleges and universities. It will also provide an orientation to pedagogical materials currently in use, and it will analyze the criteria and rationale behind these selections. The following research questions were used for this purpose:

1. Which cello etude books are the most commonly used?
2. What are the criteria for choosing an etude book?

Survey of Literature

The literature related to this research may be categorized into two types: 1) syllabi and indexes, and 2) dissertations, journal articles and books that discuss cello etudes.

Maria de Rungs' *Cello Syllabus*³ is a graded list according to the number of years of cello study, and includes teaching material from the Baroque era to the present with a

² Louis Potter, "Teaching Sequence and Materials for Cello Mastery," Gordon Epperson ed., *American String Teacher* 29: 1 (Winter 1979): 50.

short description of each selection. The author chooses the pieces and arranges the list from her experience as a cello teacher. Publishers of each selection are given.

The Royal Conservatory of Music's *Cello Syllabus*⁴ lists the required repertoire for its examinations. It is graded according to the number of years of cello study and includes publisher information, edition suggestions, and a bibliography.

Louis Potter's widely used textbook-method *The Art of Cello Playing*⁵ has a list that includes some recommended etude and study books in the order of advancement within the three grade categories: elementary, intermediate, and advanced.

Katherine Mina Azari⁶ compiles her selection of etudes from the Royal Conservatory of Music's *Cello Syllabus*, the American String Teachers Association *String Syllabus*,⁷ the *Cello Syllabus* by Maria de Rungs, and the graded list that accompanies Louis Potter's cello method *The Art of Cello Playing*. Azari also includes a survey of each available work. These surveys include information regarding technical challenges, general structure, tonal centers, rhythm and meter, range, length, a brief discussion of the keyboard parts, an editorial concerning pedagogical and/or musical merit of the work, and publication information. Apart from the four graded lists, an appendix includes additional selections for intermediate level cellists.

³ Maria de Rungs, *Cello Syllabus*, (Boston, MA: Branden Press, 1970).

⁴ Royal Conservatory of Music, *Cello Syllabus*, (Buffalo, NY: The Frederick Harris Music Co., Ltd., 1995).

⁵ Louis Potter, *The Art of Cello Playing*, 2nd ed. (Princeton, NJ: Summy-Birchard Music, 1980.)

⁶ Katherine Mina Azari, "An Annotated Bibliography of Selected Works for the Intermediate Violoncellist" (D.A. diss., University of Northern Colorado, 1997.)

⁷ American String Teachers Association, David A. Littrell, ed., *String Syllabus*, (Bloomington, IN: Tichenor Publishing, revised 1997).

David Popper's *High School of Cello Playing, op. 73* is one of the most commonly used cello etude books in use around the world. Mark D. Moskowitz's article "David Popper: An Anniversary Retrospective Part II" gives some insight into the author's ideas and his very popular etude book. Moskowitz discusses some etudes in detail and gives suggestions on how to practice them. There is also a section in which he evaluates the etude book as a whole and makes comparisons with other etude books. "No author of any method has attempted to cover all the elements necessary to good string playing, and Popper was no different. Whereas Piatti's 'Methode de Violoncelle,' for example, progresses in its demands gradually, Popper's studies are more randomly collected. The teacher needs to be familiar enough with the contents so as to be able to select studies commensurate with the student's ability, as well as to choose numbers that will help refine the technical problems at hand." ⁸

Richard Slavich's on-line article "A Player's Guide to the Popper Etudes" is a practical guide to Popper's op. 73 studies. The article identifies the specific technical problems met in the 40 studies, guides the reader to those etudes most relevant to his/her specific needs and offers some suggestions that might make the etudes more manageable. The article is divided into two main sections, bow studies and left hand studies. It also includes lists of the etudes arranged by technique, key, degree of difficulty and by basic repertoire for which the etudes will prepare the student. ⁹

⁸ Marc D. Moskowitz, "David Popper: An Anniversary Retrospective Part II: His Legacy as Performer and Pedagogue," *American String Teacher* 44: 4 (Fall 1994): 38.

⁹ Richard Slavich, "A Player's Guide to the Popper Etudes," Internet Cello Society [on-line organization]; available from <http://209.210.69.204/Newsletter/Articles/popper.htm>; internet; accessed 30 January 2002.

Gordon Epperson's "Methods and Materials: Some Reconsiderations"¹⁰ suggests criteria that may be used for selecting appropriate etudes. The article also discusses some of the most commonly used cello etude books of today. Another article of his, "A Sequence for Teaching Cello Technique and Materials: Intermediate,"¹¹ includes some suggested etudes for intermediate and advanced level cellists.

Potter's article "The Teaching Sequence and Materials for Cello Mastery" discusses many aspects of cello teaching. The article includes suggestions on how to select, teach, or learn etudes in general. "Moreover, there is a wide variation in student talent and personal goals, and the age level involved. These factors are of enormous significance in choosing the sequence of technical development and in the materials for study. For very gifted students perhaps some items can be bypassed—although most often the same solid foundation is covered but at a faster pace."¹²

Dr. Lev Ginsburg's book *The History of the Violoncello* is divided into two parts: the violoncello art of the nineteenth century and that of the twentieth century. Both parts include biographical information of important cellists organized according to the different schools of playing and annotations of their selected works. Each specific etude book is discussed in a short paragraph.¹³

¹⁰ Gordon Epperson, "Methods and Materials: Some Reconsiderations," *American String Teacher* 23: 2 (Spring 1973): 21.

¹¹ Gordon Epperson, "A Sequence for Teaching Cello Technique and Materials: Intermediate," *American String Teacher* 27: 3 (Summer 1977): 16.

¹² Louis Potter, "Teaching Sequence and Materials for Cello Mastery," Gordon Epperson ed., *American String Teacher* 29: 1 (Winter 1979): 50.

¹³ Lev Ginsburg. *History of The Violoncello*, Ed. By Herbert R. Axelrod, translated by Tanya Tchistyakova, (Paganiniana Publications, Inc. 1983).

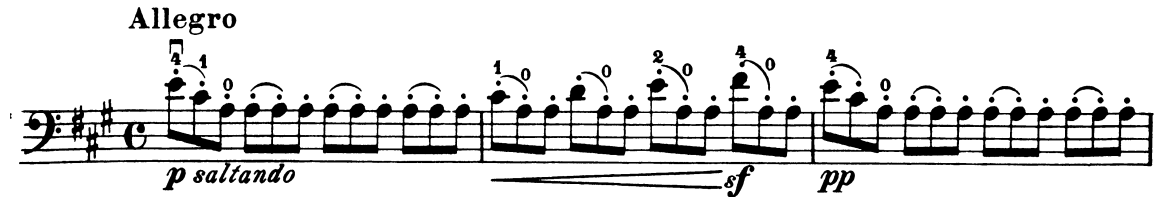
CHAPTER ONE
ETUDE BOOKS INCLUDED IN THE SURVEY

Jean-Louis Duport

Jean-Louis Duport was born in Paris on October 4, 1749, and began studying the cello at an early age with his older brother Jean-Pierre Duport. At the age of eighteen he made his debut in the *Concert Spirituel*, accompanied by his brother. Subsequently he performed in Paris under the patronage of Prince of Guéménée and later Baron de Bagge. Jean-Louis became good friends with Giovanni Battista Viotti and around 1782 joined his orchestra for *Concert de la Loge Olympique*. The French revolution disturbed his life and musical activities in Paris and, in 1790; he joined his brother in Berlin. Jean-Louis taught privately, gave chamber music concerts, composed and joined the opera orchestra where Bernard Romberg was his stand partner. Duport returned to Paris and in 1812 shared the principal position with Charles Nicolas Baudiot at the imperial chapel. Jean-Louis became a professor of cello at the Paris Conservatoire for a year in 1814, and died in Paris on September 7, 1819.

Duport wrote six cello concertos, three duets, eight *air variés* for two cellos, three duos for harp and cello, and several sonatas in addition to numerous other works. His best-known work, *Essai sur le doigté du violoncelle et sur la conduite de l'archet* (Essay on the Art of Fingering the Violoncello and of Bowing) (Paris, c1806), was later

Number 10 makes use of thumb positions and virtuoso bow techniques such as *saltando*, *Sautillé*, (Ex. 3).¹⁴



Example 3. Duport, Etude no. 10, mm. 1-3.

The studies are not placed in order of difficulty and some are very long. Numbers 2, 12, 17, 18 and 21 are five pages each, and number 9 is six pages. The first study, for example, is composed entirely of double stops and is much more difficult than some of the later ones (Ex. 4).



Example 4. Duport, Etude no. 1, mm. 1-6.

The majority of studies includes both thumb and neck positions. Another characteristic of Duport's etudes is that almost all of them have detailed dynamic markings similar to regular performance repertoire. While the etudes are musically

¹⁴ Number 10 is from Jean-Pierre Duport's Cello Sonata no. 5, op. 4, third movement.

appealing, most of them make use of various techniques. There are also studies concentrating on a specific problem: numbers 1, 8, 14 and 16 are for double stops; numbers 4, 5, 6, 7, 8 and 10 are for bowing techniques.

Table 1

Studies that Involve Specific Techniques

Technical Challenges Addressed	Etudes
Scales (regular and chromatic)	3, 17, 18, 21
Arpeggios/Broken Thirds	18
Thumb Positions	5, 6, 10, 12, 13, 14, 17, 18, 21
Position Establishment	2, 9, 13, 17, 19, 21
Multiple Stops	1, 8, 9, 12, 14, 15, 16
Bowing Techniques	4, 5, 6, 7, 8, 9, 10, 11, 13, 18
String Crossings	4, 5, 7, 18, 20
Left and Right Hand Coordination	4, 5, 8

Justus Johann Friedrich Dotzauer

One of the most important members of the Dresden school of cello playing, Justus Johann Friedrich Dotzauer was born on January 20, 1783, at Häselrieth, near Hildburghausen. He began studying piano, violin, cello and composition at an early age. He was sent to Meiningen in 1799 for two years of study with a student of Jean-Louis Duport, Johann Jacob Kriegk. After that, he accepted a post in the Meiningen Kapelle until 1805, when he moved to Leipzig and played in the Gewandhaus Orchestra between 1805-1811. While in Leipzig he visited Berlin where he had the opportunity to hear and study with Bernard Romberg.

During the year 1821, Dotzauer accepted a position in the Dresden Court Orchestra where he worked for almost forty years. Exceptional musicians such as Carl Maria von Weber, Richard Wagner and Hector Berlioz conducted this orchestra. Dotzauer's students later became important musicians: Friedrich August Kummer, Carl Schubert, and Karl Dreschler. Dotzauer died on March 6, 1860, in Dresden.

Dotzauer was a particularly prolific composer for his instrument, producing nine concertos, three concertinos, two sonatas with bass, variations, divertissements, potpourris, a great number of duets, and four cello method books (opuses 126, 147, 155 and 165), as well as a number of exercises of various kinds. He was one of the first cellists to make an edition of Johann Sebastian Bach's Six Suites. He also wrote an opera, overtures, symphonies, a mass and several chamber pieces.

113 Violoncello-Etüden

One hundred and thirteen studies are selected, progressively arranged, fingered and divided into four volumes by Johann Klingenberg. The first two volumes (études 1-62) are more appropriate for the pre-college level because studies preceding number 74 do not include high registers of the cello. However, these two volumes include études with a rich variety of bowing techniques and it could be beneficial to use them as supplements to volumes three and four.

The études included in the third volume (63-85) tend to focus on one or two particular aspects of technique in each study, while the fourth volume (86-113) includes many studies containing multiple techniques (e.g. 85, 89, 100, 105, 106 and 111). Most of the studies are comprised of several sections and each section is built on a single

Table 2—*Continued*

Technical Challenges Addressed	Etudes
Octaves	95, 110
Tenths	110
Bowing Techniques	66, 68, 75, 78, 79, 82, 85, 89, 91, 96, 97, 98, 100, 101, 102, 104, 109, 110, 111, 113
String Crossings	64, 65, 84, 89, 98, 105
Slurred Staccato	70, 78, 104

Josef Merk

A distinguished Austrian cellist, Josef Merk was born in Vienna on January 18, 1795. He played the violin until he was fifteen when he was injured and forced to stop playing. He soon realized that his injuries would not interfere with the manipulation of another string instrument, the cello. He studied the cello with Philipp Schindlocker, principal cellist of the orchestra of the Viennese Court Opera. After two years of performing in a quartet of a Hungarian aristocrat, Merk became the principal cellist of the Viennese Court Opera and three years later, of the *Imperial Kapelle*. Merk appeared in solo recitals in Vienna and other cities of musical importance. In 1830, he performed Beethoven's Triple Concerto with violinist Joseph Mayseder and pianist Carl Maria von Bocklet. Frédéric Chopin dedicated his *Polonaise Brillante*, op. 3 to him. Merk became the cello professor in Vienna Conservatory between 1822-1848 and his important students included Karl Leopold Bohm, Anton Trag, Jacque Franco-Mendes and Franz Knecht. He died in Vienna on June 16, 1852. Merk composed only for his instrument, including a Concertino in A Major, op. 17, Concerto in D Major, op. 5, and several sets of variations, character pieces and studies.

20 Studies, op. 11

In Merk's etudes intonation is less challenging than some of the required techniques, such as left and right hand coordination and a variety of bow techniques. Merk uses difficult bow patterns to challenge left and right hand coordination (Ex. 6).



Example 6. Merk, Etude no. 13, mm. 38-40.

Except for a few passages in etude number 16, there are no thumb positions required throughout the book. The characteristics of Merk's studies are that most of them consist of several sections, each in a different character, and bear different tempo markings (Ex. 7).



mm. 1-3



mm. 38-43

Example 7. Merk, Etude no. 10 mm. 1-3, mm. 38-43.

Etudes 4, 5, 6, 8, 10, 13, 14, 16 and 20 begin with slow sections that are melodic and linear and are usually followed by faster sections that explore different technical problem. There are only a few etudes with a single technical idea throughout (numbers 1, 2, 3, 7, 9, 17, 18 and 19). A prevailing trend of Merk’s writing is the challenge of difficult string crossings in the left hand (Ex. 8).



Example 8. Merk, Etude no. 4, mm. 57-61.

Table 3

Studies that Involve Specific Techniques

Technical Challenges Addressed	Etudes
Scales (regular and chromatic)	1, 20
Arpeggios/Broken Thirds	3, 5, 16, 17
Left Hand Agility	4, 10, 12, 18
Ad Libitum Style, Trills, Grace Notes	6, 10, 16, 20
Multiple Stops	6, 8, 10, 13, 15, 20
Bowing Techniques	2, 3, 4, 5, 7, 9, 10, 14, 17, 19, 20
String Crossings	6, 10, 19
Spiccato	2, 4, 10, 20
Left and Right Hand Coordination	4, 5, 13

Adrien François Servais

The renowned cello virtuoso, Adrien François Servais, was born on June 6, 1807 in the Belgian town of Hal, near Brussels. He began his musical studies by playing the

violin and at the age of twelve switched to the cello and entered Nicolas Joseph Platel's class at the Royal Music School in Brussels. A year later in the same school he was awarded the first prize. During this time, he played in a theatre orchestra. In 1829, Servais became Platel's assistant at the Royal Music School. He toured extensively to important musical centers in Europe and Russia and on April 2, 1844, at the Gewandhaus, Felix Mendelssohn Bartholdy, Ferdinand David and Servais performed Beethoven's Trio in B-flat Major op. 97 "Archduke". His playing style was believed to be stimulated by the Franco-Belgian violin school, Niccolò Paganini and Henri Vieuxtemps. Servais performed with Vieuxtemps many times and they composed a fantasia for violin and cello together on a theme from *Les Huguenots*, Giacomo Meyerbeer's opera. Replacing his teacher, Servais became the cello professor at the Brussels Conservatoire until his death on November 26, 1866 at Hal. His pupils included Joseph Servais, Jules De Swert, Charles Montigny, Ernest De Munck, Adolph Fisher, Paul Becker and Joseph Hollmann of Holland. Most importantly, Servais is known as the inventor of the endpin for cello.

“Servais' playing and compositions both reflected the tastes of the new epoch, with its romantic fervor and ardent affection for the art of Niccolo Paganini and Franz Liszt.”¹⁵ Servais was part of the Franco-Belgian cello school, founded by the famous French cellist Platel, pupil of Jean Louis Duport and Jacque Michel Lamare. His playing was also representative of the nineteenth century virtuoso-romantic style. A prolific composer for his instrument, Servais wrote two cello concertos (1839, 1860), sixteen

¹⁵ Lev Ginsburg, *History of The Violoncello*, Ed. By Herbert R. Axelrod, translated by Tanya Tchistyakova, (Paganiniana Publications, Inc. 1983) 31.

fantasias for cello and orchestra, six studies and fourteen duos for cello and piano, six caprices for cello and optional second cello (1850), three duos for violin and cello with Huber Léonard and a duo for violin and cello with Henri Vieuxtemps.

Sei Capricci per Violoncello, op. 11 (Mainz, ca. 1854)

In these pieces, the rare use of shifts promotes stability and confidence in the left hand and establishes a good sense for left hand positions (Ex. 9).





Example 10. Servais, Caprice no. 2, mm. 77-80.

Left-hand agility and position establishment are the main issues that are also addressed in the caprice number three. The key signature changes five times during the piece, which is only two pages long. The entire piece is played with one bow per measure.

Number four mostly stays in the middle register of the cello with the exception of a few runs to the high registers. In ternary form, the caprice includes a *più lento* section followed by a *da capo*. Most of the caprice is based upon repeated figures that can be played in similar finger configurations, which provides a good base to work on left-hand agility (Ex. 11).



Example 11. Servais, Caprice no. 4, mm. 70-75.

In the fifth caprice, thirds in double stops, double trills, and long passages of regular trills are explored. The piece is one and a half pages long and bears the tempo marking *larghetto cantabile*.

The last caprice is one of the longest, featuring continuous string crossings that dominate the entire piece. In the left hand, the thumb and third finger stretch through tenths (Ex. 12).



Example 12. Servais, Caprice no. 6, mm. 1-4.

Table 4

Studies that Involve Specific Techniques

Technical Challenges Addressed	Caprices
Left Hand Agility	2, 3, 4
Thumb Positions	1, 2, 3, 5, 6
Trills/Double Trills	5
Double Stops	1, 5
Thirds	1, 5
Octaves	1
Tenths	6
Bowing Techniques	4, 6
Spiccato	2

Auguste Joseph Franchomme

Franchomme was an eminent French cellist, born in Lille on April 10, 1808. He studied with Pierre Baumann at the Lille Conservatory, Jean Henri Levasseur and Louis Pierre Norblin at the Paris Conservatoire. Franchomme became the solo cellist of the

Théâtre Italien in 1827 and at the *Chapelle Royale* the next year. He was also a founding member of the *Société des Concerts du Conservatoire*.

In 1846, Franchomme became the professor of cello at the Royal Conservatoire in Paris. He, together with Delphin Allard, founded the Allard Quartet. Acknowledged as the most distinguished French cellist of his day, he formed a close friendship with Felix Mendelssohn Bartholdy, as well as Frédéric Chopin. He premiered Chopin's Cello Sonata, op. 65, which was dedicated to him, and Chopin's other cello pieces are thought to be a result for his admiration for Franchomme's playing. He used the traditional French bow technique of holding the bow above the frog. Franchomme died in Paris on January 21, 1884. His pupils included Jules Delsart, Louis Hegyesi and Ernest Gillet.

Franchomme's compositions include a cello concerto and numerous cello solos with chamber orchestra or piano accompaniment, as well as 12 Etudes, op. 35 with optional second cello and 12 Caprices, op. 7. He also transcribed Wolfgang Amadeus Mozart's and Ludwig van Beethoven's violin sonatas for cello and piano.

12 Capricen, op. 7

Most of the caprices in op. 7 do not go beyond seventh position. The thumb is used in the middle register of the cello as a convenience for fingering (Ex. 13).

Musical notation for Example 13, Franchomme, Caprice no. 5, mm. 1-3. The notation is in 3/4 time with a key signature of two sharps (F# and C#). It features a melodic line with slurs and fingerings (1-4, 1-3, 1-2-3). Performance markings include 'Moderato.', 'p dolce', and fingering instructions 'IIa' and 'IIa'.

Example 13. Franchomme, Caprice no. 5, mm. 1-3.

Each caprice has a characteristic bow or left hand technique. In general, bow techniques are actively explored, as in numbers 1, 3, 4, 7 and 8. Number 5 is mostly in thumb positions. Number 11 requires string crossings over three strings and each measure is slurred. Number 12 includes double stops required to be played with *spiccato* bowing.

Table 5

Studies that Involve Specific Techniques

Technical Challenges Addressed	Caprices
Left Hand Agility	6
Thumb Positions	5
Position Establishment	5
Multiple Stops	2, 3, 4, 7, 12
Sixths	6
Bowing Techniques	1, 3, 4, 6, 7, 10, 11, 12
String Crossings	1, 4, 5, 8
Spiccato	6, 7

12 etudes, op. 35

The op. 35 etudes include an optional second cello part. Most of the studies are one page long and employ a particular bow or left-hand technique. None of them require playing in very high registers. There are several passages that include thumb, usually around 6th and 7th positions (Ex. 14).



Example 14. Franchomme, Etude no. 3, mm. 44-50.

Double or triple stops combined with various bowing techniques are common features of studies 4, 6, 7 and 12 (Ex. 15).



Example 15. Franchomme, Etude no. 4, mm. 1-4.

Numbers 3, 5, 8 and 9 are rather linear and some of them develop agility while others require constant string crossings. Number 11, marked *adagio* and *espressivo*, is a melodic study that makes use of a variety of techniques within a musical context.

Table 6

Studies that Involve Specific Techniques

Technical Challenges Addressed	Etudes
Left Hand Agility	5, 8, 9
Thumb Positions	3, 10
Ad Libitum Style, Trills, Grace Notes	11

Table 6—*Continued*

Technical Challenges Addressed	Etudes
Multiple Stops	1, 4, 6, 7, 11
Sixths	4
Bowing Techniques	1, 2, 12
String Crossings	7, 8

Alfredo Piatti

The renowned Italian cellist and teacher, Alfredo Piatti was born in Borgo Canale on January 8, 1822. Piatti received his primary musical education both from his father and his great uncle, the cellist Gaetano Zanetti. He later continued his studies at the Milan Conservatory with Vincenzo Merighi from 1832 to 1837. Piatti played his own concerto at a public concert in the conservatory on September 21, 1837.

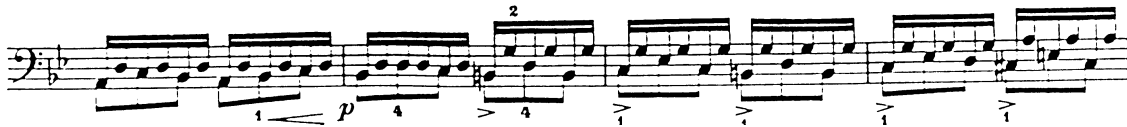
Piatti made his first tour of Europe in 1838. He was invited to Munich by Franz Liszt to share a concert, which proved to be a great success. Liszt encouraged Piatti to go to Paris in 1844. During the visit to Paris Liszt gave him a cello made by Niccolò Amati, which he played for the rest of his career. Later in the same year, Piatti made his London debut and had a long and influential career in England as a performer and teacher. He played with all the great soloists of the day, including Henryk Wieniawski, and was engaged as the cellist of the Joachim Quartet. Piatti also played in another quartet with Heinrich Wilhelm Ernst, Josef Joachim, and Henryk Wieniawski. He taught at the Royal Academy of Music where Robert Hausmann, Leo Stern, Hugo Becker and William Whitehouse were among his many famous pupils. Toward the end of his life Piatti returned to Italy where he died in Crocetto di Mozzo, July 18, 1901.

He published a cello method (London, 1878), two cello concertos (1874-1877), a concertino for cello and orchestra (1863), six sonatas for cello and piano, twelve caprices for cello, dedicated to Bernard Cossmann, and numerous arrangements of eighteenth century music, such as sonatas by Pietro Locatelli, Luigi Boccherini and others.

12 Capricci, Op. 25 per Violoncello (1875)

The caprices are excellent study material, as well as beautiful and interesting enough to perform in public.

The challenge of the first caprice is to be able to play cleanly and solidly at the tip of the bow throughout the piece. The left hand is also tested with fifths and other double stop combinations (Ex. 16).



Example 16. Piatti, Caprice no. 1, mm. 12-15.

The second caprice also features bow technique. Its formal structure is A-B-A-B-A, and the A section consists of double-stops that are not very difficult to play and contain a beautiful tune. The B section relies on the bowing technique (specifically string crossings) and the ability to change chords smoothly with the left hand.

Caprice number three's challenge is based on left hand technique, with double stops (octaves and thirds) in thumb positions. Intonation and agility are far more important than bow strokes.

Based on a beautiful tune that is hidden in double, triple and quadruple stops, the fourth caprice is in A-B-A form. The B part is a *poco meno* section that is more linear (mostly double stops) and is surrounded by two *allegretto* sections with energetic chords.

The fifth and seventh caprices are showpieces in ternary form on bow virtuosity. Number 6 requires great facility in the left hand, especially in rapid arpeggio passages. The form of number 8 is A-B-A. The A section is more vertical with quick changing chords and is energetic in character, while the contrasting B section features calmer and linear lines (mostly broken octaves). The intonation in the B section is particularly demanding.

A good coordination of left and right hand is required for the ninth caprice. Constantly changing chords in the left hand combined with up-down-up-up bowing create a challenge for the student (Ex. 17).



Example 17. Piatti, Caprice no. 9, mm. 1-2.

In the key of D Major, Caprice number 10 explores several thumb positions. The music is written in *moto perpetuo* style with a bow pattern of two slurred and two *staccato* up bows throughout. The principal study points are agility and intonation in the high registers of the instrument.

A beautiful melody is concealed in the constantly changing double stops of the eleventh caprice. Technically, the caprice addresses the strength and flexibility of the left hand and intonation. The frequency of fifths makes the left hand even more difficult in the *allegro* tempo.

The last caprice, number 12, is composed of the juxtaposition of strong down bows and slurred staccato up-bows. Some harmonics are included, and when they are combined with staccato bow, coordination between the left and right hands becomes quite difficult (Ex. 18).



Example 18. Piatti, Caprice no. 12, mm. 51-53.

Table 7

Studies that Involve Specific Techniques

Technical Challenges Addressed	Caprices
Arpeggios/Broken Thirds	6
Left Hand Agility	16, 9
Thumb Positions	6, 9
Double Trills	6
Multiple Stops	2, 3, 4, 8, 9, 11
Octaves	3, 8
Bowing Techniques	1, 2, 5, 7, 9
Slurred Staccato	5, 12
Left and Right Hand Coordination	9, 11, 12

Friedrich Wilhelm Ludwig Grützmacher

Grützmacher, a third generation member of the Dresden school, was one of the leading cellists in the second half of the nineteenth century. He was born in Dessau, Germany on March 1, 1832 and began studying first with his father, later with Justus Johann Friedrich Dotzauer's pupil, Karl Dreschler.

In 1848, Grützmacher was discovered in Leipzig by the famous violinist Ferdinand David, who arranged some concerts for him. Later, he took part in the *Gewandhaus* and *Euterpe* concerts. In 1850, he replaced Bernhard Cossmann in the Leipzig Theatre Orchestra as well as at the Conservatory.

Grützmacher moved to Dresden in 1860 to become the principal cellist of the Court Orchestra and head of the Dresden Music Society. In 1877, he obtained the position of Professor at the Dresden Conservatory. Grützmacher performed all over Europe and Russia, where he became a friend of the famous cellist Karl Davidov. He played the first performance of Richard Strauss's *Don Quixote* in Cologne in 1898. Grützmacher was the teacher of Johann Klingenberg, Wilhelm Fitzenhagen, and Hugo Becker. Grützmacher died on February 23, 1903 at Dresden.

Grützmacher's compositions include a cello concerto, arrangements of other composers' works (Luigi Boccherini's B-flat Major Concerto being the most famous), editions of Johann Sebastian Bach's cello suites and viola da gamba sonatas as well as several books of cello studies. His well-known teaching material, *Technology of Cello Playing*, op. 38, is in two volumes with twelve etudes each. "Exceptions are his studies, especially the *Technology of Cello Playing*, op. 38, although the second book is in many instances over-laden with difficulties of a transcendental nature, which make their value

somewhat problematic except for the virtuoso. The first book stands in no relation to these Paganini-like feats, and that is a book of great value to all students of moderately advanced technique.”¹⁶

Technology of Cello Playing, op. 38, vol. I

The first book concentrates on the middle register of the cello (up to sixth position) and a variety of bowing techniques. With the exception of numbers 7 and 12 (six pages each), the studies in volume one are shorter than those of the second book. Grützmacher’s writing in both books is diatonic.

The first study is in two parts: the first part introduces basic double stops in a very simple fashion, while the second is written in a *moto perpetuo* style with changing bow techniques. Study number 4 is similar to the second part of etude number 1 which is *moto perpetuo* with changing bow techniques. There are several studies devoted to bowing techniques that include constant string crossings and bow arpeggiation (numbers 3, 6, 10 and parts of 12).

Number 5 is an exercise on double stops, and number 8 concentrates on trills and some natural harmonics. Number 9 is a fine study of left hand agility, the left hand finger pattern of 2-4-2-1-2-1 allows the student to achieve the highest speed after a short period of practice (Ex. 19).

¹⁶ Edmund S. J. van der Straeten, *History of the Violoncello, the Viol da Gamba, Their Precursors and Collateral Instruments*, (London: William Reeves, 1971), 430.



Example 19. Grützmacher, Etude no. 9, mm. 1-2.

Although number 7 requires more variety of techniques, most of it resembles number 9 in terms of the left-hand pattern (it includes runs in broken thirds in many keys). Number 11 is a three-page study full of scales. Number 12, the final study, is a summary of the techniques studied throughout the book.

Technology of Cello Playing, op. 38, vol. II

Grützmacher's second volume deals almost exclusively with the thumb position, and there is not a great variety in bowing techniques. The first four studies (13-16) consist of scale and arpeggio patterns using thumb positions.

Number 17 is a preparatory study for octaves and thirds, composed in broken double stops (Ex. 20).



Example 20. Grützmacher, Etude no. 17, mm. 128-131.

Almost six pages long, number 18 introduces combinations of fingered octaves in double stops. The contrasting middle section, *poco adagio*, consists of thirty-second note arpeggios.

Number 19 introduces thirds in double stops and is followed by a longer study that focuses on thirds, arpeggios, and octaves. Number 21 is purely a study of thirds in double stops, while number 22 introduces tenths, which are studied further along with all other techniques in the last two studies, numbers 23 and 24.

Table 8

Studies that Involve Specific Techniques

Technical Challenges Addressed	Etudes
Scales (regular and chromatic)	1, 3, 7, 8, 11-14, 16, 17, 19, 20, 24
Arpeggios/Broken Thirds	1, 2, 7, 8, 9, 12, 14, 15, 18, 20, 21
Left Hand Agility	1, 7, 9, 11, 14, 16, 24
Ad Libitum Style, Trills, Grace Notes	8, 15, 18, 24
Double Trills	4, 19, 23
Multiple Stops	4, 5, 7, 17, 18-24
Thirds	20-24
Octaves	17, 18, 20, 24
Tenths	22, 23, 24
Bowing Techniques	3, 4, 6, 10, 11, 12, 14, 21-24
String Crossings	3, 10, 12, 17, 22, 23, 24
Slurred Staccato	12, 14, 18, 24
Spiccato	4, 7, 10, 12, 15, 20, 21, 24
Harmonics	8, 24
Left and Right Hand Coordination	4, 11, 21, 23, 24

David Popper

One of the most prominent cellists of his generation, David Popper was born on June 18, 1843 in Prague. From 1855 to 1861 he studied at the Prague Conservatory with Julius Goltermann, and graduated by playing his own concerto. In 1864, he gave the first performance of Robert Volkmann's A Minor Cello Concerto with Hans von Bülow conducting the Berlin Philharmonic. Popper was principal cellist of the Vienna Court Opera between 1868 and 1873, and also played in the Hellmesberger Quartet with Joseph Hellmesberger, Adolf Brodsky, and Sigismund Bachrich. In 1873, he gave up his posts in order to undertake concert tours to Germany, France, England, and Russia with his wife, pianist Sophie Menter. Popper was the first to perform concertos of Joseph Haydn and Robert Schumann, which are among the most popular works of the cello repertoire today.

Franz Liszt recommended Popper for the teaching position at the National Hungarian Royal Academy of Music in 1886, where many famous musicians of the future, such as Béla Bartók, Ernő Dohnányi, and Zoltán Kodály were students. Leaving an impressive output of music for cellists and students, Popper died in Baden, near Vienna, on August 7, 1913.

Popper wrote four concertos (1871, 1880, 1888, 1900) *Requiem for Three Cellos and Orchestra* (Hamburg, 1892), two suites (op. 16 and 50), and a string quartet, as well as a considerable number of character and salon pieces. He also composed teaching material: *High School of Cello Playing*, op. 73 (Leipzig, 1901-5); *Ten Medium Difficult Studies*, op. 76 (1907); *Easy Studies for Cello*, op. 76a (1908).

High School of Cello Playing, op. 73 (Leipzig 1901-5)

Most of the op. 73 studies are musically appealing, which makes practicing them enjoyable for the student. A unique feature of Popper's studies is that they are more chromatic than most of the studies that were written earlier in the nineteenth century. This makes them more challenging for accurate intonation. "The *High School* stresses the importance of playing in hand positions, avoiding note-to-note survival. . . . Perhaps more than any other organizing features found in the *High School* are the reliance on sequences, both ascending and descending. Popper did this to teach the relationship of one position to the next. Furthermore, because many of these sequences move by whole or half step, frequently with a significant amount of chromaticism, the cellist must use all the fingering combinations within a given group, therefore learning all the notes available in any hand position."¹⁷ In etude number 20 left hand moves by half step playing many notes in each position (Ex. 21).



Example 21. Popper, Etude no. 6, mm. 36-37.

Although the op. 73 studies cover many aspects of cello playing, they do not really explore a wide range of bowing techniques. Also the difficulty of the studies does not progress gradually.

¹⁷ Marc D. Moskovitz, "David Popper: An Anniversary Retrospective Part II: His Legacy as Performer and Pedagogue," *American String Teacher* 44: 4 (Fall 1994): 36.

Some etudes have very specific technical goals: 2, 3, 4, 7, 8, 12, 21, 22, 23, 24, 26, 28, 29 and 33 require the ability to play many notes in one bow. These studies address a variety of left-hand problems with a well-sustained bow (Ex. 22).



Example 22. Popper, Etude no. 23, mm. 1-4.

Number 6 is designed to improve agility and synchronization between the two hands. Numbers 9, 13 and 17 are double stop studies in thumb positions. Numbers 8 and 12 emphasize the grouping of the left hand in thumb positions. Numbers 14 and 32 are staccato studies and, number 27 is clearly for *spiccato*. Number 37 is a study on mordents and number 40 is on harmonics.

There are also those etudes that are more musical and include a combination of techniques, such as numbers 15, 20, 22, 31 and 36.

Table 9

Studies that Involve Specific Techniques

Technical Challenges Addressed:	Specific Etudes:
Left Hand Agility	6, 12, 18, 21, 26, 28
Thumb Positions	4, 7, 8, 12, 14, 15, 18, 21-24, 26, 28, 29-33
Position Establishment	1, 2, 3, 6, 8, 11, 28, 33
Trills, grace notes	37
Double Trills	13
Double Stops	7, 9, 13, 17, 34
Thirds	9, 29, 31

Table 9—*Continued*

Technical Challenges Addressed:	Specific Etudes:
Sixths	17, 24, 34
Octaves	13, 20, 23, 38, 39
Bowing Techniques	2, 5, 15, 25, 27, 35, 38
String Crossings	1, 2, 4, 11, 19, 25
Single String Crossings	8, 12, 31, 36
Slurred Staccato	14, 32

Alwin Schroeder

German-American cellist and pedagogue Alwin Schroeder was born in Neuahaldensleben, Saxony, on June 15, 1855. His older brother Karl Schroeder was also a distinguished cellist who taught at the Leipzig Conservatory. Alwin first studied the viola in Berlin at the Hochschule für Musik and was engaged by several orchestras as a violist. In 1875, he started to play the cello in Karl Liebig’s orchestra in Berlin. A year later he went to Hamburg to be a cellist in Laube Kappelle. Moving to Leipzig in 1880, Schröder was appointed to share the position of principal cello with Julius Klengel in the Gewandhaus orchestra, and began teaching at the conservatory after his brother left. He toured with great success as a soloist in Germany and Russia. About 1891, he accepted an appointment as solo cellist in the Boston Symphony Orchestra. He also played in several quartets such as the Kneisel and Hess Quartets. Schroeder died in Boston, October 17, 1928. He published some study material and made transcriptions for cello.

170 Foundation Studies for Violoncello

Alwin Schroeder's 170 studies are in three volumes. The etudes are selected and progressively arranged from the works of Buchler, Cossmann, Dotzauer, Duport, Franchomme, Grützmacher, Kummer, Lee, Merk, Piatti, Schroeder, and Servais. All of the first and most of the second volumes rather belong to the pre-college level student. Due to the large quantity and the diversity of the etudes, detailed information related to etudes will be limited to Table 10.

Table 10

Studies that Involve Specific Techniques

Technical Challenges Addressed	Etudes
Scales (regular and chromatic)	116, 160
Arpeggios/Broken Thirds	98, 117, 139 153, 157, 164
Left Hand Agility	85, 91, 95, 96, 97, 104, 109, 114, 119, 120-122, 127, 130, 131, 136-138, 142, 146, 15-153, 161, 165
Thumb Position	109, 111, 112, 113, 134-137, 158, 162, 164, 165, 169
Position Establishment	81, 107, 113, 119, 135, 142, 157, 160
Multiple Stops	88, 89, 106, 110, 140, 143, 145, 147, 150, 154, 166-168
Octaves	136, 156, 167, 168
Bowing Techniques	81, 82, 84, 86, 90, 92, 93, 94, 99, 100, 101, 103, 105, 106, 108, 115, 116, 124, 125, 126, 128, 129, 131, 132, 136, 138, 139, 141, 143, 144, 148, 149, 150, 151, 154, 158, 159, 162, 163, 166, 169
String Crossings	83, 89, 99, 118, 162, 163
Slurred Staccato	116, 128, 148, 170
Spiccato	83, 84, 85, 116
Position Establishment	81, 107, 113, 119, 135, 142, 157, 160
Left and Right Hand Coordination	92, 94, 100, 101, 139, 143, 146, 149, 150, 151
Trills, Grace Notes	106, 121, 123-125, 144, 154, 155, 168

CHAPTER TWO

RESEARCH METHOD

Introduction

The research for this treatise utilizes surveys sent to college cello teachers from the list provided by the American String Teachers Association. The main goal of the current study is to gather information on the most widely used cello etude books in American colleges. The second goal is to delineate criteria used by cello teachers in selecting and implementing the cello etude books in their teaching.

Development of Survey Instrument

The questions of the survey were generated by the researcher. The survey contains two parts. The first includes ten questions gathering the demographic information of the participants. The four main questions were asked in the last part. The questions required that the respondent mark the choices given, and add other relevant information as necessary. The approximate time to complete the survey was 5-7 minutes. The questions covered the two goals stated above.

Sampling and Data Gathering

The target population is defined as cello teachers in American colleges and universities. The American String Teachers Association has a list of primary cello teachers at American colleges and universities, and the total number is given as 259. A random sample of one hundred was selected and mailed the survey. Since there were an insufficient number of responses, the same sample of one hundred participants was mailed the survey a second time. A total of two hundred surveys were mailed to the participating one hundred cello teachers in American colleges and universities.

Data Analysis

All responses in the survey were for analyzing in the *Statistical Package for the Social Sciences*¹⁸ using the Frequencies and Crosstabulations subprograms. The last chapter includes an overview and evaluation of the surveys collected from all over the country and some final words about the most commonly used etude books.

¹⁸ Statistical Package for the Social Sciences for Windows Rel. 10 (SPSS 10.0.1), SPSS Inc., Chicago 1999.

CHAPTER THREE

RESULTS

Demographic Information of Participants

A total of thirty-three completed surveys were received. The demographic part of the survey included occupational status, school type involved, teaching experience and other relevant information (tables 11 and 12). Also the participant's familiarity with cello syllabi, similarities of teaching materials used by the participant as a student and the quantity of etudes practiced per semester by the participant's students were among the questions. The relationship between the professional teaching experience of the participants and their familiarity with cello syllabi were cross-examined. The relationship between the participants' school type, teaching experience and selection criteria of the etude books was cross-examined and proved to be insignificant. The relationship between professional teaching experience of the participants and selection criteria of the etude books as well as frequency of use of selected etude books were also insignificant.

Table 11
Professional Teaching Experience of the Participants

Number of Years	Frequency	Percent
No Information	2	6.1
1-15 Years	10	30.3
16-30 Years	12	36.4
31 and More	9	27.3
Total	33	100.0

Table 12
Classification of Schools

	Frequency	Percent
No Information	2	6.1
Public College/University	17	51.5
Private College/University	14	42.4
Total	33	100.0

The participants' familiarity with the teaching material was taken into consideration in two basic ways: string syllabi and personal experience. String syllabi are valuable reference materials for teachers. Tables 13, 14 and 15 demonstrate the participant's familiarity with the selected syllabi. Teachers checked the ones with which they were familiar. In the "other" section (Table 16) some included their own syllabi, two participants included the California Music Teachers Cello Syllabus, and one suggested Katherine Mina Azari's dissertation "An Annotated Bibliography of Selected Works for the Intermediate Violoncellist".¹⁹ The participants were asked if they used the same material in their teaching that they used when they were students, (Table 17). The majority gave a positive answer to that while some stated "not only". The quantity of the etudes practiced by the participant's students was also questioned. Very few teachers suggested that their students practice more than 11 etudes per semester, as shown in Table 18. The majority practiced 1-10 etudes per semester

¹⁹ Katherine Mina Azari, "An Annotated Bibliography of Selected Works for the Intermediate Violoncellist" (D.A. diss., University of Northern Colorado, 1997.)

Table 13

Participants' Familiarity with the ASTA String Syllabus

	Frequency	Percent
Yes	21	63.6
No	12	36.4
Total	33	100.0

Table 14

Participants' Familiarity with the Royal Conservatory of Music's Cello Syllabus

	Frequency	Percent
Yes	8	24.2
No	25	75.8
Total	33	100.0

Table 15

Participants' Familiarity with Maria de Rungs' Cello Syllabus

	Frequency	Percent
Yes	3	9.1
No	30	90.9
Total	33	100.0

Table 16

Participants' Familiarity with Other Cello Syllabi

	Frequency	Percent
Yes	8	24.2
No	25	75.8
Total	33	100.0

Table 17
Participants' Usage of Teaching Material Used as a Student

	Frequency	Percent
No information	1	3.0
Yes	21	63.6
No	11	33.3
Total	33	100.0

Table 18
The Quantity of Etudes Practiced per Semester by the Participants' Students

	Frequency	Percent
No information	4	12.1
1-5	13	39.4
6-10	12	12.1
11-more	4	12.1
Total	33	100.0

The relationship between teaching experience and cello syllabi was cross-examined and some significant results obtained. As shown in Table 19, seven out of twelve participants in the 16-30 years experience group were not familiar with the ASTA String Syllabus. Familiarity with other cello syllabi was significantly lower especially at the group with 30 and more years of teaching experience. In general the group with 1-15 years of teaching experience was more familiar with both the ASTA and the Royal Conservatory syllabi (tables 19 and 20).

Table 19

Relationship Between Professional Teaching Experience of the Participants and Familiarity with the ASTA String Syllabus

Number of Years in Professional Teaching	Familiarity with the ASTA String Syllabus		
	Yes	No	Total
No Information	1	1	2
1-15	9	1	10
16-30	5	7	12
31 and more	6	3	9
Total	21	12	33

Table 20

Relationship Between Professional Teaching Experience of the Participants and Familiarity with the Royal Conservatory of Music's Cello Syllabus

Familiarity with the Royal Conservatory of Music's Cello Syllabus			
Numbers of Year in Professional Teaching	Yes	No	Total
No Information		2	2
1-15	4	6	10
16-30	3	9	12
31 and more	1	8	9
Total	8	25	33

Table 21

Relationship Between Professional Teaching Experience of the Participants and Familiarity with Maria de Rungs' Cello Syllabus

Number of Years in Professional Teaching	Familiarity with Maria de Rungs' Cello Syllabus		
	Yes	No	Total
No Information		2	2
1-15		10	10
16-30	2	10	12
31 and more	1	8	9
Total	3	30	33

Frequency and Means of Books

The participants numbered the etude books according to the frequency of use. On a scale of eleven, the number one indicated the most frequently used etude book. In the “others” column, some participants suggested Janos Starker’s *An Organized Method of String Playing*, Kreutzer-Silva 42 Etudes, and Francis Grant’s several books of etudes.

Table 22

The Most Commonly Used Cello Etude Books

Etude Book	Mean of the Usage Frequency
Popper	1.97
Schroeder	2.97
Duport	4.12
Piatti	6.67
Dotzauer	7.12
Franchomme Etudes	8.85
Franchomme Caprices	8.85
Grützmacher	8.61
Servais	9.48
Merk	9.79
Others	10.33

Selection Criteria of the Etude Book

Participants numbered the criteria according to their importance in selecting the etude books in their teaching. On a scale of seven, the number one indicated the most frequent use.

Table 23

The Criteria for Choosing the Etudes

Criteria	Mean of the Usage Frequency
Involvement of many aspects of cello technique in one book	2.73
Concentration on one or two types of technical problems at a time	2.94
Appropriate order of pieces in an etude book in terms of their difficulty	3.45
Musical appeal of the etudes	5.18
Expense to the student	5.91
Guidelines/curricula recommended by institutions	6.30
Others	6.58

Conclusion

Respectively, Popper, Schroeder and Duport are the composers of the most commonly used cello etude books. Popper's book is the most chromatic one, Schroeder's is a collection of etudes composed by different cellists and Duport's is the oldest of all the books that were in the survey. When combined, these books offer all criteria for choosing an etude book.

Teachers are interested in etude books that explore a wide variety of cello techniques. Etudes that clearly feature particular aspects of technique are more popular. The proper order of etudes is another important feature of a good etude book, although it is also customary to mix etudes from different books to create an appropriate order of etudes for an individual. According to the surveys, the common criteria for choosing an etude book are 1) involvement of many aspects of cello technique in one book, 2) concentration on one or two types of technical problems in a single etude, 3) appropriate order of etudes in a book in terms of their difficulty.

The romantic and twentieth-century repertoire is introduced in college; thus, a certain level of preparation is needed. The most noticeable distinction between this repertoire and the earlier repertoire is the more chromatic writing in this later works. One of the reasons a majority of musicians include scales and arpeggios in their daily practice sessions is the ease of noticing an out-of-tune note when diatonic notes are played one after another. Playing each expected note of a scale in any key helps the student recognize intonation flaws sooner. For the same reason, more chromatic etudes are better-suited preparation material for romantic and twentieth-century repertoire. There are also

studies that are preparation for pieces composed after 1950's in unconventional notation.²⁰

It is only natural for teachers to use their own past training as a source for determining the proper etudes for their students. Teachers consider the level of difficulty and the efficiency of etudes and can compare them with a pool of other studies that they have encountered over the years. On the other hand, in order to research teaching materials other than the familiar ones, teachers need a source that lists the availability and the level of such materials. The current study proves that the majority of the participants are familiar with the *American String Teachers Association String Syllabus*, and that they mostly use the same teaching material as they studied. Also, cello teachers who had less than fifteen years of experience were more familiar with cello syllabi in general.

²⁰ Sigfried Palm, *Pro Musica Nova: Studies for Playing Contemporary Music for Violoncello*, (Wiesbaden: Breitkopf & Härtel, 1985).

APPENDIX A

SURVEY SENT TO CELLO TEACHERS

Survey:

Last name:

First name:

Address:

Phone:

E-mail:

Occupational Status:

College/University:

Number of years in professional teaching:

Check your primary occupational involvement:

Public College/University Private College/University

Mark the cello syllabi you are familiar with:

- ASTA String Syllabus
- Royal Conservatory of Music Cello Syllabus
- Maria de Rungs' Cello Syllabus
- Other (please specify):

I. Do you mainly use the same teaching material you used as a student?

II. Please number the following cello etude books according to the frequency of use. The number 1 indicates the most frequent use:

_ Popper “High school of Cello Playing” op. 73 _ Duport “21 Studies”

_ Schröder “170 Foundation Studies” (volumes I, II, III)

_ Servais "Six Caprices" op. 11

_ Dotzauer "113 Studies"

_ Merk “20 Studies” op. 11

_ Piatti “12 Caprices” op. 25

_ Franchomme “12 Etudes” op. 35

_ Franchomme “12 Caprices” op. 7

_ Grützmacher “Technology of Cello Playing”

_ Others:

III. Please number the following criteria, according to their importance in selecting the etude books in your teaching activities. The number 1 indicates the most frequent use:

_ Guidelines/ curricula recommended by institutions

_ Appropriate order of pieces in an etude book in terms of their difficulty

_ Involvement of as much variety as possible in the cello teaching and covering many aspects of cello technique in one book

_ Concentrates on one or two types of technical problems at a time

_ Expense to the student

_ Musical appeal and tunefulness of the etudes in addition to their technical features

_ Others

IV. Approximately how many etudes do your students work through during a semester?

APPENDIX B

HUMAN SUBJECTS RESEARCH APPROVAL



Office of the Vice President
for Research
Tallahassee, Florida 32306-2811
(850) 644-5260 • FAX (850) 644-4392

APPROVAL MEMORANDUM

from the Human Subjects Committee

Date: March 30, 2000

From: David Quadagno, Chair *DQ/p/h*

To: Ozan Tunca
429 W. Park Ave #16
Tallahassee, FL 32301

Dept: Music

Re: Use of Human subjects in Research

Project entitled: Most Comm,only Used Etude Books by Cello Teachers in American Colleges and Universities

The forms that you submitted to this office in regard to the use of human subjects in the proposal referenced above have been reviewed by the Secretary, the Chair, and two members of the Human Subjects Committee. Your project is determined to be exempt per 45 CFR § 46.101(b)2 and has been approved by an accelerated review process.

The Human Subjects Committee has not evaluated your proposal for scientific merit, except to weigh the risk to the human participants and the aspects of the proposal related to potential risk and benefit. This approval does not replace any departmental or other approvals which may be required.

If the project has not been completed by March 30, 2001 you must request renewed approval for continuation of the project.

You are advised that any change in protocol in this project must be approved by resubmission of the project to the Committee for approval. Also, the principal investigator must promptly report, in writing, any unexpected problems causing risks to research subjects or others.

By copy of this memorandum, the chairman of your department and/or your major professor is reminded that he/she is responsible for being informed concerning research projects involving human subjects in the department, and should review protocols of such investigations as often as needed to insure that the project is being conducted in compliance with our institution and with DHHS regulations.

This institution has an Assurance on file with the Office for Protection from Research Risks. The Assurance Number is M1339.

cc: L. Georgiev
APPLICATION NO. 00.091

APPENDIX C
INFORMED CONSENT DOCUMENT

Dear Sir,

I am a doctoral student under the direction of Professor Lubomir Georgiev in the School of Music at Florida State University. I am conducting a research study to determine the most commonly used etude books by cello teachers in American colleges and universities.

I am requesting your participation, which will involve completing the attached survey (approximated time: 5-7 minutes.) Your participation in this study is voluntary. If you choose not to participate or withdraw from the study at any time, there will be no penalty. The results of the research study may be published, but your name will not be used. Only the researcher will know the identities of the subjects and keep the identities confidential to the extent allowed by law.

If you have any questions concerning the research study, please call me at 850 222 60 37, or e-mail ozantunca@hotmail.com.

Return of the questionnaire will be considered your consent to participate.

Thank you.

Sincerely,

Ozan Tunca

330 00
00 091
3/30/04

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BIOGRAPHICAL SKETCH

Ozan Tunca was born in Konya, Turkey, on March 30, 1973. He received degrees from Hacettepe University State Conservatory, Louisiana State University and Florida State University. Tunca's cello professors were Doğan Cangal, Ali Doğan, Dennis Parker and Lubomir Georgiev.

At age eighteen Ozan Tunca won the Hacettepe University Concerto Competition and performed Vivaldi's Concerto for Two Cellos in G Minor with Demet Gökalp and the Conservatory Symphony Orchestra. Three years later he won the same competition performing Dvorak's B Minor Cello Concerto. Tunca continued making solo and chamber music appearances in Turkey and the USA. His string quartet "alla Turca" was the recipient of the Eppes Foundation scholarship, which gave the ensemble performing and teaching opportunities at Florida State University and within the Tallahassee community. The quartet won the Grand Prize in the NUMUS 2002 Chamber Music Competition in Canada.

Tunca served as assistant principal cellist of the Baton Rouge Symphony and principal cellist of the Aurora Chamber Orchestra and Louisiana Sinfonietta.

He was a teaching assistant at Florida State University as well as an instructor in the University String Orchestra Camp. He also maintained a private studio and was the cello teacher at Stubb's Music School during his time in Florida.